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RETHINKING MINIATURE AXES: NEW EVIDENCE FROM BÁCS-KISKUN COUNTY IN THE CARPATHIAN BASIN

ABSTRACT

This article presents five newly discovered miniature axe amulets from Bács-Kiskun County in the Carpathian Basin, significantly expanding the known corpus of such objects in Central and Eastern Europe. With a total of eighteen examples now documented from Hungary, including a notable concentration in the southern Great Plain, these finds invite a critical reassessment of existing interpretations. Traditionally linked to the Rus' cultural sphere and often interpreted as elite or ritual objects, miniature axes are here recontextualized as items associat-

ed with local settlement environments, frequently recovered through repeated metal detector surveys. The variation in form, decoration, and raw materials, particularly the use of lead and tin, suggests a more diverse cultural significance than previously assumed. By integrating typological, spatial, and methodological evidence, this study challenges prevailing narratives and underscores the importance of regional dynamics in shaping early medieval symbolic practices.

Keywords: Early Middle Ages, Central Eastern Europe, Carpathian Basin, Rus' cultural sphere, amulets, miniature weapon, intercultural contacts

Introduction

Finds of miniature metal axes from Central Eastern and Northern Europe have long attracted considerable scholarly interest. Over the years, various attempts have been made to interpret this category of artefacts, and several hypotheses regarding their origin have been proposed. However, most researchers have focused primarily on publishing individual examples from specific archaeological sites. A major shortcoming remains the lack of an up-to-date, comprehensive catalogue encompassing finds from across the entire distribution area. Furthermore, the issue of their sociocultural identification has received rel-

atively little attention. Miniature axes have most commonly been interpreted as linked to the Rus' cultural sphere.¹

The most significant study on the subject to date is the publication by P. Kucypera and colleagues.² The catalogue included in that work listed only a single example of a miniature axe from the Carpathian Basin – at the time, the only known specimen of its kind. This was an isolated find of a Type II miniature, and notably the southernmost occurrence of such an object. The axe originated from Szabolcsveresmart, Szabolcs-Szatmár-Bereg County (Hungary), and remained the only known artefact of this type from the Carpathian Basin.³

¹ Makarov 1992; Panasiewicz, Wołoszyn 2002.

² Kucypera *et al.* 2011.

³ Fodor 1996, 172.

A major breakthrough occurred shortly before 2015, when the number of known specimens rose to ten. Additional finds were published in 2017.⁴ Another significant development took place in 2024, when five additional specimens, published in this article, were discovered in Bács-Kiskun County. In total, 18 miniature axes are now known from the Carpathian Basin.⁵

This expanding corpus of material presents a unique opportunity to reassess the scale of the phenomenon, reconsider patterns of distribution, and gain new insight into the function and cultural significance of these distinctive artefacts.

New Finds from Hungary

The discovery of five additional miniature metal axes marks a major development in the study of this unique category of early medieval artefacts. The sudden increase to 18 finds in the Carpathian Basin, seven of which are concentrated on a relatively small geographical area in Bács-Kiskun County, not only alters our understanding of the distribution of these objects, but also raises important new questions about their cultural significance, function, and social context. This expansion is significant not merely in terms of numbers, but also in terms of quality. The new specimens exhibit a diversity of forms, manufacturing techniques, and degrees of preservation that open the door to fresh typological analysis and comparative studies. They invite us to reconsider earlier interpretations and assumptions, particularly those which have linked miniature axes exclusively to the Rus' cultural sphere.

The aim of this article is to present the new material within a broader archaeological and historical framework, re-evaluating the scale and meaning of the phenomenon and exploring potential connections to identity, ritual, and symbolism in the early medieval world. In the following section, we provide a detailed description and contextual analysis of each newly discovered specimen.

When analysing the miniature axes, it is worth having a closer look at the raw materials from which they were made. The vast majority of finds were produced from various copper alloys. Initially, these were bronze specimens (copper-tin alloys), followed by brass (copper-zinc alloys). Axes made of iron or lead are significantly less common.⁶ Of the five specimens discussed in this publication, three (nos. 1, 3, 4) were made of copper

alloys, while the remaining two (nos. 2, 5) were cast from a tin-lead alloy.

Axe no. 1 (Fig. 1:a) can be classified as Type II; axe no. 3 (Fig. 1:c) belongs to Type I; and axe no. 4 (Fig. 1:d) shows features similar to Type I. The last two specimens resemble Type I axes but, due to their unusual raw material and the presence of a massive neck, should be regarded as atypical.

Miniature axes are generally attributed to the 11th century.⁷ However, the growing body of finds recorded over the past decades has significantly broadened our understanding of the chronological range of these objects. Recent discoveries from various parts of Central and Eastern Europe have extended the timeframe for miniature axes from the turn of the 10th and 11th centuries through to the late 12th century.⁸ This broader chronological horizon reflects both the sustained use and symbolic relevance of such items over several generations.

The specimens from the Carpathian Basin discussed here can likewise be placed within this general timeframe. Nevertheless, caution must be exercised when considering the two lead examples (nos. 2 and 5). These objects lack close typological parallels and currently offer no firm basis for precise dating. Their atypical raw material, uncommon among known miniature axes, combined with their unusual formal features, such as massive necks, suggest that they may represent either a later development or a different cultural or functional context. For this reason, a slightly younger chronology, possibly extending into the 13th century, cannot be excluded for these particular pieces. The archaeological context from which these finds originate also supports this possibility and may point toward a later dating as a promising direction for further research.

No. 1 (Fig. 1:a).

Site: Kunpeszér – Nyihogó, Bács-Kiskun County (Fig. 2:11).⁹

Find context: Artefact was discovered during a field walking survey. No associated finds or stratigraphic context were recorded.

Description: The specimen belongs to Type II. It features a broad, symmetrical blade with inwardly curved, hook-like projections located along the inner edges of the blade. Only the blade is preserved; the axe is broken at the neck. Both surfaces are heavily worn, and any original ornamentation is now largely illegible. A small circu-

⁴ Füredi *et al.* 2017.

⁵ Three additional miniature axes were recently discovered in Jász-Nagykun-Szolnok and Pest Counties. We thank István Steuer (Jász Museum, Jászberény) for bringing these objects to our attention.

⁶ Kucypera *et al.* 2011, 34.

⁷ Makarov 1992, 43–44.

⁸ Kucypera *et al.* 2011, Table I:1–74; cf. Panasiewicz, Wołoszyn 2002, 251–252.

⁹ Rosta 2014.

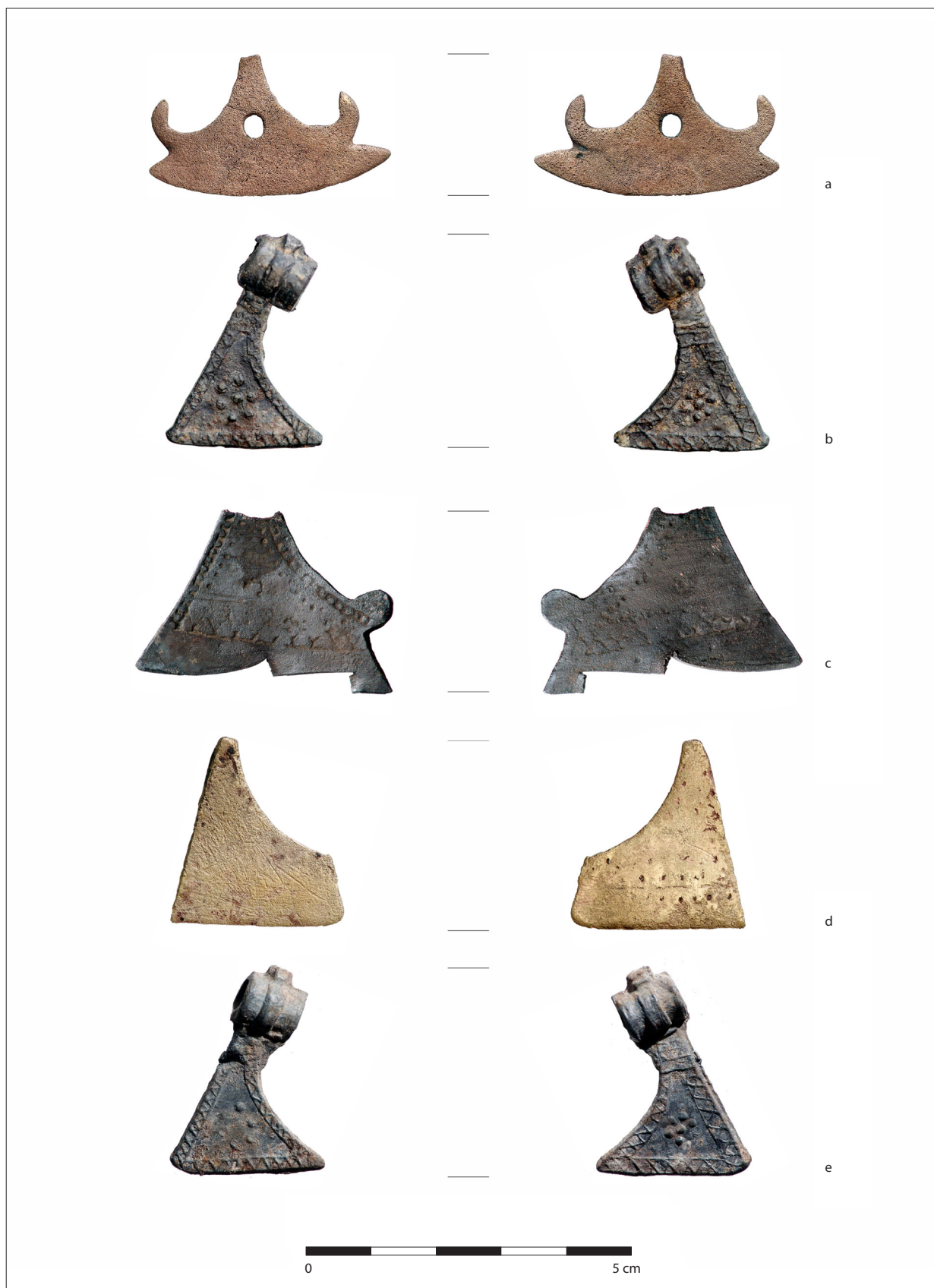


Fig. 1. New finds of miniature axes from Bács-Kiskun County: 1 – Kunpeszér – Nyihogó, 2 – Kunpeszér – Peszér, 3 – Lajosmizse – Jámber-dűlő, 4–5 – Lajosmizse – Mizse. Photo by I. Pányá.

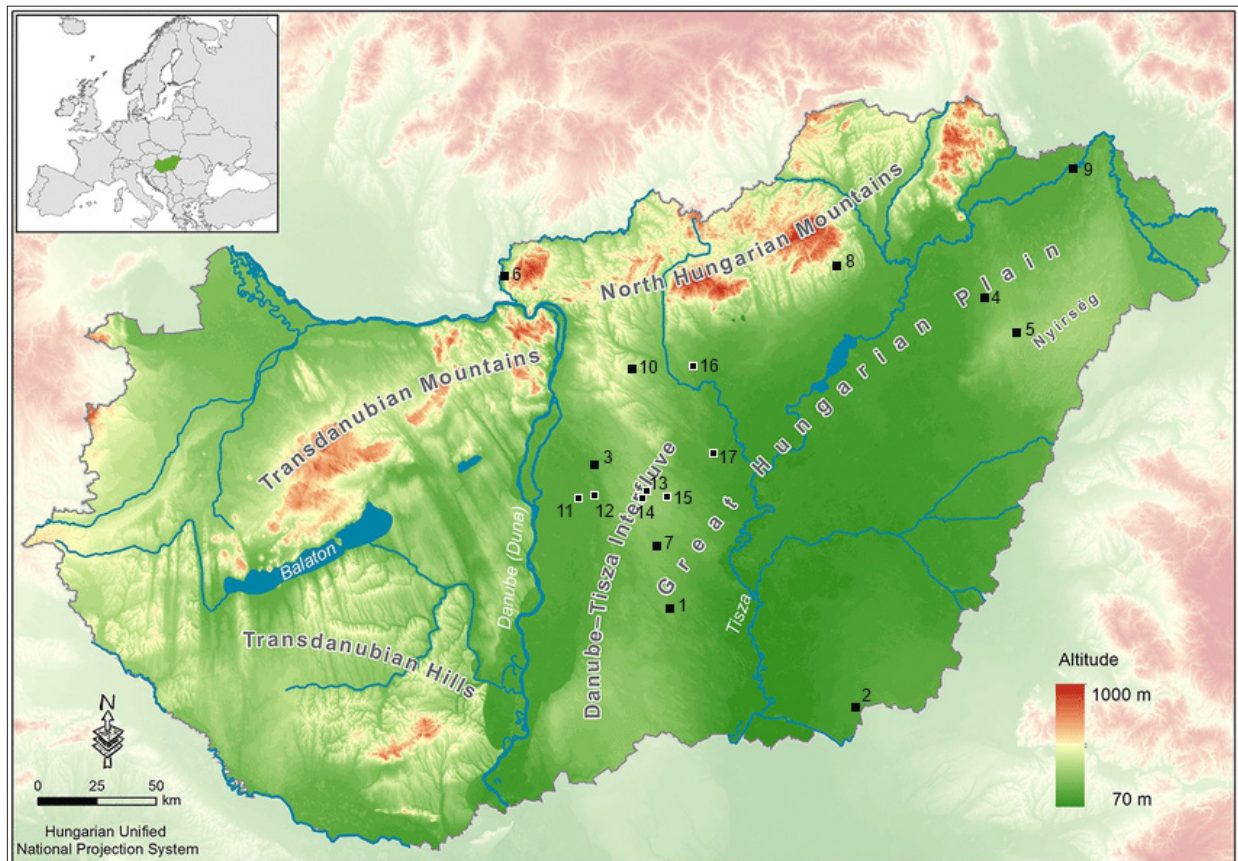


Fig. 2. Distribution of miniature axes in the Carpathian Basin (after Füredi *et al.* 2017, 463; with additions): 1 – Bugac, 2 – Csanádpalota, 3 – Dabas, 4 – Hajdúdorog, 5 – Hajdúhadház, 6 – Ipolytölgyes, 7 – Kecskemét, 8 – Sály, 9 – Szabolcsveresmart, 10 – Valkó, 11 – Kunpeszér – Nyíhóg, 12 – Kunpeszér – Peszér, 13 – Lajosmizse – Jámor-dűlő, 14 – Lajosmizse – Mizse, 15 – Nagykőrös, 16 – Jászágó, 17 – Újszilvás. Graphic by S. Wadyl.

lar perforation is located in the centre. The axe is made of a copper alloy.

Dimensions: L: 22 mm; W (blade): 4 mm; T: 1 mm; Weight: 2.78 g.

Raw material: Cu–Sn alloy

Manufacturing technique: The object was cast in a mould.

State of preservation: Preserved in fragmentary condition; the neck is broken off and the surface is worn.

Chronology: 11th–12th century, based on typological parallels with finds in Central Eastern Europe.

Remarks: Comparable in form to specimen Sály-Lator¹⁰ and Szabolcsveresmart.¹¹

No. 2 (Fig. 1:b).

Site: Kunpeszér – Peszéri-erdő, Bács-Kiskun County (Fig. 2:12).

Find context: Artefact was discovered during a field walking survey. No associated finds or stratigraphic context were recorded.

Description: The specimen resembles Type I in general form, featuring a triangular blade and a prominent, thickened neck. However, due to its unusual raw material and an atypically massive neck, it should be considered an atypical example. The blade is decorated on both sides with a series of circular motifs arranged across the surface. Along the edges runs a double line border enclosing a zigzag motif. The axe was cast in a mould and is made of a tin–lead alloy.

Dimensions: L: 42 mm; W (blade): 24 mm; T: 2 mm; Weight: 7 g.

Raw material: Pb–Sn (lead–tin) alloy.

Manufacturing technique: The object was cast in a bivalve mould; a slight casting seam is visible along the edge.

State of preservation: Well preserved, with minor surface corrosion.

Chronology: 11th–12th century, based on typological parallels with finds in Central Eastern Europe. A slightly later date cannot be ruled out.

¹⁰ Füredi *et al.* 2017, Fig. 22.

¹¹ Füredi *et al.* 2017, Fig. 23.

Remarks: It is comparable in form and nearly identical to the specimen from Lajosmizse – Mizse site (see No. 5). No other close parallels have been identified.

No. 3 (Fig. 1:c).

Site: Lajosmizse – Jámor-dűlő, Bács-Kiskun County (Fig. 2:13).

Find context: Artefact was discovered during a field walking survey. No associated finds or stratigraphic context were recorded.

Description: Miniature axe of Type I, featuring an asymmetrical bearded axe-head blade with a short, rounded neck and a prominent lateral projection at the base of the neck. Both faces of the blade are decorated with incised motifs: a double incised line near the cutting edge encloses a zigzag pattern, while a series of small stamped or punched dots forms an arched border along the upper edge. The cutting edge is asymmetrical, slightly curved on one side. The surface is worn, but the decorative elements remain partially visible. The axe is made of a copper alloy.

Dimensions: L: 29 mm; W (blade): 40 mm; T: 1.5 mm; Weight: 6.6 g.

Raw material: Cu–Sn alloy.

Manufacturing technique: The object was cast in a mould.

State of Preservation: Partially preserved; the neck is broken off and the surface is slightly worn. Two distinct cut marks are visible on the blade, possibly resulting from secondary use or reuse. It is conceivable that a goldsmith or metalworker removed two pieces from the blade for recycling or experimentation.

Chronology: 11th–12th century, based on typological parallels with finds in Central Eastern Europe.

Remarks: Comparable in form to the specimen from Hajdúdorog-Pedagógus-földek.¹²

No. 4 (Fig. 1:d).

Site: Lajosmizse – Mizse, Bács-Kiskun County (Fig. 2:14).

Find context: Artefact was discovered during a field walking survey. No associated finds or stratigraphic context were recorded.

Description: Miniature axe with an asymmetrical bearded axe head and a short, slightly thickened neck. The general form is consistent with Type I specimens, although in a more simplified form. Decoration is preserved only on one face, consisting of a row of small, punched dots forming a horizontal band near the lower part of the blade, possibly accompanied by faint traces of additional motifs. The reverse side is plain and undecorated. The object was cast in a mould and is made of a yellowish copper alloy.

Dimensions: L: 29 mm; W (blade): 27 mm; T: 1.2 mm; Weight: 4.48 g.

Raw material: Cu–Zn alloy.

Manufacturing technique: The object was cast in a mould.

State of preservation: Preserved in fragmentary condition; the neck is broken off and the surface is worn.

Chronology: 11th–12th century, based on typological parallels with finds in Central Eastern Europe.

Remarks: Comparable in form to the specimen from Daugmale.¹³

No. 5 (Fig. 1:e).

Site: Lajosmizse – Mizse, Bács-Kiskun County (Fig. 2:14).

Find context: Artefact was discovered during a field walking survey. No associated finds or stratigraphic context were recorded.

Description: The specimen resembles Type I in general form, featuring a triangular blade and a prominent, thickened neck. However, due to its unusual raw material and the atypically massive neck, it should be considered a atypical example. The blade is decorated on both sides with a series of circular motifs arranged across the surface. Along the edges runs a double-line border enclosing a zigzag motif. The axe was cast in a mould and is made of a tin–lead alloy.

Dimensions: L: not preserved; W (blade): not preserved; T: 2.5 mm; Weight: 6.54 g.

Raw material: Pb–Sn (lead–tin) alloy.

Manufacturing technique: The object was cast in a bivalve mould; a slight casting seam is visible along the edge.

State of preservation: Well preserved, with minor surface corrosion; the upper part is damaged, likely due to ploughing.

Chronology: 11th–12th century, based on typological parallels with finds in Central Eastern Europe. A slightly later date cannot be ruled out.

Remarks: It is comparable in form and nearly identical to the specimen from Kunpeszér – Peszéri-erdő site (No. 2). No other close parallels have been identified.

Archaeological Context of the Finds

All miniature axes (axe-shaped pendants) were recovered from medieval settlement sites. However, it is important to distinguish between two main types of medieval settlements in the Hungarian Great Plain:

- 11th–13th-century (Árpád-era) settlements, which either declined gradually or were destroyed dur-

¹² Füredi *et al.* 2017, Fig. 17.

¹³ Kucpera *et al.* 2011, Plate 16:3.

ing the Mongol invasion of 1241. Examples include *Lajosmizse – Jámbor-dűlő* and *Kunpeszér – Nyihogó*. Metal detector surveys indicate that these settlements ceased to exist by the mid-13th century and were never reoccupied (for additional data on settlements before the Mongol invasion and on classical late medieval settlements that emerged from the 14th century).¹⁴

2. Late medieval settlements with Árpád-era antecedents, repopulated after the Mongol invasion. These include *Kunpeszér – Peszér falu*, which was resettled by Hungarians, and *Lajosmizse – Mizse*, which was newly founded by nomadic Cuman groups in the late 13th to early 14th century. Over time, the Cumans adopted Christianity and gradually assimilated into the surrounding Hungarian population.¹⁵

Metal detector surveys at both later sites have yielded exceptionally rich assemblages of late medieval finds (over 2,000 objects per site, dating from the 14th to 16th centuries). In many cases, these late medieval layers obscure earlier Árpád-era deposits, although a significant number of 11th–13th-century metal objects and ceramics have also been recovered.

It is likely that the axe-shaped pendants are associated with the early medieval (11th–13th centuries) occupation layers at both sites. However, due to centuries of agricultural activity, the objects have likely been displaced from their original positions. Importantly, the five new specimens from Bács-Kiskun County were all found within the former core areas of Árpád-era settlements and not in the vicinity of destroyed church sites. This confirms that they are associated with settlement activity rather than burial contexts.

Distribution and Function of Miniature Axes

The geographical distribution of miniature metal axes covers a broad area of Central Eastern and Northern Europe. Although their occurrence is relatively concentrated, the highest densities of finds are recorded in the territories of the former Kievan Rus', the Baltic region, Poland, and southern Scandinavia (Fig. 3). The northernmost find comes from Bolvanskiy Nos I on Vaygach Island, located north of the Yugor Peninsula between the Barents and Kara Seas. This is an isolated discovery, far removed from the main zone of distribution of these axes, which, excluding this outlier, extends as far north as the sites of Nikolskoye III and Taskuli. The easternmost examples have been found in the territo-

ry of Volga Bulgaria, at the sites of Bilär and Izmerskoye Selišče. On the southeastern frontier, two axes have been recovered from the former Khazar fortress of Sarkel-Bela Vezha on the Don River, in an area once inhabited by the Polovtsians. The southernmost finds come from Bulgaria, specifically from Preslav and Shumen. To the west, isolated finds mark the limits of the distribution area: in Poland, an axe from Nętno; in Denmark (Zealand), a specimen from Hjelmsølle; and in north-western Scandinavia, miniature axes from Bergen, Trondheim, and Villi in Norway. Most of the above-mentioned examples represent Types I and II, which together account for the overwhelming majority of known miniature axes. The distribution of Type I largely mirrors the general spread of the category, except a distinct cluster of axes found in the Danubian region. Similarly, the distribution of Type II is confined mainly to the so-called Baltic zone, forming a notably compact geographical group.

Traditionally, researchers have identified three main areas of concentration for these miniature axes: the vicinity of Kyiv and the Dnieper Valley near the modern Kremenchuk Reservoir; the eastern shores of the Gulf of Riga, encompassing Livonia, Semigallia, and Courland; and the Uppland region in Sweden, especially the town of Sigtuna.¹⁶ Recent discoveries from the Carpathian Basin now define a newly emerging cluster, clearly distinct from the previously recognized centres of distribution.

The question of the function and meaning of miniature axes is one of the most frequently discussed topics related to this category of early medieval artefacts. It has been the subject of extensive scholarly debate. P. Kucypera and colleagues¹⁷ reviewed previous hypotheses and proposed new interpretative directions. Despite these efforts, the purpose of these objects remains open to interpretation.

Scholars have long debated whether miniature axes served purely as decorative items, held magical or religious significance, or perhaps functioned as toys. Among the many interpretations, the most prominent theory connects them to ritual or symbolic practices.

The dominant hypothesis connects these objects to the cult of Perun, the Slavic god of thunder.¹⁸ This interpretation is supported by typical decorative motifs found on the axes, concentric circles with central dots and zig-

¹⁴ Kucypera *et al.* 2011, Plate 16:3.

¹⁵ Rosta 2014, for additional data.

¹⁶ Kucypera *et al.* 2011, 27–28; Kucypera, Wadyl 2011.

¹⁷ Kucypera *et al.* 2011, 41–50.

¹⁸ Golubeva 1997; Zemitis 1998, 110.

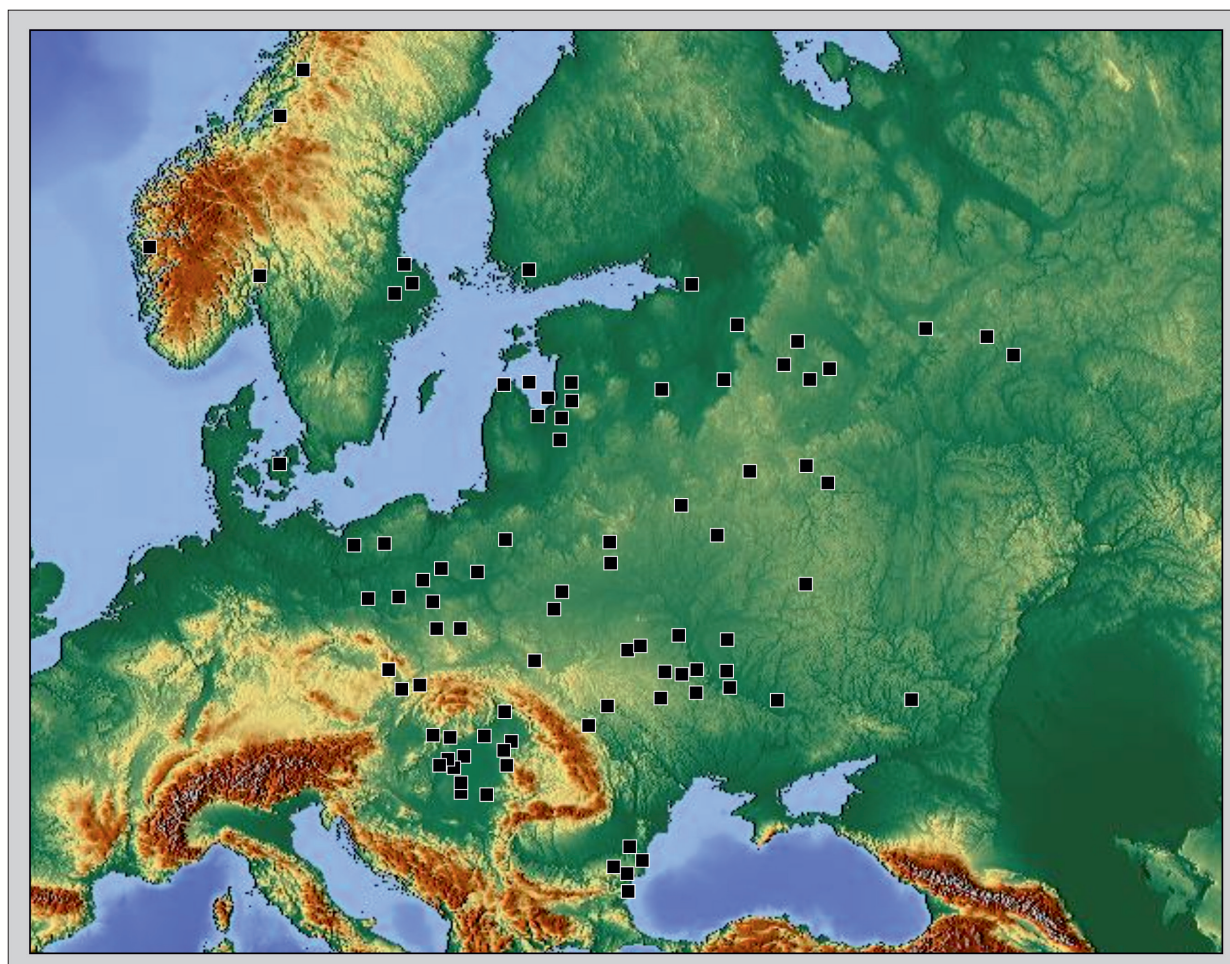


Fig. 3. Distribution of miniature axes in Northern, Central and Eastern Europe. After Kucypera *et al.* 2011, map 3, with additions.

zag lines, believed to represent solar symbols and lightning, respectively. In this context, the axes may have functioned as protective amulets, guarding the wearer against natural forces.

Other theories have also been proposed. N. A. Makarov¹⁹ suggested that miniature axes were given to boys during their first haircut as a rite of passage, and in cases of premature death, placed in their graves. M. Wołoszyn²⁰ associated them with the Rus' *druzhina* (military retinue), while some authors have interpreted the axes as Christian symbols, specifically linked to St. Olaf, whose iconography includes the axe as a key attribute.

However, the *druzhina* hypothesis remains unconvincing. The idea that these objects mark the movement or presence of Rus' warriors beyond Kievan Rus' is diffi-

cult to sustain, especially in cases like Sigtuna, where 15 axes have been found. As Rune Edberg²¹ noted, the suggestion that returning Scandinavian mercenaries brought them home lacks solid archaeological support. The axes were not found in a single context and differ in date, weakening the argument for a uniform origin. Similarly, finds from other regions should not be simplistically explained as trade goods or military souvenirs from Rus'. Their frequent presence in elite stronghold contexts does not inherently confirm a link with the *druzhina*. More broadly, there is no compelling evidence to tie miniature axes exclusively to Eastern Slavic culture.

The St. Olaf theory, originally proposed by Oscar Montelius, is also noteworthy. It suggests a symbolic continuity from pre-Christian traditions, where the axe, as a solar or thunder attribute, was later transformed

¹⁹ Makarov 1992.

²⁰ Wołoszyn 2006.

²¹ Edberg 2000.

into Thor's hammer, and subsequently into St. Olaf's axe within Christian iconography.²²

Given the substantial number of finds and their typological and contextual diversity, it seems most appropriate to view these objects as part of the magical-religious sphere. To date, no single hypothesis has offered conclusive evidence regarding their function. As suggested by P. Kucypera and colleagues,²³ it is more likely that the meaning of miniature axes varied across different cultural and chronological contexts. Their interpretation should therefore remain flexible and open to multiple possibilities.

Intensive Survey and an Expanding Dataset: Methodological Shifts and the Rise in Discoveries

The number of amulets discovered across the Hungarian Great Plain has increased significantly recently. This phenomenon can be attributed to two main factors.

First, before 2010, archaeological investigations involving metal detection were limited. Only a few private contractors (typically 2–3) were engaged in the detection of metal artefacts at archaeological sites, and such work was typically conducted under the supervision of professional archaeologists. The broader use of metal detectors in Hungary began around 2010–2011, when the cost of the devices decreased and museums began to adopt a more open attitude toward cooperation with civilian metal detectorists. As a result, the number of metal finds began to increase rapidly. This marks a methodological shift: previously, metal artefacts were generally recovered only during formal excavations. While there were occasional instances of civilians handing finds over to museums, such occurrences were rare, partly due to widespread mistrust. Many civilians believed that reporting discoveries could result in fines, obligations to fund rescue excavations, or restrictions on land development.

Second, the intensity of metal detector-based investigations has increased dramatically since 2011. New surveys have been carried out not only at newly identified sites but also at previously known ones. Furthermore, many sites have been revisited multiple times. The sites of Kunpeszér–Peszer and Lajosmizse–Mizse serve as prominent examples. Since 2011, each has been the subject of at least 10 large-scale surveys involving groups of 20 or more people, as well as approximately 50 smaller-scale investigations. These efforts have involved a wide array of civilian detectorists, each employing different methods, techniques, and equipment. It is now evident

that one, two, or even three surveys are insufficient to capture the full archaeological potential of a site. Only through repeated visits has it been possible to build a more accurate picture of the sites' temporal and cultural significance. Notably, the axe-shaped amulets at these two locations were only discovered after approximately the 50th investigation.

Therefore, the recent recovery of five amulets in Bács-Kiskun County in a single year is not surprising – it reflects the outcome of sustained, intensive fieldwork. The proximity of Kunpeszér and Lajosmizse to the residences of active metal detectorists enables frequent, repeated surveys throughout the year. It is highly probable that extending systematic metal detector surveys to additional medieval sites would yield further axe amulets. This pattern is already evident in Pest and Jász-Nagykun-Szolnok Counties, where similar artefacts have been recovered at repeatedly surveyed locations.

Consequently, the discovery of five axe amulets in Bács-Kiskun County should not be interpreted as evidence for a denser Varangian presence at those specific sites during the 11th–13th centuries. It is important to stress that all known amulets from Bács-Kiskun County, including the newly presented examples, are stray finds recovered from the wider village landscapes; none were recovered during systematic excavations. As such, some Hungarian archaeologists argue that these finds lack context. While it is true that no associated graves, features, or layers have been documented, the spatial context – medieval village territories – is nonetheless meaningful. For a more comprehensive understanding of the spatial distribution of such finds and the potential Varangian presence in the region, surveys must be expanded to other medieval village sites.

Some sites already provide promising leads. For example, the village of Bática, located on the western edge of Bács-Kiskun County along the Danube, was historically bordered by the medieval settlements of Varajt and Orosz. The name *Varajt* likely derives from *varég* (Varangian), while *Orosz* may be linked to *orosz* or *rusz*, also referring to the Varangian people.²⁴ These settlements, dated to the Árpád period (11th–13th centuries) through both archaeological and written sources, were destroyed during the Mongol invasion of 1241, though they were resettled from the 14th to the 17th centuries. While these sites have undergone various small-scale investigations, no large-scale, community-led archaeological surveys have yet been conducted. More intensive research at these locations could potentially yield additional Varangian-related artefacts.

²² Beck, Jankuhn 1973, 566.

²³ Kucypera *et al.* 2011, 54.

²⁴ Nagy 1969, 139; Katona 2019, 1207.



Fig. 4. Double-edged sword from Solt – Révfülöp site (Inv. no. 2015.18.10164., Photo by Béla Kiss). After Wilhelm 2025, 327.

Another site of interest is Révbér (medieval Révfülöp) near Solt. Excavations there revealed 32 graves beneath the remains of late medieval (14th–16th century) houses. Based on the associated finds, the burials likely date to the 10th–11th centuries. Of particular note is the grave of a warrior interred with a double-edged sword (Fig. 4). The excavating archaeologist has interpreted this individual as a member of the armed retinue of the princely group that controlled the river crossing.²⁵

Discussion

The discovery of five new miniature axes in Bács-Kiskun County represents a significant development in the study of early medieval amulets and prompts a reassessment of their distribution, chronology, and cultural significance within the Carpathian Basin. With a total of eighteen such objects now documented from the region, seven of them concentrated in a relatively small area, Hungary has emerged as a noteworthy locus of finds that was previously underrepresented in scholarly discourse. This growing corpus challenges the prevailing assumption that miniature axes are exclusively tied to the Rus' cultural sphere and raises important questions about local patterns of use, production, and symbolic meaning.

The Hungarian finds are particularly notable for their archaeological context. Unlike many examples

from the Baltic region or Kievan Rus', which are often associated with fortified settlements or burials, the specimens from Bács-Kiskun County originate from open settlement areas. All were discovered through field walking and metal detector surveys, often in the absence of stratigraphic context or associated structures. However, this lack of excavation context does not render the finds meaningless. On the contrary, their consistent occurrence within the core areas of Árpád-era settlements suggests a meaningful spatial association with everyday habitation zones. This distribution pattern indicates that miniature axes were not restricted to elite contexts, but may have played a role in broader social and cultural practices across multiple strata of early medieval communities.

The variation in raw materials and typology further supports the idea of local production or at least regional adaptation of broader cultural forms. While copper alloys remain dominant, the discovery of two specimens cast in lead-tin alloy, both with massive necks and distinctive decoration, introduces a potential chronological or functional divergence. These items may represent either a continuation of the tradition into the thirteenth century or a localized reinterpretation of a once widespread symbolic form. The unusual material choice could also reflect a shift in meaning or status, as lead-tin objects often suggest more accessible, possibly mass-produced items.

²⁵ Wilhelm 2025, 327.

The significance of these finds must also be viewed in light of changing archaeological practice in Hungary. The increased use of metal detectors since 2010 has led to a dramatic rise in the number of small finds reported, especially in regions like Bács-Kiskun County, where community engagement and repeat surveys are common. Sites such as Kunpeszér and Lajosmizse have been investigated dozens of times, often by different detectorists using a range of methods. It is therefore no coincidence that these areas now yield multiple miniature axes. The data strongly suggest that the presence of these objects is not necessarily an indicator of specific ethnic groups, such as the Varangians, but rather reflects patterns of survey intensity and methodological refinement. In short, the more we look, the more we find.

Nonetheless, the cultural associations of miniature axes remain a subject of debate. Their symbolic role, whether as protective amulets, ritual objects, identity markers, or components of male initiation, continues to elude definitive explanation. Decorative motifs such as concentric circles and zigzag patterns may allude to solar or thunder symbolism, supporting theories that link the axes to the cult of Perun. Others have argued for Christian reinterpretations, particularly associations with St. Olaf, while some propose connections to warrior identity or the Rus' *družhina*. However, the evidence remains circumstantial. The diversity of forms and contexts in which these objects appear suggests that their meaning was neither fixed nor uniform. Instead, miniature axes likely held multiple and shifting meanings depending on the cultural setting, the period, and the individual or group using them.

In light of this, the Hungarian finds should not be seen merely as peripheral reflections of eastern or northern European traditions. Rather, they point to a regionally embedded phenomenon shaped by local circumstances, technological choices, and historical contingencies. The emergence of a concentration of finds in Bács-Kiskun County, alongside isolated examples from other parts of the Carpathian Basin, defines a new zone of significance that warrants closer comparative analysis. These discoveries underscore the importance of expanding field surveys, integrating community involvement, and revisiting previously investigated sites with new questions in mind.

In sum, the miniature axes from Hungary challenge us to rethink established narratives about cultural boundaries and object traditions in the early medieval period. Their presence in settlement contexts, their material

diversity, and their increasing numbers all suggest that these small but symbolically rich objects played a more complex and widespread role than previously recognised. Continued interdisciplinary research, including metallurgical analysis, spatial modelling, and contextual studies, will be essential in advancing our understanding of their function and meaning in the medieval world.

Conclusion

The recent discoveries of miniature axes in Bács-Kiskun County offer compelling new data that challenge earlier assumptions about the distribution, chronology, and cultural associations of these early medieval objects. Rather than isolated curiosities linked solely to the Rus' cultural sphere, the Hungarian specimens reveal a more nuanced picture. Their concentration in Árpád-era settlement zones, their material and typological diversity, and their emergence through intensive survey efforts all point to a broader, regionally embedded phenomenon within the Carpathian Basin.

This study has shown that miniature axes in Hungary are not simply peripheral reflections of northern or eastern European traditions, but may reflect local uses, adaptations, and meanings. The inclusion of lead-tin examples, potential indications of later use, and the lack of elite or burial contexts further support this reinterpretation. By presenting and analysing this new evidence, the article calls for a reassessment of long-held interpretive frameworks.

In this light, the title *Rethinking Miniature Axes: New Evidence from Bács-Kiskun County in the Carpathian Basin* is fully justified. The Hungarian finds do not merely supplement the existing dataset – they actively reshape our understanding of the phenomenon. They encourage us to rethink not only where these objects appear, but how and why they were used, produced, and valued in different historical and cultural contexts.

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