
THE EARLY MEDIEVAL THRUSTING AND CUTTING WEAPONS FROM THE NATIONAL MUSEUM OF ROMANIAN HISTORY IN BUCHAREST. THEIR BACKGROUND AT THE TIME

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ABSTRACT:

The referred article is concerned with the theme of early medieval sabres, palashes, swords and their parts from the National Museum of Romanian History in Bucharest. They (eight pcs) originate from the territory of present-day Romania. All of them may be dated from the 6th to the 11th century, although some of them could belong to the turn of Late Antiquity and the Early Middle Ages and others to the turn of the Early and High Middle Ages too. They do not just come from unknown archaeological contexts and stray finds, but also from burial sites and settlement layers. Therefore, the authors were able to associate some of these objects of museum collections to a specific archaeological context and not dated them only on the basis of their analogies. Most of the discussed weapons (five out of eight pcs) were already published. Unfortunately, they mostly miss the complete description, clear drawings and photographic documentation, complete measurements, relevant parallels, or their correct dating. The authors of this article have attempted to resolve these shortcomings. Moreover, they supplemented the article with radiographic and spectroscopic analyses of some studied objects.

REZUMAT: ARME MEDIEVALE TIMPURIU DE ÎMPUNGERE ȘI TĂIERE DIN MUZEUL NAȚIONAL DE ISTORIE A ROMÂNIEI DIN BUCUREȘTI. TRECUTUL LOR LA VREMEA RESPECTIVĂ

Articolul are ca temă săbiile, paloșele, spadele și fragmente din astfel de arme medievale timpurii aflate la Muzeul Național de Istorie a României din București. Acestea (opt piese) provin de pe teritoriul actual al României. Toate ar putea fi date din secolul al VI-lea până în secolul al XI-lea, deși unele dintre ele ar putea aparține perioadei de la cumpăna Antichității Târzii și a Evului Mediu timpuriu, iar altele perioadei de la cumpăna Evului Mediu timpuriu și mijlociu. Ele nu provin doar din contexte arheologice necunoscute și din descoperiri întâmplătoare, ci și din locuri de înmormântare și straturi din așezări. Prin urmare, autorii au putut asocia unele dintre aceste obiecte ale colecțiilor muzeului cu un context arheologic specific și nu le-au datat doar pe baza analogiilor lor. Cele mai multe dintre armele discutate (cinci din opt piese) au fost deja publicate. Din păcate, le lipsesc în mare parte descrierea completă, desene clare și documentația fotografică, măsurătorile complete, paralelele relevante sau datarea corectă. Autorii acestui articol au încercat să rezolve aceste neajunsuri. Mai mult, ei au completat articolul cu analize radiografice și spectroscopice ale unora dintre piesele studiate.

KEYWORDS: sabre, palash, sword, the National Museum of Romanian History in Bucharest, the Early Middle Ages.

CUVINTE CHEIE: sabie, paloș, spadă, Muzeul Național de Istorie a României, București, Evul Mediu timpuriu

1. Introduction

The given contribution is related to the topic of early medieval thrusting and cutting weapons¹ from the National Museum of Romanian History in Bucharest (hereafter the MNIR), mainly from the medieval part of the depository of its Department of Archaeology. The authors of this article identified during their research eight pieces of them at the museum between the years 2018 and 2024 (Table 1).

Seven out of the eight objects of our research can be connected with a particular place of discovery in Romania. The place of discovery of the remaining object may only be specified to a certain region or county, namely to Southern Romania or even to the Ilfov County.² The majority of the aforementioned localised objects come from

¹ Sabres, palashes, swords, or their parts.

² An unpublished exemplar without inventory number at the MNIR.

Transylvania, i.e. four specimens. They originate in the Alba³, Mureș⁴, and Sibiu⁵ Counties. Other one thrusting and cutting weapon was found in the Ilfov County.⁶ The last two referred objects come from Dobruja and directly from Dinogetia/Garvăn-Bisericuța in the Tulcea County.⁷

As we mentioned before, the three objects of our interest have not been described, measured, evaluated, dated, or published yet. The rest (five pcs) was published indeed, although its assessment, apart from one exception, was not comprehensive and without sufficient description, measurements, analogies, and dating. The above-mentioned exception concerns the find of a sleeve cross-guard of a sword from house no. 144 from the fortress Dinogetia/Garvăn-Bisericuța (inventory no. 17339 at the MNIR) that was published by us a few years ago.⁸

A half of the examined assemblage, i.e. four weapons or their parts, was found out of archaeological context or it has been doubtful whether they could be associated with some context or not.⁹ According to the Museum register of the MNIR, the double-edged sword with inventory number 18669 (at the MNIR) originated in Bratei and was brought to the museum from the “Vasile Pârvan” Institute of Archaeology in 1971. The sword has similar proportions to the swords from graves 77 or 214 from the cemetery no. 3 at Bratei.¹⁰ They are 86.7 (grave 77) and 86.3 (grave 214) cm long.¹¹ And the discussed sword from the MNIR is 86.5 cm long. The cemetery no. 3 at Bratei lasted from the second half of the 6th century to the first half of the 7th century¹² and belonged to the Group IV¹³ of Kurt Horedt’s row-grave cemeteries in Transylvania. In addition to this knowledge, in the environs of this cemetery (Gepidic) finds from the first half of the 6th century were found as well.¹⁴ In total, three cemeteries, three settlements, some grave groups and a single grave from the time span ranging from the Early Migration Period up to the Early and High Middle Ages have been identified in Bratei so far.¹⁵

The way of acquisition and the transfers concerning the double-edged sword with inventory number 54484 at the MNIR are clearly indicative that its association with a specific archaeological context is with certainty impossible at present. The sword had exactly been found in 1896 and was acquired by the Museum of Cluj¹⁶ within the so called Domokos collection¹⁷ and under inventory number IV 1920.¹⁸ The excavations in Morești (there are several archaeological sites/locations) even started on the basis of the referred sword in 1951¹⁹ and Kurt Horedt²⁰ connected it²¹ with the fortified medieval settlement on the Podei plateau.²² There is also other opinion²³ on the origin of the referred sword according to which it was found somewhere in Brăișoru (Cluj County, Romania).²⁴ Concerning this sword, the designation Malomszeg had been written in the former Inventory Book of the Museum of Cluj, although Kurt Horedt thought that it was a mistake or wrong reading of the designation.²⁵ In fact, the Hungarian name of Morești was Malomfalva.²⁶ On the contrary, the sword was handed to the Museum in Cluj

³ A specimen from grave 17 of the cemetery in Noșlac (inventory no. 84921 at the MNIR).

⁴ One exemplar, which is most likely from grave 70 of the cemetery in Morești-Hulă (inventory no. 17152 at the MNIR), and another one from the fortified settlement or an unknown location in Morești-Podei (inventory no. 54484 at the MNIR). There is a possibility that this exemplar could have been from an unknown location in Brăișoru (Cluj County). Nonetheless, this option is discussed in the following lines of this article.

⁵ An unpublished specimen from Bratei in the Sibiu County (inventory no. 18669 at the MNIR).

⁶ An unpublished stray find from Vidra in the Ilfov County (without inventory no. at the MNIR).

⁷ Two finds from the fortress Dinogetia/Garvăn-Bisericuța (inventory nos. 17305 and 17339 at the MNIR).

⁸ Husár and Oța 2020, 229-231, Pl. 1.

⁹ Inventory numbers 18669 and 54484 at the MNIR, a stray find from Southern Romania or the Ilfov County without inventory number at the MNIR, and a stray find from Vidra (Ilfov County) without inventory number at the MNIR.

¹⁰ Bârză 2010, Abb. 69/77, 214.

¹¹ Bârză 2010, Abb. 70.

¹² Dobos 2015a, 210.

¹³ The so-called Band-Vereșmort group (more on this group in Dobos 2022, 151-155). This group could be dated between the second third of the 6th century and the middle of the 7th century (Dobos 2018, 634).

¹⁴ Bârză 1991, 211-214; Bârză 2010, Abb. 2; Dobos 2015a, 210.

¹⁵ Bârză 2010, 7-9, Abb. 1-2; Dobos 2015a, 209.

¹⁶ Nowadays the National Museum of Transylvanian History in Cluj-Napoca (Romania).

¹⁷ 82 objects donated by Teleki Domokos. These objects were transferred to Cluj from Gornești.

¹⁸ Heitel 1994-1995, 436; Vlassa 1967, 511.

¹⁹ Horedt 1984, 49.

²⁰ Horedt 1957, Abb. 4/2; Horedt 1984, Taf. 11/8a, b.

²¹ In the captions of the aforementioned Figure 4 and Table 11 (in Horedt 1957 and Horedt 1984).

²² Dobos et al. 2021, Fig. 2; 4; 9. The aforementioned fortified settlement could be dated to the 11th – 13th centuries (Horedt 1984, 7, 68-71) or to the Arpadian Age (Dobos et al. 2021, 8).

²³ Dobos et al. 2021, 34, footnote 3 on page 34; Vlassa 1967, 511-512.

²⁴ Malomszeg in Hungarian.

²⁵ Horedt 1984, 49.

²⁶ Horedt 1984, 49.

in 1918²⁷ by archaeologist Sándor Ferencz, who, in the views of Nicolae Vlăsa or Michal Viskupič,²⁸ could not have mistaken Malomfalva and Malomszeg, because he knew the Hungarian language and had topographical understanding as well. In this article we will use the locality of Morești(-Podei) for the discussed sword, because this is how this object has been indexed in the Museum register of the MNIR in Bucharest.

The remaining half of the referred collection might regard some archaeological context. We will look into them in the subsequent lines. The double-edged sword with inventory number 17152 at the MNIR²⁹ most probably comes from grave 70 from the cemetery of Morești-Hulă.³⁰ This grave also contained golden accessories (probably rivets from the sword belt or its hanger straps), a silver belt buckle and shield boss, which was covered by silver.³¹ The whole cemetery of Morești-Hulă was dated by Kurt Horedt to the years 500 – 575.³² It is one of the main representatives of Group III or the Morești group of Kurt Horedt's row-grave cemeteries in Transylvania³³, which was lastly dated by him to 525 – 575.³⁴ Alpár Dobos dated this group rather from the end of the 5th century/the first third of the 6th century to the second third of the 6th century.³⁵

Based on the research of Alpár Dobos of the cemetery in Noșlac and the Museum register of the MNIR, we can assume that the double-edged sword with inventory number 84921³⁶ at the MNIR was found in grave 17 from the cemetery of Noșlac.³⁷ The above-mentioned grave³⁸ was dated to phase 2a of the Noșlac cemetery, i.e. between the last third of the 6th century and the beginning of the 7th century.³⁹ That is temporally within Group IV of Kurt Horedt's row-grave cemeteries in Transylvania. In his excellent scholarly works, however, Alpar Dobos did not primarily pay attention to the parallels and typology of the discussed sword from the Noșlac cemetery.

Two items⁴⁰ from the set in question were uncovered within two archaeological contexts inside the fortress of Dinogetia⁴¹ that had operated near the River Danube in Dobruja during the Middle Byzantine period, namely from the 10th to 12th centuries.⁴² The cross-guard of a sabre/palash was found in the sunken part of the house no. 112 (within sector C of the fortress), which was near the former southeastern part of the Romano-Byzantine basilica and close to the southeastern corner of the fortress of Dinogetia. The house no. 112 can be stratified to the second half of the 11th century.⁴³ The aforementioned sleeve cross-guard of a sword from Dinogetia was unearthed in the house no. 144. Within the framework of this house (in sector D of the fortress), 22 ceramic vessels were also discovered during the field archaeological campaign. These dishes consisted of seven amphorae with raised handles and other 15 vessels of local patterns, which had been decorated with irregular horizontal lines.⁴⁴ The utensils from house no. 144 could indicate the second half of the 11th century with regard to the dating of this house.⁴⁵

Two objects out of the above-mentioned eight underwent radiographic and/or quantitative spectroscopic analyses as well. Those objects are: one double-edged sword from Morești-Podei (inventory no. 54484 at the MNIR) and one cross-guard from Dinogetia/Garvăn-Bisericuța (inventory no. 17305 at the MNIR). Because of its complex

²⁷ By its transfer from Gornești.

²⁸ Viskupič 2023, 12; Vlăsa 1967, 511.

²⁹ It was brought to the MNIR from the “Vasile Pârvan” Institute of Archaeology in 1971 (Information from the Museum register of the MNIR).

³⁰ Horedt 1979, 190, Abb. 86/15. It is not clear whether the sword depicted in the above-mentioned monograph of Kurt Horedt (1979, Abb. 86/15) is coinciding with the sword registered under inventory number 17152 at the MNIR. The difference between them is that the sword on the referred plate 86 has got a blade, which is tapering to its tip more markedly than the blade of the sword from the MNIR. However, both swords are metrically identical or compatible. These swords could have been exchanged accidentally or it could more likely have been an inaccuracy of the previous draughtsman.

³¹ Horedt 1979, 186, 192, Abb. 86/11, 15.

³² Horedt 1979, 204.

³³ Groups III and IV belong to the Gepidic Age row-grave cemeteries in Transylvania (Dobos 2019, 119-124). They were mainly connected with the Gepids themselves or other Germanic communities and were influenced by the Merovingian cultural milieu, the Avars and by the Byzantine-Balkan area (Dobos 2019, 111-112, 131).

³⁴ Cited through Dobos 2019, 120, Fig. 4.

³⁵ Dobos 2018, 634.

³⁶ The item was brought to the MNIR from the Institute of Archaeology and Art History (Cluj-Napoca) in 1973. In 1975 it was sent to evaluation at the MNIR (Information from the Museum register of the MNIR).

³⁷ Dobos 2018, Fig. 2/7; Dobos 2019, Fig. 6/13.

³⁸ Grave goods also included metal fittings and a buckle of a belt set and a ceramic pot.

³⁹ Dobos 2018, 632-633, Fig. 2; 9.

⁴⁰ Cross-guard of a sabre/palash (inventory no. 17305) and sleeve cross-guard of a sword (inventory no. 17339).

⁴¹ Currently Garvăn-Bisericuța.

⁴² Alexandrescu 2016, 23; Husár and Oța 2020, 229.

⁴³ Ștefan et al. 1967, 338, Fig. 182/24; 184/20.

⁴⁴ Ștefan et al. 1953, 248, Fig. 4/5.

⁴⁵ Ștefan et al. 1967, 55-57, Fig. 35/19.

decoration, the sword underwent the radiographic as well as quantitative spectroscopic analyses. As far as the cross-guard is concerned, only a quantitative spectroscopic analysis was performed in this case. The radiographic analysis (of the sword) in question was carried out by Dr. phys. Laurențiu-Marian Angheluță⁴⁶ on the 29th of January 2024. He used the following generator: a General Electric's ISOVOLT 160 M1. The sword was examined by this inspection device in three working modes, namely at 60, 100, and 120 kV (kilovolts) energy thresholds.⁴⁷ Decoration in the upper third of the double-edged sword's blade from Morești-Podei had been already examined by a radiographic analysis published by Romanian archaeologist Radu Robert Heitel.⁴⁸ Nevertheless, the decoration was not revealed and presented clearly in this article from the middle of the 1990s.

Then we are provided with the results of quantitative spectroscopic analyses of the above-mentioned two objects that were achieved by Dr Gheorghe Niculescu, PhD.⁴⁹, on the 7th⁵⁰ and 26th⁵¹ of March 2024. Dr Niculescu employed in relation to his analyses a handheld Bruker X-ray fluorescence spectrometer S1 Titan. He conducted several probes into the referred objects. Probes R3532, R3533, R3534, and R3535 from the 7th of March 2024 concern the sword from Morești-Podei (inventory no. 54484 at the MNIR) and probes R3729 and R3730 from the 26th of March 2024 regard the cross-guard from Dinogetia/Garvăn-Bisericuța (inventory no. 17305 at the MNIR).

The existence of widely spread and almost complete English description terminology for medieval sabres, palashes and swords helped us to choose and apply the significant and frequently used terms of these weapons⁵² and their equivalents or synonyms too. Important scientific works⁵³ in this regard have been the following. The most important piece of topical scientific work is a monograph called "Swords of the Viking Age" written by Ian G. Peirce, Ewart Oakeshott and Lee A. Jones in 2002.⁵⁴ The nomenclature of the Viking Age swords is explained on the example of (earlier) Petersen type H and (later) Petersen type X swords.⁵⁵ Features of the swords from Finland in the Late Iron Age (circa 700 – 1200) are treated in the monograph of Mikko Moilanen dated at 2015. He touched this topic in the subchapter concerning the measurement and documentation of the previously mentioned swords.⁵⁶ The elaborated (fundamental) terminology of medieval swords might be found in the monograph of Jiří Hošek, Jiří Košta and Petr Žákovský about swords from the Czech Republic from the period between the 9th century and the middle of the 16th century.⁵⁷ The authors also distinguished between specific features or parts of the early medieval swords and those of the late medieval or early modern swords. Gergely Csiky focused on the terminology of the various kinds of the edged weapons of the early medieval Avar Khaganate in the Carpathian Basin, namely on single-edged and double-edged swords, sabres and seaxes.⁵⁸ Lastly, Gennadij Valer'evič Baranov described his type IA of the (Byzantine) arched sleeve cross-guards using a drawing containing a Russian and English legends.⁵⁹ Early medieval swords, palashes and sabres from Romania have also been the subject matter of several Romanian and other European researchers who have been interested in (early) medieval weapons for a quite long time. I would like to mention the most significant scholars and works in this regard.

Romanian archaeologist Zeno – Karl Pinter published a monograph dealing with the medieval (the 8th/9th – 14th centuries) swords and sabres deposited in the museums of Transylvania and Banat in 2007. He⁶⁰ classified them by dating⁶¹ and then into particular types⁶². These types are based on combinations of swords' elements or features⁶³ and their forms. As for the early medieval swords, there are types I-III that can be dated between the end of the 8th century and the second half of the 10th century.⁶⁴

⁴⁶ Center of Excellence for Restoration by Optoelectronic Techniques at the National Institute of Research and Development for Optoelectronics – INOE 2000 (Măgurele, Romania).

⁴⁷ Angheluță 2024.

⁴⁸ Heitel 1994-1995, 436, Abb. 19/a-b.

⁴⁹ X-Ray Investigation Department within the Section of the Physical-Chemical and Biological Investigations of the MNIR in Bucharest.

⁵⁰ Niculescu 2024a.

⁵¹ Niculescu 2024b.

⁵² And their parts.

⁵³ The significant ones are from the native English-speaking countries and from the Central, Eastern and Northern Europe.

⁵⁴ Peirce et al. 2002.

⁵⁵ Peirce et al. 2002, plate on page 2.

⁵⁶ Moilanen 2015, 40-43, subchapter 3.2, Fig. 6.

⁵⁷ Hošek et al. 2019, 43-54, Fig. 6-14.

⁵⁸ Csiky 2015, 30-34, Fig. 2.

⁵⁹ Baranov 2017, Ris. 1.

⁶⁰ Pinter 2007, 134-136.

⁶¹ The group of the early medieval swords (A) and the group of the high medieval swords (B).

⁶² Types I-III (within group A) and types IV-VII, VIII-a, VIII-b, IX-XII (within group B).

⁶³ Categories of blades, length of a grip or a hilt, cross-guards' variants, and pommel forms (Pinter 2007, 129-134, Abb. 32).

⁶⁴ Pinter 2007, 67-79, 134-135, Abb. 17-f, 33-c, 33-d, 34-a.

In 2015 Romanian archaeologist Alpár Dobos paid attention to weapons of the (Gepidic) Band- Vereșmort Group of the row-grave cemeteries in Transylvania (Romania), which can be dated from the second third of the 6th century to the middle of the 7th century, as well as to weapons from cemetery 3 in Bratei that is included in the previously referred group. He also presented parts concerning swords and saexes.⁶⁵

The same year Hungarian archaeologist Gergely Csiky⁶⁶ put out a monograph on polearms and edged weapons of the Avar Khaganate in the Carpathian Basin.⁶⁷ He covered parts of this basin that are associated with present-day Romania as well, although only from publications.⁶⁸ Among the weapons he discussed in his monograph he dealt with double-edged and single-edged swords, sabres, and saexes.⁶⁹

Another Romanian archaeologist, Călin Cosma, authored a paper titled “Seventh – Eighth-Century Swords, Sabres, and Backswords Discovered in Transylvania, Maramureș, and the Romanian Banat” in 2018.⁷⁰ He classified all these kinds of thrusting and cutting weapons from the cemeteries and settlements of the Avar Khaganate in these historical regions of Romania.⁷¹ In the year 2020 Călin Cosma in his new monograph narrowed down his geographical focus to Transylvania, but he included all arms (including backswords/palashes, sabres and saexes)⁷², armour and horse harness from the Avar Period.⁷³

The identical year Martin Husár and Silviu Ion Oța, the authors of this article, collected four middle Byzantine period weapons⁷⁴ from the collections of the MNIR in Bucharest and evaluated them in the scientific article in the Romanian journal *Materiale și Cercetări Arheologice* (serie nouă).⁷⁵ Apart from archaeological analogies, we also tried to find relevant iconographical and historical sources in this respect.⁷⁶

An interest of Zeno – Karl Pinter in early medieval swords, in addition to his aforementioned monograph from 2007, is evident from his works after the year 2020. In fact, these works of his are complementary with the works coming from the research of Bulgarian archaeologist Valeri Yotov who followed up on his research in this field from previous years.⁷⁷ Their research was mainly undertaken into swords of the 5th – 6th and 9th – 10th/11th centuries coming from complexes in the territory of Romania and from complexes of some neighbouring regions, especially in Bulgaria, Ukraine, and Serbia. In the years 2021 and 2022 they mutually tried to shed more light on the more or less unclear subject of the Eastern Roman *spathae* from the end of the 5th century to the beginning of the 7th century.⁷⁸ Both archaeologists investigated this issue regarding finds from present-day Serbia, Romania, Bulgaria and Greece.

Zeno - Karl Pinter and Valeri Yotov have recently touched upon the problem of swords with arched sleeve cross-guards of Valeri Yotov’s type Garabonc, which have also been unearthed on the Romanian territory – in Dinogetia/ Garvăn-Bisericuța. Valeri Yotov updated and summarised the available archaeological and iconographical data on the above-mentioned Byzantine type of a sword (in Europe) in 2021 and 2022.⁷⁹ In relation to the six such swords or their parts he declared representations from the 9th to the 10th/the first half of the 11th century.⁸⁰ In 2023 Zeno – Karl Pinter⁸¹ published an scientific article about the previously unknown incomplete sword with cross-guard of

⁶⁵ Dobos 2015a, 211-213; Dobos 2015b, 63-65.

⁶⁶ Currently in the German Academic Exchange Service (DAAD) in Bonn (Germany).

⁶⁷ Csiky 2015.

⁶⁸ Csiky 2015, 64, footnote 289.

⁶⁹ Mainly there: Csiky 2015, 152-291.

⁷⁰ Cosma 2018, 27-48.

⁷¹ Type I – the sword, Type II – the sabre, and Type III – the backsword. The typology of the backswords was further more processed in detail (Cosma 2018, 29-37).

⁷² Cosma 2020, 9-19.

⁷³ Cosma 2020.

⁷⁴ A separate arched sleeve cross-guard of a sword, and three combat pickaxe heads with spear-like blades and blunt butts.

⁷⁵ Husár and Oța 2020, 229-243.

⁷⁶ We have noticed that our findings, drawings and cross-sections of these drawings (which had not yet been published before the year 2020) concerning the separate arched sleeve cross-guard of a sword from house no. 144 in the fortress Dinogetia/ Garvăn-Bisericuța (inventory no. 17339 at the MNIR; Husár and Oța 2020, 229-230, Pl. 1/2a-c) have been used in certain recent articles (Maniotis and Klochko 2023 – 2024, Fig. 10; Yotov 2021c, 138-139, Fig. 6; Yotov 2022a, 158, Fig. 6), although they have not been cited here at all. This also applies (Yotov 2021b, Plate IV/1-2) to the combat pickaxe heads with spear-like blades and blunt butts (Husár and Oța 2020, Pl. 4/1b, 2b, 3b) from the hoards in Dragosloveni (inventory nos. 69469 and 69470 at the MNIR) and Radovanu (inventory no. 102318 at the MNIR). We hereby urge Valeri Yotov, Errikos Maniotias, and Danylo Klochko to respect the publication ethics and intellectual property of others.

⁷⁷ For example: Yotov 2011, 113-124 and Yotov 2017, 153-162.

⁷⁸ Pinter and Yotov 2021a, 61-82; Pinter and Yotov 2021c, 167-181; Yotov 2022b, 93-102.

⁷⁹ Yotov 2021c, 135-149; Yotov 2022a, 153-168.

⁸⁰ Yotov 2021c, 140-144, Fig. 9-15; Yotov 2022a, 160-162, Fig. 9-15.

⁸¹ Pinter 2023, 13-24.

Valeri Yotov's type Garabonc/ Gennadij Valer'evič Baranov's type IA deposited in National Museum of the Union in Alba Iulia (Romania)⁸².

Valeri Yotov and Slovak researcher Michal Viskupič recently treated two solitary finds of thrusting and cutting weapons from Romania as well. These finds have tended to bring up more questions than answers. The finds concern the sword from Sfântu Gheorghe (Covasna County, Romania)⁸³ and the pommel cap from Păcuil lui Soare (Constanța County, Romania)⁸⁴.

In 2023 Michal Viskupič collected 27 specimens of early medieval swords and their parts from the territory of present-day Romania between the 8th and 11th centuries.⁸⁵ His research, which was published online, was based on scientific literature and even consultations with two archaeologists from Romania and Moldova, Erwin Gáll and Ion Tentiuc. The author of this study sought to classify his objects of study on the basis of the established classifications or typo-chronologies of Jan Petersen and Alfred Geibig. The author associated some specimens of the assemblage with historical events or dated them in accordance with their decoration.

In the follow-up sections or chapters of the present article, we cover several shape groups of the discussed early medieval thrusting and cutting weapons and their parts deposited at the MNIR. We do not omit their archaeological context, analogies (in form or in material), or dating. We also further discuss the results of the radiographic and spectrographic analyses of the two aforementioned research objects. The set of eight referred swords, sabres, palashes and their parts can be divided into five groups (Table 1, Fig. 1):

1. Double-edged sword consisting of a tang and a blade;
2. Double-edged sword consisting of a tang, a lower guard, and a blade with a fuller;
3. Cross-guard of a sword consisting of a collar, a quillon, and a sleeve;
4. Single-edged palash with an elman/false edge;
5. Cross-guard of a sabre or a palash with a rhomboid widening in its middle.

2. Double-edged sword consisting of a tang and a blade

The group or category consists of four iron swords equipped with just a tang and a blade (Fig. 2). Their blades are lenticular and their tangs are rectangular in cross-sections. The tangs have got an elongated trapezoidal shape. Their blades lack a fuller or have probably been fitted with a very shallow fuller. The shoulders of blades of most of the specimens are almost perpendicular to their tangs. The only exception is the sword found as a stray find in Vidra (Ilfov County, Romania)⁸⁶. Shoulders of its blade are oblique to its tang or it might be said that the blade's shoulders are rounded (Fig. 2/4a). The blades of swords with inventory numbers 17152 and 18669 at the MNIR have got nearly parallel cutting edges. This almost applies to the other two swords of the same group⁸⁷, but with the difference that their blades visually taper to their tips moderately (the former) or slightly (the latter). The tip of the exemplar from Vidra is rounded now, although it could have previously been acute, like the tips of the remaining discussed double-edged swords. The length of the above-mentioned sword from Vidra is 74.6 cm and the other three referred swords are almost similar in length, i.e. 87.2, 86.5, and 88.45 cm long.

Within this shape group we first turn our attention to parallels and dating of the swords with inventory numbers 17152 and 18669 at the MNIR (Fig. 2/1-2), whose blades have almost parallel cutting edges. As we have already noted above, the dating of the specimen with inventory number 17152 at the MNIR, which most likely comes from grave 70 of the cemetery in Morești-Hulă (Mureș County, Romania), is connected with the dating of the whole aforementioned cemetery. That is the years 500 – 575 or the period from the end of the 5th century/the first third of the 6th century to the second third of the 6th century. The analogies for both aforementioned swords are as follows and on the basis of the typological-chronological analyses of the early medieval swords and the dating of the individual sites they can be assigned to the time frame from the second half of the 3rd century to the 8th century.

⁸² There is only an indirect evidence of the presence of such cross-guard in the upper part of the blade of the incomplete sword under consideration.

⁸³ Yotov 2021b, 189-198.

⁸⁴ Viskupič 2022, 1-9.

⁸⁵ Viskupič 2023, 1-51.

⁸⁶ The sword was discovered as a stray find from an unknown site near the village of Vidra, most likely in 2020 (?). It was subsequently brought to the MNIR (Information from the Museum register of the MNIR).

⁸⁷ The sword with inventory number 84921 at the MNIR and the sword from the stray find in Vidra.

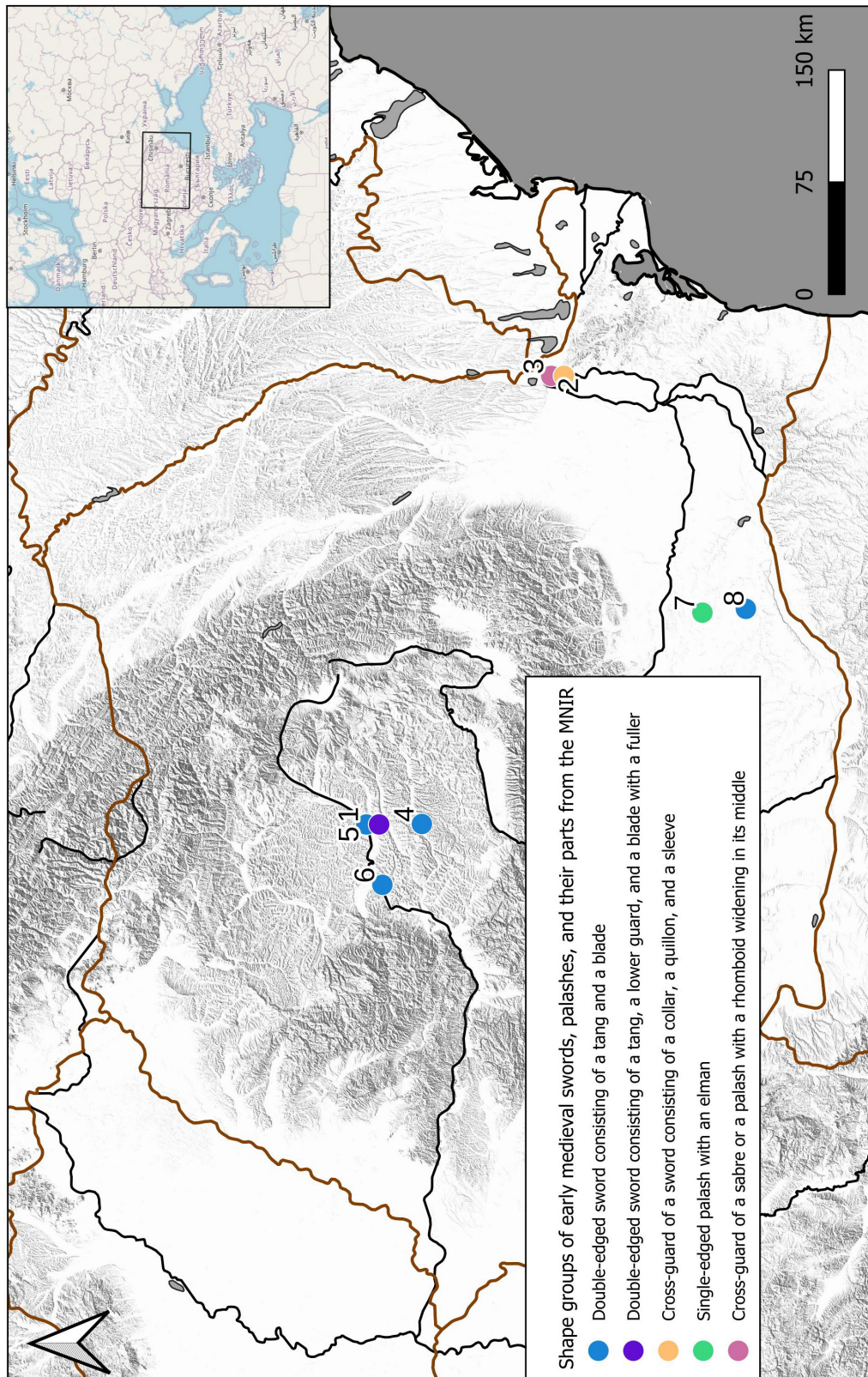


Fig. 1. Map of the sites where early medieval sabres, palashes, swords and their parts were found, which are stored in the National Museum of Romanian History in Bucharest (Romania); author: Martin Husár. 1 – Morești-Hulă (Mureș County, Romania), most likely grave 70, inventory no. 17152 at the MNIR; 2 – Dinogetia/Garvăn-Bisericiuța (Tulcea County, Romania), fortress, house no. 112, inventory no. 17305 at the MNIR; 3 – Dinogetia/Garvăn-Bisericiuța (Tulcea County, Romania), fortress, house no. 144, inventory no. 17339 at the MNIR; 4 – Bratei (Sibiu County, Romania), inventory no. 18669; 5 – Morești-Podei (Mureș County, Romania), inventory no. 54484 at the MNIR; 6 – Noșlac (Alba County, Romania), grave 18, inventory no. 84921 at the MNIR; 7 – Unknown site, Southern Romania (probably the Ilfov County, Romania), stray find, without inventory no. at the MNIR yet; 8 – Vidra (Ilfov County, Romania), stray find, without inventory no. at the MNIR yet. Map sources: ESRI Terrain, Natural Earth (<https://www.naturalearthdata.com/>), QGIS, OpenStreetMap, Marineregions.org.

Table 1. Early medieval sabres, palashes, swords and their parts from the National Museum of Romanian History in Bucharest

Consecutive nos.	Inventory nos. in the MNIR	Site	Archaeological/find context	Illustration	Literature	Measurements of the			
						Total length	Length of the hilt (or just the tang)	Length of the blade	Width of the blade near the tip before the point
1	17152	Morești-Hulă (Mureș County, Romania)	most likely grave 70 of the local cemetery	Fig. 2/1; 8/1	Horedt 1979, 186, 190, 192, Abb. 86: 15	87.2	10.9	76.4	3.4
2	17305	Dinogetia/Garvăn-Bisericuța (Tulcea County, Romania)	fortress, house no. 112	Fig. 7; 8/5	Ștefan et al. 1967, 338, Fig. 182: 24; 184: 20	-	-	-	-
3	17339	Dinogetia/Garvăn-Bisericuța (Tulcea County, Romania)	fortress, house no. 144	Fig. 5; 8/3	Husár – Oța 2020, 229-231, Pl. 1; Ștefan et al. 1953, 248, Fig. 4: 5; Ștefan et al. 1967, 55-57, Fig. 35: 19	-	-	-	-
4	18669	Bratei (Sibiu County, Romania)	unknown	Fig. 2/2	unpublished	86.5	12.7	73.8	3.7
5	54484	Morești-Podei (Mureș County, Romania)	fortified settlement or unknown	Fig. 3-4; 8/2	Dobos et al. 2021, 34, footnote 3 on page 34; Horedt 1957, 307, Abb. 4: 2; Horedt 1984, 49-50, Taf. 11: 8 a-b; Heitel 1994-1995, 435-437, Abb. 19: a-b; Oța – Dragotă – Ducman 2006, 92, Planșa 9. 1-2; Pinter 2007, 38-39, Planșa 17: b, c.	*68.35	10.5	857.85	3.8
6	84921	Noșlac (Alba County, Romania)	local cemetery, grave 17	Fig. 2/3	Dobos 2018, Fig. 2: 7; 9; Dobos 2019, Fig. 6: 13	88.45	11.45	77	3.25
7	without inventory number	Unknown site, Southern Romania (probably the Ilfov County, Romania)	stray find	Fig. 6; 8/4	unpublished	77	8.8	68	2.85
8	without inventory number	Vidra (Ilfov County, Romania)	stray find	Fig. 2/4	unpublished	74.6	8.63	65.97	2.2

* - incomplete part of the sabre/palash/sword or its part and therefore its incomplete measurement as well.

(Romania; authors: Martin Husár and Silviu Ion Oța).

sabres/palashes/swords or their parts (cm)							Suggested dating according to the authors of the article	Classification groups according to the authors of the article
Width of the blade below the (lower) guard or shoulders of the tang	Blade thickness at the same locations as the width measures	Length of the (lower) guard	Height of the (lower) guard at its ends	Height of the (lower) guard at its middle	Thickness of the (lower) guard at the same locations as the height measures	Weight of the sabres/palashes/swords or their parts (kg)		
4.65	0.35, 0.45	-	-	-	-	0.623	500 – 575 or from the end of the 5th century/the first third of the 6th century to the second third of the 6th century	Double-edged sword consisting of a tang and a blade
-	-	8.25	0.3, 0.4	2.05	0.65, 2.5, 0.7	0.04142	the second half of the 11th century	Cross-guard of a sabre or a palash with a rhomboid widening in its middle
-	-	8.5	-	10.6	-	0.06975	the second half of the 11th century	Cross-guard of a sword consisting of a collar, a quillon, and a sleeve
4.75	0.45, 0.5	-	-	-	-	0.514	the second half of the 3rd century – the 8th century	Double-edged sword consisting of a tang and a blade
5.55	0.3, 0.5	9.5	1.4, 1.6	1.55	0.25, 2.3, 0.25	0.762	the second half of the 8th century – the middle of the 10th century	Double-edged sword consisting of a tang, a lower guard, and a blade with a fuller
5.85	0.35, 0.55	-	-	-	-	0.660	the last third of the 6th century – the beginning of the 7th century	Double-edged sword consisting of a tang and a blade
3.65	0.4, 0.65	-	-	-	-	0.439	the 9th – 10th centuries	Single-edged palash with an elman
3.33	0.36, 0.51	-	-	-	-	0.4356	the last quarter of the 5th century – the 7th/8th century	Double-edged sword consisting of a tang and a blade

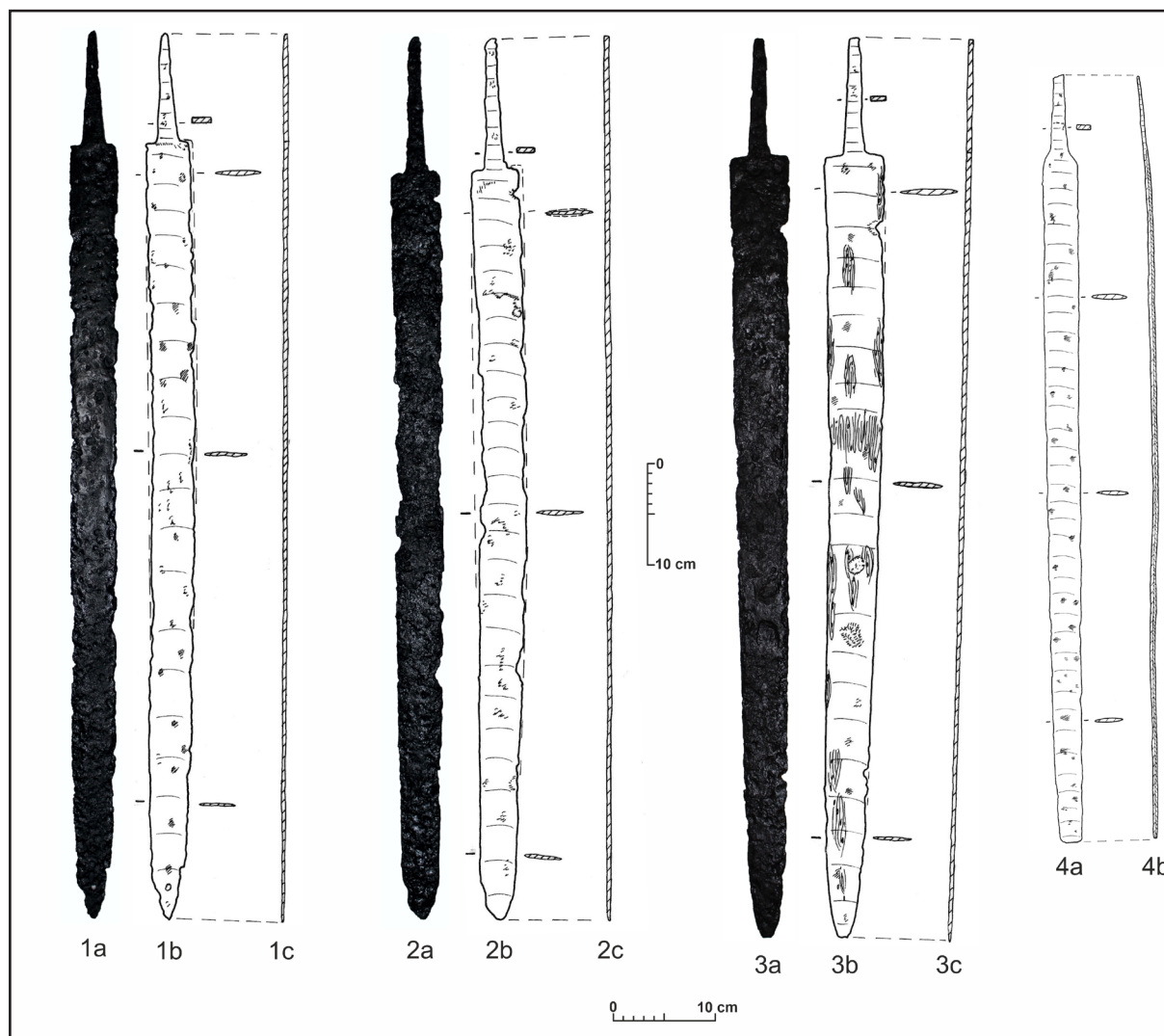


Fig. 2. Early medieval double-edged sword consisting of a tang and a blade from the National Museum of Romanian History in Bucharest (Romania). 1 – Morești-Hulă (Mureș County, Romania), most likely grave 70 – inventory no. 17152; 2 – unknown site in Bratei (Sibiu County, Romania) – inventory no. 18669; 3 – Noșlac (Alba County, Romania), grave 17 – inventory no. 84921; 4 – stray find from Vidra (Ilfov County, Romania) – without inventory no. 1b-c, 2b-c, 3b-c, 4a-b – drawings by Georgiana Ducman; 1a, 2a, 3a – photographs by Martin Husár. 1-4 – iron. Scale: 1-4.

The origins of this kind of double-edged swords or *spathae*⁸⁸ might be already traced in the Roman Empire and contemporary Barbaricum⁸⁹ during the turbulent era from the second half of the 3rd century to the 5th century.⁹⁰ German archaeologist Christian Miks designated this form as type Illerup-Wyhl, tendency Illerup C.⁹¹ Then the continuation of *spathae* with almost parallel cutting edges into the Early Middle Ages was proved for the 5th – 7th century Germans by German archaeologist Wilfried Menghin in 1983⁹² or for the Eastern Roman Empire in the Early Byzantine Period (395 – 641) by German archaeologist Dieter Quast in 2012⁹³. Moreover, German archaeologist Alfred Geibig observed that this type of double-edged blades of swords – his “Klingentyp 1” (blade type 1)⁹⁴ – had been used on the territory of the former Federal Republic of Germany even before the 7th century and

⁸⁸ They have almost parallel edged blades with mostly lenticular cross-sections (besides other sorts of cross-sections) and their blades’ shoulders are horizontally connected to tangs. The lengths of blades are between 62 and 85.2 cm.

⁸⁹ Up to the steppes of Eastern Europe and Central Asia in the 5th century (Pletneva ed. 1981, 109, Ris. 5/3; Pletneva 2003, 179, Ris. 3).

⁹⁰ Miks 2007a, 99-103; Miks 2007b, Vortafel B, D; Weller et al. 2020, 151-152.

⁹¹ Miks 2007a, 99.

⁹² Menghin 1983, 16.

⁹³ For example, the hoard from Jerusalem-Mamilla (present-day Israel; Quast 2012, 351, 362, Abb. 9/2).

⁹⁴ Blades without a fuller or with a very shallow fuller. Their lengths were generally between 70 and 80 cm, albeit some exemplars were less than 70 cm long.

then up to the year 800.⁹⁵ Danish archaeologist Anne Nørgård Jørgensen classified same early medieval spathae as “Spathen ohne erhaltene metallene Griffstangen oder Knauf, SP”⁹⁶ Also based on primary contexts, she dated them in the area of present-day Denmark, Sweden and Norway to the 6th – 8th centuries.⁹⁷ Such swords can be identified in the cemeteries of the Avar Khaganate in the Carpathian Basin during the Early Avar Period too. Hungarian archaeologist Gergely Csiky lists 35 of them in his type “Double-edged swords with lenticular section (E.I.B.)”, namely in variant E.I.B./1.a that were not equipped with (inorganic) cross-guards.⁹⁸ Alpár Dobos also noticed them on the (Gepidic) row-grave cemeteries of Transylvania during the Early Avar Period.⁹⁹

The sword (Fig. 2/3) from grave 17 at the cemetery of Noșlac (Alba County, Romania; inventory number 84921 at the MNIR), whose blade tapers to its tip quite moderately could be dated (according to the horizontal stratigraphy of the cemetery) to the last third of the 6th century – the beginning of the 7th century. Its analogies are, with one exception, more or less identical to those of the two sword specimens evaluated above (inventory numbers 17152 and 18669 in MNIR). The roots of this shape might have been in spathae of Christian Miks’ type Straubing-Nydam¹⁰⁰, tendency/variant Einang, although their blades¹⁰¹ are fitted with two fullers and at the same time are lenticular. This tendency or variant was probably used between the middle of the first half of the 3rd century and the first third of the 4th century.¹⁰²

The sword from the stray find found in Vidra (Ilfov County, Romania; Fig. 2/4) is shorter than the other specimens from the discussed group and shoulders of its blade are oblique to the tang. Its parallels can be specified from the last quarter of the 5th century to the 7th or 8th century following the typo-chronologies or the dating of the particular sites or contexts. They come from the Carpathian Basin, specifically from the Lombard milieu before the Avar arrival in this area in 567/568¹⁰³ and from the Gepidic milieu before as well as after this arrival¹⁰⁴. The referred arms were quite often unearthed there in funerary contexts. The shape affinity of the specimen from Vidra with the above-mentioned “Klingentyp 1” of Alfred Geibig can be acknowledged as well. In the end, similar exemplar to the examined one was discovered on the steppes of Central Asia and present-day Kazakhstan and was even dated to the 8th or 9th century.¹⁰⁵

3. Double-edged sword consisting of a tang, a lower guard, and a blade with a fuller

The specimen, which originates in the fortified settlement of Morești-Podei (Mureș County, Romania; inventory number 54484 at the MNIR) or its place of discovery is other or unknown, is the content of the second referred group (Fig. 3). It was brought to the MNIR from the National Museum of Transylvanian History (Cluj-Napoca)¹⁰⁶ in 1974.¹⁰⁷

The iron sword¹⁰⁸ is fitted with a lower guard¹⁰⁹, which has got the lenticular ground plan and is straight with rounded ends from the front, and a gently tapering double-edged blade with a fuller on its both sides. The sword

⁹⁵ Geibig 1991, 85, 153, Abb. 40; Peirce at al. 2002, 21-22.

⁹⁶ “Spathae without a grip or a pommel, SP” in English.

⁹⁷ On Bornholm – circa 550 – circa 650, on Gotland – 520/530 – circa 800, and in Norway – 560/570 – 740/750 (Jørgensen 1999, 70, Abb. 106, 111, 115).

⁹⁸ Csiky 2015, 167-168, 299-301, Fig. 61/1-2.

⁹⁹ Dobos 2015b, 63-64, Fig. 2/2-5.

¹⁰⁰ Within the typo-chronology for the Roman Empire and contemporary Barbaricum.

¹⁰¹ Length of their blades are between 67 and 76 cm.

¹⁰² Miks 2007a, 85-86, 121; Miks 2007b, Vortafel B-C; Weller et al. 2020, 148-149.

¹⁰³ It concerns a minority of specimens of Hungarian archaeologist Noémi Ninetta Keresztes’ type II swords (with simple blades without a fuller) from the Lombard milieu, namely from the cemetery of Hegykő (grave 1 dated to the chronological group C in the cemetery, i.e. to the second half/second third of the 6th century – Keresztes 2015, 473; Koncz 2014, 84, 3. kép; graves 30 and 33 dated to the chronological group D in the cemetery, i.e. to the middle/second half of the 6th century – Keresztes 2015, 473, 4. kép 1; Koncz 2014, 84, 3. kép) and Várpalota-Unio-Homokbánya (grave 25; blade of this sword is only 49.25 cm long; the Lombard phase of the cemetery is dateable from 536 to 550s – Bóna 1956, 190, Taf. XXXIX/1; Bóna 2000, 154) in present-day Hungary.

¹⁰⁴ A list of the graves and a stray find that are involved: grave 57 from the Szentes-Kökényzug cemetery (sword’s blade is 55.6 cm long; the grave was dated to 480 – 568 – Csallány 1961, 333, Taf. XIX/1), grave from the Szőreg-Ziegelei “A” cemetery (sword’s blade is 68.8 cm long; the grave was dated to 500 – 600 – Csallány 1961, 333, Taf. CLXXXIII/3), graves 1 and 7 from the Hódmezővásárhely-Kishomok cemetery (swords’ blades are 71.6 and 70.4 cm long; the graves were dated to 534 – 679 – Csallány 1961, 330, Taf. CCXXII/1-2), and a stray find from Srijemska Mitrovica (sword’s blade is 67.5 cm long; the stray find was dated to 472 – 568 – Csallány 1961, 332, Taf. CCLXXV/5).

¹⁰⁵ The sword is 91.3 cm long (Pletneva ed. 1981, 124, Ris. 20/30).

¹⁰⁶ The History Museum of Cluj in that time.

¹⁰⁷ Information from the Museum register of the MNIR.

¹⁰⁸ It is 68.35 cm long and the length of its hilt is 10.5 cm.

¹⁰⁹ The lower guard is 9.5 cm long.

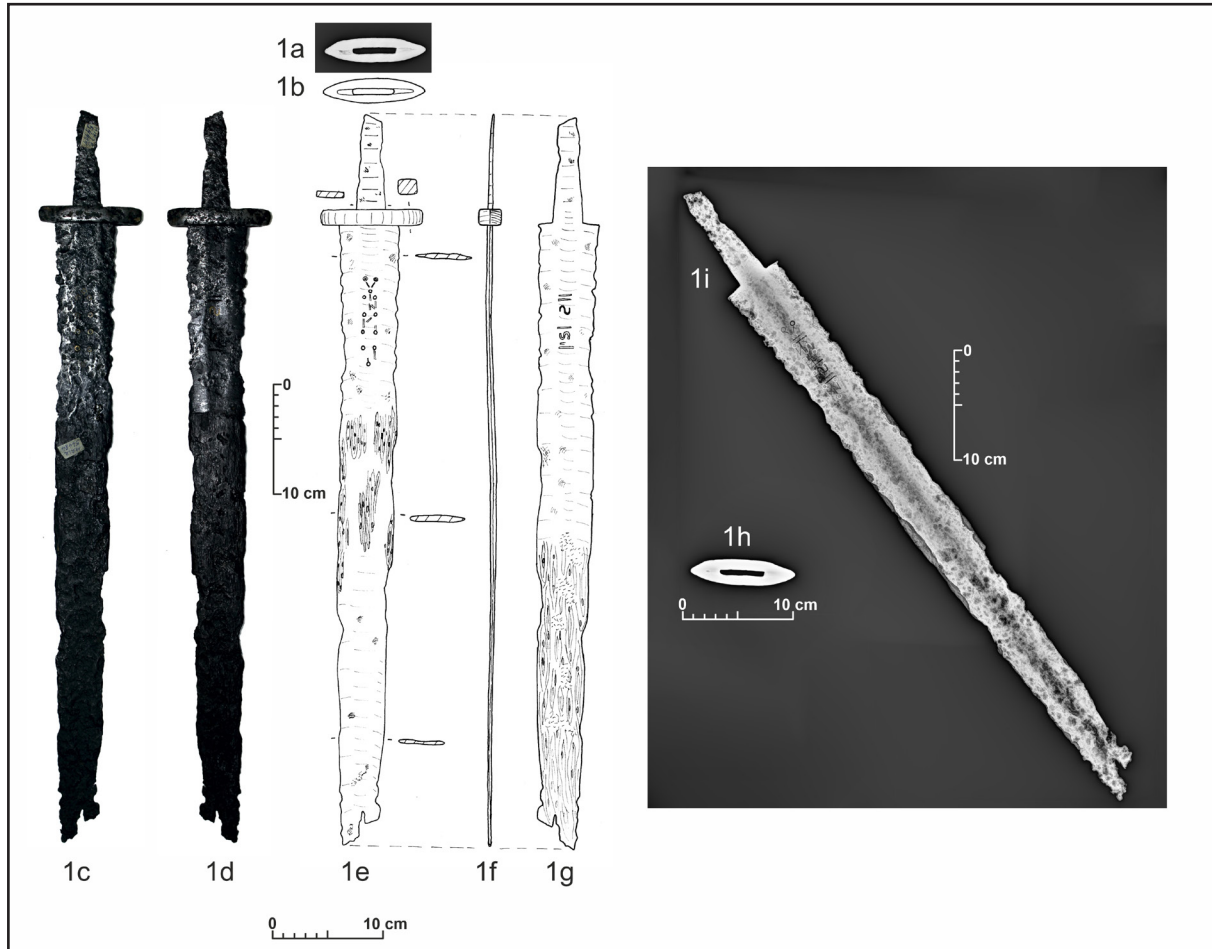


Fig. 3. Early medieval double-edged sword consisting of a tang, a lower guard, and a blade with a fuller from an unknown site in Morești-Podei (Mureș County, Romania) – inventory number 54484 at the National Museum of Romanian History in Bucharest (Romania). 1a – X-ray image at 120 kV energy threshold by Laurențiu-Marian Angheluță (after Angheluță 2024); 1b, e-g – drawings by Georgiana Ducman; 1c-d – photographs by Martin Husár; 1h-i – X-ray image at 80 kV energy threshold by Laurențiu-Marian Angheluță (after Angheluță 2024). 1a-b, h – iron; 1c-g, i – iron, copper, brass. Scale: 1a-i.

is markedly corroded (mainly the lower two thirds of the blade) and its upper guard and pommel are missing completely. On the lower two thirds of the blade, there are most likely traces of wood from a scabbard.¹¹⁰ During conservation, the upper third of the blade, lower guard and tang were most likely whetted or polished for a better presentation of the sword.

The surface of the both sides of the blade, in its upper third (under the lower guard) and in its fullers, is engraved and inlaid with brass and copper (Table 2, Fig. 3/1c-e, g, i; 4).¹¹¹ 12 circular engravings¹¹² can be observed in the fuller and on its periphery on the surface of the one side of the sword blade. They are connected by engraved lines, which were filled by brass.¹¹³ These connecting lines are preserved partially – mostly in the upper and lower parts of this decoration composition (Fig. 4/1a, c). X-ray images of this decoration inlay revealed that besides the central vertical line there are other ones in the form of the Latin letter V (in the uppermost part) and the reversed Latin letter M (four times in the middle and lower parts; Fig. 4/1b, d).¹¹⁴ 10 of the 12 aforementioned circular engravings and very short parts of some connecting lines are still filled with brass.

On the other side of the blade, namely in the fuller, there were engraved seven¹¹⁵ relatively short lines¹¹⁶ and two lines in the form of the Latin letter S and the reversed Latin letter S (Fig. 4/1b, f). Just the four short lines and both

¹¹⁰ Oța et al. 2006, 92.

¹¹¹ Niculescu 2024a.

¹¹² Diameter: 0.5 cm, width: 0.15 cm.

¹¹³ Probe R3535 of Gheorghe Niculescu recorded 69.01% of iron, 27.42% of copper, 3.50% of zinc there (Niculescu 2024a). Angheluță 2024.

¹¹⁴ Based on radiography published in: Angheluță 2024 and Heitel 1994-1995, 436, Abb. 19/a-b.

¹¹⁶ In the order 2 – 3 – 2 (Heitel 1994-1995, Abb. 19: a-b). Their lengths are circa 1.35 cm and widths 0.15 cm.

Latin letters S are visible with the naked eye and just one engraving in the form of the reversed Latin letter S remained most likely inlaid with copper (Fig. 4/1a, e).¹¹⁷ Some encrusting by some non-ferrous metal containing zinc can probably be noticed on the surface of the lower guard too.¹¹⁸

Analogies¹¹⁹ for the sword from Morești-Podei under study can mainly be seen in some typological-chronological schemes, which are also based on the dating of particular sites¹²⁰. The blade (with fullers) of the sword from Morești-Podei might be compared to Alfred Geibig's blade types 2 ("Klingentyp 2") or 3 ("Klingentyp 3") that were dated on the territory of the former Federal Republic of Germany circa to the years 750 – 950 ("Klingentyp 2") and 780 – 980 ("Klingentyp 3").¹²¹

The lower guard of the discussed sword, which has got the lenticular ground plan and is straight with rounded ends from

¹¹⁷ Probe R3534 of Gheorghe Niculescu identified 96.89% of iron and 2.94% of copper here (Niculescu 2024a).
¹¹⁸ One of the probes (R3532 and R3533) of Gheorghe Niculescu into the front part of the cross-guard, namely probe R3532, recognised, among other chemical elements, 96.65% of iron and 3.08% of zinc there (Niculescu 2024a).
¹¹⁹ Between the middle of the 8th and the middle of the 10th century.
¹²⁰ From the German milieu of Central and Northern Europe.
¹²¹ Geibig 1991, 85-86, Abb. 40; Peirce et al. 2002, 21-23.

Table 2. Chemical composition of parts of the early medieval thrusting and cutting weapons from the National Museum of Romanian History in Bucharest (Romania) according to the quantitative XRF analyses of Gheorghe Niculescu. (X-Ray Investigation Department, Section of the Physical-Chemical and Biological Investigations of the National Museum of Romanian History in Bucharest), dated the 7th (Niculescu 2024a) and 26th of March (Niculescu 2024b) 2024.

Consecutive no.	Inventory no. in the MNIR	Site	Archaeological/ find context	No. of the selected probe of the quanti- tative XRF analysis	Location of the selected probe of the quantitative XRF analysis	Chemical composition of the mace heads (%)							
						Cu	Fe	Zn	As	Sn	Sb	Pb	Other chemical elements
1	17305	Dinogetia/Garvăn-Biserița (Tulcea County, Romania)	fortress, house no. 112	R3729	the front part of the cross-guard	91.75 +/-	0.98 +/-	0.24 +/-	0.26 +/-	4.86 +/-	0.24 +/-	1.47 +/-	circa 0.2 +/- 0.01
						0.11	0.01	0.01	0.01	0.05	0.03	0.03	
	17305	Dinogetia/Garvăn-Biserița (Tulcea County, Romania)	fortress, house no. 112	R3730	the internal part of the cross-guard	92.17 +/-	0.90 +/-	0.21 +/-	0.21 +/-	4.46 +/-	0.21 +/-	1.63 +/-	circa 0.19 +/- 0.02
						0.11	0.01	0.01	0.01	0.05	0.03	0.03	
2	54484	Morești-Podei (Mureș Coun- ty, Romania)	fortified settlement or unknown	R3532	the front part of the cross-guard (one side)	0.10 +/-	96.65 +/-	3.08 +/-	0.12 +/-	0	0	0	circa 0.05 +/- 0.01
						0.01	0.16	0.02	0.02				
	54484	Morești-Podei (Mureș Coun- ty, Romania)	fortified settlement or unknown	R3533	the front part of the cross-guard (the other side)	0.12 +/-	99.57 +/-	trac- es	0	0.01 +/-	0	trac- es	circa 0.30 +/- 0.02
						0.01	0.15						
	54484	Morești-Podei (Mureș Coun- ty, Romania)	fortified settlement or unknown	R3534	engravings of the lines and the letters S	2.94 +/-	96.89 +/-	0.06 +/-	0	0.02 +/-	0	0	circa 0.09 +/- 0.02
						0.04	0.15	0.01	0.02				
54484		Morești-Podei (Mureș Coun- ty, Romania)	fortified settlement or unknown	R3535	circular engrav- ings with connect- ing engraved lines	27.42 +/-	69.01 +/-	3.50 +/-	0	0	0	0	circa 0.07 +/- 0.01
						0.11	0.14	0.02					

the front, can be found within Alfred Geibig's "Kombinationstyp 6" and "Kombinationstyp 11" (combination types 6 and 11) that belong to approximately the years 790 – 890 (combination type 6) and 900 – 950 (combination type 11).¹²²

Some types and special types of Jan Petersen's typology (made principally for the area of the present-day Norway) of sword hilts have got or may have lower guards with lenticular ground plan and are or may be straight with rounded ends from the front (special type 1, types E, H, I, K, O-3, U, and V). These types are dateable to the time span from the second half of the 8th century to about the middle of the 10th century.¹²³

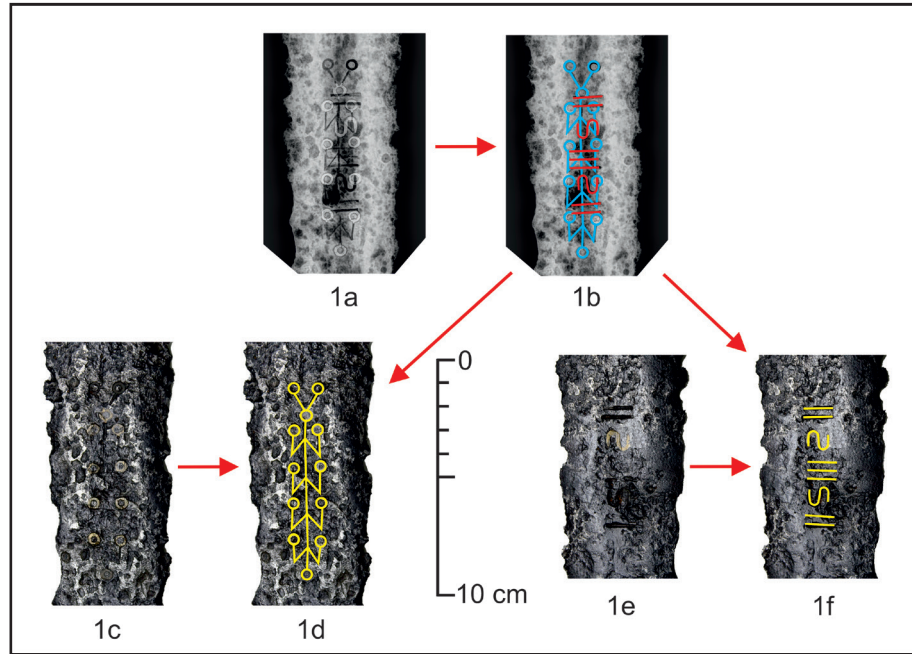


Fig. 4. Early medieval double-edged sword from an unknown site in Morești-Podei (Mureș County, Romania), details of the blade's decorations – inventory number 54484 at the National Museum of Romanian History in Bucharest (Romania). 1a-b – X-ray image at 120 kV energy threshold by Laurențiu-Marian Angheluță (after Angheluță 2024); 1c-f – photographs by Martin Husár. 1b, d, f – the most probable forms of the former decorative inlays identified by Martin Husár and Silviu Ion Oța following the radiographic analysis made by Laurențiu-Marian Angheluță (Angheluță 2024). 1a-f – iron, copper, brass. Scale: 1a-f.

The elements of the aforementioned decoration of the one side of the sword blade, which consists of vertical bars or the Latin letter S, can be found in decoration inlays upon the various early medieval swords from Europe.¹²⁴ Nevertheless, we miss an exact analogy for the decoration of the referred sword. Zeno – Karl Pinter suggested that the mentioned decoration can be related to the repeated combination of the victorial runes I and S (together "Ich siege"). The same author connected the 12 inlaid circular engravings with the rune othala, a symbol of property, or with the eye of god Odin. The rune t (in the form of an arrow), the symbol of god Tyr, could be seen, inter alia, among the engraved connecting lines on the sword blade.¹²⁵

4. Cross-guard of a sword consisting of a collar, a quillon, and a sleeve

The item with inventory number 17339 at the MNIR is the only one object that is linked to this group (Fig. 5). As already mentioned, it was found in the fortress of Dinogetia/Garvăn-Bisericuța (Tulcea County, Romania). The cross-guard was transferred from the "Vasile Pârvan" Institute of Archaeology to the MNIR in 1971.¹²⁶ We already dealt with this cross-guard back in 2020¹²⁷ and after four years, we may provide further updates in this matter.

The examined remnant of a separate sleeve cross-guard of a sword (Fig. 5), made of iron, is hollow and comprises a quillon, an incomplete arched sleeve, and a collar.¹²⁸ Most likely, there was some kind of rim on the inner edge of the above-mentioned arch (Fig. 5/1h). The photograph from 1967 reveals that there was probably some projecting circular area, namely between the middle of the arch's crown and the middle of the quillon. Two pairs of racetrack-shaped (?) openings¹²⁹ might originally be seen on the collar (oval in cross-section). The upper section of the collar

¹²² Geibig 1991, 44-47, 54-46, Abb. 7; 12; 39.

¹²³ Košta 2015, 237-239, obr. 2-3; Peirce et al. 2002, 15-20; Petersen 1919, 54-221, Fig. 51-138.

¹²⁴ Moilanen 2015, 168-171.

¹²⁵ Pinter 2007, 39.

¹²⁶ Information from the Museum register of the MNIR.

¹²⁷ Husár and Oța 2020, 229-231.

¹²⁸ Height: 10.6 cm; length: 8.5 cm.

¹²⁹ 1.5 x 0.5 cm and 1.35 x 0.45 cm,



Fig. 5. Early medieval cross-guard of a sword consisting of a collar, a quillon, and a sleeve from house no. 144 of the fortress of Dinogetia/Garvân-Bisericuța (Tulcea County, Romania) – inventory number 17339 from the National Museum of Romanian History in Bucharest (Romania). 1a, e-g, i, j – photographs by Martin Husár from the year 2018; 1b-d – drawings by Martin Husár from the year 2018; 1h – photograph from the year 1967 (Ștefan et al. 1967, Fig. 35/19). 1a-j – iron. Scale: 1a-j.

was previously constructed with a concave curvature on both sides.¹³⁰ The quillon has a markedly convex upper side and a concave lower side, with a hollow central portion. It is designed to bend towards the blade of the sword, while the ends of the quillon are pointed.

The analogies¹³¹ for this (Byzantine) sleeve cross-guard, found in the archaeological complexes and iconographical sources, were formerly dated to the second half of the 8th century – 9th century or even up to the beginning of the 11th century by Gennadij Valer’evič Baranov in 2017, or to the 9th – 10th centuries by Valeri Yotov in the same year.¹³² The dating up to the 11th century, or possibly to its second half, was also supported by the publication of the find from the Dinogetia fortress (the Byzantine Empire) in 2020 by us.¹³³ Recently, the idea of the continuation of this kind of a cross-guard up to the 11th century has probably been proved by its other Byzantine iconographical representations published by Valeri Yotov in 2021¹³⁴ as well as 2022¹³⁵.

¹³⁰ I was still visible in 1953 and 1967 (Ștefan et al. 1953, Fig. 4/5; Ștefan et al. 1967, Fig. 35/19).

¹³¹ Specimens of Type IA of Gennadij Valer’evič Baranov or the Garabonc type of Valeri Yotov.

¹³² For literature of the quoted archaeologists, see: Husár and Oța 2020, 230.

¹³³ Husár and Oța 2020, 229-231, 235, Pl. 1-3.

¹³⁴ Yotov 2021c, 143-144, Fig. 13-15.

¹³⁵ Yotov 2022a, 162, Fig. 13-15.

In relation to the spatial distribution of Baranov's type IA, we may point out that since our last article in the matter (in 2020)¹³⁶ of this form of a cross-guard or swords with this form of a cross-guard, two previously unknown specimens have been found and published. The first one was revealed in the National Museum of the Union in Alba Iulia (Romania) and it is a sword with inventory number D 4723. It lacks a place of its discovery and archaeological context.¹³⁷ There are two negative impressions on the upper part of the sword's blade (below the shoulders of the tang).¹³⁸ It concerns the piers of the former arched sleeve of the sword's cross-guard. In his article, Zeno-Karl Pinter dated Yotov's type Garabonc/Baranov's type IA to the 9th – 10th centuries.¹³⁹ Another sword with the discussed cross-guard comes from the territory of the Byzantine Empire, Zekio (the Peloponnese, Greece), and it was dated to the first half of the 10th century.¹⁴⁰

Considering all of the above, we record eight exemplars from the territory of Central Europe two pieces), Southeastern Europe (one piece), Southern Europe (one piece), the Northern Black Sea Region (three pieces), and probably from the territory of present-day Iran (maybe one piece from Iran) as well.¹⁴¹ Two of them (from Dinogetia and Zekio) were directly unearthed within the borders of the former Byzantine Empire.

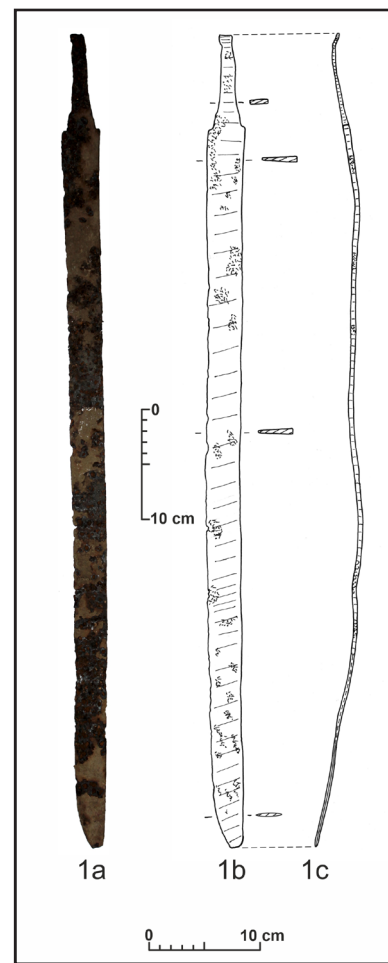
5. Single-edged palash with an elman/false edge

The category is made up of one stray find of an iron palash from the MNIR that is still placed there without an inventory number (Fig. 6). It originates in the unknown place in Southern Romania (probably within the Ilfov County) and was received by the MNIR in the year 2018.¹⁴²

The damaged single-edged palash comprises only a blade and a tang.¹⁴³ It is corroded and wavy in profile. Its blade has got an elman/false edge¹⁴⁴ at its spine. This elman is 17.5 cm long since the point/tip of the palash. The tip of the palash, which is now broken off, was formed by the tapering of the blade from the side of its cutting edge. The most of the blade has got a triangular cross-section, although its elman is naturally lenticular in cross-section. It should be noted that the blade is lightly concavely curved from the side of the cutting edge. The shoulders of the blade are perpendicular to the tang whose upper half is tapering. The tang is rectangular in cross-section.

Most of parallels¹⁴⁵ of the aforementioned palash might be dated to the 9th – 10th centuries following archaeological contexts¹⁴⁶ in the Balkans as well as Central and Eastern Europe. The form parallels in these parts of Europe are related to the so called “Bulgarian-type sabres” or the Middle Byzantine paramerions (παράμηρια in Greek). These palashes with more or less straight single-edged blades had an elman and an approximate length of about 80 cm (+/- 5 cm).

Fig. 6. Early medieval single-edged palash with an elman/false edge from an unknown site in Southern Romania or the Ilfov County (Romania) – without inventory no. from the National Museum of Romanian History in Bucharest (Romania). 1a – photograph by Martin Husár; 1b-c – drawings by Georgiana Ducman supplemented by Martin Husár's drawings. 1a-c – iron. Scale: 1a-c.



¹³⁶ Husár and Oța 2020, 229-231, 235, Pl. 1-3.

¹³⁷ Pinter 2023, 13.

¹³⁸ Pinter 2023, Pl. I/a-b; II/a.

¹³⁹ Pinter 2023, 13.

¹⁴⁰ Cited after Vlasatý 2023, 12.

¹⁴¹ Vlasatý 2023, Map 2. Tomáš Vlasatý classified cross-guards of the Garabonc type/Type IA as variant 5 of the cross-guards of the Byzantine double-edged swords, palashes and sabres of the 9th – 10th centuries (Vlasatý 2023, 10).

¹⁴² Information from the Museum register of the MNIR.

¹⁴³ Total length: 77 cm; length of the tang: 8.8 cm; width of the blade below the shoulders of the tang: 3.65 cm.

¹⁴⁴ A double-edged part of a palash or a sabre.

¹⁴⁵ In relation to the blade and the tang of the discussed palash from the MNIR.

¹⁴⁶ Including cemeteries and settlements.

In 2018 Stoyan Popov¹⁴⁷ summarised that he, Valeri Yotov¹⁴⁸ and Milen Petrov and Nikolaj Hrisimov gave an opinion that the “Bulgarian Type” sabres had been of the Bulgarian¹⁴⁹ origins with a significant influence of the Byzantine Empire in regard their cross-guards and hilts or grips¹⁵⁰. Milen Petrov and Nikolaj Hrisimov¹⁵¹ assumed that the Byzantine primary sources used for this kind of weapons the term παραμήριον (pl. παραμήρια).¹⁵² Gennadij Valer’evič Baranov acknowledge that, albeit he took them as Byzantine artefacts, namely the Byzantine paramerions.¹⁵³

The “Bulgarian-type sabres”¹⁵⁴ were usually equipped by specific iron cross-guards or quillons, whereas the referred specimen from the MNIR lacks this feature. There are two kinds of these cross-guards: the lenticular (from the front) iron cross-guards/quillons terminated by rounded flat ends (Valeri Yotov’s type 2 and variant B)¹⁵⁵ and iron cross-guards with collars and terminated by rounded flat ends (Valeri Yotov’s type 2 and variant A)¹⁵⁶. Even though Valeri Yotov approximately dated type 2 and variants A and B from the end of the 9th century to the beginning of the 10th century, he also associated his variant B with the 11th century.¹⁵⁷

The authors of this study incline more to the above-mentioned opinion of Gennadij Valer’evič Baranov that examined kind of palashes were the Byzantine paramerions of the 9th – 10th centuries¹⁵⁸ and it might be stated with reference to written and iconographical sources as well. This scholar¹⁵⁹ remarked that references to this kind of a weapon might in particular be found in three Byzantine military treatises: the *Praecepta Militaria*¹⁶⁰, the *Sylloge Tacticorum*¹⁶¹, and the *Taktika* of Leo VI¹⁶².

A few years ago, French scholar Thomas Salmon did research into the paramerion (mostly) in the primary literary and iconographical sources of the Early and Middle Byzantine Periods too. He¹⁶³ tracked down that this cutting weapon could have been single-edged (relatively) long knives or short swords in the Early Byzantine Period and then, during the Middle Byzantine Period,¹⁶⁴ quite long (and straight) single-edged swords¹⁶⁵. Thomas Salmon appended that it remains a serious issue to link the term paramerion with archaeological material.

¹⁴⁷ Popov 2018, 34-35.

¹⁴⁸ Yotov 2004, 63-65; Yotov 2010, 217-225. In 2010, Recently, Valeri Yotov admitted either the Bulgarian or the Byzantine origin of the “Bulgarian-type sabres” (Yotov 2021a, 172).

¹⁴⁹ In our view, this was exactly observed just for Milen Petrov and Nikolaj Hrisimov’s group III (Petrov and Hrisimov 2015, 347).

¹⁵⁰ Popov 2018, 34.

¹⁵¹ In their study the above-mentioned authors singled out two groups of iron single-edged weapons that resemble the referred palash from the MNIR: palashes of Milen Petrov and Nikolaj Hrisimov’s groups II and III (from present-day Bulgaria) with an elman. Group II (with cross-guards of Valeri Yotov’s type 2 and variant B) was dated as early as the middle of the 7th century and was also used later (Petrov and Hrisimov 2015, 343-344) and group III (with cross-guards of Valeri Yotov’s type 2 and variant A) was mainly dated to the 9th – 10th centuries (Petrov and Hrisimov 2015, 344-348).

¹⁵² Petrov and Hrisimov 2015, 350, 358.

¹⁵³ Baranov 2016, 81-82, 100; Popov 2018, 34-35.

¹⁵⁴ This kind of thrusting and cutting weapons was dated to the late 9th century – the 10th century by Valeri Yotov (Yotov 2021a, 172). The dating is also supported by the dating of two settlements (Razgrad, the 9th – 11th centuries; Batovo, the 9th – 10th centuries), in addition to finds from unknown archaeological complexes (Yotov 2004, Katalog – 449-452).

¹⁵⁵ Yotov 2004, 69, Tablica 9-10; Yotov 2021a, 168, Fig. 6/B. Tomáš Vlasatý saw them as his variant 1 of the Byzantine cross-guards of the Byzantine double-edged swords, palashes and sabres of the 9th – 10th centuries (Vlasatý 2023, 9-10, Map 2).

¹⁵⁶ Yotov 2004, 69, Tablica 9-10; Yotov 2021a, 168, Fig. 5; 6/A. Tomáš Vlasatý took them as his variant 2 of the Byzantine cross-guards of the Byzantine double-edged swords, palashes and sabres of the 9th – 10th centuries (Vlasatý 2023, 10, Map 2).

¹⁵⁷ Yotov 2004, 69, Tablica 9. This dating is mainly based on the dating of particular fortresses or settlements (Yotov 2004, Katalog – 464-477).

¹⁵⁸ Baranov 2016, 79-82.

¹⁵⁹ Baranov 2016, 79-80.

¹⁶⁰ The treatise might be dated to circa the year 965 (McGeer ed. 1995, vii).

¹⁶¹ It is highly assumed to date this treatise between the years 920 and 944, during the reign of Byzantine Emperor Romanos I Lekapenos (Chatzelis and Harris eds. 2017, 6-7).

¹⁶² The treatise was finished sometime in the early 10th century (Chatzelis and Harris eds. 2017, 4).

¹⁶³ Salmon 2020, 12.

¹⁶⁴ The particular passage (*Sylloge Tacticorum* XXXVIII, 5 – Chatzelis and Harris eds. 2017, 53) from the Middle Byzantine *Sylloge Tacticorum* was incorrectly translated from Greek to English and one might think that paramerions could also have been double-edged swords attached to the waist belts of the Byzantine heavy infantry (according to the Romans). In 2020 Thomas Salmon corrected this passage and indicated that the infantry in question used to fix single-edged swords, i.e. paramerions, to their waist belts (Salmon 2020, 10, footnote 5).

¹⁶⁵ The continuation of such paramerions into the 11th century may be indicated by their mention in the written source *Taktika* of Nikephoros Ouranos, or even by the possible depiction (its cross-guard reminds us cross-guards of Valeri Yotov’s type 2 and variant B) of one of them on the steatite icon of St George from the Vatopedi Monastery in present-day Greece (Chatzelis and Harris eds. 2017, 127, footnote 165; McGeer eds. 1995, vii; Salmon 2020, 9-10, Fig. 3).

The aforementioned Middle Byzantine treatises report that paramerions were used by infantry as well as cavalry.¹⁶⁶ Unlike double-edged swords, which used to hang from their shoulders,¹⁶⁷ paramerions, single-edged palashes, were fasten to their waist belts.¹⁶⁸ Using the paramerion as a clearly cavalry¹⁶⁹ or infantry¹⁷⁰ weapon from the above-mentioned sources and the calculation¹⁷¹ of its length¹⁷² according to them may more or less connect this weapon with the discussed exemplar of the palash from the MNIR in Bucharest.

If we return back to the archaeological evidence of the Middle Byzantine paramerions/“Bulgarian-type sabres” and the closest parallels of the discussed palash from the MNIR, we could find them notably in the following countries or areas: Bulgaria¹⁷³, the Czech Republic¹⁷⁴, Hungary¹⁷⁵, Poland¹⁷⁶,

¹⁶⁶ Salmon 2020, 9; Leonis imperatoris *Tactica* V, 17; VI, 19, 198 – Dennis ed. 2010, 74-75, 82-83, 98-99; *Praecepta Militaria* III, 56-58, 64 – McGeer ed. 1995, 36-37; *Sylloge Tacticorum* XXX, 2; XXXVIII, 5, 7, 10; XXXIX, 2, 9 – Chatzelis and Harris eds. 2017, 47, 53-55.

¹⁶⁷ Leonis imperatoris *Tactica* V, 17 – Dennis ed. 2010, 82-83; *Sylloge Tacticorum* XXXIX, 2 – Chatzelis and Harris eds. 2017, 54.

¹⁶⁸ Leonis imperatoris *Tactica* V, 17 – Dennis ed. 2010, 82-83; *Sylloge Tacticorum* XXX, 2 – Chatzelis and Harris eds. 2017, 47. In this context, it should be noted that the Greek noun *παραμήριον* had been derived from the Greek adjective *παραμήριος* that means “on/close to/next to the thigh” (Chatzelis and Harris eds. 2017, 125, footnote 137; Haldon 2014, 173; Salmon 2020, 7). According to Georgios Chatzelis, Jonathan Harris and Thomas Salmon this word most probably reflects the manner the object was worn (Chatzelis and Harris eds. 2017, 125, footnote 137; Salmon 2020, 7).

¹⁶⁹ Paramerions were included in the weapons of cavalry according to the Romans – cataphracts (*Praecepta Militaria* III, 56-58, 64 – McGeer ed. 1995, 36-37; *Sylloge Tacticorum* XXXIX, 2 – Chatzelis and Harris eds. 2017, 54) and the horse archers (*Sylloge Tacticorum* XXXIX, 2 – Chatzelis and Harris eds. 2017, 55) as well.

¹⁷⁰ Paramerions were probably listed among arms of the infantry of the period of Phillip II and Alexander the Great in Macedonia and Greece (*Sylloge Tacticorum* XXX, 2 – Chatzelis and Harris eds. 2017, 47), then among the Byzantine heavy infantry (according to the Romans; *Sylloge Tacticorum* XXXVIII, 5 – Chatzelis and Harris eds. 2017, 53), the Byzantine medium infantry (*Sylloge Tacticorum* XXXVIII, 7 – Chatzelis and Harris eds. 2017, 53), and the Byzantine light infantry (*Sylloge Tacticorum* XXXVIII, 10 – Chatzelis and Harris eds. 2017, 54).

¹⁷¹ Lengths of the Middle Byzantine paramerions can be derived from the military treatise *Sylloge Tacticorum*. The length of the paramerion of the Byzantine heavy infantry (according to the Romans) should have been four spans, including the hilt (*Sylloge Tacticorum* XXXVIII, 5 – Chatzelis and Harris eds. 2017, 53), and then the paramerions of the Byzantine cataphracts should have been approximately four spans long, excluding or including their hilts (the same way as their double-edged swords; *Sylloge Tacticorum* XXXIX, 2 – Chatzelis and Harris eds. 2017, 54).

¹⁷² When one Byzantine span (*σπιθαμή*) was 23.4 cm long (after Erich Schilbach in 1970; Kolias 1988, 137, footnote 25; Kolias 2021, 23, footnote 25), the paramerions of the Byzantine heavy infantry were approximately up to 93.6 cm long, and the paramerions of the Byzantine cataphracts could be approximately up to 93.6 cm or 93.6 cm and more. Gennadij Valer’evič Baranov (Baranov 2016, 80) also echoed the opinion of Julian Andrejevič Kulakovskij who wrote in 1908 about the Byzantine *σπιθαμή* that had been 22.18 cm long. Then four Byzantine spans could have been up to 88.72 cm that is much closer to lengths of the Middle Byzantine paramerions/“Bulgarian-type sabres” under study, which are known from archaeological contexts.

¹⁷³ Among other similar specimens from the area of Bulgaria, one almost identical specimen stands out, namely from the Barovo settlement (Dobričko). It is 78 cm long palash that is also slightly concave from the cutting edge’s side, as the referred palash from the MNIR. The settlement was dated to the 9th – 10th centuries (Yotov 2004, 63, obr. 28/ 452, katalog, tablo XXXV/452).

¹⁷⁴ Two Middle Byzantine paramerions/“Bulgarian-type sabres”: I. Olomouc-Nemilany, grave H64; the dating of the cemetery: the turn of the 9th and 10th centuries or between the last decades of the 9th century and the first half of the 10th century; length of the palash: 81.7 cm; palash (with a cross-guard of Valeri Yotov’s type 2 and variant A, as well as a pommel of Valeri Yotov’s type 1 – cylindrical one with an upper end’s horizontal extension/ring) was formerly equipped with a scabbard, which consisted of a field maple (*Acer campestre*; Přichystalová and Kalábek eds. 2014, 102, 233-234, 267, Tab. 44/1. II. Stará Břeclav-Na Zvolenci, grave 1/1927; the grave could be dated to the second half of the 9th century and the beginning of the 10th century (it is based on the radiocarbon dating of the chronologically related graves from the south bailey of Pohansko, which could be set between the second half of the 9th century and the beginning of the 10th century; then on the dating of grave goods – the axe head can be spotted in graves dated in the second half of the 9th century and the beginning of the 10th century; further on the dating of the Blučina-type pottery found in the same grave that was popular in the second half of the 9th century and the beginning of the 10th century – Vlasatý 2023, 5-6); grave 1/1927 contains, among other grave goods, an iron cross-guard of Valeri Yotov’s type 2 and variant A and a pommel of Valeri Yotov’s type 1; Vlasatý 2023, 1-6, figures on pages 3, 5-6.

¹⁷⁵ One Middle Byzantine paramerion/“Bulgarian-type sabre”: Keszthely-Fenekpusta, grave 1951/9 (grave of a man who died when he was between 20 and 39 years old); dating of the grave: according to the dating of the whole cemetery from the Carolingian Period – the second half of the 9th century – the turn of the 9th and the 10th centuries (Müller 2010, 12, 246), although the first graves could be assigned to the second third of the 9th century, to the time before the middle of the 9th century (Müller 2010, 246-247); part of a single-edged blade, a tang and an iron cross-guard of Valeri Yotov’s type 2 and variant B that belongs to “the Bulgarian-type sabres” (Yotov 2022a, Fig. 18/b; Müller 2010, 41, 246-247, 266, Taf. 19).

¹⁷⁶ One Middle Byzantine paramerion/“Bulgarian-type sabre”: Terka, stray find (Subcarpathian Voivodeship of Southeastern Poland); the end of the 9th century – 10th century according the nearby Hungarian presence/finds in the region and similar/same palashes from Morava and Western Ukraine (Kotovič 2019, 100, 108-109); length of the palash: 78.8 cm; the palash with an elman is slightly concave from the cutting edge’s side (as the referred palash from the MNIR) and is fitted with the cross-guard of Valeri Yotov’s type 2 and variant A (Kotovič 2019, 100-109, Ris. 1-4).

Slovakia¹⁷⁷ and Ukraine¹⁷⁸. Some of the analogies might even be associated with the period of the Avar Khaganate.¹⁷⁹ Last but not least, we can also draw our attention to early medieval single-edged swords from Northern Europe or the Germanic milieu of Europe. However, they lack a false edge or an elman.¹⁸⁰

6. Cross-guard of a sabre or a palash with a rhomboid widening in its middle

The last shape group is only reserved for one specimen within the examined assemblage from the MNIR. It is a cross-guard/lower guard of a sabre or a palash (inventory number 17305; Fig. 7) that was recorded in the sunken part of the house no. 112 upon the fortress of Dinogetia/Garvăn-Bisericuța in the Tulcea County of Romania. This house was dated to the second half of the 11th century, as we have already noted that before. The item was brought to the MNIR from the “Vasile Pârvan” Institute of Archaeology in an unknown year.¹⁸¹

From the front, the cross-guard¹⁸² of a sabre or palash has got a rhomboid/diamond widening in the middle. Shoulders/quillons of the object are rectangular (with rounded edges) in cross-section. The cross-guard is provided

¹⁷⁷ Two Middle Byzantine paramerions/“Bulgarian-type sabres”: I. Čierny Brod-Homokdomb, grave 2; Jozef Zábajník (Zábajník 1995, Tabelle III) published just the probable dating span of the grave: the third and fourth phase of the Late Stage of the Avar Khaganate Age, namely circa 750 – 800/825; length of the palash: 83 cm (Točík 1992, 12); iron blade (according to Jozef Zábajník, it is single-edged – Zábajník 2007, 26; without a proven elman, because this blade is under the remnants of a wooden scabbard and a conservation substance) and tang of a palash with (unlike the referred palash from the MNIR) an bronze (or, in our view, made from some copper alloy) cross-guard and pommel with a loop; the grip was also made of rivet (of unknown metal) and leather; the palash is also equipped with a cross-guard resembling Valeri Yotov’s type 2 and variant A. Točík 1992, 12, obr. 5; 7/1; Zábajník 2007, 26. II. Čakajovce, grave 738; dating of the grave: on the basis of the depth and cubage of the grave, its meaty grave goods, fragments of a convex bronze strip, which most likely originated from a plate finger ring used in the 9th century, the location of the grave in the older phase of burial horizon A at the cemetery (i.e. from the first decade of the 9th century to the turn of the second and last third of the 9th century – Hanuliak and Rejholcová 1999, 9, obr. 5; Rejholcová 1995a, Plán 1); the palash was formerly dated to first half of the 10th century (Rejholcová 1995a, 50); length of the palash: 81 cm; iron palash with a probable elman (which is placed in the lower third of the blade and it starts in the location of the blade’s bend – before the tip of the palash); the palash (with a cross-guard resembling Valeri Yotov’s type 2 and variant B) was formerly equipped with a scabbard (its wooden remnants are on the both sides of the blade), which consisted of birch (*Betula* sp.) and was strengthen by strip fitting and iron rivets; the palash’s grip coverings were made from birch wood (*Betula* sp.) and iron rivets (Hanuliak and Rejholcová 1999, 9, 49, obr. 5; 44/17; Rejholcová 1995a, 50; Rejholcová 1995b, 80-81, tab. CXIV/3).

¹⁷⁸ Three Middle Byzantine paramerions/“Bulgarian-type sabres” from the Upper and Middle Dniester Basin (the Western Ukraine – stray finds from the Lviv Oblast, the Kam’yanets’-Podil’s’kyi district of the Khmelnytskyi Oblast, and the Chernivtsi Oblast; Baranov 2016, 76-92, Ris. 1-3). As we have written that above, Gennadij Valer’evič Baranov perceived them as the Byzantine paramerions (Baranov 2016, 81-82) without dating, although he indirectly pointed to the 9th – 10th centuries on the basis of their archaeological and literary parallels (Baranov 2016, 79-82).

¹⁷⁹ Gergely Csiki’s type E.II.C – “Single-edged Swords with False Edge (Proto-sabre)” (Csiky 2015, 189-192, Fig. 73-74); the Early – Late Avar Period (568 – circa 800); iron sabres/palashes with an elman (with or without various cross-guards, even made of non-ferrous metals); the most similar specimen to the referred palash from the MNIR is a 97 cm long palash (with cross-guard resembling Valeri Yotov’s type 2 and variant B, most likely made from bronze and silvered/coated with a thin layer of silver) from grave X at the cemetery of Tárnáméra, Urak dűlő (Hungary), dated between circa 620 and 650 (Simon 1991, 307; Szabó 1965, 42, VIII. t. 1-3).

¹⁸⁰ Single-edged swords without elmans from Northern Europe and Germany: I. present-day Sweden (Gotland) and Norway – Jørgensen 1999, 64-67, Abb. 36-37, 39 [relevant features to the referred palash from the MNIR: iron single-edged swords (without an elman) with or without various cross-guards, even made of non-ferrous metals, namely “das lange einschneidige Schwert mit schmaler Klinge, SAX 6” (the total length of the sword: circa 74.1 – 90 cm; maximal width of the blade: circa 4.5 – 4.8 cm); “das lange einschneidige Schwert mit sehr schmaler Klinge, SAX 7” (the total length of the sword: circa 72 – 96.8 cm; maximal width of the blade: circa 3.7 – 4.4 cm; also Jan Petersen’s types A and B of sword hilts), and “das größte einschneidige Schwert, SAX 8” (the total length of the sword: circa 102.5 – 106.5 cm; maximal width of the blade: circa 4.5 – 4.7 cm; also Jan Petersen’s type H of sword hilts)]; 110 [Gotland – SAX 7 – Nordische Stufe V (740/750 – circa 800) and VI (circa 800 – 830/840)]; 116 [Norway – SAX 6-8 – Nordische Stufe VI (circa 800 – 830/840) and VII (circa 830/840 – circa 900)]. II. British Isles, Scandinavia and Finland – Peirce et al. 2002, 20-22 [relevant features to the referred palash from the MNIR: iron single-edged swords (without an elman and their blades are rarely pattern-welded – Peirce et al. 2002, 40-41) and with an approximate length of the blade about 80 cm (+/- 5 cm, exceptionally over 90 cm) – “Single-edged Blades of the Viking Age” – with (swords with mainly Jan Petersen’s types C, F and G of sword hilts, but also with Jan Petersen’s types B, H, M, or X) or without various cross-guards, even made of non-ferrous metals (Peirce et al. 2002, 50-51); the Viking Age (circa 793 – 1066), although these swords are rare after the end of the 9th century – Peirce et al. 2002, 22]. III. the former Federal Republic of Germany – Geibig 1991, 89, Abb. 22, 40 [relevant features to the referred palash from the MNIR: iron single-edged sword (without an elman) and with the length of the blade 80.6 cm and the width of the blade 4.54 cm – “Klingentyp 14”; the 8th century – Geibig 1991, 154; but in Geibig 1991, Abb. 40 – from the second half of the 7th century to the 9th century].

¹⁸¹ Information from the Museum register of the MNIR.

¹⁸² Length of the cross-guard: 8.25 cm; height of the cross-guard at its ends: 0.3, 0.4 cm; height of the cross-guard at its

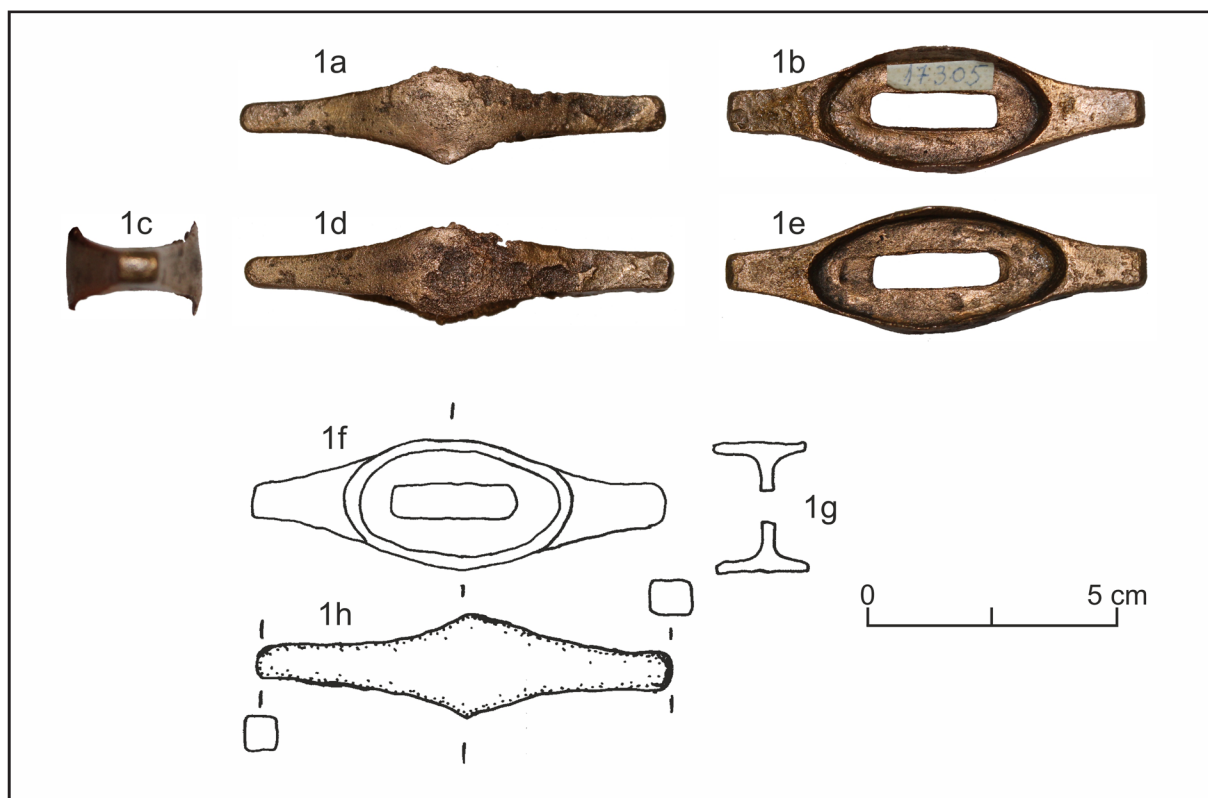


Fig. 7. Early (and high) medieval cross-guard of a sabre or a palash with a rhomboid widening in its middle, from house no. 112 of the fortress of Dinogetia/Garvăn-Bisericuța (Tulcea County, Romania) – inventory number 17305 from the National Museum of Romanian History in Bucharest (Romania). 1a-e – photographs by Martin Husár; 1f-h – drawings by Martin Husár. 1a-h – bronze. Scale: 1a-h.

with a hollow bed in its centre (Fig. 7/1b, e, f). The hollow bed consists of a racetrack-shaped opening (2.5 x 0.7 cm) and two ellipsoid caverns (4 x 2.1 cm and 0.9 cm deep; 4 x 2.2 cm and 0.7 cm deep). The racetrack-shaped opening was meant for a tang and two ellipsoid caverns were most likely intended for a grip and the upper part of a blade, probably some kind of a ricasso-collar. The cross-guard is an ellipse with two projecting trapezoids (they are rectangular sectionally; Fig. 7/1c) in cross-section from above.

The entire cross-guard almost exclusively comprises an alloy of copper and tin, in other words bronze (Tab. 2). Probes R3729¹⁸³ and R3730¹⁸⁴ of Gheorghe Niculescu determined that the discussed item was mainly made of copper, tin, and lead.¹⁸⁵

The nearest analogies for the specimen with inventory number 17305 from the MNIR could mostly concern the end of the Early Middle Ages and the High Middle Ages (the 10th/11th – 13th centuries) and were tied at least to the following regions: the Carpathian Basin, present-day Bulgaria, Rus', the steppes of Eastern Europe, Kazakhstan, and Central Asia. The dating of the examined cross-guard of a sabre or palash principally relies on the typochronology of Anatolij Nikolaevič Kirpičnikov and archaeological contexts of various settlements.

In 1982 László Kovács published a scientific article on sabres, combat axes and lances from the period of the Hungarian conquest of the Carpathian Basin. The examined cross-guard would be classified as his type II3 of the Hungarians' cross-guards of the 10th – 11th centuries.¹⁸⁶

Other two parallels come from present-day Bulgaria. Twenty years ago, an object from the private collection originating in Northeastern Bulgaria, which is similar to the referred cross-guard from the MNIR, was defined by Valeri Yotov as type 1 (with elongated diamond shape) of the cross-guards of the First Bulgarian Empire.¹⁸⁷ It was

middle: 2.05 cm.

¹⁸³ The front part of the cross-guard, i.e. in its middle part.

¹⁸⁴ The internal part of the cross-guard, namely the hollow bed.

¹⁸⁵ Apart from the other chemical elements, probe R3729 showed 91.75% of copper, 4.86% of tin, and 1.47% of lead and then 92.17% of copper, 4.46% of tin, and 1.63% of lead were detected by probe R3730 (Niculescu 2024b).

¹⁸⁶ Kovács 1982, 247, Taf. 1/Typ II3.

¹⁸⁷ Yotov 2004, 69, katalog No. 463, tablica 9/Predpaziteli -1; 10; tablo XXV/463.

cast in bronze and has got embossed decoration. This specimen was probably produced with the same length as the referred cross-guard – between 8.2 and 8.3 cm. Sadly, the state of its central hollow bed is not known. In spite of the fact that the specimen remains undated because of its unrecognised context,¹⁸⁸ Valeri Yotov tried to date it to the second half of the 8th century – the early 9th century.¹⁸⁹ Another analogy from today's Bulgaria comes from the region of Илѣмен and is currently in the collections of the National Museum of History in Sofia. The shoulders of this cross-guard (belonging to a sabre) are slightly longer (10.27 cm) than those of the referred cross-guard. The cross-guard was made of iron and encrusted by silver-gilt leaf foil. The sabre's blade and cross-guard were connected by copper. Mariela Inkova roughly dated this object to the time span of the 11th century – the early 14th century.¹⁹⁰

Many more specimens, which are similar to the studied object, were found on the territory of 'Rus. The referred exemplar of cross-guard has some features of types II and III of Anatolij Nikolaevič Kirpičnikov.¹⁹¹ The former one was mostly common in 'Rus during the 11th – 13th centuries¹⁹² and the latter one appeared there in the 13th century¹⁹³. Both discussed types have got a diamond-shaped extension from the front, like the specimen studied at the MNIR. Nonetheless, type II¹⁹⁴ is lenticular with trimmed end in cross-section from above, unlike the referred cross-guard, and type III¹⁹⁵ is ellipsoid from above with two projecting trapezoids¹⁹⁶, which are circular in cross-section¹⁹⁷. The monograph by Mikalaj Aljaksandravič Plavinski from 2009¹⁹⁸ on the Belarus region indisputably validated the findings of Anatolij Nikolaevič Kirpičnikov from the 1960s.

In addition, cross-guards with a rhomboid widening in its middle entered in usage in the steppes of Eastern Europe, Kazakhstan, and Central Asia at least during the 11th – 12th centuries.¹⁹⁹

7. Conclusions

It can be concluded that the heterogeneous set (eight pcs) of thrusting and cutting weapons (swords, palashes, sabres and their parts) from the Early Middle Ages, which are deposited at the MNIR in Bucharest, may reveal various places of their origins, their different dating, or possibilities in the matter of their circulation.

Iron double-edged swords consisting of a tang and a blade (the first group; Fig. 8/1) from the MNIR are mainly²⁰⁰ related to the Gepidic area of Transylvania or area where the Gepidic Age row-grave cemeteries of Kurt Horedt's

¹⁸⁸ Yotov 2004, tablica 10.

¹⁸⁹ Valeri Yotov wrote about the alleged parallels (from the 7th to 10th centuries) of this cross-guard – the parallels from the Late Avar milieu, the Proto-Bulgarian cemeteries from the Middle Volga region and the North Caucasus (Yotov 2004, 69).

¹⁹⁰ Inkova 2013, 63, 66-75, 85, Fig. 1-2, 5.

¹⁹¹ In 1966 39 pieces of type II and two pieces of type III were reported by Anatolij Nikolaevič Kirpičnikov on the territory of 'Rus (Kirpičnikov 1966, tablica 6). There are other forms as well, e.g. a specimen from the layer (the middle of the 12th century) of the settlement in Velikij Novgorod (Russia). From the front, the iron cross-guard (13 cm long) has got a rhomboid widening in the middle as the referred cross-guard. However, its cross-section from above is just ellipse, unlike the referred cross-guard (Medvedev 1959, 122-123, Ris. 1/8).

¹⁹² Kirpičnikov 1966, 69; Plavinski 2009, 49.

¹⁹³ Kirpičnikov 1966, 72; Plavinski 2009, 48.

¹⁹⁴ Kirpičnikov 1966, 69-70, ris. 13/tipy perekpestij – II; tabl. XXXV/1-2, katalog – sabli/29, 36. These exemplars were probably made of bronze and some of them also had an engraved or embossed decoration (Kirpičnikov 1966, tabl. XXXV/1). Two exemplars were found in the layer (the 12th – 13th centuries) of the town of Kiev and in the layer (the 12th century – the first half of the 13th century) of the hill fort of Knjaža Gora (Cherkasy Oblast, Ukraine; Kirpičnikov 1966, tabl. XXXV/1-2, katalog – sabli 29, 36).

¹⁹⁵ Kirpičnikov 1966, 70, 72, ris. 13/tipy perekrestij – III, katalog – sabli 89, 108. Two specimens of Kirpičnikov's type III are from the layers (both of them from the 12th century – the first half of the 13th century) of hill forts of Vojns'ka Greblja (Poltava Oblast) and Gorodišče (Khmelnitskyi Oblast; Kirpičnikov 1966a, katalog – sabli 89, 108).

¹⁹⁶ Nevertheless, they are longer than those of the specimen under consideration from the MNIR.

¹⁹⁷ The trapezoids of the referred object from the MNIR are rectangular across.

¹⁹⁸ Plavinski 2009, 138, 145, Мал. 48. In Belarus Kirpičnikov's type II (two pcs; Plavinski 2009, 49, Мал. 41/3; 42/2) was dated to 1250s on the basis of the dating of the armoury workshop within the surrounding bailey (nakol'ny gorad) of the Gomel' fortified settlement where one piece of such cross-guard was found (Plavinski 2009, 49, Tabl. 10; Tabl. IV/7). Another specimen was unearthed out of archaeological context, probably somewhere in the region of Belaruskaga Panjamonnja, i.e. in the western part of Belarus (Plavinski 2009, 49, Tabl. IV/14). Kirpičnikov's type III (two pcs) might be dateable in Belarus to the 13th century. It is also backed by the dating of two settlement archaeological contexts, namely from Kopys' (13th century) and Mscislaj (1260s and 1270s; Plavinski 2009, 48, мал. 41/4-5; Tabl. 10; IV/3, 13).

¹⁹⁹ The steppes of Eastern Europe – Pletneva ed. 1981, 260, Ris. 83/40 (the cross-guard of a sabre dated to the 12th century); the steppes of Kazakhstan and Central Asia – Pletneva ed. 1981, 249, Ris. 74/33, 57 (cross-guards of two palashes with a ricasso-collar related to the 11th – 12th centuries).

²⁰⁰ Three [specimen from most likely grave 70 in Morești-Hulă (inventory number 17152 at the MNIR), specimen from unknown context in Bratei (inventory number 18669 at the MNIR), and specimen from grave 17 in Noșlac (inventory number

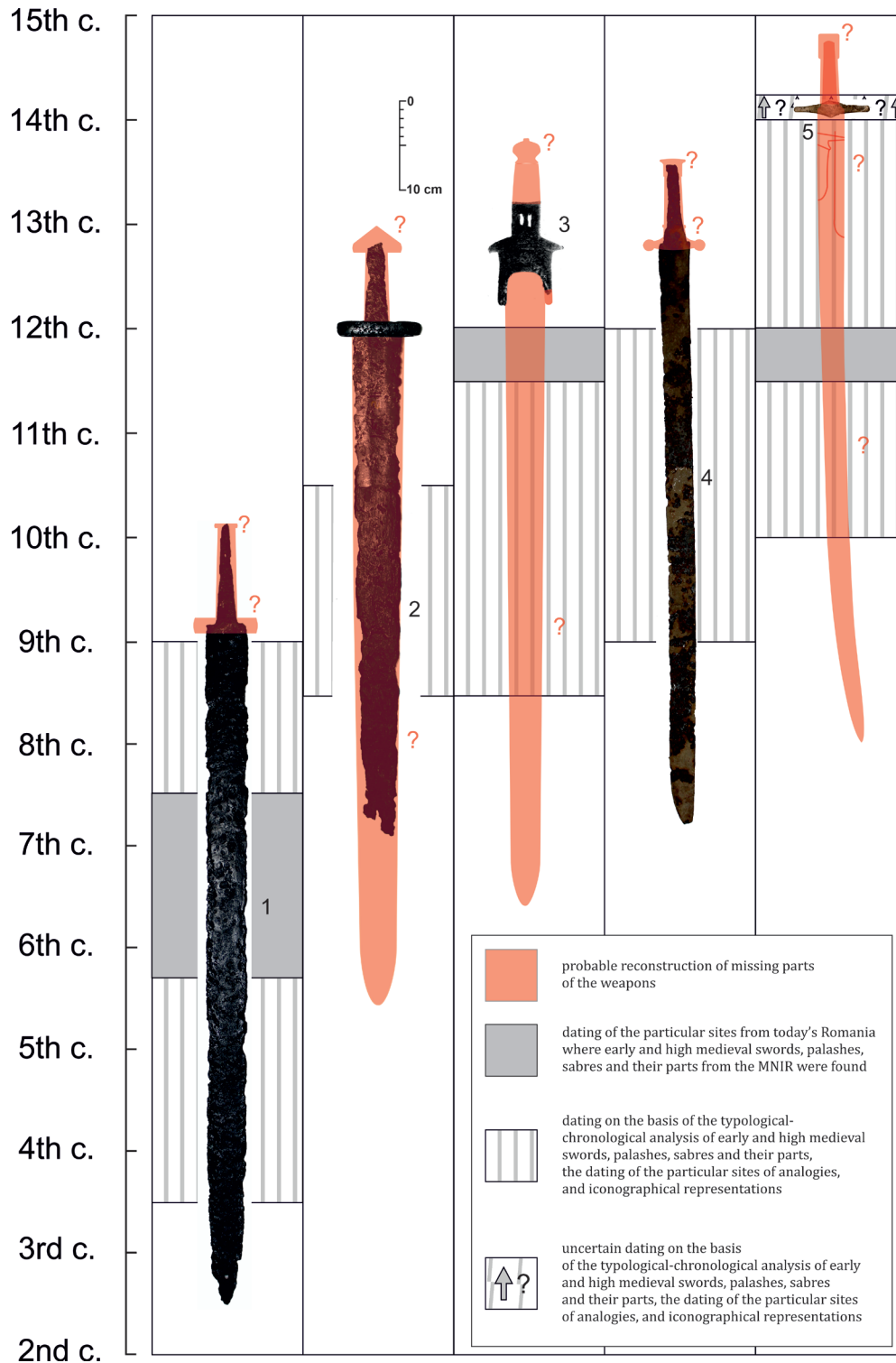


Fig. 8. The shape groups of the early medieval thrusting and cutting weapons (and their parts) from the National Museum of Romanian History in Bucharest (Romania) represented by their particular specimens (and their possible reconstruction based on their analogies) and chronology of these selected forms of the aforementioned weapons from Central, Southeastern and Eastern Europe and from the former Byzantine Empire (author: Martin Husár). The particular specimens noted above, reconstructed and displayed on figure 8: 1 – Morești-Hulă (Mureș County, Romania), most likely grave 70 – inventory no. 17152; 2 – Unknown site in Morești-Podei (Mureș County, Romania) – inventory number 54484; 3 – Dinogetia/Garvăn-Biseriçuța (Tulcea County, Romania), house no. 144 of the fortress – inventory number 17339; 4 – Unknown site, Southern Romania (probably the Ilfov County, Romania), stray find – without inventory no.; 5 – Dinogetia/Garvăn-Biseriçuța (Tulcea County, Romania), house no. 112 of the fortress – inventory number 17305. 1-2, 4-5 – photographs by Martin Husár; 3 – photograph of an unknown photographer from the year 1967 (Ștefan et al. 1967, Fig. 35/19). 1, 3-4 – iron; 2 – iron, copper, brass; 5 – bronze. Scale: 1-5.

groups III and IV were present in this region from the end of the 5th to the middle of the 7th century. Analogies for these swords can be found in the territory of the Roman Empire and Barbaricum (the German milieu in particular) from the second half of the 3rd century to the 8th century, i.e. in the time between Late Antiquity and the Early Middle Ages.

Another qualitative form is represented by an iron double-edged sword consisting of a tang, a lower guard, and a blade with a fuller (the second group; Fig. 8/2) from the fortified settlement or an unknown context in Morești-Podei (Mureș County; inventory number 54484 at the MNIR) in Transylvania. Its parallels are connected with the German milieu of Central and Northern Europe between the middle of the 8th century and the middle of the 10th century. An engraved decoration (inlaid with brass and copper) of the upper third of its blade, in the place of its fullers, could hint at the presence of German heathen symbolism.²⁰¹

The iron cross-guard of a sword consisting of a collar, a quillon, and a sleeve²⁰² (the third group; Fig. 8/3) belongs to type IA of Gennadij Valer'evič Baranov or type the Garabonc of Valeri Yotov. Its production most likely concerns a kind of a sword (σπάθιον) used in the Byzantine Empire. This type of a cross-guard is likely dateable between the second half of the 8th century – 9th century and the 11th century. Exemplars of this form were even unearthed on the territory of the Byzantine Empire itself (in Dinogetia/Garvăn-Bisericuța, Romania, and Zekio, Greece),²⁰³ then they were recognised in Central Europe (Hungary), Southeastern Europe (Romania), the Northern Black Sea Region (Ukraine), and possibly on the territory of today's Iran too.

The fourth group (Fig. 8/4) of early medieval thrusting and cutting weapons from the MNIR corresponds to the iron single-edged palash with an elman/false edge deposited there without inventory number, which was discovered as a stray find somewhere in Southern Romania, probably in the Ilfov County. Its analogies can be sought in Central (the Czech Republic, Slovakia, Poland) and Eastern Europe (Ukraine), and the Balkans (Bulgaria) from the 9th to the 10th – 11th centuries. In scientific literature, such palashes can be identified with the so called “Bulgarian-type sabres” or the Middle Byzantine paramerions (παρამήρια). They were usually equipped with cross-guards of Valeri Yotov's type 2 and variants A and B. It is possible to consider the Byzantine origin of these paramerions/palashes by comparing their archaeological sources with Byzantine written and iconographic sources of the 9th to 11th centuries.

The last group (Fig. 8/5) is based on one bronze cross-guard of a sabre or a palash with a rhomboid widening in its middle. In the MNIR, this cross-guard from house no. 112²⁰⁴ within the Byzantine fortress of Dinogetia/Garvăn-Bisericuța (Tulcea County, Romania) is registered under inventory number 17305. Parallels to this kind of thrusting and cutting weapons from the end of the Early Middle Ages and from the High Middle Ages (10th/11th – 13th centuries) may be traced to regions (present-day Bulgaria, the Carpathian Basin, Rus', the steppes of Eastern Europe, Kazakhstan, and Central Asia) where nomadic people were present. Therefore, its nomadic origin at that time can probably be assumed.

Abbreviations

CERTO – the Center of Excellence for Restoration by Optoelectronic Techniques at the National Institute of Research and Development for Optoelectronics (INOE 2000), Măgurele.

Inv. No./Nos. – inventory number/numbers.

MNIR – Muzeul Național de Istorie a României, București = the National Museum of Romanian History in Bucharest.

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84921 at the MNIR)] out of four pieces. The remaining one was found as a stray find in Vidra (Ilfov County, Romania; without inventory number at the MNIR).

²⁰¹ At least the victorial runes I and S (together “Ich siege”) and the rune t associated with god Tyr.

²⁰² Inventory number 17339 at the MNIR. It was found in house no. 144 (dated to the second half of the 11th century) in the Byzantine fortress of Dinogetia/Garvăn-Bisericuța (Tulcea County, Romania).

²⁰³ They were proved by the Byzantine iconographical representations from the 9th to 11th centuries as well.

²⁰⁴ This archaeological context is dateable to the second half of the 11th century.

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BIBLIOGRAPHY

- Alexandrescu, C.-G. 2016. Dinogetia – about the first archaeological documentation of the ancient site from Bisericiuța, Garvăn (com. Jijila, Tulcea county). *Caiete ARA* 7: 23-31.
- Angheluță, L.-M. 2024. Report on radiography of the sword with Inv. No. 54484 (from the National Museum of Romanian History in Bucharest) from the cemetery of Morești-Podei (Mureș County, Romania). The 29th of January 2024. Unpublished report of the Center of Excellence for Restoration by Optoelectronic Techniques at the National Institute of Research and Development for Optoelectronics – INOE 2000. Măgurele: Center of Excellence for Restoration by Optoelectronic Techniques at the National Institute of Research and Development for Optoelectronics – INOE 2000.
- Baranov, G. V. 2016. Nahodki rannesrednevekovyh sabel' «bolgarskogo tipa» v bassejne verhnego i srednego tečeniia Dnestra (k voprosy o vizantijskoj voinskoj tradicii v Vostočnoj Evrope). *MAIASK. (Materialy po Arheologii i Istorii Antičnogo i Srednevekovogo Kryma)* 8: 76-92.
- Baranov, G. V. 2017. Bizantijskie (Sredizemnomorskie) meči s perekrest'jami s muftoj IX – XI vv. *MAIASK. (Materialy po Arheologii i Istorii Antičnogo i Srednevekovogo Kryma)* 9: 248-556.
- Bârză, L. 1991. Gepidische Funde von Bratei. *Dacia. Nouvelle Série* 35: 211-214.
- Bârză, L. 2010. Ein gepidisches Denkmal aus Siebenbürgen: das Gräberfeld 3 von Bratei (bearbeitet von R. Harhoiu). *Archaeologia Romanica IV. Cluj-Napoca – Bistrița: Editura Accent.*
- Bóna, I. 1956. Die Langobarden in Ungarn. Die Gräberfelder von Várpálota und Bezenye. *Acta archaeologica Academiae Scientiarum Hungaricae* 7: 183-244, Tafel XXVII-LVI.
- Bóna, I. 2000. Ein frühawarisches Gräberfeld in der Unio-Sandgrube von Várpálota. *Communicationes archaeologicae Hungariae* (2000): 123-160.
- Chatzelis, G. and Harris, J. (eds.). 2017. *A Tenth-Century Byzantine Military Manual: The Sylloge Tacticorum.* London – New York: Routledge.
- Cosma, C. 2018. Seventh – Eighth-Century Swords, Sabres, and Backswords Discovered in Transylvania, Maramureș, and the Romanian Banat. *Slovenská archeológia* 56, 1: 27-48.
- Cosma, C. 2020. The military equipment of the 7th –8th century warriors from Transylvania. Weapons, military equipment, harness parts and accessories. *Echipamentul military al războinicilor din Transilvania secolelor VII–VIII. Arme, piese de echipament militar, piese și accesorii pentru harnașament.* Cluj-Napoca: Editura Mega.
- Csallány, D. 1961. *Archäologische Denkmäler der Gepiden im Mitteldonaubecken (454-568 u. Z.).* Budapest: Verlag der Ungarischen Akademie der Wissenschaften.
- Csiky, G. 2015. *Avar-Age Polearms and Edged Weapons. Classification, Typology, Chronology and Technology.* Leiden – Boston: Brill.
- Dennis, G. T. (ed.). 2010. *The Taktika of Leo VI. Corpus Fontium Historiae Byzantinae 49.* Washington, D.C.: Harvard University Press.
- Dobos, A. 2015a. Notes on the Weapons and Weapon. Depositions from Cemetery 3 at Bratei (Sibiu County, Romania). *Transylvanian Review* 24, Supplement No. 2: 209-227.
- Dobos, A. 2015b. Weapons and weapon depositions in the late row-grave cemeteries in Transylvania, in: C. Cosma (ed.) *Warriors, weapons, and harness from the 5th–10th centuries in the Carpathian Basin: 57-88.* Cluj-Napoca: Mega Publishing House.

- Dobos, A. 2018. Transformations of the human communities in the eastern part of the Carpathian Basin between the middle of the 5th and 7th century. Row-grave cemeteries in Transylvania, Partium and Banat. *Dissertationes Archaeologicae ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae* 3/6: 621-639.
- Dobos, A. 2019. On the edge of the Merovingian culture. Row-grave cemeteries in the Transylvanian Basin in the 5th–7th centuries, in: T. Vida, D. Quast, Zs. Rácz and I. Koncz (eds.) *Kollaps – Neuordnung – Kontinuität. Gepiden nach dem Untergang des Hunnenreiches. Tagungsakten der Internationalen Konferenz an der Eötvös Loránd Universität, Budapest, 14. – 15. Dezember 2015*: 111-142. Budapest: Institut für Archäologiewissenschaften, Eötvös Loránd Universität, Budapest.
- Dobos, A. 2022. Shifting Identities on the Periphery of the Avar Khaganate. Settlement Pattern and Social Transformations in the Transylvanian Basin during the Avar Period, in: A. Rapan Papeša and A. Dugonjić (eds.) *Avari i Slaveni. Dvije strane pojasnog jezičca – Avari na sjeveru i jugu kaganata. Zbornik radova s međunarodnog znanstvenog skupa održanog u Vinkovcima 2020. Godine*: 150-178. Zagreb: Arheološki muzej u Zagrebu.
- Dobos, A., Pánczél, S.-P., Sidó, K., László, K., Berecki, S., Pethe, M., Lenkey, L. and Szabó, M. 2021. Spotting the Past of Morești. New Data Collected through Non-invasive Research, in: K. László, D. Băcuț-Crișan, I. Stanciu and F. Mărginean (eds.) *Orbis Mediaevalis III. Exploring Dwellings and Manufacturing Spaces in Medieval Context (7th–14th Centuries). Proceedings of the International Conference Exploring Dwellings and Manufacturing Spaces in Medieval Context (7th–14th Centuries). Târgu Mureș, 27th–30th October 2020*: 31-58. Cluj – Napoca: Editura Mega.
- Geibig, A. 1991. Beiträge zur morphologischen Entwicklung des Schwertes im Mittelalter: Eine Analyse des Fundmaterials vom ausgehenden 8. bis zum 12. Jahrhundert aus Sammlungen der Bundesrepublik Deutschland. Neumünster: Karl Wachholtz Verlag.
- Haldon, J. 2014. A Critical Commentary on the Taktika of Leo VI. *Dumbarton Oaks Studies* 44. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Hanuliak, M. and Rejholcová, M. 1999. Pohrebisko v Čakajovciach (9. – 12. storočie). Vyhodnotenie. Bratislava: VEDA.
- Heitel, R. R. 1994-1995. Die Archäologie der ersten und zweiten Phase des Eindringens der Ungarn in das innerkarpatische Transilvanien. *Dacia. Nouvelle Série* 38I-39: 389-439.
- Horedt, K. 1957. Die befestigte Ansiedlung von Morești und ihre frühgeschichtliche Bedeutung. *Dacia. Nouvelle Série* 1: 297-308.
- Horedt, K. 1984. Morești. Band 2. Grabungen in einer mittelalterlichen Siedlung in Siebenbürgen. Bonn: Dr. Rudolf Habelt GmbH.
- Hošek, J., Košta, J. and Žákovský, P. 2019. Ninth to Mid-Sixteenth Century swords From the Czech Republic in Their European Context. Part I. The Finds. Prague – Brno: The Czech Academy of Sciences, Institute of Archaeology, Prague et al.
- Husár, M. and Oța, S. 2020. Middle Byzantine Period Weapons From the Collections of the National Museum of Romanian History in Bucharest (Also) Used in Byzantium. *Materiale și cercetări arheologice (serie nouă)* 16: 229-243.
- Horedt, K. 1979. Morești. Grabungen in einer vor- und frühgeschichtlichen Siedlung in Siebenbürgen. Bukarest: Kriterion Verlag.
- Inkova, M. 2013. A Medieval Sabre and a Knife from the Exhibition of the National Museum of History in Sofia. *Acta Militaria Mediaevalia* 9: 63-88.
- Jørgensen, A. N. 1999. Waffen und Gräber: typologische und chronologische Studien zu skandinavischen Waffen gräbern 520/30 bis 900 n. Chr. (Nordiske Fortidsminder ser. B Vol. 17). Copenhagen: Kongelige Nordiske Oldskriftselskab.
- Keresztes, N. N. 2015. Fegyveres langobardok Magyarországon I. Típusok és fegyverkombinációk, in: A. Türk (ed.) *Hadak útján XXIV. A népvándorlások fiatal kutatóinak XXIV. Konferenciája. Esztergom, 2014. november 4–6. 1. Kötet*: 469-498. Budapest – Esztergom: Pázmány Péter Katolikus Egyetem, Bölcsészeti és Társadalomtudományi Kar, Régészeti Tanszék – Magyar Tudományos Akadémia, Bölcsészettudományi Kutatóközpont, Magyar Őstörténeti Témacsoport.
- Kirpičnikov, A. N. 1966. Drevenrusskoe oružie. Vypusk pervyj. Meči i sabli IX-XIII vv. Moskva – Leningrad: Izdatel'stvo «Nauka».
- Kolias, T. G. 1988. Byzantinische Waffen. Ein Beitrag zur byzantinischen Waffenkunde von den Anfängen bis zur lateinischen Eroberung. *Byzantina Vindobonensia* 17. Wien: Verlag der Österreichischen Akademie der Wissenschaften.

- Kolias, T. G. 2021. Edged Weapons. Sword, Sabre and Knife, in: V. Yotov, T. G. Kolias and Ch. Eger (eds.) *Swords in Byzantium: 19-59*. Varna: Slavena Publishing House.
- Koncz, I. 2014. A hegyközi 6. századi temető időrendje és kapcsolattrendszere. *Archaeologiai Értesítő* 139: 71-98.
- Košta, J. 2015. Vývoj bádání nad tříděním mečů z 2. poloviny 8. až přelomu 10. a 11. století. *Præhistorica XXXII/2*, 233-252.
- Kotovič, P. N. 2019. Netipičnyj klinok «bolgarskogo tipa» iz Terki, jugo-vostočnaja Pol'sa, in: *Voennaja arheologija. Sbornik materialov naučnogo seminaru. Vypusk 5. V čest' 90-letija vydajuščegosja otečestvennogo oružievěda doktora istričeskich nauk A.N. Kirpičnikova*: 100-116. Moskva: Institut arheologii Rossijskoj akademii nauk.
- Kovács, L. 1982. Voorużenie Vengrov – obretatelej rodiny: sabli, boevye topory, kop'ja (Die Waffen der landnehmenden Ungarn: Säbel, Kampfäxte, Lanzen). *Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften* 10-11 (1980-81), 243-255; 6 t./Taf. 1-6.
- Maniotis, E. and Klochko, D. 2023 – 2024. The Arched Sleeved Sword Guards from Pre-Scythian Time to the Byzantine and Islamic Realms. *Пловдивски исторически форум/Plovdivski istoricheski forum VII/1*: 5-26.
- McGeer, E. (ed.). 1995. *Sowing the dragon's teeth: Byzantine warfare in the tenth century*. *Dumbarton Oaks studies XXXIII*. Washington, D. C.: Dumbarton Oaks.
- Medvedev, A. F. 1959. Oružie Novgoroda Velikogo, in: A. V. Arcihovskij and B. A. Kolčín (eds.), *Materialy i issledovanija po arheologii SSSR. № 65. Trudy novgorodskoj arheologičeskoj ekspedicii Tom. 11*: 121-191. Moskva: Izdatel'stvo akademii nauk SSSR.
- Menghin, W. 1983. *Das Schwert im Frühen Mittelalter*. Stuttgart: Konrad Theiss Verlag.
- Miks, Ch. 2007a. *Studien zur römischen Schwertbewaffnung in der Kaiserzeit. Text. Kölner Studien zur Archäologie der römischen Provinzen. Band 8. Rahden/Westf.: Verlag Marie Leidorf GmbH*.
- Miks, Ch. 2007b. *Studien zur römischen Schwertbewaffnung in der Kaiserzeit. Katalog und Tafeln. Kölner Studien zur Archäologie der römischen Provinzen. Band 8. Rahden/Westf.: Verlag Marie Leidorf GmbH*.
- Moilanen, M. 2015. Marks of Fire, Value and Faith. Swords with Ferrous Inlays in Finland during the Late Iron Age (ca. 700–1200 AD). *Turku: Turku Suomen Keskiajan Arkeologian Seura*.
- Müller, R. 2010. *Die Gräberfelder vor der Südmauer der Befestigung von Keszthely-Fenékpuszta*. Budapest/Leipzig/Keszthely: Verlag Marie Leidorf GmbH.
- Niculescu, Gh. 2024a. Report on the quantitative XRF analysis of two swords (Inv. Nos. 54484 and 69920) from the National Museum of Romanian History in Bucharest. The 1st of February 2024. Unpublished report of the X-Ray Investigation Department within the Section of the Physical-Chemical and Biological Investigations of the National Museum of Romanian History in Bucharest. Bucharest: National Museum of Romanian History in Bucharest.
- Niculescu, Gh. 2024b. Report on the quantitative XRF analysis of the cross-guard of a sabre/palash (Inv. No. 17305) from the National Museum of Romanian History in Bucharest. The 26th of March 2024. Unpublished report of the X-Ray Investigation Department within the Section of the Physical-Chemical and Biological Investigations of the National Museum of Romanian History in Bucharest. Bucharest: National Museum of Romanian History in Bucharest.
- Oța, S., Dragotă, A. and Ducman, G. 2006. Piese din colecțiile MNIR, provenite din descoperiri de caracter funerar, din Transilvania și Crișana (secolele X-XII). *Patrimonium Apvlense* 5-6, 75-120.
- Peirce, I., Oakeshott, E. and Lee, A. J. 2002. *Swords of the Viking Age*. Woodbridge: The Boydell Press.
- Petersen, J. 1919. *De norske vikingesverd. En typologisk-kronologisk studie over vikingetidens vaaben*. Kristiania: I kommission hos Jacob Dybwad.
- Petrov, M. and Hrisimov, N. 2015. Ednoostrite klinovi oražija ot teritorijata na Bălgarija i vizantijskata voenna tradicija. *Sbornik Dobrudža* 3: 337-358.
- Pinter, Z. – K. 2007. *Spada și sabia medievală în Transilvania și Banat (secolele IX – XIV)*. Sibiu: Ministerului Culturii și Cultelor – Muzeul Național Brukenthal.
- Pinter, Z. – K. 2023. O spadă bizantină descoperită la Alba Iulia, in: Z. K. Pinter, C. Urduzia, A. Nițoi and R. C. Pop (eds.) *Relații Interetnice în Transilvania Militaria Mediaevalia în Europa Centrală și de Sud-Est V. Lucrări prezentate în conferințele internaționale Interethnic Relations in Transylvania. Militaria Mediaevalia in Central and South-Eastern Europe. Sibiu, 2020-2023*: 13-24. Sibiu: Editura Muzeului Național Brukenthal.

- Pinter, Z. K. and Yotov, V. 2021a. The Byzantine Spatha in the Late 5th Century and the 6th Century AD in the Balkans (based on the sword from Capidava and other similar finds), in: V. Yotov, T. G. Kolias and Ch. Eger (eds.) *Swords in Byzantium*: 61-82. Varna: Slavona Publishing House.
- Pinter, Z. K. and Yotov, V. 2021b. A sword from Capidava (Romania) and some notes on the Byzantine “Spathae” in the 6th century. *Acta Militaria Mediaevalia* 17: 167-181.
- Plavinski, M. A. 2009. *Narysky gistoryi klinkovaj zbroi X–XIII stagoddzjaŭ na Belarusi*. Minsk: I.P. Logvinaŭ.
- Pletneva, S. A. (ed.) 1981. *Stepi Evrazii v epohu srednevekov’ja*. Moskva: Izdatel’sтво Nauka.
- Pletneva, S. A. 2003. *Kočevniki juznorusskikh stepej v epohu srednevekov’ja*. Voronež: Izd-vo Voronež.
- Popov, S. 2018. “Bulgarian Type” Sabers from Vatevi Collection in the City of Plovdiv, Bulgaria, in: Z. K. Pinter, A. Nițoi and C. Urduzia (eds.) *Relații interetnice în Transilvania: Militaria Mediaevalia în Europa Centrală și de Sud-Vest. Lucrări prezentate în conferințele internaționale Relații interetnice în Transilvania, Sibiu, 2015-2017*: 33-40. Sibiu: Astra Museum.
- Príchystalová, R. and Kalábek, M. (eds.). 2014. *Raněstředověké pohřebiště Olomouc – Nemilany*. Katalog. Brno: Masarykova univerzita.
- Quast, D. 2012. Einige alte und neue Waffenfunde aus dem frühbyzantinischen Reich, in: T. Vida (ed.) *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére*: 351-370. Budapest: ELTE – Magyar Nemzeti Múzeum – MTA.
- Rejholcová, M. 1995a. Pohrebisko v Čakajovciach (9. – 12. storočie). Analýza. Nitra: Archeologický ústav SAV.
- Rejholcová, M. 1995b. Pohrebisko v Čakajovciach (9. – 12. storočie). Katalóg. Nitra: Archeologický ústav SAV.
- Salmon, T. 2020. New perspectives on the Byzantine “paramerion”. *Acta Militaria Mediaevalia* 16: 7-14.
- Simon, L. 1991. Korai Avar kardok, in: E. Maróti (ed.) *Studia Comitatus (Régészeti tanulmányok Pest megyéből)* 22: 263-346. Szentendre: Pest megye múzeumai.
- Szabó, J. Gy. 1965. Azz egri múzeum avarkori emlékanyaga I. Kora-avarkori sírleletek Tarnaméráról. *Az Egri Múzeum Évkönyve* III, 29-71.
- Ștefan, Gh., Barnea, I., Bitir, Gh., Bolde, Em., Bujor, E., Constantin, F., Comșa, E., Constantinescu, St., Diaconu, P., and Pompilian, Gh. 1953. Șantierul Garvăn - Dinogetia. *Studii și Cercetări de Istorie Veche* 4/1-2: 240-274.
- Ștefan, Gh., Barnea, I., Comșa, M., and Comșa, E. 1967. *Dinogetia. I. Așezarea feudală timpurie de la Biserița-Garvăn*. București: Editura Academiei Republicii Socialiste România.
- Točík, A. 1992. Materiály k dejinám južného Slovenska v 7.-14. storočí. *Študijné zvesti AÚ SAV* 28: 5-250.
- Viskupič, M. 2022. Koruna hlavice meča z Păcuilui lui Soare. Projekt Forløg: Reenactment a věda [online] 2022-03-07: 1-9. Accessed July 23, 2024. <https://sagy.vikingove.cz/koruna-hlavice-meca-z-pacuilui-lui-soare/>.
- Viskupič, M. 2023. Ranostredoveké meče z územia Rumunska (8. – 11. storočie). Projekt Forløg: Reenactment a věda [online] 2023-01-02: 1-51. Accessed June 23, 2024. <https://sagy.vikingove.cz/ranostredoveke-mece-z-uzemia-rumunska-9-11-storocie/>.
- Vlasatý, T. 2023. Šavle bulharského typu ze Staré Břeclavi. Projekt Forløg: Reenactment a věda [online] 2023-11-23: 1-21. Accessed August 12, 2024. <https://sagy.vikingove.cz/savle-bulharskeho-typu-ze-stare-breclavi/>.
- Vlassa, N. 1967. Tot despre locul de descoperire a sabiei “de la Morești”. *Acta Musei Napocensis* 4: 511-512.
- Weller, U., Bloier, M., and Flügel, Ch. 2020. *Dolche und Schwerter. Erkennen, bestimmen, beschreiben*. Berlin – München: Deutscher Kunstverlag.
- Yotov, V. 2004. *Văorăzhenieto i snarjăzhenieto ot bălgarskoto srednovekovie (VII-XI vek)*. Varna: Zograf – Abagar.
- Yotov, V. 2010. Rannie sabli (VIII–X vv.) na Nižnem Dunae, in *Kul’tury Evrazijskikh stepej vtoroj poloviny I tysjačeleťija n.e.*: 217-225. Samara: Gosudarstvennoe bjudžetnoe učreždenie kul’tury «Samarskij oblastnoj istoriko-kraevedčeskij muzej im. P. V. Alabina».
- Yotov, V. 2011. A New Byzantine Type of Swords (7th – 11th Centuries). *Ншш и Византија IX*: 113-124.
- Yotov, V. 2017. Byzantine Weaponry and Military Equipment in the Homilies of St. Gregory of Nazianzus (Paris, Gr. 510). *Fasciculi Archaeologiae Historicae* XXX: 153-162.
- Yotov, V. 2021a. The cold weapon from Čierny Brod No. 2 and the polemic about the παραμήριον, in: V. Yotov, T. G. Kolias and Ch. Eger (eds.) *Swords in Byzantium*: 163-174. Varna: Slavona Publishing House.
- Yotov, V. 2021b. The find of Sfântu Gheorghe, Covasna County (1943): questions, that might be raised, in: V. Yotov, T. G. Kolias and Ch. Eger (eds.) *Swords in Byzantium*: 189-198. Varna: Slavona Publishing House.

Yotov, V. 2021c. The Garabonc Type of Byzantine Swords (second half of the 9th century), in: V. Yotov, T. G. Kolias and Ch. Eger (eds.) *Swords in Byzantium: 135-149*. Varna: Slavica Publishing House.

Yotov, V. 2022a. Archaeological and Art Parallels of Byzantine Sword Discovered in Grave No 55 of Garabonc I Necropolis (Second Half of 9th century), in: A. Türk (ed.) *Hadak útján. A népvándorlások fiatal kutatóinak XXIX. konferenciája*. Budapest, 2019. november 15–16. (29th Conference of young scholars on the Migration Period. November 15–16, 2019, Budapest): 153-168. Budapest: Bölcsészettudományi Kutatóközpont Magyar Őstörténeti Kutatócsoport – Pázmány Péter Katolikus Egyetem Régészettudományi Intézetének – Martin Opitz Kiadó.

Yotov, V. 2022b. The Sword from Tekija Fortress and the Problem of Date of Byzantine Spatha at the End of 5th until 6th C. in the Balkans. *Acta Musei Tiberiopolitani* 4: 93-102.

Zábojník, J. 1995. Soziale Problematik der Gräberfelder des nördlichen und nordwestlichen Randgebietes des Awarischen Kaganats. *Slovenská Archeológia* XLIII/2: 205-344.

Zábojník, J. 2007. K problematike predmetov „byzantského pôvodu“ z nálezisk obdobia avarského kaganátu na Slovensku, in: V. Turčan (ed.) *Byzantská kultúra a Slovensko. Zborník štúdií. Zborník Slovenského národného múzea. Archeológia. Supplementum 2: 13-32*. Bratislava: Slovenské národné múzeum – Archeologické múzeum.

Lista ilustrațiilor și tabelelor

Tabelul 1. Săbii medievale timpurii, paloșe, spade și părțile acestora din Muzeul Național de Istorie a României din București (România; autori: Martin Husár și Silviu Ion Oța). * - parte incompletă a sabiei/paloșului/spadei sau a fragmentului, așadar dimensiunile sunt incomplete.

Tabelul 2. Compoziția chimică a părților armelor medievale timpurii de împungere și tăiere din Muzeul Național de Istorie a României din București (România) conform analizelor cantitative XRF ale Gheorghe Niculescu. (Secția Investigații cu Raze X, Secția Investigații Fizico-Chimice și Biologice a Muzeului Național de Istorie a României din București), din 7 (Niculescu 2024a) și 26 martie (Niculescu 2024b) 2024.

Fig. 1. Harta siturilor în care au fost găsite săbii, paloșe, spade întregi și fragmentare medievale timpurii păstrate la Muzeul Național de Istorie a României din București (România; autor: Martin Husár). 1 – Morești-Hulă (județul Mureș, România), cel mai probabil mormântul 70, nr. inv. 17152 la MNIR; 2 – Dinogetia/Garvăn-Bisericuța (județul Tulcea, România), cetate, locuința nr. 112, nr. inv. 17305 la MNIR; 3 – Dinogetia/Garvăn-Bisericuța (județul Tulcea, România), cetate, locuința nr. 144, nr. inv. 17339 la MNIR; 4 – Bratei (județul Sibiu, România), nr. inv. 18669; 5 – Morești-Podei (județul Mureș, România), nr. inv. 54484 la MNIR; 6 – Noșlac (județul Alba, România), mormântul 18, nr. inv. 84921 la MNIR; 7 – Locație necunoscută, Sudul României (probabil județul Ilfov, România), descoperire întâmplătoare, încă fără nr. inv. la MNIR; 8 – Vidra (județul Ilfov, România), descoperire întâmplătoare, încă fără nr. inv. la MNIR. Surse hărți: ESRI Terrain, Natural Earth (<https://www.naturalearthdata.com/>), QGIS, OpenStreetMap, Marineregions.org.

Fig. 2. Spadă medievală timpurie cu două tăișuri constând dintr-o tijă de înmănușare și o lamă de la Muzeul Național de Istorie a României din București (România). 1 – Morești-Hulă (județul Mureș, România), cel mai probabil mormântul 70 – nr. inv. 17152; 2 – sit necunoscut în Bratei (județul Sibiu, România) – nr. inv. 18669; 3 – Noșlac (județul Alba, România), mormântul 17 – nr. inv. 84921; 4 – descoperire întâmplătoare din Vidra (jud. Ilfov, România) – fără nr. inv. 1b-c, 2b-c, 3b-c, 4a-b – desene de Georgiana Ducman; 1a, 2a, 3a – fotografii de Martin Husár. 1-4 – fier. Scara: 1-4.

Fig. 3. Spadă medievală timpurie cu două tăișuri formată dintr-o tijă de înmănușare, o gardă inferioară și o lamă cu plin dintr-un sit necunoscut de la Morești-Podei (județul Mureș, România) – număr de inventar 54484 la Muzeul Național de Istorie a României în București (România). 1a – Imagine cu raze X la pragul de energie de 120 kV de Laurențiu-Marian Angheluță (după Angheluță 2024); 1b, e-g – desene de Georgiana Ducman; 1c-d – fotografii de Martin Husár; 1h-i – Imagine cu raze X la pragul de energie de 80 kV de Laurențiu-Marian Angheluță (după Angheluță 2024). 1a-b, h – fier; 1c-g, i – fier, cupru, alamă. Scara: 1a-i.

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decorative identificate de Martin Husár și Silviu Ion Oța în urma analizei radiografice realizate de Laurențiu-Marian Angheluță (Angheluță 2024). 1a-f – fier, cupru, alamă. Scara: 1a-f.

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Fig. 8. Grupurile de forme ale armelor medievale timpurii de împungere și tăiere (și ale părților acestora) din Muzeul Național de Istorie a României din București (România), reprezentate prin exemplarele lor particulare (și posibila lor reconstrucție pe baza analogiilor) și cronologia acestor forme ale armelor menționate mai sus din Europa Centrală, de Sud-Est și de Est și din fostul Imperiu Bizantin (autor: Martin Husár). Exemplarele particulare menționate mai sus, reconstituite și prezentate în figura 8: 1 – Morești-Hulă (județul Mureș, România), cel mai probabil mormântul 70 – nr. inv. 17152; 2 – Sit necunoscut din Morești-Podei (județul Mureș, România) – nr. inv. 54484; 3 – Dinogetia/Garvăn-Bisericuța (județul Tulcea, România), locuința nr. 144 a cetății – nr. inv. 17339; 4 – Sit necunoscut, sudul României (probabil județul Ilfov, România), descoperire întâmplătoare – fără nr. inv.; 5 – Dinogetia/Garvăn-Bisericuța (județul Tulcea, România), locuința nr. 112 a cetății – nr. inv. 17305. 1-2, 4-5 – fotografii de Martin Husár; 3 – fotografia unui autor necunoscut din anul 1967 (Ștefan et al. 1967, Fig. 35/19). 1, 3-4 – fier; 2 – fier, cupru, alamă; 5 – bronz. Scara: 1-5.

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