

RESEARCH ARTICLE – VÝZKUMNÝ ČLÁNEK

An early medieval sword with a Carolingian K-type pommel from Varín in Northwestern Slovakia: A status symbol rather than a weapon

Raně středověký meč s karolínskou hlavicí typu K z Varína na severozápadním Slovensku: Statusový symbol spíše než součást výzbroje

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Early medieval swords, Carolingian or Viking, are treated and usually discussed in the literature as finds related to elites. In real life, however, second-grade swords were also made, and old and used weapons were repaired and traded. Lower-quality items were used by people with aspirations who could not afford to acquire expensive signs of status. Here, the author describes the find of a Carolingian-type sword from Varín in Northwestern Slovakia, which is determined to be a difficult-to-classify, low-end, early medieval product. However, it fits into the historical context of Carolingian times, when a class of new European nobility was forming. These considerations shed new light on the genesis of this social group.

Early Middle Ages – Carolingian period – Carolingian sword – elites – metallography

Raně středověké meče, karolínské či vikingské, jsou v literatuře obvykle považovány a diskutovány jako nálezy související s elitami. Ve skutečném životě se však vyráběly i méně kvalitní předměty, staré a použité zbraně se opravovaly a obchodovalo se s nimi. Méně kvalitní předměty používaly ambiciózní osoby, které si nemohly dovolit poříditi nákladné znaky společenského postavení. Autor popisuje nález meče karolínského typu z Varína na severozápadním Slovensku, který se ukázal být obtížně klasifikovatelným raně středověkým výrobkem nižší kvality. Zapadá však do historického kontextu karolínské doby, kdy vznikala nová vrstva evropské šlechty. Tyto úvahy vrhají nové světlo na její původ.

raný středověk – karolínské období – karolínský meč – elity – metalografie

Introduction

Swords of Carolingian age, commonly referred to in the English-language literature as Viking swords, are one of the most popular topics in archaeology. Indeed, these weapons have always been of interest, both in the past and now. Highly regarded artefacts, richly decorated, perfectly crafted swords are a showpiece and often the centrepiece of many museum collections. Produced mainly in Rhineland workshops, Carolingian swords exemplified a high degree of technological sophistication and enjoyed a distinguished reputation throughout Europe, with the success of the Frankish armies being a major factor in their popularity. Driven by the vision of a universal kingdom, the Franks conquered large parts of Europe at the turn of the 9th century, extending Carolingian power and influence to the Elbe, the Middle Danube, and the foothills of the Eastern Alps. The strength and effectiveness of Frankish swords was painfully demonstrated to the Avars, whose powerful



Fig. 1. K-type sword finds from the area of former Great Moravia: 1 – Teplička near Varín; 2 – Mikulčice; 3 – Krasná Hôrka castle; 4 – Detva (map by Google Earth under CC-BY 4.0 license).

khaganate fell in the early 9th century under the onslaught of the Franks and their Slavic allies. The demand for western weaponry in Central Europe is evidenced by the capitularies of the Carolingian rulers forbidding the export of arms to the lands of the Slavs and Avars, in particular. The persistent enforcement of this ban, which also applied to Vikings and Saracens, underscores the high value and widespread desirability of Frankish weapons (Nelson 2008, 384; Stalsberg 2017, 266–269). Over time, the production of these swords expanded locally, encompassing regions in Scandinavia and Central and Eastern Europe (Martens 2004; Marek 2005; Williams 2012; Martens – Astrup 2021).

Since its inception, the sword has remained the archetype of all weapons, as an object carrying symbolic (and often metaphysical) meaning and anchored in human culture—regardless of whether we consider the Bible, Germanic sagas or Celtic legends (Ellis-Davidson 1962, 104–215; Oakeshott 2001, 5–8; Pearce 2012; Brunning 2019, 12–17, 44, 111–158; Classen 2020). In common representation, it was always the weapon of gods, heroes, rulers, and elites. Its value, which was sometimes limited only by imagination and technological possibilities, was associated with the highest social and economic status an individual could achieve in a given community (Ellis-Davidson 1962, 211–215; Sayer et al. 2019). In early medieval societies, the sword constituted a central element of ceremonial practice, functioning not only as a visual marker of power but also as a repository of memory and social relationships. Political authority in the Early Middle Ages was articulated and legitimised through ritualised performances in which material objects played an active and constitutive role, rather than serving as passive symbols. Within this framework, ceremonial objects such as swords operated as media through which power was made visible, relationships were negotiated, and collective memory was structured. Swords embodied biographies, alliances, and obligations, transforming the weapon into a medium through which social order and collective memory were ritually negotiated. The sword emerges as an object with its own ‘biography’, accumulating layers of meaning derived from its role

in ceremonies, exchanges, and acts of remembrance. In this sense, swords functioned simultaneously as instruments of authority and as material repositories of social memory, anchoring power relations within both ritual practice and material culture (*Nelson 1986*, 313–314, 378; *Theuvs – Alkemade 2000*; *Brunning 2019*, 6–15, 86–88, 109–158). It is therefore not surprising that any man aspiring to be a serious warrior or willing to demonstrate his social position, e.g. personal freedom (*Foote – Wilson 1970*, 89; *Martens – Astrup 2021*, 120–121; *Macháček et al. 2021*, 34) at the time needed and wanted to own a sword. In the popular mind, even today, swords are treated as elite and luxury finds.

The subject of this article is an in-depth typological and technological analysis of an unusual early medieval sword found near Varín, Žilina district, Slovakia (*Fig. 1*), in 1974, and which was held for years at the Považie Regional Museum in Žilina. Due to its condition, it is not on public display at the museum. However, modern technology has made it possible to carry out thorough non-invasive research. The results, although they do not completely solve the mystery of the sword's origin, may help guide further research on particular groups of early medieval weapons. Most importantly, they shed light not only on the object itself, but on the cultural role swords in general played at that time—not as weapons, but as symbols of status, aspirations, and adherence to the newly formed elites.

Historical and cultural background

The defeat of the Avars in the war with the Franks (AD 788–803), and the consequent political collapse and social and cultural decay of the Avar Khaganate, had the effect of changing the political and power arrangements in the Middle Danube Region. These events also gave the Carolingian Empire opportunities for increased political activity aimed at political exploitation and control of its Slavic neighbours 'freed' from the Avars (*Wolfram 2001*; *Pohl 2018*, 376–397). Frankish political and cultural expansion, combined with the spread of Christianity, had an impact not only on the political situation in the region, but also on the material, social, and symbolic culture of the individual communities, which—if they did not resist—sought quite quickly to integrate with the centre. For the Carolingian Empire, it was an excellent opportunity to expand its influence and make its borders more secure, while for the local tribes it promised political, economic, and social benefits.

The Frankish expansion eastwards, the Avar Wars, and the forcible political subjugation of the area of the former Avar Khaganate also caused great changes in the structure of the armaments commonly used in the areas formerly controlled by the khaganate (lying in the basins of the Middle Danube). On the one hand, this was a natural reaction to the methods of fighting imposed by the Frankish troops and their armaments (*Nelson 2008*, 428; *Petri 2019*, 73–74). Sabres and battle knives were replaced by Carolingian double-edged swords, which, in addition to their purely military function, also had a symbolic meaning—they unambiguously identified the circle of elite culture to which their users belonged. Slavic elites, especially those who were newly baptised, adopted the Frankish way of demonstrating their social position by outlook, in which the sword and its accessories (the richly decorated belt and scabbard), along with spurs, played a crucial role (*Wamers 1994*; *Le Jan 2000a*, 64; *2000b*; *Garižanov 2008*, 239–240; *Nelson 2008*, 428; *Loveluck 2011*, 25–26; *Bilogrivić 2013*; *2019*). At the same time, the sword indicated their aspirations towards the Carolingian nobility (*Robak 2017–2018*; *2018*; *Košta 2020*;

Macháček et al. 2021, 34); it clearly distanced them from the earlier model of elites associated with the culture of the Avar Khaganate, which originated in nomadic and Byzantine-Mediterranean traditions (*Bálint 2019, 107–110, 113–117, 125, 129–137, 155, 207*). It should be noted here that the turn of the 9th century was a time of the formation of rituals and image norms of Western and Middle European Christian elites, which reflected the general conception of the functioning of the newly formed Carolingian Empire with universalist aspirations and its social structures (*Althoff 2013, 38–67*). Certain elements of these norms, behaviours and rituals, later regarded as standard and natural for the early feudal nobility, could *in statu nascendi* be exhibited in an exaggerated, poseur manner.

The establishment of official diplomatic contacts with the Carolingian Empire, and the subsequent adoption of Christianity from the west by the Moravians—that is, in general, the integration of the newly formed Moravian elite into the circle of Carolingian culture—is quite clear in the archaeological sources (*Robak 2013; Poláček et al. 2020*). At the end of the first quarter of the 9th century, elite products characteristic of Carolingian nobility appeared in the Middle Danube Region, albeit in small numbers. All these items were used by members of the elite and their squads, as is evidenced both by their excellent craftsmanship and their later presence in richly furnished burials. The absence of more finds of this type (as well as others characteristic of the turn of the 9th century) in Moravia and western Slovakia has a rather simple explanation related precisely to the chronology of Carolingian influence in these areas. Similar artefacts were just beginning to arrive and were acquired by the elites (*Robak 2017–2018*).

The sword

General description

A sword (*Fig. 2*) with a slightly arched axis, at a glance giving the impression of being single-edged, is preserved in three fragments with a total length of 791 mm (*Tab. 1*). The two sword fragments can be put together quite easily, while the tip is now difficult to match because of the damage caused by the previous examination. The sword pommel is two-part and has a rectangular base with vertical sides. The upper part is divided into seven lobes. The tang extends all the way through the pommel, and the grip part is slightly curved (*Fig. 3; Online Supplementary Material 1: Figs. S1–S4*). The crossguard is rectangular and slightly widened in the middle part. The sword shows no traces of any decoration or signs. The sword has survived in very poor condition, and all parts are extremely fragile, but not heavily deformed. The item is currently well protected and is part of the Považie Regional Museum in Žilina collection under number 13568 A.

total length	hilt										blade		
	pommel			tang			cross-guard						
	width	height	thick	length	width	thick	length	height	thick	opening	length	width	thick
791 (+ ~1–3)	54	22–29	13	102	23–29	4	118	16	9–17	45x,5	644 (+ ~1–3)	22–56	3–5

Tab. 1. Varín sword: dimensions of individual components. All values in mm.

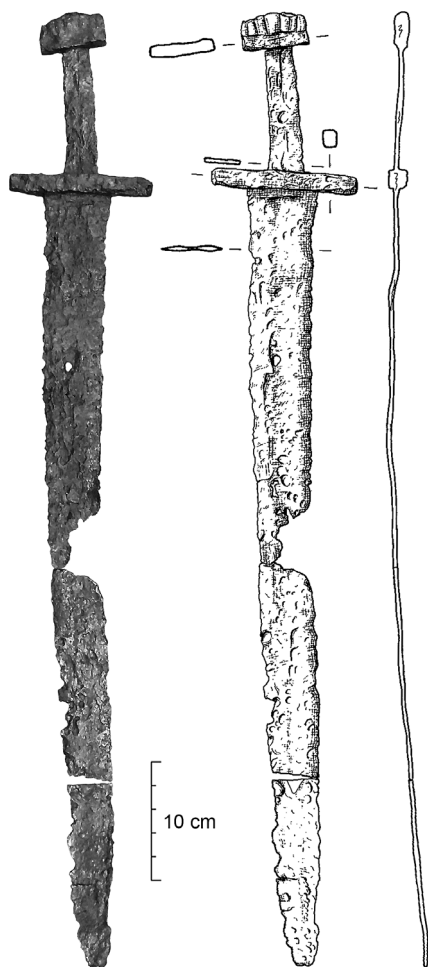


Fig. 2. The sword from Varín (photo by Z. Robak, drawing by Ž. Nagyová).

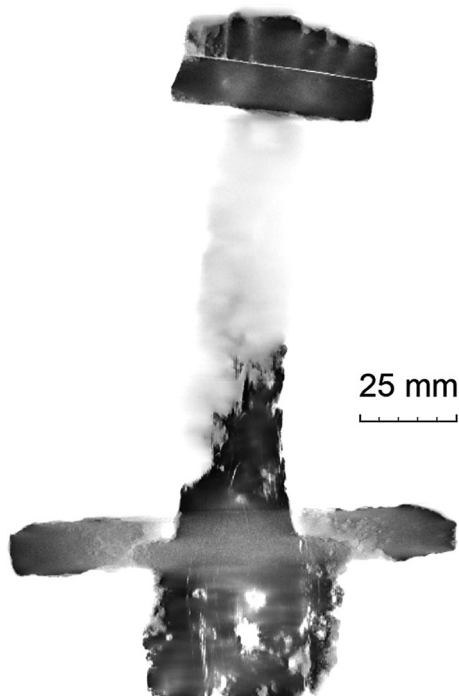


Fig. 3. An X-ray image of the sword's upper part (elaborated by Z. Robak, image by J. Šurka).

The find has already been announced (*Moravčík 2000*), and minor metallographic analyses have been carried out (*Pleiner 1990*). Both publications, however, were limited to brief information about the mere existence of such an artefact. They were supplemented only by an extremely simplified drawing of the sword's contour, without any details or photography. In 1990, a sample for metallographic analyses was taken from the edge of the broken tip, across the width of the blade. Thanks to Jiří Hošek from the Institute of Archaeology of the Czech Academy of Sciences in Prague, this fragment has been identified in a depository. It roughly matches the other elements, so it is clear that the sword was preserved in its full size.

Find circumstances

Although the findspot of the sword has not been identified, it is known that the artefact most probably came from a destroyed archaeological site. According to the finder

(*Moravčik 2000*), the sword was discovered on a lorry in a load of earth carried for the construction of a railway line in the small village of Teplička, situated between Žilina and Varín in Northwestern Slovakia. In the literature, the item is referred to as the ‘sword from Varín’.

The alleged find location is corroborated by the fact that Varín is the site of one of the largest groups of early medieval Slavic barrows in Slovakia and generally in the northern part of the Carpathian Basin. There are several early medieval Slavic barrow burial grounds, generally dated to the 9th century (*Hanuliak 2001*). Along with the North Váh and Turiec groups, it forms an extensive complex distributed over a large part of Northwestern Slovakia. The fact that several barrow cemeteries are located in the vicinity of the site from which the soil is said to have come led to the suspicion that an unknown and unrecorded burial ground was destroyed during the railway line construction. We know comparable 9th-century barrow cemeteries with burials furnished with swords from the Moravian–Slovak borderland (*Budinský-Krička 1959; Hošek et al. 2019, fig. 2*). The commonly accepted hypothesis is that the sword was placed in one such grave, although Varín burials have never been excavated. While this is a fairly plausible explanation, it obviously remains unverifiable. The lack of a recorded archaeological context of the find is a fundamental deficiency that makes analysis difficult, but it certainly is no reason why this interesting object should be forgotten in a museum’s collections.

Typology

With reference to its pommel, the sword apparently represents the Carolingian type K of double-edged sword, according to *Petersen (1919, 105–110)*. In *Geibig’s* combination typology (*1991, 44–47; 1999, 25*), it should be classified as a type 6-7-1-10. K-type swords are a fairly well-known and commonly described variant of Carolingian swords in the literature. Due to the luxurious appearance of this sword type (*Fig. 4*), such examples have received considerable research attention. Researchers currently record around eighty K-type swords from all over Europe (*Fig. 5*; numbers vary among scholars, reflecting differences in the acceptance or rejection of certain questionable or putative specimens as type K).

In the area of Moravia and Western Slovakia, which formed the core of the Great Moravia in the 9th and early 10th centuries, K-type swords are extremely rare (*Fig. 1*)—with only two certain items recorded from elite graves in Mikulčice and one separate pommel (*Bilogrivič 2009; Košta – Hošek 2014; 2019; Hošek et al. 2021*). A sword from Detva (*Šalkovský 2018, fig. 7: 1*), an early medieval hillfort in central Slovakia, is occasionally mentioned in the literature as K-type (*Marek 2005, 24; Milošević 2012, fig. 10*). Scholarly opinion remains divided regarding its typological classification, with proposals ranging from the Mannheim type to types H, K or Y (*Košta – Hošek 2014, 44; Bilogrivič 2009, 145*). To date, assessments have relied solely on a published drawing and a black-and-white



Fig. 4. A luxurious K-type sword from Koljane-Slankovac in Croatia (no scale, after *Milošević 2012*).

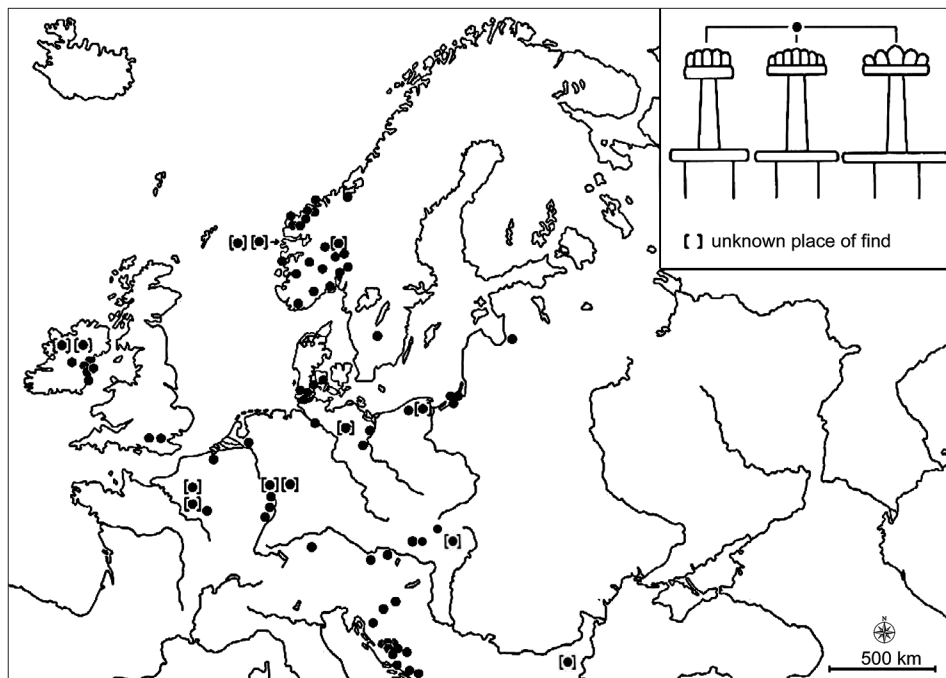


Fig. 5. Distribution of K-type swords finds in Europe (modified by Z. Robak according to Müller-Wille 1976 and Bilogrivić 2009).

photograph, which do not preserve sufficient detail to allow a precise evaluation of the pommel's shape (Ruttkay 1975, 136–138; Jocsik – Móc 2024). A fourth specimen, currently displayed in the museum exhibition at Krasná Hôrka Castle, is of unknown provenance.

It should be noted, however, that the dimensions of the Varín sword make it one of the shortest of all K-type swords (Bilogrivić 2009). Its pommel is much smaller than that of the other K-type specimens, and is disproportionately small in general. Unlike most K-type swords, the Varín sword is not decorated. Moreover, other aspects make the sword's classification problematic. The slightly curved shape of the blade is rather unusual among Carolingian swords, and this is probably not a result of corrosion. Although the blade is double-edged, it seems that its shape could be adapted to a mode of use closer to that of a sabre.

Technology

In the opinion of Jiří Hošek (pers. comm. 12 June 2023), who kindly re-examined the sample taken in 1990 by Radomír Pleiner, the blade 'is one of the most unreliable construction types, perhaps a variant with edge rods welded to the core, which was unusual for the construction practices of that time [i.e. Early Middle Ages]'. The lone sample taken for metallographic analyses in 1990 can, of course, be considered not very representative. However, we concluded that any further invasive analyses would mean serious damage

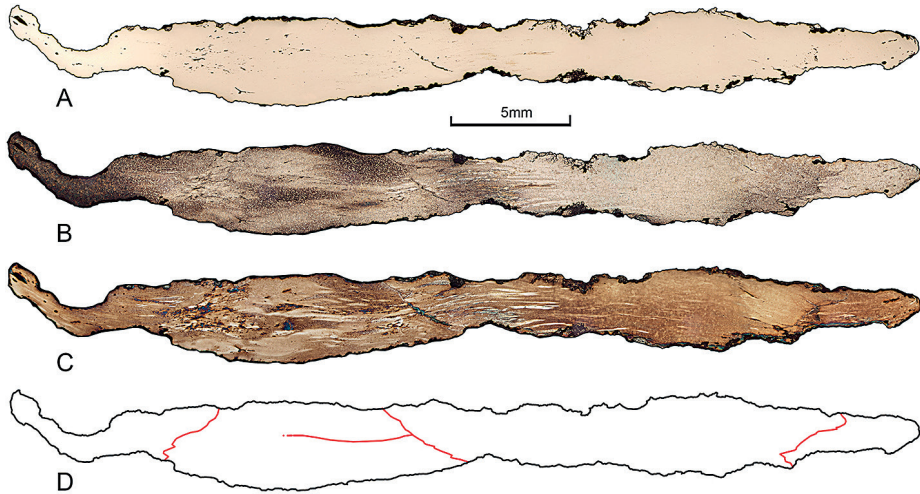


Fig. 6. Analysis of the 1990 sample from the Varín sword: A – macrophotography; B – identification of phosphoric iron with nital reagent; C – with Oberhoffer's reagent; D – identified structures (photos by J. Hošek).

to this already fragile object. Nevertheless, the results of the metallographic analyses of the sword section by *Pleiner (1990)*, and the re-examination of this sample by Jiří Hošek (*Fig. 6*), were confirmed by the computed tomography image of the whole sword (*Fig. 7*). The construction method revealed by the examination of the section seems to be present along the entire length of the blade. Only one of the sword's sides was made of rather high-quality steel, while the other half was made of soft iron, which became more corroded. This is also shown by a recent CT scan, where the hard edge is clearly visible. The middle of the blade was fused from two parts—a ferrite-perlite iron, to which a soft ferrite edge was attached; and two layers of heterogeneous carburised steel, to which a highly tempered steel edge with a fine perlite and sorbite structure was attached (*Fig. 8*). This is a rather unusual procedure for the structure of Carolingian swords, or any swords in general (*Petri 2019, 68; Hošek et al. 2021, 9–40*), because it contradicts the general principle of the two-sidedness of the sword's blade.

Indeed, the technology used in the sword from Varín does not resemble any of the dozen or more different general methods of forging the blades of Carolingian swords and seems more appropriate for 8th–9th-century battle knives (*Szameit – Mehoffer 2002, 146–149*), or even ordinary knives (*Pleiner 1967; Tylercote – Gilmour 1986, fig. 1*). A similar, though geographically distant, analogy can be found in the construction of a 'sword of decent quality' with a V-type pommel from Ballestad in Norway (*Martens – Aastrup 2021, 72–75*). However, this sword, as well as other 'swords of decent quality' analysed in the cited study, appears to have been crafted by experienced artisans who had mastered the technology and process of sword-making. They deliberately produced swords not intended for combat, though often visually attractive (*Martens – Aastrup 2021, 120*). This is certainly not the case under analysis. Severe cracks visible on the Varín sword CT image (*Fig. 7*) between layers and the lack of decoration may indicate rather low craftsmanship and/or inadequate technological resources.

Fig. 7. Transverse X-ray CT section of the blade with visible structures. Black structures represent corrosion pittings (photo by J. Šurka).

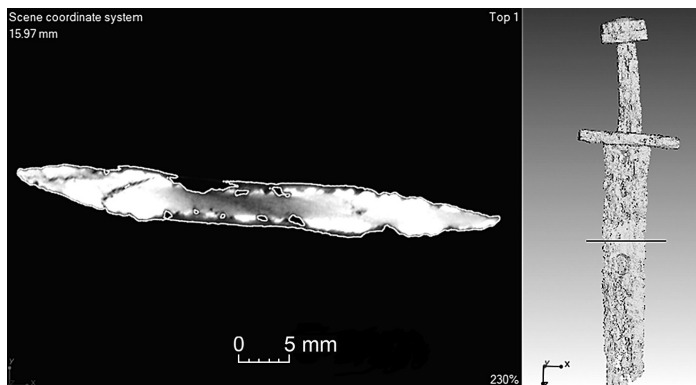
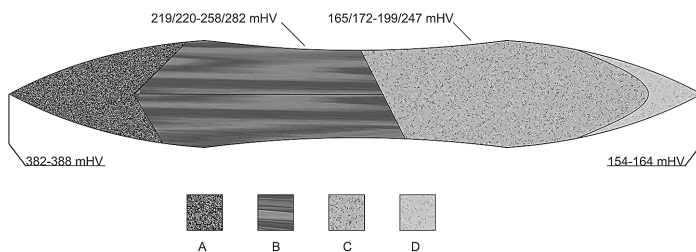


Fig. 8. Schematic construction of the blade and its microhardness: A – fine perlite (sorbite); B – ferrite-perlite; C – mostly ferrite with perlite stripes; D – ferrite (drawing by Z. Robak).



The search for technological and formal analogies for the sword from Varín leads to not distant places. It is possible, for example, to point out some technological similarities to a late Avar sabre from Holiare in Slovakia, made with a steel blade and iron back (Pleiner 1967; Csiky 2015, 197; 298, fig. 75: 4; Hošek – Haramza 2018, 478), although this represents an exception in its category, rather than a typical product. Overall, Avar sabres were of quite poor quality compared to Carolingian swords and other cutting weapons (Csiky 2015, 292–298). It is also worth noting the similarities in the manufacturing technology of weapons from grave 124 at the ‘Avar-Slavic’ cemetery at Želovce in Slovakia (Hošek – Haramza 2018), dated to the 7th–8th century, as this atypical weapon also shows hybrid features of a sword and sabre. Furthermore, researchers have noted its technological similarity to Late Roman *spathas* from Bavaria and Austria, rather than to Carolingian/Viking swords (Pleiner 1990; Szameit – Mehofer 2002, 147). We can therefore assume that the sword blade from Varín is a local product, or the product of workshops operating somewhere on the eastern periphery of the Carolingian state, which did not adopt the new advanced technology of producing double-edged sword blades. At the same time, it is impossible to determine whether the blade and the pommel were a set from the beginning.

Chronology

The presence of a K-type pommel, together with the metric characteristics of the sword, allows for an approximate determination of the period in which the weapon was made. The chronology of K-type swords is relatively well established (Petersen 1919, 105–110;

Müller-Wille 1976, 32–50; 1982, 137–150; Menghin 1980, 252–254; Vinski 1981; 1983, 477–487; Ypey 1984; Geibig 1991, 44–47; Jakobsson 1992, 42–45, 201; Westphal 2002, 118–422; Bilogrivić 2009; 2013; 2018, 91–99; 2019; Milošević 2012; 2016; Androshchuk 2014, 63–66; Košta – Hošek 2014, 246–249; Hošek et al. 2021, 297–299). K-type swords belong to the small group of sword forms that can be readily identified in iconographic sources owing to the distinctive profile of their pommels (Brunning 2019, 24, 140). This permits the confident attribution of the majority of sword depictions in the Stuttgart Psalter (Bilogrivić 2009, 144–149; Weski 2015) and some in the Utrecht Psalter (Mäder 2019), both produced in the 820s. Such iconographic evidence suggests that K-type swords functioned as markers of elite status (Vinski 1983; Steuer 2010, 54–56; Bilogrivić 2013, 76–78).

In archaeological contexts, K-type swords frequently occur in association with artefacts decorated in the style of the Tassilo Chalice and other early Carolingian objects, as well as with prototypes and early examples of late Carolingian sword sets fitted with trefoil mounts (Robak 2013, 19, 152; 2014, 72–78). The ornamentation of pommels and cross-guards often incorporates plant motifs (Ypey 1984; Bilogrivić 2009, taf. X: 3; XI: 2; XII: 2; XIII: 1, 3; XIV: 2; XIX: 1; Müller-Wille 1982, 144; Wamers 1994, 6–14; Peirce 2002, 63–73; Robak 2013, 116, fig. 39) characteristic of the early Carolingian Renaissance. Such swords also predominate in burial assemblages attributed to the earlier phase of the ‘Biskupija–Crkvina’ horizon, which marks the initial stage of Carolingian influence in present-day Croatia (Vinski 1981; 1983; Jelovina 1986; Robak 2013, 17–22; 2017–2018, 331–332). This horizon is securely dated, with scholarly consensus converging on a span from the late 8th century to the first quarter of the 9th century (Jakobsson 1992, 43; Bilogrivić 2009; 2018; Hošek et al. 2021, 297–299, with comprehensive bibliography). Researchers therefore broadly agree that this sword type was particularly popular in the late 8th century and the first half of the 9th century, especially during Charlemagne’s Avar Wars (Vinski 1981; 1983; Jakobsson 1992, 43; Bilogrivić 2009; 2018; Steuer 2010; Androshchuk 2014, 66; Milošević 2016).

More problematic is the dating of forms derived from the K-type, sometimes classified as O-type variants or as type K-III (Petersen 1919, 126–127; Jakobsson 1992, 202–203; Androshchuk 2014, 66; Hošek et al. 2021, 297–298), which appear throughout the 9th and 10th centuries. This is noteworthy, as the shape of the pommel of some K-III swords (Androshchuk 2014, fig. 21; Yotov 2004, 42; Viskupič 2023) closely approximates the rectangular form observed on the Varín specimen. The pommel of the sword from Varín itself (see *Online Supplementary Material 1*), however, represents an early two-part construction (more closely comparable to type K-II) through which the tang passes continuously (Geibig 1991, 90–92; tab. 70: 4, 157: 1; Androshchuk 2014, fig. 20; Hošek et al. 2021, 267–268, 297). The similarity in shape with K-III specimen is therefore likely coincidental.

The remaining attributes of the Varín sword, most notably the blade length (64.5 cm), are also consistent with an earlier date. From the late 9th century onwards, Carolingian swords show a well-documented tendency towards significantly longer blades, frequently exceeding 80 cm (Geibig 1991, 85, 90–100; 153, 158; Košta 2005, 166; Hošek et al. 2021, 41, 46). A similar pattern can be observed among early Hungarian sabres: blade lengths are comparable to 10th-century swords, whereas the shortest 65 cm blades form a clear minority (Haramza 2019, 101–103). In this context, the Varín sword would stand out as exceptionally short.

In contrast to 10th-century weapons, the Varín sword combines a markedly short blade with an early two-part pommel pierced by a tang—a configuration best attested in the early 9th century (*Geibig 1991*, 88, 90–92; *Košta 2014*, 237). Consequently, the first half of the 9th century appears to be the most plausible period for the weapon's manufacture, while a 10th-century date for the Varín sword must be regarded as highly improbable.

A separate issue from the date of manufacture concerns the duration of use of such weapons. Recent research has demonstrated (*Brunning 2019*, 61–88; *Hošek et al. 2019*, 82–83; 2021, 58) that swords could remain in service for several decades while undergoing multiple repairs over their lifespan. Older blades were frequently refitted with pommels or crossguards reflecting contemporary fashions or even with reused components from other swords, resulting in combinations that do not conform to established archaeological typologies. Such refurbishments were generally carried out locally, meaning that the workmanship of replacement parts could vary considerably depending on regional stylistic traditions, available materials, and the technical capabilities of individual workshops.

Discussion

The majority of K-type swords probably come from Frankish (Rhenish) workshops (*Bilogrivić 2009*, 146; 2018, 91). K-type swords (together with the Mannheim type) are also among the oldest sword types signed with the VLFBERHT type mark and geometric pattern (*Müller-Wille 1976*; 1982; *Jelovina 1986*, 15; *Piteša 2001*; *Peirce 2002*, 63–73; *Westphal 2002*, 180–181; *Stalsberg 2008*; *Moilanen 2015*, 90). This leads to a reasonable assumption that their blades were originals produced by a workshop using this (later commonly copied) signature (*Geibig 1991*, 118–120). The almost identical decorations of some specimens along with the technological similarities also support this hypothesis (*Hošek et al. 2021*, 125). HILTIPREHT type inscriptions are also found among K-type swords, many of them damascened and signed (*Moilanen 2015*, 318). In general, they were high quality (or even premium at first glance) products intended for wealthier owners and elites, as confirmed by Carolingian-age burials from Croatia with elite warrior furnishings (*Bilogrivić 2009*; 2018; 2019).

However, despite the superficial similarities, the Varín sword's atypical appearance and manufacturing technology make us wonder what kind of object we are actually dealing with. It does not meet the standards of technological and visual quality that characterised K-type swords. This is possibly not a Carolingian K-type sword at all, and only a pommel of this type was used. This relates to what *Brunning (2019, 61)* termed 'Frankenstein swords'.

As recent research has shown (*Brunning 2019*, 61–87; *Hošek et al. 2019*, 82–83; 2021, 58), swords could remain in use for a considerable period, sometimes several decades, and were frequently repaired. Old blades were often fitted with pommels or crossguards in keeping with contemporary fashions (or reused components from other swords), producing combinations entirely incompatible with standard archaeological models. Such repairs were generally performed locally, meaning that the workmanship of refurbished parts could vary considerably according to regional stylistic traditions, available materials, and the technical capabilities of the workshop. This situation presents a considerable challenge for researchers attempting to construct coherent typologies of Carolingian swords. Such schemes are often encumbered by a multitude of footnotes, exceptions, and 'intermediate

types'. For this reason alone, isolated swords are regarded as poor chronological indicators in assemblages—an observation long recognised in the literature (*Petersen 1919*, 18; *Stalsberg 2008*, 97–98; *Bilogrivić 2009*, 154).

Luxury weapons represent a rather different case. Elite swords from burials in Croatian territory appear to have been interred with their first owners. In contrast, a sword from Haithabu (*Müller-Wille 1976*, fig. 16: 3) was retained for several decades before being placed in a grave. This was clearly a highly valuable and aesthetically accomplished object, which may have been presented as a symbolic gift and preserved as a family heirloom and a marker of the owner's social position (*Wamers 1994*), without having been significantly worn in combat (*Le Jan 2000b*, 290–291). There are, however, more utilitarian examples of prolonged use. Both K-type swords from Mikulčice appear to have been deposited around the mid-9th century or later, as indicated by the general chronology of the site and the associated grave goods. Both also bear traces of repair (*Košta – Hošek 2014*, 297; *Hošek et al. 2019*, 155–156, 159–160; 2021, 296). A recent comprehensive analysis of almost all Carolingian swords from Bohemia and Moravia has revealed numerous examples—across various typological groups—that exhibit similar evidence of refurbishment (*Stalsberg 2008*, 97–98; *Košta – Hošek 2014*, 256–257; *Hošek et al. 2019*; 2021).

In the case of the Varín specimen, however, the question arises as to whether this blade can be deemed a sword at all. In both of the metallographic examinations, Radomír Pleiner and Jiří Hošek stressed several times the technological 'oddity' of the blade, fused from iron of mediocre quality and good steel, as if only one side of the blade would work. If we look at the overall design of the sword, this is not unreasonable. The angle of the handle together with the slight asymmetry and curvature of the blade give the impression of an object made more for someone accustomed to handling a sabre or other single-edged weapon. In such cases, early medieval weapon research uses the term 'sabersword' after *Paulsen (1956)*. Although the definition of this type is very vague, it is used just to describe objects bearing the characteristics of both weapons (see *Strzyż 2006*, 15; *Pinter 2007*, 19; *Grygiel 2023*). It is significant that this type of weapon in Europe in the 9th–11th century occurs mainly in the Carpathian Basin, where the cultural and technological traditions of Western Europe, the Eastern European–Asian nomads, and Byzantium clashed. Such weapons were not particularly common and were probably of limited effectiveness in combat, which in turn suggests that they may have served a display or symbolic function. 'Saberswords' were not a transitional evolutionary stage between swords and sabres, but a deliberate cultural hybrid reflecting the self-representation strategies of Hungarian or Hungarian-associated warrior elites in the mid-10th century (*Radišić – Bilogrivić 2024*, 275–277). These cases, however, predominantly involve blades of typical Carolingian and Ottonian swords with a pierced tang, onto which a sabre hilt was subsequently fitted.

In the case of the sword from Varín, the evidence points to exactly the opposite situation: the pommel and crossguard of a sword were mounted onto a blade forged as a technically single-edged weapon. Nevertheless, the blade is far removed from a form typical of a sabre. It therefore appears that the intention behind this construction was to evoke the image of a sword rather than that of a sabre, as in the case of 'saberswords'. In this regard, an analogy arises with single-edged swords featuring a type-H pommel from Norway, which are chronologically consistent with the Varín sword (*Petersen 1919*, 91). This analogy, along with the previously noted similarities to the group of Scandinavian swords of 'decent quality' opens further avenues for research on the Varín sword. Hopefully these

studies will continue, benefiting from the development and increased availability of advanced non-invasive techniques, such as thermal neutron diffraction (*Fedigo et al. 2017*). However, we must bear in mind that the number of known Viking Age (AD 800–1050) swords from Norway alone exceeds three thousand (*Martens – Astrup 2021*), compared to approximately one hundred twenty from the same period originating from former Great Moravia territory, corresponding to present-day Slovakia and the Czech Republic (*Hošek et al. 2019; Jocsik – Môc 2024*). This clearly reflects enormous differences in the scale and intensity of their production, availability, and use.

The typological and metric analysis of the sword from Varín allows us to assume that it is a weapon that appeared in the area of the Carpathian Basin in the initial period of popularisation of the Carolingian type of weaponry, i.e. in the first half of the 9th century, rather than in the 10th century. But the sword from Varín does not fit with the luxurious connotations of most of the imported or copied Carolingian products of that period, of which K-type swords were especially characteristic. The simplicity and poor craftsmanship, and the lack of decoration, suggest that it was merely an imitation of an elite weapon; while it certainly could inflict harm, its effectiveness in battle is highly doubtful. However, we must remember the huge importance of ostentation in Carolingian times. A luxurious sword and a richly decorated sword-belt were an essential part of the image-making of European nobles. Some poorer warriors, wishing at least to distinguish their social position from that of the plebs, equipped their belts with sets of iron ornaments and used straight iron spurs of such low quality that they could in no way attest to their elite status (*Robak 2018*). Nevertheless, they chose to do so for image reasons, which may also have motivated their choice of poor-quality swords (*Košta – Hošek 2014, 296*).

The Carolingian period, especially in Central Europe, was a time of increasing hierarchisation of society, which led people to devise strategies for bolstering their position and preventing a loss of social status (*Bougard et al. 2013*). The Great Moravian nobility residing in the major centres of southern Moravia had no difficulty accessing luxurious goods, including swords (*Košta 2020*). The majority of the approximately seventy swords and sword fragments broadly dated to the 9th–11th century originate from just four of the largest Great Moravian funerary complexes (*Hošek et al. 2019, fig. 2*). These include both technologically advanced, high-quality swords and examples of inferior workmanship. In comparison, the whole of present-day Slovakia has yielded only about forty finds of Carolingian-type swords and their fragments. None of the cemeteries has produced more than two examples, and—apart from a single, highly doubtful specimen from Blatnica Castle—there are no truly luxurious pieces among them (*Robak 2017; 2018; Jocsik – Môc 2024*). This starkly illustrates the disparity in access to prestigious goods between areas within and those outside the main political and economic centres. This contrast is also evident when comparing other categories of luxurious and prestigious goods, such as spurs, horse and riding equipment, jewellery, and other types of weaponry. It underscores the pronounced inequality in their distribution, reflecting the concentration of authority, elites, and thus prestigious goods and economic resources within the major Moravian centres, while highlighting their scarcity in the eastern peripheral regions (*Robak 2013, 201*).

We can therefore assume that someone who could not afford the flagship product of the Rhine master armourers or was not worthy to receive it as a symbolic gift, also wanted or needed to demonstrate his social standing in a manner that reflected the spirit of the times (*Macháček et al. 2021, 34*). Suddenly, these individuals found themselves in a new

socio-political reality in which the elites began to copy the dress and way of life of the Carolingian nobility *en masse*. Parading around in such conditions with a ‘nomadic’ sabre or combat knife was probably undesirable and inappropriate for their image. One may have bought a weapon from a cheaper manufacturer for this purpose, or used some old weapon, which was embellished with a two-part, undecorated (and therefore cheap), but relatively in vogue pommel. Probably the trade in second-hand blades at that time was not very different from today’s trade in second-hand weapons (*Härke 2000; Le Jan 2000b*, 290; *Nelson 2008*, 384; *Stalsberg 2017*, 268). In the absence of funds for a new sword, such a compromise was necessary. On the other hand, blacksmiths who produced mediocre ‘Avar’ sabres or ‘Bavarian’ battle-knives probably did not suddenly abandon their profession just because of the rise in popularity of swords, but tried to adapt to the demands of the market that had just opened up in the north of the Carpathian Basin, even despite the lack of access to specialised technology. This is naturally a rather loose hypothesis, but not unjustified; a similar phenomenon was pointed out by *Martens (2004, 136; Martens – Astrup 2021, 120–121)* in the case of 9th-century Norway. In fact, it fits perfectly with the generally poor and rather coarse picture of ‘elite’ culture in the 9th century in Western Slovakia (and especially in the northern mountain areas), compared to its Moravian version (*Robak 2013, 201; 2018, 171*). This situation could be explained by the fact that the territories of today’s Slovakia were a secondary centre of Great Moravia, distant from southern Moravia, which was home to larger groups of nobility and the clergy, who were the natural recipients and distributors of luxurious goods.

Conclusion

The sword from Varín irremediably lost its archaeological context at the moment of its accidental recovery. Consequently, the conclusions drawn from the analysis of the sword must remain partly open to further discussion. The question of who commissioned the weapon and for whom it was made will likely never be resolved with any greater degree of certainty. In attempting to determine the chronology of the weapon, it was possible to rely solely on its technical parameters, an approach that may be misleading if the duration of its use remains unknown. The issue of when it was produced, however, may yet be addressed in the near future in light of ongoing advances in radiocarbon dating methods for iron artefacts (*Cook et al. 2023*), although this would inevitably entail further loss of original material. Nevertheless, research on the sword from Varín demonstrates that even a seemingly unimpressive archaeological find can yield a wealth of valuable information. In particular, it sheds new light on our understanding of the cultural model of Great Moravia at the beginning of the Carolingian era.

First, sword analyses and the search for analogies show that we have yet to understand many of the technological nuances of early medieval weapon production, especially in the Carpathian Basin area. This is mainly due to researchers’ tendency to focus on the study of luxurious items. In reality, weapons varied as much as the financial capabilities of their owners and the manufacturers’ technological abilities. It should therefore come as no surprise that cheaper weapons may have been of inferior quality; what may come as a surprise is just how poor their quality could be, so much so that only with a great deal of goodwill are we able to consider it combat-ready at all.

Secondly, trends in the study of weapons have led to some distortions in the picture created by previous archaeologists, who often focused excessively on luxurious wares. However, as it turns out, not every sword is synonymous with elitism. Overshadowed by truly elite production, we often forget that inferior items were also made, scrap metal was repaired, and second-hand weapons were traded. Indeed, this was probably much more common than the import of luxurious weapons, and therefore more representative of everyday life.

Thirdly and finally, further study of the imitation of elite wares may help to better understand some of the processes of past societies, especially during periods of rapid and fundamental social changes. People aspiring to be elite often had no other option than to use low-end products or cheap substitutes. Perhaps they were even more interested and determined in demonstrating their rights and position than the actual elites. As the example of Great Moravia at the beginning of its history shows, in a situation where new social structures were forming, perhaps even such imperfect, superficial ostentation meant to be or not to be and served as a means to secure a better position in the future.

Future research into the weaponry of the Carolingian period should focus primarily on the local production of stabbing weapons in the Carpathian Basin at the turn of the 9th century. In particular, it should address possible ideological and technological transfers and interferences resulting from the adoption of a western cultural model by the Moravian Slavs, and how these are reflected in archaeological sources. The cooperation of archaeology, cultural anthropology, and the sciences still has a wide field of action here. Perhaps there are more unique artefacts like this one from Varín hidden in museums.

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