

AN EARLY-MEDIAEVAL WINGED SPEARHEAD FROM FRUŠKA GORA

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Researchers have referred to the winged spearhead found on the southern slopes of Fruška Gora for more than 50 years. This paper fully describes and analyses this winged spearhead for the first time. The author briefly discusses the possible places of the spearhead's origin, compares the spearhead with morphologically and technologically similar artefacts found all over Europe,

and places it within relevant typological-chronological classifications. Based on more or less close analogies, the Fruška Gora spearhead is dated to between the middle of the 9th century and the beginning of the 11th. The lack of archaeological context calls for caution when it comes to dating and interpreting this artefact and placing it in the course of known history.

Key words:

Syrmia, Fruška Gora, Grgurevci, Šuljam, early Middle Ages, winged spearheads

Introduction

The Mediaeval Collection of the Archaeological Museum in Zagreb treasures several winged spearheads, including one found on the southern slopes of Fruška Gora and shrouded in a veil of mystery.¹ The location of its discovery, its archaeological context and the circumstances of its appearance in the museum remain unknown.

Researching early-mediaeval weaponry from the territory of the former Yugoslavia, Dušan Pribaković touched on winged spearheads, citing the find from Fruška Gora as one of the examples.² Zdenko Vinski described it as a “Carolingian long and heavy” spearhead discovered in Grgurevci-Šuljam.³ Both scholars de-

prived the readers of crucial information: a detailed description accompanied by an illustration, the spearhead's history and archaeological context, and an inventory number or its keeping place.

Museum curators probably neglected to enter the Fruška Gora spearhead into the inventory book of the Mediaeval Collection of the Archaeological Museum in Zagreb,⁴ leading to its misplacement during the great reconstruction of the museum in 1997/1998. Recently, Željko Demo traced this artefact and assigned it a new inventory number (inv. no. S-4120).⁵

1 Željko Demo, museum advisor (now retired), and Maja Bunčić, senior curator of the Mediaeval Collection of the Archaeological Museum in Zagreb, kindly and selflessly granted me access to examine this winged spearhead and provided me with information, drawings, photographs, and X-ray images. I would like to use this opportunity to express my deepest gratitude.

2 Pribaković 1965a, 121; 1965b, 88, n. 400; 1966, 47, n. 95; Originally, Pribaković labelled the find-site as Grgurevac, subsequently calling it Grgurovac.

3 Vinski 1979, 176, n. 192, 187, no. 21.

4 Demo 2011, 62, n. 8.

5 The spearhead is still marked with its old inventory number, 2020. The number lacks a museum collection identification symbol (Pl. 2: 2). Željko Demo informed me in writing about the history of the Fruška Gora spearhead, in an e-mail of September 18, 2013.

In the meantime, several researchers have mentioned the Fruška Gora spearhead, usually citing the work of Zdenko Vinski.⁶ One of them, intriguingly, even revealed one previously unpublished fact.⁷

A Possible Place of Discovery

The village of Grgurevci lies on the southern slopes of Fruška Gora, north of Sremska Mitrovica. It borders the village of Šuljam to the east. There are no documented early-mediaeval archaeological sites in Grgurevci or Šuljam.⁸ In Grgurevci, the archaeologists found scant evidence of the mediaeval period: some pottery shards, the remains of mediaeval and/or post-mediaeval plumbing, and a vaulted underground structure thought to be part of the St. Grgur monastery, first mentioned in 1247.⁹ In Šuljam, the traces of mediaeval life took the form of several furnaces discovered at the prehistoric site of Vagan.¹⁰ On Gradac hill, about 6 km north of Šuljam, sit the remains of an elliptical mediaeval fortification.¹¹ However, a testament to early-mediaeval human activity near Grgurevci does exist: a necropolis excavated near Mandelos, a village on Grgurevci's western boundary. Until discovered, the necropolis slept next to the Sirmium-Bononia Roman vicinal road, active throughout the Middle Ages.¹² On the basis of small finds, the necropolis was dated to between the beginning of the 7th century and the middle of the 9th.¹³

Description of the Spearhead

The long (560 mm) and massive (1593 g) winged spearhead found either in Grgurevci or neighbouring Šuljam, or in their vicinity, exhibits quality artisanship and a high state of preservation, with the exception of sporadically damaged blade edges (Pl. 1–3).

A lenticular cross-section and almost uniform width characterize the blade (Pl. 1–2). Its maximum width lies in the lower part, 235 mm below the tip. From that point, the blade gradually narrows towards the tip and curves towards the socket. The blade length equals 386 mm, with maximum width 63 mm. Thickness at maximum width is 10.5 mm. X-radiography revealed that the

spearhead was not made by pattern welding (Pl. 4). The X-ray brought to light a circular motif – invisible to the naked eye – in the lower part of the blade (Pl. 4: 2). Higher transparency of this motif to the X-rays could indicate either that the motif was made by inlaying some other metal, more radiolucent, into the iron blade, or that some ornament, symbol or workshop sign, which faded away in time, was very gently imprinted into the blade's surface. Two thin plastic protrusions of a semi-circular cross-section decorate the blade-socket connection, one below each of the blade's edges.

The long, narrow socket lacks decoration (Pl. 1–2; Pl. 3: 1). Its length equals 174 mm, outer diameter 38 mm, and inner diameter 32 mm. The socket's cross-section changes from octagonal, almost circular in the lower part, to hexagonal in the upper part. Massive wings with flat tops and concave bottoms sit near the socket's mouth and extend slightly above the middle of the socket (each wing is 94 mm long). The wings span 118 mm. Two vertical grooves trim the end of each wing (Pl. 1; Pl. 3). Iron nails, used to fasten the spearhead to a wooden shaft, pierce the lower part of each wing. One nail is missing its head. The nail with the preserved head (21 mm long) curves towards the socket's mouth; the other (19 mm long) inclines slightly (Pl. 1; Pl. 3: 3).

Comparative Analysis

The spearhead from Fruška Gora was compared with morphologically and technologically similar artefacts discovered throughout Europe. Comparison examples were chosen on the basis of similarities in contour, dimensions, proportions, weight, and lack of socket grooves and pattern-welded blades. It seems that the spearhead from Fruška Gora is rather unique, as none of the proposed analogies fully resembles it.

The winged spearhead from Fruška Gora resembles the spearhead discovered in the 10th – 11th century settlement in Malá Kopanja (Ukraine) in contour, dimensions and proportions (Tab. 1–2), and the lack of socket grooves. The spearhead from Malá Kopanja differs by having a prominent blade ridge and smaller, archaically shaped wings.¹⁴

A destroyed section of a necropolis excavated in Luboń (Poland) gave birth to a damaged spearhead found with weapons of mainly Scandinavian origin, belonging to one or two graves dated to the end of the 10th century and the first half of the 11th.¹⁵ The spearheads from Fruška Gora and Luboń share common features such as contour, blade shape and lack of socket grooves, but differ in size (Tab. 1), proportions (Tab. 2) and placement of wings.¹⁶

Two winged spearheads surfaced from the wreck of a Byzantine merchant ship dated to the third decade of the 11th century, discovered in Serçe Limanı bay (Turkey).¹⁷ The spearhead labelled WP6 resembles the find from Fruška Gora in contour, but differs

6 E.g. Милетић 1979, 146; Bekić 2004, 169; Sekelj Ivančan 2004, 111, n. 5; Husár 2006, 50; 2014, 33, 34, n. 48, 35, n. 57.

7 Husár 2006, 50; 2014, 34, n. 48. Husár described the socket of the spearhead as octagonal in cross-section.

8 I am indebted to Dragan Anđelić and Ivana Pašić, archaeologist-conservationists, who granted me access to the documentation of the Provincial Institute for Protection of Cultural Monuments, Petrovaradin. My gratitude goes to Biljana Lučić, archaeologist-conservationist, who provided me with information from the documentation of the Institute for Protection of Cultural Monuments, Sremska Mitrovica, in an e-mail of December 6, 2013. The archaeological documentation of these institutions does not contain information about the winged spearhead from Fruška Gora.

9 Dossier no. 272/B in the documentation of the Provincial Institute for Protection of Cultural Monuments, Petrovaradin; Прица 1991, 67; Поповић 1996, 57–59.

10 Dossier no. 279/B in the documentation of the Provincial Institute for Protection of Cultural Monuments, Petrovaradin.

11 Прица 1991, 255.

12 Тадин 1995, 257; For the route of the Sirmium-Bononia road, see Милошевић 1988.

13 Тадин 1995, 262.

14 Kovács 1980, 100, 106, Taf. 64: 1.

15 Kurasiński 2005, 169, 173.

16 Nadolski 1954, 178–179, no. 52, Tab. 27: 2; Kurasiński 2005, 169–170, Abb. 5.

17 Bass 2004, 3–4.

TABLE 1. Measurements of the winged spearhead from Fruška Gora and comparison examples (made by A. Sajdl).

Find-site, Country	L (mm)	BL (mm)	BW (mm)	SL (mm)	SD (mm)	WS (mm)
Fruška Gora, Serbia	560	386	63	174	32/38	118
Malá Kopanja, Ukraine ¹	530	360	55*	170	?	81*
Luboń, Poland ²	450	340*	40*	110*	?	75*
Serçe Limanı WP6, Turkey ³	563	434	42	129	27/?	80*
Budapest, Danube, Hungary ⁴	570	410	65	160	40 / 30-45	?
Bosnia and Herzegovina ⁵	522	354	58	168	46	104
Bosnia and Herzegovina ⁶	>517	>385	65	132	?	N/A
Bosnia and Herzegovina ⁷	495	368	56	127	?	N/A
Varaždin, Croatia ⁸	520	385	57	135	39/43	100
Nijmegen, Waal, Netherlands ⁹	±536	±425	±62	±111	?	±100
Rijswijk, Netherlands ¹⁰	479	±360	39,3	±119	?	78,4
Chalon-sur-Saône, France ¹¹	465	350*	40*	115*	?	80*

L – spearhead length; BL – blade length; BW – maximum blade width;
 SL – socket length; SD – socket diameter (inner/outer); WS – wing span; ? – unknown;
 N/A – not applicable

*The author of this paper estimated these measurements by processing the published drawings with a computer software.

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| 1 Kovács 1980, 100. | 7 National Museum of Bosnia and Herzegovina, inv. no. 6899; Demo 2011, 74, tab. 4. |
| 2 Nadolski 1954, 178–179, no. 52. | 8 Tomičić 1985, 224. |
| 3 Schwarzer 2004, 367, 369, WP 6, 389, Tab. 21: 3. | 9 Ypey 1982, 255, no. 7. |
| 4 Kovács 1980, 98. | 10 Ypey 1982, 261, no. 23. |
| 5 Museum of Republika Srpska, inv. no. 443; Sijarić 2014, 221. | 11 Bouzy 1990, 166, cat. no. 209. |
| 6 National Museum of Bosnia and Herzegovina, inv. no. 6898; Demo 2011, 74, tab. 4. | |

TABLE 2. Proportions, weight, and type according to Westphal's typology of the winged spearhead from Fruška Gora and comparison examples (made by A. Sajdl).

Find-site, Country	BL/BW	BL/SL	Weight (g)	Type
Fruška Gora, Serbia	6.1	2.2	1593	III
Malá Kopanja, Ukraine	6.5	2.1	?	III (?)
Luboń, Poland	8.5	3.1	?	IV
Serçe Limanı WP6, Turkey	10.3	3.4	?	IV
Budapest, Danube, Hungary ¹	6.3	2.6	1710	III
Bosnia and Herzegovina ²	6.1	2.1	1822.4	III
Bosnia and Herzegovina ³	5.9	2.9	1333	III
Bosnia and Herzegovina ⁴	6.6	2.9	1113.7	III
Varaždin, Croatia ⁵	6.75	2.85	1200	III
Nijmegen, Waal, Netherlands ⁶	6.9	3.8	1400	III
Rijswijk, Netherlands ⁷	9.2	3.0	?	III/IV
Chalon-sur-Saône, France ⁸	8.8	3.0	?	IV

BL – blade length; BW – maximum blade width; SL – socket length; ? – unknown; N/A – not applicable

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| 1 Weight according to Kovács 1980, 98. | 5 Demo 2011, 72, tab. 3, 74, tab. 4. |
| 2 Museum of Republika Srpska, inv. no. 443; Weight according to Sijarić 2014, 213. | 6 Ypey 1982, 255, no. 7; Westphal 2002, 295, Tab. 3.4.b. |
| 3 National Museum of Bosnia and Herzegovina, inv. no. 6898; Demo 2011, 72, tab. 3, 74, tab. 4. | 7 Ypey 1982, 261, no. 23; Westphal 2002, 295, Tab. 3.4.b. |
| 4 National Museum of Bosnia and Herzegovina, inv. no. 6899; Demo 2011, 72, tab. 3, 74, tab. 4. | 8 Type according to Westphal 2002, 260. |

by its pronounced blade ridge, its proportions (Tab. 2) and the position of the wings.¹⁸

A stray find from Rijswijk (Netherlands) parallels the spearhead from Fruška Gora in contour and blade shape. The pattern-welded blade, different dimensions and proportions (Tab. 1–2), presence of socket grooves, and position of the wings distinguish it from the Fruška Gora find.¹⁹ A very similar spearhead emerged from the River Saône near Chalon-sur-Saône (France).²⁰ This spearhead, along with two other specimens from France, shows incised motifs on the blade. These motifs differ significantly in shape, position and creation technique in comparison with the motif on the Fruška Gora spearhead.²¹

Researchers did not publish the weight of the spearheads from Malá Kopanja, Luboň, Rijswijk and Chalon-sur-Saône. Joseph Schwarzer described the spearheads from the Byzantine shipwreck as “heavy”.²² Their weight could not be measured, as all iron artifacts from the shipwreck have disintegrated, and their reproductions were cast with epoxy resin using the natural mould that had formed around the artefacts before they perished.²³

In weight, the Fruška Gora spearhead approximates the spearhead found in the Danube near Budapest (1710 grams)²⁴ and the stray find kept in the Museum of Republika Srpska (1822.4 grams).²⁵ Similar in size (Tab. 1), proportions (Tab. 2) and the lack of socket grooves, these spearheads contrast in shape. The latter two specimens have deltoid shaped blades with prominent ridges, and shorter, stronger sockets with a larger diameter.²⁶ László Kovács dated the Budapest spearhead to between the 9th and 11th centuries, with a possibility of later dating due to its shape.²⁷ Mirsad Sijarić dated the spearhead from the Museum of Republika Srpska to between the middle of the 9th century and the first decades of the 11th.²⁸

Other winged spearheads, whose weight exceeds 1 kg, differ significantly from the Fruška Gora spearhead. Two stray finds from the territory of present-day Herzegovina have deltoid shaped blades with prominent ridge and socket grooves;²⁹ a spearhead from Varaždin, also with a grooved socket, and another from the

River Waal, near Nijmegen, stand out with pattern-welded blades with prominent ridge and dissimilar wings.³⁰ Compared with the spearhead from Fruška Gora, these four specimens also differ in proportions and weight (Tab. 2): they are 12 – 30 % lighter.³¹

Typological Analysis and Dating

On the basis of the shape of its wings, one could classify the Fruška Gora find as a winged spearhead of fully developed form (*Flüggellanze mit vollendeter Form*) according to Peter Paulsen's typology.³² Spearheads of this type developed in the Alemannic-Frankish territory of southern Germany, where Paulsen linked specimens with decorative socket grooves with the expansionism of Charlemagne towards the southeast, along with the establishment of the Eastern March, dating them around the year 800.³³ The Fruška Gora find fits into Paulsen's next development stage of winged spearheads, dated up to the year 1000, and characterized by lack of socket grooves and a wingspan between 10 and 15 cm.³⁴

Erik Szameit classified winged spearheads from the territory of present-day Austria on the basis of the position of their wings. According to his research, these spearheads, originating mostly from graves, appeared in the Austrian regions between the last third of the 8th century and the first third of the 9th, as early Carolingian products of western workshops.³⁵ The spearhead from Fruška Gora could be included in Szameit's type A, characterized by massive decorated wings with a relatively large wingspan, whose bottom edge extends to the socket mouth. However, other examples of Szameit's type A differ considerably: they weigh four times less and have pattern-welded blades and socket grooves.³⁶ These morphological differences are most probably chronological as well.

Martin Husár has typologically analysed spearheads from the Carpathian Basin. He designated winged spearheads as type BA, dividing them into four groups on the basis of the shape of their wings.³⁷ Despite the lack of detailed description and illustration, Husár included the spearhead from Fruška Gora in his variant BAd, citing the paper of Zdenko Vinski. Spearheads of this variant have flat wings with a large wingspan, a flat top perpendicular to the socket, and a concave bottom.³⁸

Using typology developed by Herbert Westphal, who analysed grave and stray finds from Westphalia, Saxony, and neighbouring regions, Željko Demo suggested a somewhat different grouping and dating of winged spearheads from present-day Croatia

18 Schwarzer 2004, 367, 369, WP 6, Fig. 21: 6, WP 6, 389, Tab. 21: 3.

19 Ypey 1982, 261, no. 23, 262, Abb. 23.

20 Bouzy 1990, 166, Fig. 137, cat. no. 209.

21 Bouzy 1990, 164, 166, Fig. 137, cat. no. 207–209.

22 Schwarzer 2004, 367, WP 5, WP 6.

23 Bass, van Doorninck 2004, 65.

24 Kovács 1980, 98.

25 Sijarić 2014, 213.

26 Kovács 1980, 98, 105, Taf. 61: 4; Sijarić 2014, 212–213, 221, T. 45: 1.

27 Kovács 1980, 105.

28 Sijarić 2014, 215.

29 Miletić 1991, 204–205, T. 4: 1–2. A stray find from Vir, near Posušje, possibly the largest and heaviest spearhead found on the Balkan Peninsula, was not compared with the find from Fruška Gora, since the two differ in shape substantially and the exact dimensions and weight of the spearhead from Vir still remain unknown (Oreč 1984, 124, sl. 18; b; Miletić 1991, 205–206, T. 4: 3; Demo 2011, 72, tab. 3, kat. br. B8, 73, n. B8, 74, tab. 4.).

30 Tomičić 1968, 53–55, sl. 2; 1985, 223–226, sl. 9, 10; Ypey 1982, 255, no. 7, Abb. 7.

31 Tomičić 1985, 224; Demo 2011, 72, tab. 3, 74, tab. 4.

32 Paulsen 1967, 257–259.

33 Paulsen 1967, 262–263, Abb. 1.

34 Paulsen 1967, 263–264, Abb. 2.

35 Szameit 1987, 167–170.

36 Szameit 1987, 167, Abb. 2.

37 Husár 2014, 29–37.

38 Husár 2014, 33, Tab. 18–26.

and Bosnia and Herzegovina.³⁹ Westphal based his typology on technological and morphological characteristics of winged spearheads such as: ratio of blade length to blade width and of blade length to socket length, position of the blade's maximum width in relation to its length, presence/absence of pattern welding and decorative socket grooves, diameter and cross-sectional shape of the socket, shape and span of the wings, and material and decoration of the nails.⁴⁰

Demo included the massive spearheads from Varaždin and Herzegovina in Westphal's type III.⁴¹ Winged spearheads of this type share the following characteristics: a blade with mostly uniform width; a socket with circular, octagonal or square cross-section, diameter up to 38 mm, and decorative grooves; a wingspan considerably greater than the maximum blade width; and a weight up to and around 1 kg. Westphal dated this group from the end of the 8th century to the second half of the 9th.⁴² This type also encompasses the spearhead from Nijmegen.⁴³ Based on proportions, shape and weight, the spearheads from Budapest and the Museum of Republika Srpska could also be placed in Westphal's type III. Depending on its weight, which is currently unknown, the spearhead from Malá Kopanja could belong to this type.

Westphal included the spearheads from Rijswijk and Chalon-sur-Saône in his type IV.⁴⁴ Spearheads of this type resemble the spearheads of type III in shape, but weigh less and have a more slender form. Westphal dated type IV to the second half of the 9th century and the 10th.⁴⁵ On the basis of shape, proportions, and placement of wings, the spearheads from Serçe Limanı (WP6) and Luboň probably belong to this type as well.

Plastic decorations on the blade-socket connection, present on the spearhead from Fruška Gora, characterize Westphal's type V from Otonian time. Based on their conspicuous and slender sockets, Westphal assumed that spearheads of this type had more of a parade use than a fighting one.⁴⁶ None of the spearheads previously mentioned, more or less similar to the one from Fruška Gora, shows this kind of decoration.

Martin Husár included the spearhead from Fruška Gora in Westphal's type II,⁴⁷ dated to the second half of the 8th century and the first half of the 9th,⁴⁸ despite the lack of detailed description or illustration. Indeed, the proportions of the Fruška Gora find (blade length / blade width ratio: 6.1; blade length / socket length ratio: 2.2) approximate the proportions of spearheads from Germany

(6.9; 2.8), the Netherlands (6.1; 2.6) and Austria (6.3; 2.5), included in Westphal's type II.⁴⁹ However, as shown above, the Fruška Gora find has more in common with the spearheads of Westphal's types III and IV; but, due to its dimensions, proportions and weight, it is closer to type III. Besides, the proportions of the Fruška Gora find approximate the proportions of spearheads from present-day Croatia and Bosnia and Herzegovina, included by Željko Demo in Westphal's type III (6.22; 2.79).⁵⁰

The characteristics of the spearhead from Fruška Gora match (more or less) the characteristics of later types of winged spearhead and those dated to the 10th/11th century. In accordance with the analogies offered, and with certain similarities to Westphal's type III, the spearhead from Fruška Gora could be dated to a broad time frame from the middle of the 9th to the end of the 10th / beginning of the 11th century. With the absolute lack of archaeological context, cautious dating is necessary.

Regarding Origin

Some scholars have associated the appearance of winged spearheads in the Carpathian Basin with Frankish conquests and wars against the Avars,⁵¹ while their presence in the 9th and 10th centuries has been explained through cultural influences of the Carolingian Empire, East Francia and the Holy Roman Empire.⁵²

Researchers have usually considered winged spearheads from the territories of present-day Bosnia and Herzegovina and Croatia as a product of Frankish workshops, dating them to the end of the 8th century and the beginning of the 9th, on the basis of analogies from Germany, Austria and the Carpathian Basin.⁵³ Similarly, archaeologists have dated the winged spearheads from nearby Slovenia to the end of the 8th century and the 9th.⁵⁴ Some researchers have interpreted their occurrence in the Pannonian regions of present-day Croatia, and in Slovenia, within the context of Frankish-Avar wars, Slavic-Frankish conflicts in the times of Liudewit or Ratimar,⁵⁵ or even Hungarian raids on Italy, in the case of later finds from Slovenia.⁵⁶ Others have observed winged spearheads from Bosnia and Herzegovina through the prism of historical events in the early-mediaeval Croatian state, which fell under Frankish control at the beginning of the 9th century.⁵⁷ The two massive spearheads from Herzegovina represent the only exception, since it was believed that they arrived later in the 9th century through the Carpathian Basin. Originally, Nada Miletić dated these finds to the 9th/10th century, because they

39 Demo 2011.

40 Westphal 2002, 221–266.

41 Demo 2011, 71–73.

42 Westphal 2002, 258.

43 Westphal 2002, 295, Tab. 3.4.b.

44 Westphal 2002, 260, 294, Tab. 3.4.c.

45 Westphal 2002, 259–260.

46 Westphal 2002, 260; 2004, 59–61.

47 Husár 2014, 35, n. 57.

48 Westphal 2002, 257.

49 Westphal 2002, 294, Tab. 3.4.a, 296, Tab. 3.4.c, 298, Tab. 3.4.e.

50 Demo 2011, 72, tab. 3.

51 Hampel 1905, 183–184; Kovács 1980, 97.

52 Kovács 1980, 97, 106–107; Husár 2014, 114–115.

53 Tomičić 1968; 1985, 224–226; Miletić 1977, 234–235; 1991; Милетић 1979; Vinski 1986, 67–69; Bekić 2004, 170–173; Sekelj Ivančan 2004.

54 Bitenc, Knific 1997, 22, 26, sl. 17; 2001a; 2001b; 2009, 328, cat. no. 91; Knific 2009, 139, Fig. 137; Knific, Nabergoj 2016, 73, sl. 85.

55 For Croatia see Tomičić 1968, 58–59; 1985, 226–228; Bekić 2004, 174–176; Sekelj Ivančan 2004, 122; For Slovenia see Bitenc, Knific 1997, 22; Knific 2009, 139; Knific, Nabergoj 2016, 73, sl. 85.

56 Bitenc, Knific 1997, 22; 2009, 328, cat. no. 91.

57 Miletić 1977, 237; 1991, 206; Милетић 1979, 149–150.

have decorative socket grooves, unlike analogous massive spearheads from the Carpathian Basin dated to the 10th/11th century.⁵⁸

Ante Milošević has proposed that winged spearheads without pattern-welded blades and socket grooves, found within the territories of present-day Croatia and Bosnia and Herzegovina, could be local products based on Carolingian examples.⁵⁹ László Kovács has interpreted 10th/11th century winged spearheads from the Carpathian Basin as local products, as well.⁶⁰ Alexander Ruttkay, who studied weapons and warrior equipment made between the 9th and 14th centuries found within the territory of present-day Slovakia, has also pointed out the possibility of local production of winged spearheads.⁶¹ According to Joseph Schwarzer, weapons from the Byzantine shipwreck at Serçe Limanı, including pole weapons, originate from the territory of present-day Bulgaria.⁶² To favour his hypothesis, he used the results of botanical analysis of the wooden parts of the weapons. This analysis determined that the wooden shafts of the pole weapons were made of two species of beech (*Fagus sylvatica* and *Fagus orientalis*), both growing on the southern Crimea and in southern and southeastern parts of present-day Bulgaria.⁶³ We should keep in mind that *Fagus sylvatica* grows all over the European continent, while *Fagus orientalis* grows on the eastern parts of the Balkan peninsula and Crimea,⁶⁴ that winged spearheads have not been discovered in the territory of present-day Bulgaria,⁶⁵ and that iron spearheads and wooden shafts do not have to be produced at the same time, nor at the same place. If this type of weaponry was e.g. subject to trade, over long distances it would be easier to transport the iron spearheads only, nailing them to the shaft once they reached their destination. Besides, we should consider the possibility that a wooden shaft was replaced with a new one if any damage occurred. Metalographic analysis has not been performed on the Fruška Gora spearhead. Bearing in mind the lack of spearhead workshops as well, at this time it is not possible to determine where the Fruška Gora spearhead was produced.

Historical Context

Written sources regarding Syrmia between the 9th and 11th centuries are not numerous, and there is no consensus when it comes to historians' interpretations. Some scholars believe that Syrmia was a border region of the Frankish Empire during the entire 9th century,⁶⁶ until Hungarians conquered it at the beginning of the next century.⁶⁷ Advocates of this hypothesis consider toponyms like Fruška Gora (Φραγγοχώριον) and *Francavilla* (modern

Mandelos) as the legacy of long-term Frankish presence,⁶⁸ although some linguists offer significantly different interpretations of these place-names' origins.⁶⁹ Others, however, think that Bulgarians conquered the area between Sava and Danube between the years 825 and 829/830, ruling it with short interruptions for more than one century.⁷⁰ Some supporters of this hypothesis believe that the Hungarians conquered Syrmia after the death of Bulgarian Tsar Simeon in 927,⁷¹ while others think that the Bulgarians ruled Syrmia until the fall of the Bulgarian Empire in 971.⁷² According to a generally accepted view, Syrmia was incorporated into the empire of Tsar Samuel at the end of the 10th century, and conquered by Byzantium after Samuel's death in 1018, and by the Hungarians before 1071/1072.⁷³ Lately, some scholars have hypothesized that Syrmia was under Hungarian rule from the first or the third decade of the 10th century, and connected Samuel's and Byzantium's conquest of Sirmium with the area of present-day Mačvanska Mitrovica, which was an island on the River Sava near Sirmium during the Middle Ages.⁷⁴

Conclusion

Torn out of the archaeological context, the spearhead from Fruška Gora cannot and should not be a contribution to the resolution of these dilemmas. Without carefully documented archaeological context and exact dating, it would be dangerous to draw any far-reaching conclusions, especially since this type of weaponry is widespread across Europe. Multiple prohibitions to export weapons and cavalry equipment to potential enemies imposed by Charlemagne and Charles the Bold testify to widespread trade in these items.⁷⁵ Quality weapons were for sure valuable spoils of war or loot.⁷⁶ As a distinctive symbol of power and status, weapons played a specific role in the maintenance of social relationships through the process of gift giving.⁷⁷ Laying weapons in a grave, or sticking a spear into a grave mound,⁷⁸ as well as the possible ritual placing of a spear in a body of water,⁷⁹ speaks of a religious-spiritual role that weapons were able to play. Some weapons are simple remnants and silent witnesses of battles past, whether known to us or not. Getting into the murky waters of interpreting the spearhead from Fruška Gora in any of these ways without reliable archaeological context would be challenging at the least.

58 Miletić 1991, 204–206, T. 4: 1–2.

59 Milošević 2000, 132–133.

60 Kovács 1980, 107.

61 Ruttkay 1976, 300.

62 Schwarzer 2004, 386.

63 Schwarzer 2004, 363, 386, 396, n. 3.

64 Tutin 1964, 61.

65 Йотов 2004.

66 Калић-Мијушковић 1967, 28, 31–32; Калић 2007, 31–34; Gračanin 2011, 154, 175.

67 Gračanin 2011, 205.

68 For Fruška Gora see Šišić 1925, 304, n. 13; Gračanin 2011, 155; For Francavilla (Mandelos) see Калић 2007, 33–34.

69 For Fruška Gora see Снок 1939, 118–119; Михајловић 1965, 1–2; Šimunović 2014, 183; For Francavilla (Mandelos) see Снок 1939, 118–119; Andrić 2005, 34–35; For a brief overview of the scientific discussion, see Калић 1971, 118–119, n. 14.

70 Šišić 1925, 334; Ферјанчић 1969, 48; Andrić 2009, 117.

71 Šišić 1925, 428–429; Andrić 2009, 117.

72 Ферјанчић 1969, 50.

73 Šišić 1925, 466, 480–482; Калић-Мијушковић 1967, 35–36; Ферјанчић 1969, 50–53; Калић 2007, 36–37.

74 Andrić 2009, 118–119; Gračanin 2011, 208–209.

75 Gessler 1908, 152–154; Vinski 1981, 53, n. 123; Gračanin 2011, 166–168, n. 148.

76 For the prices of weapons, see Nicolle 2005, 28.

77 Le Jan 2000, 286–287, 293–294; Nelson 2000, 172; Curta 2006, 2010, 271.

78 Kovács 1971, 108.

79 Bošković 2009, 99; Eichert, Mehofer, Baier 2011, 147–148.

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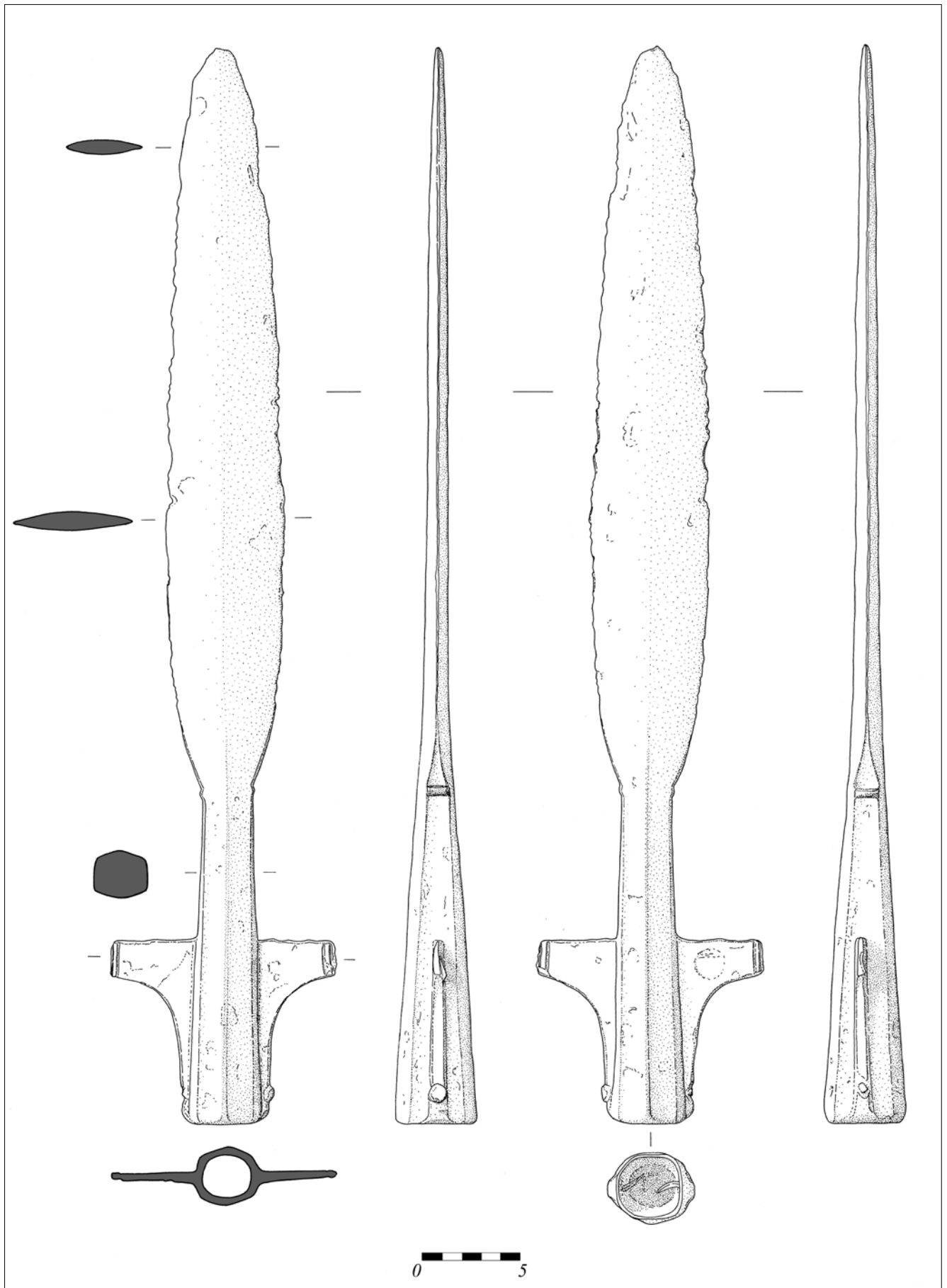


PLATE 1. Winged spearhead from Fruška Gora (The Medieval Collection of the Archaeological Museum in Zagreb, S-4120; made by A. Dugonjić).



PLATE 2. Winged spearhead from Fruška Gora (The Medieval Collection of the Archaeological Museum in Zagreb, S-4120; photo by I. Krajcar).



PLATE 3. Winged spearhead from Fruška Gora, details (The Medieval Collection of the Archaeological Museum in Zagreb, S-4120; photo by I. Krajcar).

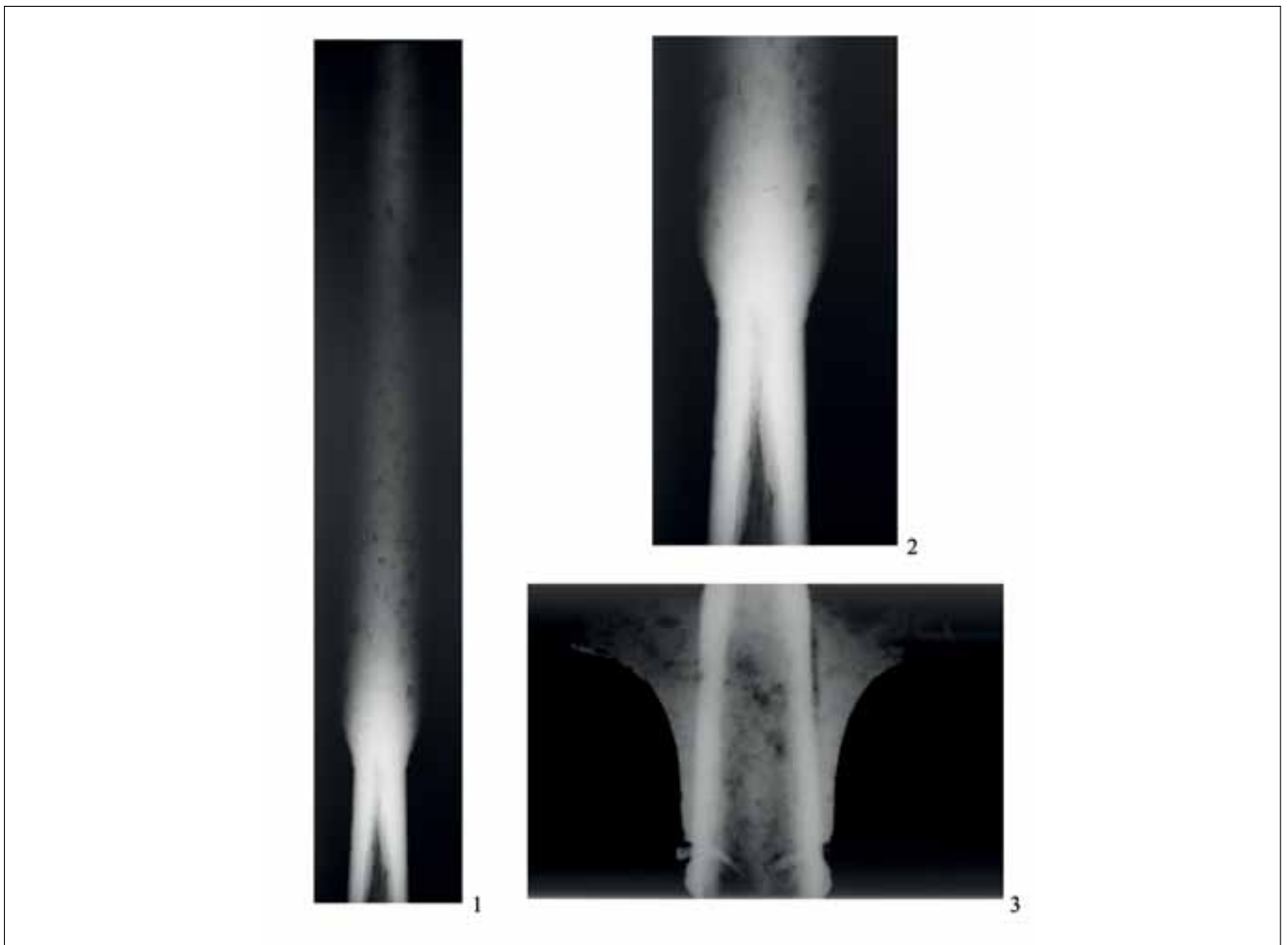


PLATE 4. Winged spearhead from Fruška Gora, radiographs (The Medieval Collection of the Archaeological Museum in Zagreb, S-4120; photo by D. Doračić).