The Spur Goad from Herslev

Tracing the Legacy of a Western Slavic Rider in Viking Age Denmark

By Leszek Gardeła and Trine Louise Borake

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In April 2023, during a metal detector survey at Herslev on Sjælland, a Danish archaeology enthusiast uncovered a remarkable Western Slavic spur goad. This small copper alloy artefact features a three-dimensional horse figure and was originally part of an elaborate spur, representing a group of high-status items known as 'spurs of the Lutomiersk type' or 'zoomorphic spurs'. Similar specimens found across Europe suggest that these spurs were produced in Poland, showcasing a sophisticated 'animal style' that developed in the Piast state during the tenth and eleventh centuries. This paper offers a comprehensive analysis of the Herslev goad, placing it in the broader context of analogous items from Poland and other regions of Viking Age Europe. It examines the artefact's socio-geographical context at Herslev and explores the circumstances of its deposition. The analysis carefully suggests that the goad may have belonged to a prominent equestrian warrior of Western Slavic origin, possibly tasked with an important mission in Denmark.

Keywords: Viking Age, Scandinavia, Western Slavs, Poland, riding equipment, animal style

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Introduction

In recent years, amateur metal detecting in Denmark has contributed enormously to widening our knowledge of the Viking Age and its material culture (e.g. Dobat 2016; Petersen 2016; Pentz 2018; 2023; Klæsøe *et al.* 2020; Gardeła *et al.* 2023b). Small metal artefacts dated between the eighth and eleventh centuries AD, ranging from coins to jewellery and from fragments of weapons to high status riding equipment, are discovered virtually on a weekly basis in different parts of the country. Unsurprisingly, the majority of finds recovered as a result of amateur metal detecting in Denmark stem from Scandinavia, and their decoration represents characteristic Northern European art styles. Due to the fact that from the early days of Viking Age archaeology in Scandinavian-speaking countries there has been considerable scholarly interest in metal artefacts – leading to the development of elaborate classification systems and typologies as well as the publication of specialist studies and vividly illustrated find-catalogues – it is fairly

uncomplicated, even for amateurs, to correctly identify and interpret objects of local Scandinavian provenance (e.g. Rygh 1885; Petersen 1928; Paulsen 1939). Every once in a while, however, detectorists and professional researchers come across small metal objects that evidently stem from non-Scandinavian cultural milieus. Among these discoveries are coins linked to various European ruling houses as well as foreign jewellery, weapons, and riding equipment. Immediate and correct identification of such artefacts, especially if they are poorly and/or fragmentarily preserved, is not always straightforward. Interpretative challenges arise from a lack of awareness of non-local material culture, linguistic barriers, and inaccessibility of specialist literature, as well as the still insufficient collaboration and exchange of archaeological knowledge between Viking Age researchers from different countries.

Recent studies show that among the numerous metal finds recovered from the Danish soil there is an increasing number of objects associated with Slavic and Baltic peoples (Kastholm *et al.* 2017; Gardeła 2022a; in press-e; Jensen 2023) as well as with nomads originating from Central and Eastern Europe (e.g. Jensen 1991; 1993; Hedeager Krag 2010; Thorsen & Grundvad 2021; Grundvad 2022). Collectively, the corpus of 'culturally-foreign' material is still relatively small, but it is undoubtedly poised to expand in the future. As these items are usually discovered stray and are not directly associated with Viking Age architectural features or graves, it is challenging to determine *how* and *why* they ended up in the Danish soil. Were they lost or discarded by non-Scandinavian travellers, settlers, or mercenaries? Or were they purchased, looted or acquired in other ways in distant lands and then brought to the North by Scandinavians? In other words, do these 'exotic' paraphernalia provide evidence of the movement of foreign people or are they simply indicative of the movement of objects?

It is usually challenging to provide straightforward answers to these questions. In exceptional cases, however, using a wide array of contextual and comparative data, one may have more confidence in interpreting a foreign object's biography and unravelling *how* and *why* it ended up in the soil in a particular location. In this paper, we make an attempt to investigate one such case. The object in focus is a copper alloy spur goad discovered at Herslev on Sjælland, Denmark.

Find circumstances and setting

The goad was found in April 2023 by a metal detectorist, Henrik Haure, just south of the small medieval village Herslev (fig. 1). Since 2015, the fields in this area have been regularly surveyed revealing more than 700 detector finds. In the twentieth century, a golden serpent ring from the Roman Iron Age and a golden pendant from the Germanic Iron Age were randomly discovered, but it was the name of the village that really spurred detector surveys. The prefix *Her-* may refer to a warrior or army leader whereas the suffix *-lev* suggests an Iron Age origin (Albris 2015, pp. 11–12). Inspired by the significant placename and find assemblage, a small trial excavation was initiated on the western field in 2017 to determine the presence of any structures below the surface. From multiple post holes and

Fig. 1. Location of Herslev and other significant sites nearby mentioned in the text. Figure by Trine Louise Borake.

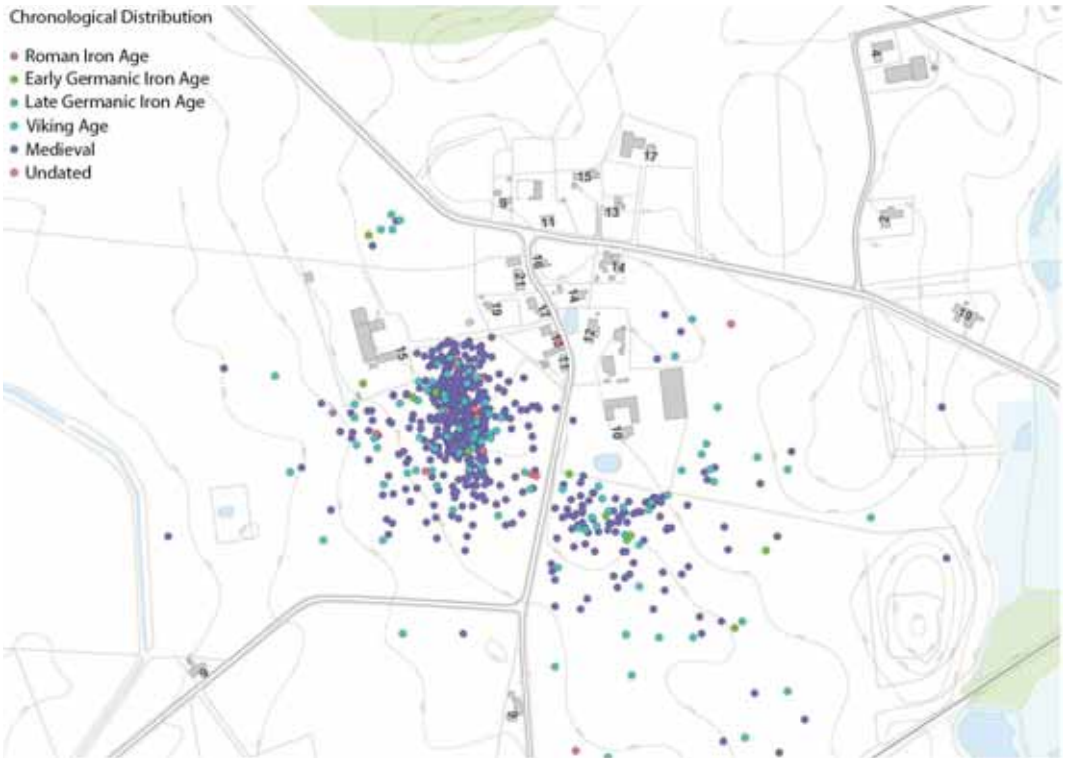

Fig. 2. The spread of detector finds on the fields south of the village Herslev. Figure by Trine Louise Borake.

traces of a medieval farmstead with well-preserved cultural layers, it was evident that the site had been settled from the Viking Age to the Middle Ages. Further work focused on rescue excavation of the medieval farmstead, and little is therefore known of the Viking Age settlement.

As detector surveys continued further east, a concentration of objects became apparent here as well, suggesting two separate farmsteads functioning from the Viking Age to the Middle Ages (fig. 2). The majority of the recovered artefacts date to the Middle Ages and are mainly represented by coins of low value. A smaller part of the find-corpus can be dated to the Viking Age, and only a few artefacts belong to the Germanic Iron Age. Some objects are conspicuous: a large piece of clip-gold (x277), a patrice for refined penannular brooches (x340), a gaming piece of presumed walrus bone, a lavish silver chain terminal (x666), and a dragonhead lock for a shrine (x718) to mention a few. A Baltic dress-pin was also found (x214) (fig. 3). However, with the remarkable accumulation of detector finds in Denmark in mind, the artefactual assemblage at Herslev does not stand out in any particular way and does not indicate any connections to a Slavic warrior elite.

However, does the socio-geographic setting suggest otherwise? The village of Herslev never became a medieval church town, and there is no written evidence of a medieval manor or other inherent legacy implying a significant Viking Age location. Nevertheless, it has been suggested that *-lev* place names reflect land ownership related to specific functions, such as an army leader represented by the prefix *Her-* (Peterson 2010, pp. 189–190). Contemporary to the Herslev site, and in the approximate vicinity, the assembly site of Tissø and the Trelleborg fortress are located. The Tissø complex shows evidence of large gatherings involving ritual feasting and extensive handicraft and trade, including many

Fig. 3. Selection of Viking Age artefacts discovered at Herslev: a) dragonhead lock; b) gold wire; c) patrice for a penannular brooch; d) fragment of a Baltic pin; e) dragonhead chain terminal; f) gaming piece, presumably made of walrus bone. Photos by Museum Vestsjælland. Figure by Leszek Gardeła.

foreign objects. The isotopic signatures of the individuals from Trelleborg buried in the adjacent cemetery suggest that some were non-local. Combined with clear traces of Slavic and Baltic material culture found at Trelleborg, it is plausible that people of Slavic origin lived in this area (Price *et al.* 2011). The main road known from later historical maps (but with a presumed predecessor) does not run anywhere close to Herslev, however, leaving it on the outskirts of any known or apparent travel or trading route. Accordingly, the socio-geographic setting does not offer much insight regarding the presence of the spur goad in this specific find spot but draws the contour of a region with significant foreign interests and relations.

The Herslev spur goad is ca. 5.4 cm long and 1.3 cm high (measured from the base to the back of the horse figure). It is made of copper alloy, round in cross-section, and has an iron core which runs through the entire object. On top of the goad stands a small three-dimensional quadruped with the head turned backwards, most likely a horse. Another decorative feature is a knob positioned in front of the animal. The knob carries a delicate braided ornament.

Despite its small size, the Herslev goad is a find of considerable international significance. Its importance can be attributed to four key factors: 1. its provenance; 2. its symbolic meaning; 3. its location in Denmark; and 4. its broader implications for cross-cultural interactions in Viking Age Scandinavia.

Even though the artefact from Herslev represents only a small fragment of a very complex spur, close analogies from Poland permit a complete and reliable reconstruction of its original appearance (fig. 4). Equestrian equipment of this kind is widely known in Polish archaeology as 'spurs of the Lutomiersk type' or 'zoomorphic spurs', the former name referring to the site of Lutomiersk in Central Poland where the first

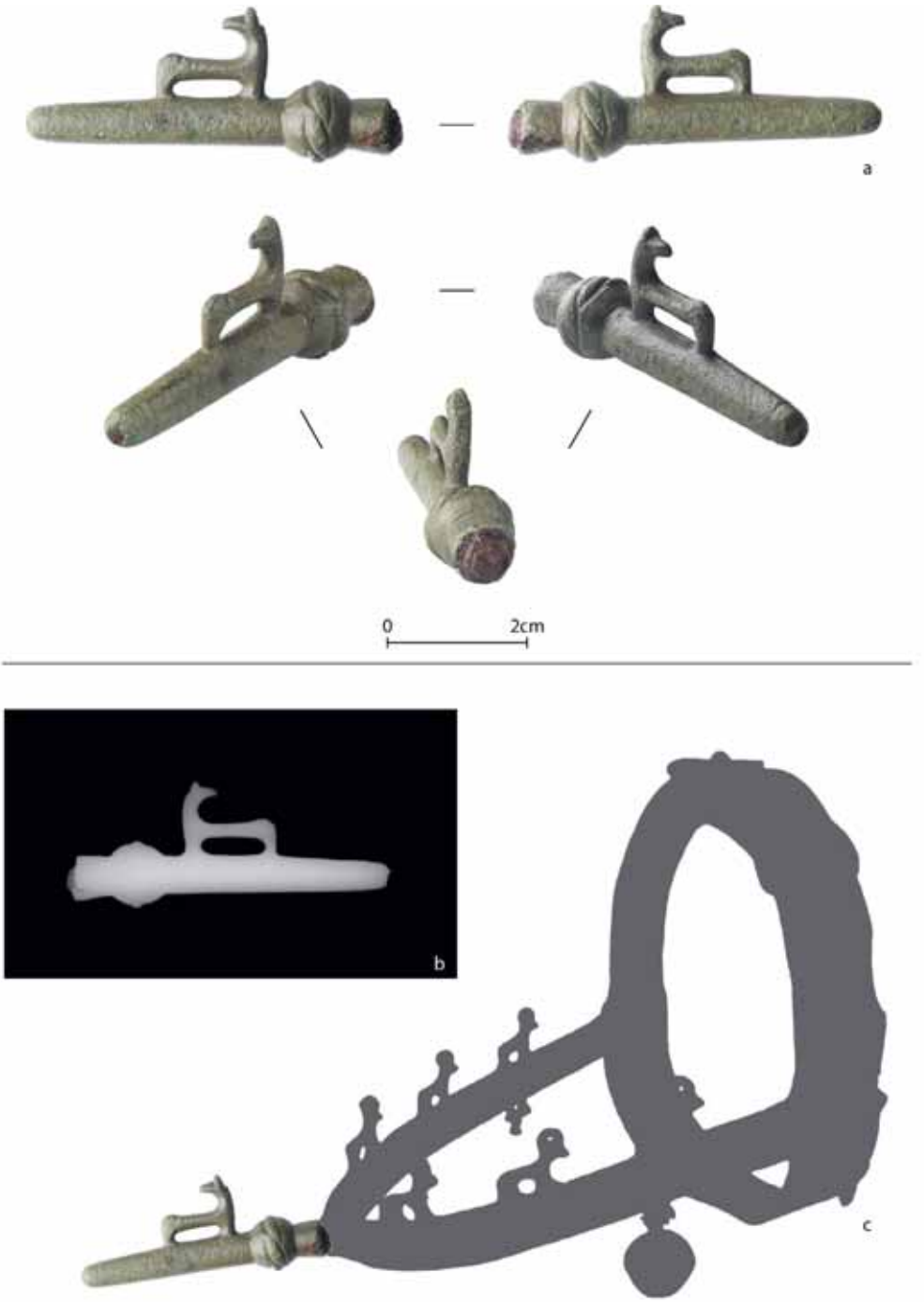

Fig. 4. The Herslev goad (a), an x-ray showing the goad's construction (b), and a reconstruction of the zoomorphic spur it was once part of (c). Photos by Museum Vestsjælland. Figure by Leszek Gardeła.

specimens were discovered in 1949. In order to set the stage for in-depth investigations of the Herslev goad and its importance for Viking Age research, it is crucial to briefly introduce the Lutomiersk finds as well as other examples of analogous artefacts from present-day Poland, Germany, Russia, Ukraine, and Sweden.

Zoomorphic spurs in context: the cemeteries of Lutomiersk, Ciepłe, and Cerkiewnik

The Lutomiersk cemetery in Central Poland is crucial to the study of zoomorphic spurs. Discovered accidentally in 1940 by Jewish forced labourers from the Łódź Ghetto, the site revealed a richly decorated Viking Age sword representing Jan Petersen's type S (Jażdżewski 1951; Nadolski 1959b, p. 9; on S-type swords, see also Petersen 1919; Androshchuk 2014, pp. 74–76; Hergesell & Snítilý 2020; Gardeła 2025, pp. 173–177). In 1941, German-led excavations began but were halted due to the lack of Scandinavian/'Viking' artifacts, which the Nazis hoped to use for propaganda (Jażdżewski 1951, p. 91; Nadolski 1959b, p. 9).

After the war, in 1949, Polish archaeologist Konrad Jażdżewski resumed work at the site, uncovering around 100 graves (Jażdżewski 1951; 1952; Abramowicz 1962b; see also Nadolski *et al.* 1959). His excavations immediately attracted a lot of attention from Polish and international scholars: during the first season in 1949, even Holger Arbman himself visited the site (Abramowicz 2010, pp. 300–302; Gardeła 2019a, pp. 56–57; 2019b, pp. 247–248). Arbman confirmed that there was nothing Germanic about the Lutomiersk finds.

The majority of the graves at Lutomiersk were inhumations, but a number of cremation graves were identified as well, a feature that is unusual in early medieval Poland where so-called 'bi-ritual' burial grounds are rarely encountered (see, for instance, the cemeteries at Bilczew and Dziekanowice: Gorczyca & Schellner 2012; Wrzesińska & Wrzesiński 2021; on cremations in the Western Slavic area, see Kostrzewski 1960; Zoll-Adamikowa 1975; 1979; Gardeła in press-g). Another peculiarity at Lutomiersk was the remarkably high proportion of graves furnished with weapons (axe heads, spearheads, swords) and riding equipment – a feature rarely seen in tenth-eleventh century cemeteries in the Western Slavic area, especially in Poland (on graves with equestrian equipment in the Piast state and Pomerania, see Sikora 2023; Gardeła & Kajkowski 2023). Precise dating of the burial assemblages is difficult to determine, but they are generally placed between the very end of the tenth century and the early eleventh century, a period that aligns with the reign of Mieszko I (born ca. 922–945, died 992 AD) and his son, Bolesław the Brave (born 967, died 1025 AD).

Graves 5 and 10 were among the richest in the cemetery (figs. 5–6) and both contained zoomorphic spurs. Despite remarkably similar furnishings, however, the two graves represented very different funerary traditions: cremation and inhumation respectively. Based on the size of grave 10 (430 x 250 cm), as well as its construction and layout, there are good reasons to believe that it was a chamber grave. In early medieval Poland, chamber graves were constructed for people belonging to the social elite (e.g. Janowski 2015; Błaszczyk & Stępniewska 2016; Błaszczyk 2017).

An interesting aspect of graves 5 and 10 is that, in both instances, the zoomorphic spurs were found incomplete and lacked goads which are absolutely essential for any spur to function properly (on Viking Age spurs in different cultural milieus, see Hilczerówna 1956; Goßler 1998; Pedersen 2014, pp. 101–106 with further references therein). It is challenging to determine with absolute certainty if the absence of goads results from their destruction during the cremation ritual (in the case of grave 5), post-depositional processes, grave re-opening procedures, or simply some unfortunate oversight in the course of excavation work. Considering that at Lutomiersk goads were absent in *all* four zoomorphic spurs from two different graves, however, one may speculate that for some reason they had been deliberately removed by the people responsible for the funerals. Such acts may have been religiously motivated – the mourners may have wanted to keep parts of the spurs as potent heirlooms or memorabilia or needed the goads to conduct additional rituals somewhere away from the cemetery. The removal of the goads

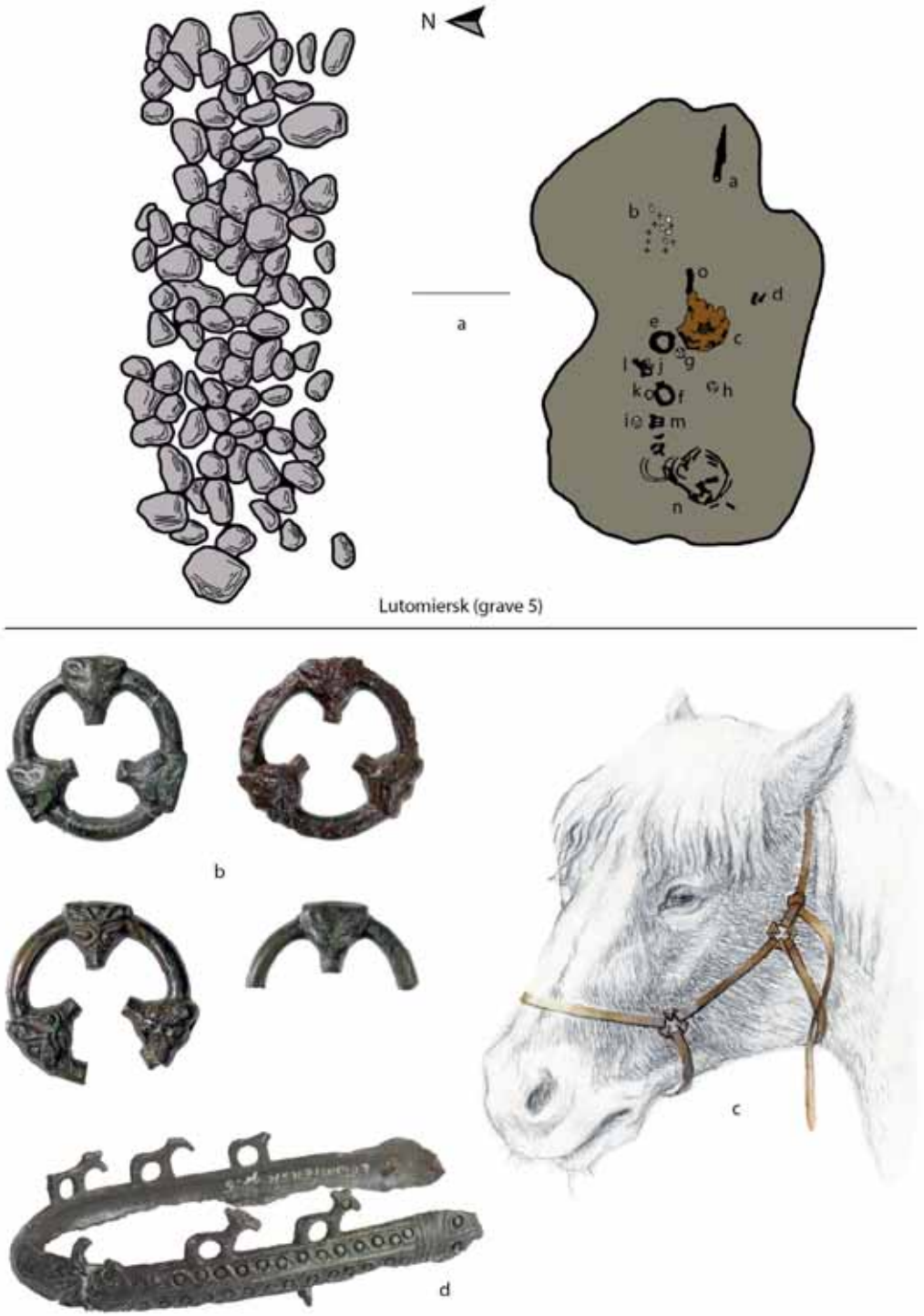

Fig. 5. Lutomiersk grave 5: a) plan of the grave showing the external layer (left) and the layout of the assemblage (right: aa – spear; ab – cremated human bones; ac – remains of a saddle; ad – iron fragment; ae–af – stirrups; ag–aj – strap distributors; ak – ring from a bit; al – iron fragment; am – iron buckle; an – bucket; ao – iron fragment); b) four copper alloy strap distributors with animal heads (probably cattle); c) reconstruction of the bridle from grave 5; d) zoomorphic spur. Illustration (a) by Leszek Gardeła, illustration (c) by Mirosław Kuźma. Photos courtesy of Muzeum Archeologiczne i Etnograficzne w Łodzi. Figure by Leszek Gardeła.

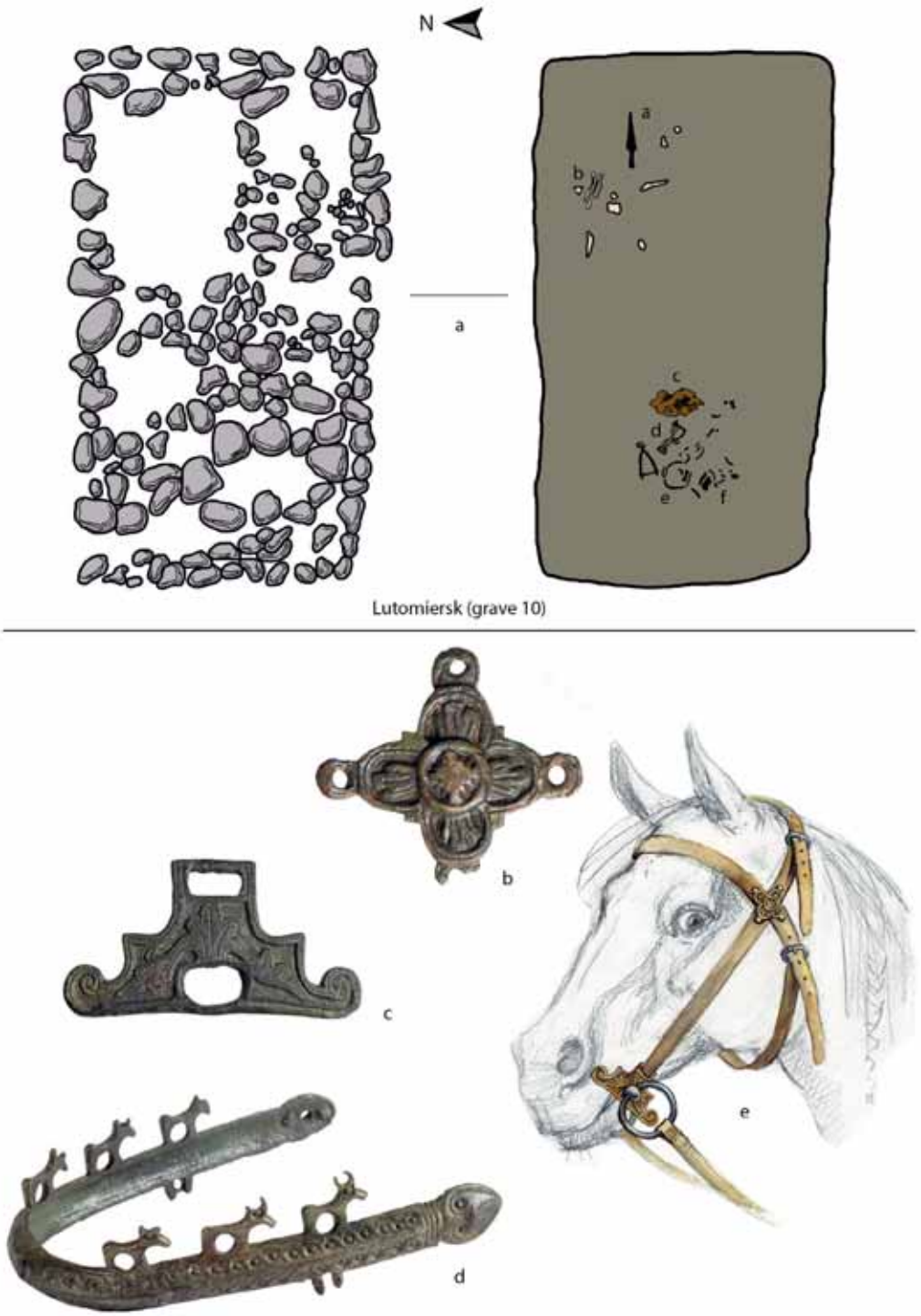

Fig. 6. Lutomiersk grave 10: a) plan of the grave showing the external layer (left) and the layout of the assemblage (right: aa- spear; ab – human bones; ac – remains of a saddle; ad – stirrups and other elements of riding equipment; ae and af – fragments of two buckets); b) cross-shaped distributor; c) cheekpiece; d) zoomorphic spur; e) reconstruction of the bridle from grave 10. Illustration (a) by Leszek Gardeła, illustration (e) by Mirosław Kuźma. Photos courtesy of Muzeum Archeologiczne i Etnograficzne w Łodzi. Figure by Leszek Gardeła.

would not have been a problem – they did not form an integral part of the copper alloy body of the spurs and were attached to them by means of an iron rivet. If this line of reasoning is correct, then perhaps the stray finds of goads, such as the one from Herslev that concerns us here, ought to be seen not only as 'accidental losses' (which is how they are usually interpreted – see Gardeła *et al.* 2019c; Michalak & Gardeła 2020) but also as potential traces of ritual acts involving the discarding or deliberate deposition of spur-fragments in the open landscape.

The rich assemblages of graves 5 and 10 from Lutomiersk help contextualise the zoomorphic spurs, offering valuable insights into the identity of their owners (presumably equestrian warriors), the equipment they might have used (spears, stirrups, and very particular types of bridles), and how these individuals were perceived by the society. Moreover, considering the remarkable stylistic and semantic consistency in the decoration of *all* animal style artefacts from graves 5 and 10 (where specific motifs on the spurs and bridle parts evidently establish 'citational relationships' echoing Howard Willams' concept of mortuary and material citations – see below and fig. 10), it is reasonable to assume that this distinctive riding gear formed a 'set/kit'. All this leads to the cautious assumption that such luxurious equipment was commissioned by a prominent authority (e.g. chieftain or duke) and distributed among a very special group of people.

A tenth century account by a travelling merchant Ibrāhīm ibn Yacqūb from Tortosa in the Caliphate of Córdoba sheds interesting light on the relationship between the Piast ruler and his warriors. In discussing the Western Slavic world, ibn Yacqūb clearly states that duke Mieszko I gave his men 'clothing, horses, weapons, and everything they needed' (Bogacki 2005; 2007a; 2007b). Judging by the geographical distribution of various Western Slavic animal style artefacts, the majority of which are found in Greater Poland and Kuyavia, it is highly probable that luxurious equestrian equipment, such as the zoomorphic spurs and bridles, was manufactured somewhere in the heart of the Piast state and under Piast supervision. The workshops may have been located, for instance, in Poznań, Giecz and/or Ostrów Lednicki. Recent discoveries of unfinished animal style metal objects in the vicinity of Ostrów Lednicki strongly support this view (Gardeła in press-a; in press-b; in press-f).

Overall, the two assemblages from graves 5 and 10 at Lutomiersk provide invaluable insights into the 'material markers' of the warrior elite in the Piast state. The individuals who used such luxurious, consistently designed, and symbolically charged war-gear, probably formed a kind of 'ingroup', reminiscent of a modern subculture. The characteristic animal style decoration of their equipment allowed them to express their social position, identity, group cohesion, and religious belief (on ingroup identification in the Viking Age and the idea of material markers in Scandinavian and Slavic worlds, see Raffield *et al.* 2016; Gardeła & Kajkowski 2021).

Another site of crucial importance that enhances our understanding of the social context of the zoomorphic spurs is a tenth-eleventh century cemetery at Ciepłe in Eastern Pomerania, Poland (Wadyl 2019). As many as four graves with high-status riding equipment have been found there (V; 35/2008; 42/2009; 43/2009), but only one of them contained spurs of the kind that interests us here.

The grave in question is numbered 42/2009 (fig. 7). It held the remains of an adult individual (*maturus*, ca. 40–49 years old at death) interred in a coffin placed within a wooden chamber. The body was arranged in a supine position and oriented N–S with the head to the north. A broad range of objects accompanied the deceased, including weapons and riding equipment: a spearhead (Jan Petersen's type E), a sword (Jan Petersen's type Z; on similar swords, see Androshchuk 2014, pp. 84–86; Gardeła 2025, pp. 178–184), a set of stirrups, a bridle with bits (Gardeła *et al.* 2019b), and the iconic zoomorphic spurs. Although grave 42/2009 from Ciepłe is certainly more opulent in terms of its contents compared to grave 10 from Lutomiersk, the arrangement of weapons and riding equipment is remarkably similar. This suggests that there may have been established patterns or conventions in mortuary practices, which the mourners deliber-

Fig. 7. Ciepłe grave 42/2009: a) plan of the grave; b) horse bits; c) stirrup; d) sword. Illustration by Leszek Gardeła. Photos courtesy of Sławomir Wadyl and Muzeum Archeologiczne w Gdańsku. Figure by Leszek Gardeła.

ately adhered to when interring individuals with zoomorphic spurs.

As already noted above, the funerary contexts of zoomorphic spurs, especially the presence of high-status weapons (e.g. a lavishly ornamented sword in Ciepłe grave 42/2009 and a silver-inlaid spearhead in Lutomiersk grave 5) permit the assumption that the deceased buried with them were equestrian warriors. This assumption is additionally supported by the results of bioarchaeological analyses of the human remains from grave 42/2009 which indicate that this individual was robustly built, had degenerative changes in the spine and peripheral joints, as well as injured feet (Pudło *et al.* 2019, pp. 418, 422). The degenerative changes in particular may have resulted from wielding weapons and horse riding. All this data, together with the man's relatively old age (by Viking Age standards), lead to the conclusion that he was a 'seasoned warrior'.

Regrettably, nothing specific can be said about the human remains from graves 5 and 10 from Lutomiersk. The state of preservation of the osteological material is poor (Kapica 1959; Grygiel 2014), but perhaps future advancements in bioarchaeology will help extract additional information.

Ciepłe and Lutomiersk are not the only cemeteries with zoomorphic spurs. One cremation grave (nr 7) from a small burial ground at Cerkiewnik in the region of Warmia in Poland also held a fragmented spur of exactly this type (Ziemlińska-Odoj 1992, pp. 122–131; Dębowska 2001). In addition to the spur, this grave contained several iron fittings, possibly from a belt or bridle, as well as broken clay vessels. Interestingly, burnt horse bones were identified in the burial pit, suggesting that either a whole animal or some of its body parts were cremated in the course of the funeral (for other examples of Western Slavic graves with horse remains, see Miechowicz 2023). Moreover, two ribs, presumably from a pig, were found. Anthropological analyses of the cremated human remains from grave 7 at Cerkiewnik indicate that the deceased person was middle-aged (*adultus-maturus*). The presence of a zoomorphic spur at a site so far away from the heart of the Piast state and in an area dominated by Prussian/Baltic tribes is intriguing. Given the other evocative contents of the Cerkiewnik grave (especially the presence of horse bones), however, it is unlikely that the spur ended up in the assemblage accidentally; it is rather more probable that it was deliberately buried with its presumed Western Slavic owner. The exact reason why this person came to the Baltic territories is unknown. New analyses of the Cerkiewnik grave are currently underway as part of the *Slavs in the North* project.

Presumably, the recent discovery of a goad belonging to a zoomorphic spur at Kumachevo on Sambia Peninsula in present-day Russia is yet another reflection of the long-distance connections that the Western Slavic elite maintained with representatives of foreign cultural groups (Wadyl & Skvorcov 2018) (fig. 8f). The immediate context of the Kumachevo goad is ambiguous, but it is not unlikely that – as in the case of Cerkiewnik – the artefact stems from a damaged cremation grave.

The presence of zoomorphic spurs (or their fragments) in cremation graves outside the Piast state – where, unlike in eleventh-century Greater Poland and Pomerania, cremation was the standard burial practice – is intriguing. Some researchers may thus be inclined to conclude that the deceased were non-Slavic. However, such conclusions should be made with caution. As discussed earlier, the Lutomiersk cemetery shows that, in the tenth-eleventh centuries, individuals with zoomorphic spurs were buried in various ways, including cremation, even within the same site. This variability likely reflects personal preferences, enduring traditions, or other socio-religious factors. Therefore, it is premature to dismiss the possibility that the individuals buried in Cerkiewnik and Kumachevo were Slavic (see Wadyl & Skvorcov 2018, p. 228) simply because they were cremated and buried 'far from home'.

In conclusion, the graves from Ciepłe and Lutomiersk distinctly stand out, not only among other graves with zoomorphic spurs but also among all early medieval graves from the Piast state and Pomerania. In fact, they rank among the richest tenth- and eleventh-century graves ever discovered in Poland. Although zoomorphic spurs have not yet been discovered in the

'central' strongholds of Giecz, Ostrów Lednicki, and Poznań, other artefacts *directly* linked (in both stylistic and semantic sense) to the grave assemblages with zoomorphic spurs from Lutomiersk have been found in these locations. Notably, these include cross-shaped and animal-head strap distributors for horse bridles (Gardeła in press-b) of *exactly* the same kind and size as those from graves 5 and 10 at Lutomiersk. These distinctive artefacts strongly suggest that all these sites, along with the people who once inhabited them, were enmeshed within a complex web of relationships.

Knowing that 'the dead do not bury themselves', it is usually challenging to argue that burial assemblages truly *belonged* to the deceased and reflected their identities and professions (e.g. Williams 2006; Williams & Sayer 2009; Härke 2014). Nevertheless, considering the remarkably evocative material from Ciepłe and Lutomiersk, in conjunction with its broader context, it is reasonable to speculate that in these very particular cases at least the weapons and riding gear *were indeed* personal possessions of the dead. If we accept that social status can be inferred from these outstanding burial goods, it appears that the individuals who used zoomorphic spurs belonged to the highest echelons of society. Consequently, it is probable that they had close ties to the Piast dynasty and its leading figures, namely the aforementioned Mieszko I and/or his son Bolesław the Brave.

Find-contexts and symbolic meanings

Altogether, apart from Herslev in Denmark, there are now as many as nine sites in Germany, Poland, Russia, Sweden, and Ukraine that have yielded either complete examples of zoomorphic spurs or their fragments (fig. 8). Condensed information about the find-contexts is provided in table 1 below.

The geographical distribution, as seen on the attached map (fig. 9), is admittedly broad, but the majority of the specimens are from Poland, suggesting that this is where they were originally produced. Four find-spots (Ciepłe, Lubniewice, Lutomiersk, and Wrocław Ostrów Tumski) are located within areas that fell under the influence or control of the Piasts. Some of the remaining find-spots are located in or fairly close to important trade hubs (Schwerin) or martial related architecture (Herslev), namely the 'Trelleborg' fortress on Sjælland. As noted above, the presence of zoomorphic spurs or their fragments outside the remit of the Piast state can be interpreted as evidence of long-distance connections and cross-cultural interactions.

Beyond their exceptional material value, zoomorphic spurs hold significant symbolic meanings and may serve as valuable aids in uncovering aspects of Slavic mythology. There are strong reasons to believe that they are models of the pagan cosmos and that they encode a story about the genesis of the world and the cosmic struggle between the gods and/or their animal avatars. Symbolic aspects of zoomorphic spurs have been discussed in detail in several other studies (e.g. Gardeła 2018; Gardeła *et al*. 2019a) which is why in the present paper these themes are treated cursorily.

In briefly discussing the symbolic content of the spurs, it is worth noting that their decoration – featuring depictions of animals such as snakes, birds, cattle, and horses – is stylistically and semantically consistent with a wide range of other Western Slavic artifacts found in Poland (e.g. knife sheath fittings, elements of horse bridles, *kaptorgas*), while also diverging significantly from the art of Viking Age Scandinavia and the Baltic states. These stylistic and semantic parallels or 'material citations' (to use Howard Williams' terminology – see Williams 2016) were probably deliberate and associated with the sphere of pre-Christian belief. Taken collectively, they can be seen as expressions of 'the Western Slavic animal style' and its particular local variant that saw its heyday in the Piast state in the late tenth and eleventh centuries (on the animal style in the Western Slavic world, see Żak 1959; Abramowicz 1962a and more recently Gardeła 2024b; Gardeła 2025, pp. 59–68; Gardeła in press-a; in press-f).

Material citations and the Western Slavic animal style in Viking Age Scandinavia

The aforementioned concept of 'material citation' is defined by Williams (2016, p. 407) as: 'practices of selection and deployment of arte-

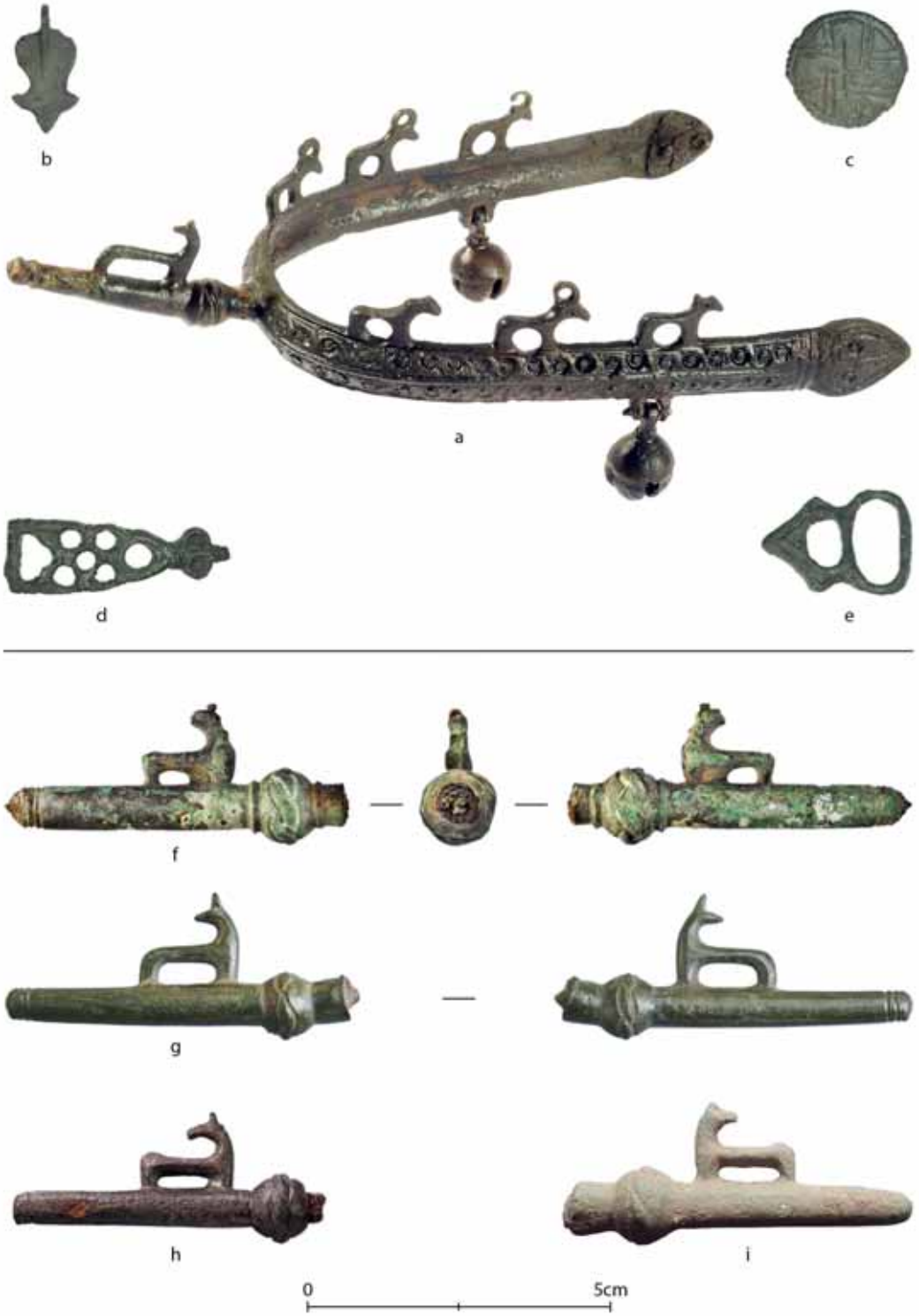

Fig. 8. Selection of zoomorphic spurs and their fragments: a) spur from Ciepłe (42/2009); b) strap mount; c) disc-shaped 'slider'; d) strap mount; e) buckle; f) spur goad from Kumachevo; g) spur goad from Lubniewice; h) spur goad from Skegrie; i) spur goad from Herslev. Photos (a–f) courtesy of Sławomir Wadyl and Muzeum Archeologiczne w Gdańsku, photo (g) courtesy of Arkadiusz Michalak, photo (h) courtesy of Bengt Söderberg, photo (i) courtesy of Henrik Haure. Figure by Leszek Gardeła.

Fig. 9. Map of Europe with the find-spots of zoomorphic spurs (or their fragments) marked with yellow circles. Map by Leszek Gardeła, based on a template by Jerzy Sikora.

Table 1. Core information about the find-contexts of Western Slavic zoomorphic spurs.

No.	Location	Context	Accompanying assemblage	Basic references
1.	Cerkiewnik, woj. warmińsko-mazurskie, Poland	Cremation grave (nr 7)	*In the grave pit*: two small fragments of a thin copper alloy plaque; iron buckle; iron knife; iron fitting with iron and copper alloy rivets; five iron fittings with (iron?) rivets; indeterminate piece of metal; four fragments of a zoomorphic spur; horse bones *In the fill of the grave pit*: small copper alloy plaque; rectangular iron buckle; two flint tools; multiple pieces of charcoal; numerous pottery shards (making up two clay vessels) *In the vicinity of the grave*: a disc-shaped 'slider' with a swastika motif (analogous to the zoomorphic spur parts found in grave 42/2009 at Ciepłe)	Ziemlińska-Odoj 1992, pp. 122–131; Dębowska 2001
2.	Ciepłe, woj. pomorskie, Poland	Inhumation grave (chamber grave with a wooden coffin)	Spearhead (Jan Petersen type E); sword (Jan Petersen's type Z); whetstone/touchstone; horse bit with cheekpieces; two stirrups (Świętosławski's type III:B–C; see also Świętosławski 1990); two complete zoomorphic spurs; iron buckle; silver buckle; fragmented silver foil; three hooks/clasps (perhaps for leg wrappings); four strap mounts; wooden bucket with iron rims; indeterminate animal bones	Ratajczyk 2013; Gardeła *et al.* 2019a; 2019b
3.	Herslev, Sjælland, Denmark	Stray find	-	-
4.	Kumachevo, ob. Kaliningrad, Russia	Cremation grave (?)	-	Wadyl & Skvorcov 2018
5.	Lubniewice, woj. lubuskie, Poland	Stray find	-	Michalak & Gardeła 2020

No.	Location	Context	Accompanying assemblage	Basic references
6.	Lutomiersk, woj. łódzkie, Poland	Cremation grave (nr 5)	Spearhead (Nadolski's type V – see Nadolski 1959a, pp. 54–56); arrowhead (Nadolski's type I – see Nadolski 1959a, p. 56); two stirrups (Nadolski's type I – see Nadolski 1959a, p. 59); two zoomorphic spurs; fragments of leather (presumably from a saddle or some kind of container); horse bridle consisting of an iron bit and four copper alloy strap distributors; iron buckle; wooden bucket; fragment of an indeterminate iron object	Jażdżewski 1951
7.	Lutomiersk, woj. łódzkie, Poland	Inhumation grave (nr 10; possibly a chamber grave with an external layer of stones)	Spearhead (Nadolski's type V – see Nadolski 1959a, pp. 54–56); two stirrups (Nadolski's type I – see Nadolski 1959a, p. 59); two zoomorphic spurs; horse bridle consisting of an iron bit with two copper alloy cheekpieces, two strap distributors and a cross-shaped object; a large iron buckle; fragments of leather (perhaps from a saddle); two wooden buckets; iron strike-a-light; small pottery shards; indeterminate and fragmented iron object	Jażdżewski 1951
8.	Schwerin, Kr. Mecklenburg-Vorpommern, Germany	Settlement site	-	Konze & Ruchhöft 2017
9.	Skegrie, Skåne, Sweden	Stray find	Magnate farm; churchtown; old communication route; dress-ornaments and jewellery; Arabic coins and weights	Gardeła *et al.* 2019c
10.	Ukraine (indeterminate location)	Stray find	-	Gardeła & Kajkowski 2023
11.	Wrocław Ostrów Tumski, woj. śląskie, Poland	Stronghold	-	Kaźmierczyk & Lasota 1979; Wachowski 2006

facts, substances, images, architectures, monuments, and spaces that, separately and in combination, created mnemonic material references to other things, places, peoples and times'. In the case of zoomorphic spurs (as well as stylistically-related artefacts), these 'citations' are materialised in the form of specific animals (cattle, snakes, horses, and birds) which held great significance in the Western Slavic pre-Christian system of belief (fig. 10).

The deep symbolism of birds, cattle, horses, and snakes in Western Slavic worldviews likely accounts for their frequent depiction by late tenth and eleventh century artists. These motifs appear not only on zoomorphic spurs but also on a variety of other objects, including jewellery, weapons, bridles, stirrups, metal and organic vessels, and everyday utensils (Gardeła in press-a). It is particularly noteworthy that in Western Slavic art, the snake – sometimes depicted as a winged hybrid – emerges as one of the most prevalent decorative motifs on tenth- to eleventh-century metal artifacts from Poland, with a strong presence on knife sheath scabbards (e.g. Szczepanik 2017) but also on copper alloy cheekpieces and other elements of riding equipment (Gardeła & Kajkowski 2021) (fig. 11). Cattle, too, is 'cited' on different types of goods, such as silver temple rings known in Polish as *kabłączki skroniowe* and small containers known as *kaptorgas* (Kóčka-Krenz 1993, pp. 78–79, 84–86). Presumably, it is also cattle heads that are shown on the openwork strap distributors found in the aforementioned grave 5 at Lutomiersk (see fig. 5b) (Gardeła & Kajkowski 2023, pp. 179–183). Intriguingly, it is often the case that in the Western Slavic animal style cattle is represented in groups of three (i.e. on the arms of zoomorphic spurs, on temple rings, on strap distributors, and on rectangular *kaptorgas*), which – in combination with medieval written accounts concerning Slavic paganism (Rosik 2023) – confirms that

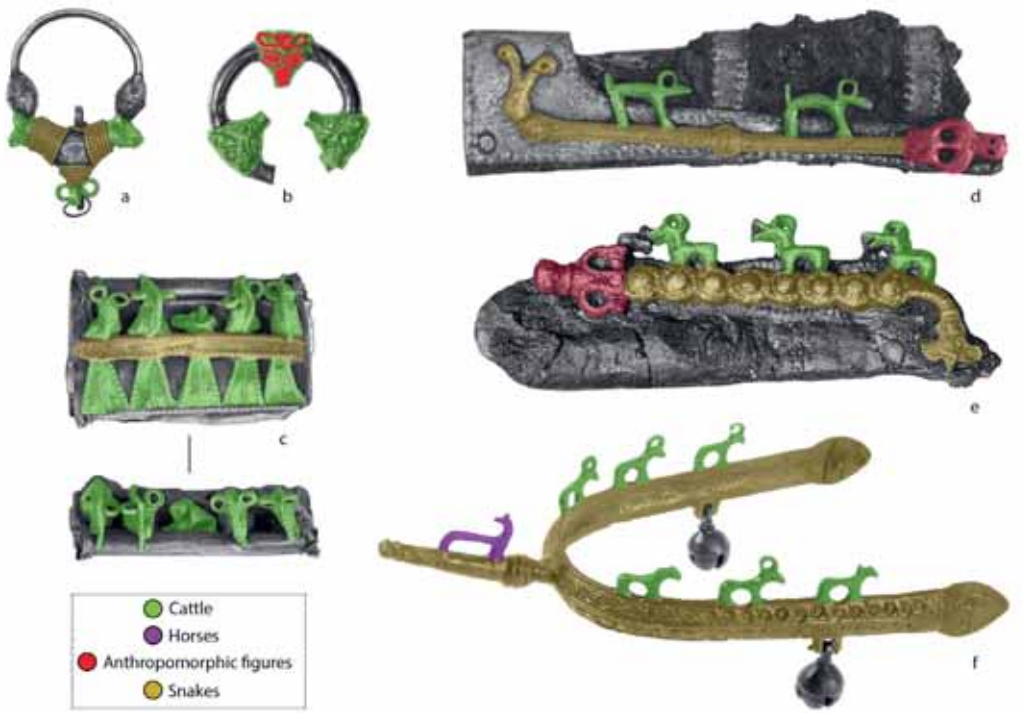

Fig. 10. The 'visual grammar' of the Western Slavic animal style in Poland. The illustrations show stylistic and semantic correspondences between different types of archaeological finds: a) temple ring; b) strap distributor; c) *kaptorga*; d–e) knife sheaths; f) zoomorphic spur. Image design Leszek Gardeła.

Fig. 11. Citational relationships between animal motifs depicted on zoomorphic spurs and other Western Slavic objects: a) *kaptorga* from Lille Karleby; b) temple ring from an indeterminate location in Poland; c) strap distributor from northern Jylland; d) cheekpiece from Lutomiersk; e) knife sheath fitting from Dziekanowice/Ostrów Lednicki; f) knife scabbard from Ostrów Lednicki; g) clay vessel with a horse motif from Wyszogród; h) miniature quadruped from Råbylille, Møn; i) miniature quadruped from Bornholm; j) miniature quadruped from Billegravsgård, Bornholm. Photos (a, h) courtesy of Roskilde Museum, photo (b) Trustees of the British Museum, photos (c, e–g) by Leszek Gardeła, photo (d) courtesy of Muzeum Archeologiczne i Etnograficzne w Łodzi, photos (i–j) courtesy of the National Museum of Denmark. Figure by Leszek Gardeła.

the number three was regarded as a 'magic number'. Horses (or horse-like quadrupeds), on the other hand, are usually portrayed singly, either in the form of stand-alone three-dimensional copper alloy figurines or as schematic images on clay vessels (Szczepanik 2019a; 2019b; Gardeła 2022a) (fig. 11g). In the Western Slavic animal style birds are witnessed relatively rarely, but like horses they can take the form of three-dimensional figurines or two-dimensional images cut or carved in bone, antler, wood and even leather (Posselt & Szczepanik 2017; Gardeła in press-f). The current corpus of artefacts with animal motifs discovered in Poland, predominantly in the historical province of Greater Poland (which, as already mentioned, formed the heart of the Piast state), includes *several hundred* specimens and is constantly growing. The artefacts are stylistically and semantically coherent and, as noted above, can be dated between the late tenth and eleventh centuries, a time which coincides with the turbulent period of Christianisation and state formation. Objects decorated in this way were used by people representing various genders and presumably belonging to the highest echelons of society.

After a brief overview of various expressions of the animal style in the Polish archaeological record, it is worth noting that a number of Western Slavic specimens decorated in exactly the same fashion made their way to Scandinavia. The most evocative among them are stand-alone copper alloy quadrupeds known from several localities in Denmark (Skov 2011, p. 120; Gardeła 2022a; 2025, pp. 333–334; in press-e) (fig. 11h–j), a gilded copper alloy bird-shaped mount from Døvregård on Bornholm (with exact analogies in Giecz, Dziekanowice/Ostrów Lednicki, and Wolin – Gardeła 2024a; in press-e; fig. 12c), a silver *kaptorga* with figural representations of cattle from the Lille Karleby hoard (Kastholm *et al.* 2017; Jensen 2023; fig. 11a), and an openwork strap distributor from Northern Jylland (Gardeła 2022b, pp. 257–258; fig. 11c). Interestingly, the so called 'bird's feet pendant' from a well-known '*völva*/Norse sorceress grave' (nr 4) from the fortress of Fyrkat in Jylland is also a Western Slavic object, which originally served the role of a temple ring (*kabłączek skroniowy*); contrary to previous views suggesting Finno-Ugric origin of this remarkable specimen (Roesdahl 1977, pp. 140, 192), the closest analogies are actually noted in Greater Poland (Gardeła *et al.* 2023a, pp. 407–408; Gardeła 2024a; in press-c).

Apart from these relatively small Western Slavic artefacts, there is also a group of larger items found in Denmark that carry corresponding animal style decoration. Probably the most spectacular among them is a T-shaped axe from the Trelleborg cemetery (fig. 12a–b), the blade of which carries a representation of a bird or winged serpent (Nørlund 1948; Pedersen 2014, pp. 87–89; Gardeła 2022b, pp. 252–255). Interestingly, the axe stems from the richest grave in the cemetery (nr 128). Clear traits of the Western Slavic animal style are also seen in the decoration of two stirrup mounts from a Viking Age grave discovered in the nineteenth century at Velds in Jylland (fig. 12d–e). Although formerly interpreted as combining elements of Anglo-Saxon and Scandinavian art (e.g. Brøndsted 1936, pp. 102–104; Roesdahl 2007, pp. 10–11; Pedersen 2014, pp. 115–116), the stirrup mounts, depicting two intertwined beasts with wings, are most likely of Western Slavic provenance. Analogous decorative motifs are seen on a *kaptorga* from Biskupin and a cheekpiece from Giecz (Gardeła 2022b, pp. 256–257; in press-a; in press-d; Gardeła & Kajkowski 2023, pp. 178, 183–184).

The various items enumerated above form only a small part of a constantly expanding corpus of high-status non-local material culture in Northern Europe. When taken collectively and situated within their appropriate socio-cultural context, these finds gradually weave a new and intricate story of cross-cultural interactions between Viking Age Scandinavians and Western Slavs. Together with the recent discovery of the Herslev goad, this material compels us to revisit and refine former ideas concerning the role(s) of foreigners in the Danish realm.

Until recently, at least in Polish academic circles, Slavs in the North were conventionally seen as voluntary or involuntary settlers, slaves, merchants, and craftspeople (e.g. Roslund 2007; Naum 2008; Jensen 2022 with further references therein). What we are beginning

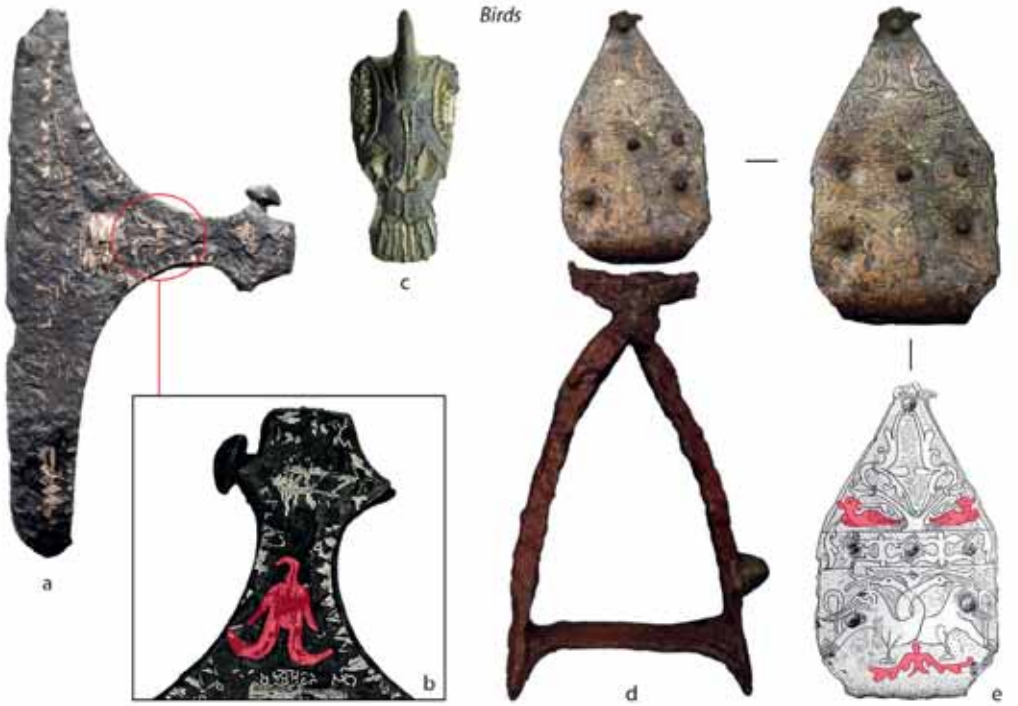

Fig. 12. Citational relationships between animal motifs (birds) depicted on different Western Slavic objects found in Denmark: a) T-shaped axe from grave 128 at Trelleborg; c) bird-shaped fitting from Døvregård on Bornholm; d) stirrup from Velds. Photos (a, c) – courtesy of the National Museum of Denmark, photo (d) by Leszek Gardeła. Figure by Leszek Gardeła.

to witness more prominently today – through high-status metal items related to the sphere of war and religion – is that among the foreigners that can be tracked-down archaeologically were also representatives of the elite. These people may have been sent to the North on important diplomatic missions and/or military campaigns. Some of them may have served in the retinues of Danish rulers such as Harald Bluetooth and Sveinn Forkbeard (as previously suggested by Dobat 2009; Price *et al.* 2011; Lindblom 2022, pp. 45–48). Political and dynastic connections between the house of Jelling and Western Slavic aristocracy were very strong, and traces of them are well-attested in extant textual sources (e.g. Labuda 1964, pp. 107–260; Morawiec 2009; Gardeła 2025, pp. 323–343 with further references therein). Harald Bluetooth was married to an Obodrite princess named Tófa, who raised a runestone at Sønder Vissing in Jylland (Gardeła 2022b), whereas his son's wife was the daughter of the Piast ruler Mieszko I (Prinke 2004). In light of these high-profile interactions, it should not come as a surprise that elite Western Slavic material culture continues to emerge within or in close proximity to the core military architecture raised by Harald Bluetooth, namely the aforementioned fortresses of Fyrkat and Trelleborg.

Conclusions: rethinking Slavic presence in the Danish realm

The Herslev spur goad is doubtlessly an important signal of reciprocal interactions between Slavic and Scandinavian elites. It serves to illustrate that the roles and activities of Slavs in the North were complex and multifaceted. Similar to Scandinavians in Pomerania and the Piast state (Gardeła 2025), Slavs in the Danish realm were clearly not only humble migrants, settlers,

craftsworkers, and slaves. It is highly probable that they also acted as warriors, valued advisors, and diplomats with ties to the highest echelons of the Scandinavian society. Interactions between the people of the North and the Slavs were certainly complicated, but in many regards very symmetrical.

In our opinion, the discovery of the zoomorphic spur goad at Herslev, a place situated between two important centres of power and prestige at Trelleborg and Tissø on western Sjælland, may be interpreted as evidence of Western Slavic activity in this area and the presence of foreign elite potentially operating in the social circles of Harald Bluetooth and/or Svein Forkbeard. While we can never know for certain whether the owner of the spur(s) was an ally or an enemy, the occurrence of artefacts featuring similar animal-style decorations – possibly emblematic of the Piast dynasty – in the cemeteries at Fyrkat (grave 4; 'bird's feet' pendant) and Trelleborg (grave 128; T-shaped axe) makes the former scenario highly probable, though it remains open to debate.

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