Although covering a small area, the Elbląg group seems to be the one of the most important cultural unit attributed to the West Balt cultural circle. It is situated in the northern part of Poland and its archaeological sites are located along the edge of the Elbląg Upland, between the mouth of the Pasłękka River and the southern edge of ‘Drużno Bay’, reconstructed in the form in which it may have existed in Late Antiquity (Fig. 1). This concentration was called the Elbląg group by Jerzy Okulicz and attributed to the West Balt cultural circle.¹ This name has been generally accepted by scholars, although there are opinions that this group was subordinated to a cultural unit from the Sambian-Natangian area referred to by Wojciech Nowakowski as the Dollkeim-Kovrovo culture² or indicating the mixed, Balt-German-Scandinavian character of the culture of that area, resulting in its lack of independent character.³ There have even been suggestions to exclude it from the West Balt circle,⁴ although these definitely seem premature. The Elbląg group was formed several dozen years after the Wielbark culture population deserted its cemeteries situated on the eastern side of the Vistula Delta. This occurred, it would appear, in the final stage of Phase D and the onset of Phase E (i.e., the late fifth and early sixth centuries), as a result of a thus-far not completely explained process of symbiosis between interregional and ‘Sambian’ elements (i.e., horse graves, pottery forms, personal ornaments but also weapons). The Elbląg group was formed as the eastern peripheries of the Vistula Delta were taken

³ BITNER-WRÓBLEWSKA 2008a, 109.
⁴ BITNER-WRÓBLEWSKA 2010, 148, 150.
Fig. 1. Balt territories during the Late Migration Period and the Elblag group area: 1 - maximum extent, 2 - Sambian-Natangian area (Dollkesim-Kovrovo culture), 3 - Elblag group, 4 - Olsztyn group, 5 - Sudovian culture, A - cemeteries, B - settlements, N - Nowinka cemetery (after BITNER-WRÓBLEWSKA 2010, Fig. 6 and KONTNY - PIETRZAK, forthcoming, Fig. 1).
over by a newly-formed, mixed social group, or, as generally assumed, by the Vidivarii, known from the writings of Jordanes.\(^5\)

\(^5\) Some researchers (e.g., KUNKEL 1942, 1812-1813; OKULICZ-KOZARYN 1992, 140) have attempted to associate the new settlement at the Elblag Upland with information from the early sixth century presented by Jordanes in Getica V, 36: “Ad litus autem Oceani, ubi tribus faucibus fluenta Vistulae fluminis ehibuntur, Vidivarii resident ex diversis nationibus aggregati...”, and elsewhere in Getica XVII, 96: “... nunc [i.e., in the early sixth century] ut fertur insulam eam [i.e., Gepe- doios] gens Vidivarii incolit... qui Vidivarii ex diversis nationibus ac si in unum asylum colecti sunt et gentem fecisse nescuntur”. The unusual manner of formation through the allochthonous process of a new tribal group – probably employing Aestian settlers moving from the Sambian Peninsula – mixing with the members of Germanic military retinues migrating from various parts of the world and sailors from Bornholm and other Baltic islands is convincingly supported by the archaeological sources. For besides the early ‘almost Balt’ cemeteries from Phases E\(_1\)-E\(_2a\) (i.e., late 5th/early 6th c.) there are also one of the four largest concentrations of finds of Byzantine solides in northern Europe issued in 455-518 AD and hoards of silver and gold ornaments from the latter half of the fifth century and the early sixth century (GODŁOWSKI 1981, 104-109; BURSCHE 1998, 225; CIOŁEK 2001). Together with the cemeteries, they formed contemporaneous concentrations of settlement points.

Unfortunately so far the area has not been studied in detail.\(^6\) This is because pre-war archaeologists were focused on finding the medieval port-of-trade, Truso, not examining the so-called Old Prussian culture from the Migration Period and the Altpreussische Gräberfelder was mentioned in the pre-war literature only exceptionally. Moreover, the documentation from excavations together with almost all of the artefacts were lost during the Second World War. Therefore, its cultural traits can be reconstructed primarily on the basis of two cemeteries: from Łęcze, Tolkmicko com. (formerly Silberberg bei Lentzen), published in the late nineteenth century,\(^7\) and one from Nowinka, Tolkmicko com.\(^8\)

The exclusive human burial rite was cremation (Fig. 2). Frequently people of both sexes were buried here together with their interred horses. Animals were found with bridles in their muzzles and frequently

\(^6\) See KOWALSKI 2000.
\(^7\) DÖRR 1898.
\(^8\) KONTNY - OKULICZ-KOZARYN - PIETRZAK 2011.
with headgear that had bronze ornamental elements mounted on cheek piece straps, brow bands, nosebands, headpieces and central straps. It may also be proven that saddles were in use, for large iron buckles used to fasten saddles were found near the abdomens, and sometimes organic material is traced on the backs of horses. Unfortunately, their reconstruction is impossible. Nevertheless, the headgear fittings have been better preserved, so this is possible to distinguish at least a few types of horse harness, i.a., with multiple straps (Fig. 3).

As refers to the construction of graves, first large pits were dug out and then animals, probably still alive, were forced into them. They were most often deposited in ventro-dorsal position, natural for a lying horse, but sometimes uncustomyary positions were observed, indicating that the horses had attempted to climb out of the grave. The animals may have been ridden into the ground so that it was easy to push them into the pit, but it is also possible that they were stunned, poisoned or intoxicated. After filling the horse’s pit, charred human bones with grave goods were deposited, sometimes also with stone pavement at the top. This most likely reflected the relationship between a rider (the horse’s owner) and his stallion (generally males were deposited). To shed light on the possible symbolic significance of the animal, it is worthwhile to note the medieval written sources describing Prussians, i.e., the successors to the Elbląg group people. Therefore, Orosius’ *Chorography*, 22 translated by King Alfred the Great, contains the late ninth century report of horse races associated with burial ceremonies for the purpose of winning the valuables formerly possessed by a deceased. The valuables were divided and situated at unconcealed sites. The riders on horseback then had to hurry and retrieve the prizes. The significance of a horse in the burial rite is also underscored by a reference in the Treaty of Christburg, 13: a peace treaty signed in 1249 between the pagan Prussian clans, rep-

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10 LABUDA 1961, 70, 86. This was the famed traveller Wulfstan, who reported this information, see: ENGLERT-TRAKADAS 2009.
resented by a papal legate, and the Teutonic Knights. Pagan priests, called Tulissones or Ligaschones, are described here during burial ceremonies; they recounted their visions of the mounted armed deceased, riding in the sky with his retinue and a falcon.\(^{11}\)

Horse graves were typical in all stages of the Elbląg group, but this is not the case of weapon graves (namely with seaxes, which are the main topic herein).\(^{12}\) It seems that they began to appear in the later stages of the Elbląg group, i.e., in the late sixth and early seventh centuries.\(^{13}\) The most spectacular weapon here were seaxes, sometimes in ornamental scabbards. Single-edged swords were recorded in Pasłęck, Pasłęck com. (former Preussische Holland) in grave 26 and outside burials, together with a shafted weapon head.\(^{14}\) Seven complete items and numerous fragments were found in Elbląg-Żytno, Elbląg com. (former Benkenstein-Freiwalde)\(^{15}\) including grave 105,\(^{16}\) and four items in Łęczce, including graves 63 and 76 and two stray finds;\(^{17}\) a fragment of a seax was also discovered in Komorowo Żuławskie, Elbląg com.\(^{18}\) Nevertheless the largest collection of preserved swords comes from the cemetery at Nowinka (graves 17, 21, 53, 60, 84, 85, 105, 120).\(^{19}\)

As to the pre-war publications, they usually do not present descriptions of the weapons, so only occasionally some details can be noted. Therefore, we mainly have to rely on measurements made of the items from Nowinka. Seaxes from Nowinka range from 50 to 71.4 cm in length and 4.2-5.5 cm in width (Fig. 4). On the basis of their dimensions and proportions, single-edged swords from the Elbląg group may be divided into two groups. Group 1 encompasses slim, longer swords, sometimes in decorative scabbards: Elbląg-Żytno, three swords in decorative scabbards,\(^{20}\) Łęczce, grave 63\(^{21}\) and probably also the item from grave 76 – preserved fragmentally; Nowinka, graves 17, 84, 85. Group 2 refers to compact, shorter examples, possibly in simple scabbards: Elbląg-Żytno, grave 105 and another (?) find from the cemetery;\(^{22}\) the item found outside the graves in Łęczce,\(^{23}\) Nowinka, graves 21 and 105. Sometimes there were items placed halfway between the two groups found (the accidental find from Łęczce;\(^{24}\) Nowinka, grave 60 and 120).\(^{25}\) Following Herbert Westphal’s suggestion,\(^{26}\) a coefficient calculated as a quotient of the length and width of the sword (l/w) was used to illustrate the difference mentioned above. Additionally, due to the atypical width of the backs, a coefficient calculated as a quotient of the width and thickness of the back (w/b) was introduced (Table 1).

Almost all adequately described swords had a clearly thicker back (1.2-1.8 cm) so that their blades were T-shaped in cross-section (one seax from Elbląg-Żytno;\(^{27}\) Nowinka, graves 17, 60, 84, 85, 105, 120). Such a solution required considerable technological skill and was a local feature unknown, e.g., in Scandinavia.\(^{28}\) Its aim was to reinforce the blade and make it heavier, which increased its cutting power.\(^{29}\) At the point of roughly one-third of its length, the blade visibly tapered toward the back. The tangs were marked out on either side, visibly and usually at right angles on the side of the back and more gently on the side of the blade. The very poor state of preservation of the iron made metallographic analyses impossible and thus so far it has been impossible to determine whether the blade was made with the use of complex technologies or the back was simply hammered down.

The swords found in decorative scabbards sometimes had cross-shaped bronze plates with rounded arms on the hilt tangs (Nowinka, grave 17 and 85). They were attached by hammering down the ends of the tang in-

\(^{11}\) Text after HARTKNOCH 1679.

\(^{12}\) Apart from swords, there were also the heads of shafted weapons popular in the Elbląg group. They represent typically Baltic forms with parallels in Lithuania and the Sambian-Natangian area (see: KONTNY 2011). The same refers to riveted spurs sporadically found here. Strangely, no shield components have been confirmed for the Elbląg group; they were probably made solely of organic materials or they were excluded from burial rites.

\(^{13}\) KONTNY - OKULICZ-KOZARYN - PIETRZAK 2011, 89.

\(^{14}\) EHRLICH 1920, 181; EHRLICH 1931, 19-25, Fig. 2; EHRLICH 1932, 404, Fig. 2, 5:i.


\(^{16}\) EHRLICH 1931, 19-21.


\(^{18}\) BOGUCKI 2009, 32-33.


\(^{20}\) EHRLICH 1931, 19-21.

\(^{21}\) DORR 1898, Pl. I:16; EHRLICH 1931, 22.

\(^{22}\) EHRLICH 1932, Fig. 5:i.

\(^{23}\) DORR 1898, 24, Pl. I:20.

\(^{24}\) DORR 1898, 24, Pl. I:22.

\(^{25}\) It should be recalled that A. Nørgård Jørgensen attempted to classify the swords from Nowinka as Type SAX2 – graves 60, 105 – see: NØRGÅRD JØRGENSEN 1999, 53 – and SAX3 – graves 17, 21, 84, 85 and 120 – see: NØRGÅRD JØRGENSEN 1999, 57 – yet due to considerable discrepancies, including chronology, it is difficult to consider this issue settled. The classification criteria adopted for west European seaxes (see: WESTPHAL 2002, 205-206, 288-293) are not suitable in this case. Finally, the monograph on the Baltic weapons, i.e., KAZAKEVIČIUS 1988, 99-109, does not suggest any classification of single-edged swords.

\(^{26}\) WESTPHAL 1997, 408-409.

\(^{27}\) EHRLICH 1931, 19.

\(^{28}\) NØRGÅRD JØRGENSEN 1999, 53, 57.

\(^{29}\) See: KONTNY 1998.
serted in the central hole. Such plates are decorated in the style found also at the suspension plate of the scabbard from the particular assemblage. The plates reinforced the fastening of the unpreserved organic hilt, which indicates that the hilts were not longer than the tangs (probably also in the case of the remaining swords). It may therefore be assumed that on the longer swords the hilt was about 13 cm long. Taking into consideration the observations made during excavations at Nowinka cemetery (namely the shape of darker patches next to the hilt – organic handle remains), it may be assumed that the width of the hilt was approximately as wide as the plates fastening it, i.e., 3.6 x 2.8 cm, and certainly not smaller than said plates. Thus, the hand holding the sword was poorly protected. With reference to the handles, Robert Dorr remarked that the iron tang of one of the swords accidentally discovered in Elbląg-Żytno in 1907 was covered with wood and in the upper part set by a fitting made of an iron band decorated with incised bronze wire. The remains of the wooden handle plating were also preserved on the sword from grave 63 in Łęcze.

In the Balt milieu, seaxes were also found at the area of Sambia, Natangia, Nadrovia and the Neman River basin. These include, for example, the long artefacts from Suworovo, ray. Gvardeysk (former Zohpen), graves 335 and 392 in the Sambian-Natangian region. They differed slightly from the finds from Nowinka: they were slimmer, the point was curved outward slightly towards the back; they also had a thick back but not to the same extent as the Elbląg group seaxes (0.5-1.0 cm) and finally they had shallow fullers near the back.

This group also consists of a single-edged sword from the former Sorthenen and a sword in a scabbard decorated with gold foil from grave 1 in Vetrovo, ray. Zełenogradsk (former Ekritten), two similar but shorter single-edged swords were also found in grave 3. A seax 30

<table>
<thead>
<tr>
<th>Dimensions: (cm) length x width x thickness of back</th>
<th>I/w</th>
<th>w/b</th>
<th>group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nowinka, grave 17</td>
<td>71.4 x 4.7 x 1.4</td>
<td>15.19</td>
<td>3.36</td>
</tr>
<tr>
<td>Nowinka, grave 21</td>
<td>58.5 x 5.5 x 0.9</td>
<td>10.36</td>
<td>6.11</td>
</tr>
<tr>
<td>Nowinka, grave 60</td>
<td>~60 x 4.5 x 1.2</td>
<td>13.33</td>
<td>3.75</td>
</tr>
<tr>
<td>Nowinka, grave 84</td>
<td>~67 x 4.7 x 1.7</td>
<td>14.25</td>
<td>2.76</td>
</tr>
<tr>
<td>Nowinka, grave 85</td>
<td>69 x 4.5 x 1.6</td>
<td>15.33</td>
<td>2.81</td>
</tr>
<tr>
<td>Nowinka, grave 105</td>
<td>~50 x 4.2 x 1.4</td>
<td>11.90</td>
<td>3.00</td>
</tr>
<tr>
<td>Nowinka, grave 120</td>
<td>63.9 x 4.6 x 1.2</td>
<td>13.89</td>
<td>3.83</td>
</tr>
<tr>
<td>Łęcze, grave 63</td>
<td>70 x 4.7 x 1.3</td>
<td>14.98</td>
<td>3.36</td>
</tr>
</tbody>
</table>

Table 1. Dimensions and proportions of well-preserved Elbląg group swords.

30 DORR 1914, 2.
31 DORR 1898, 23. The sword survives in the collection of the Museum in Elbląg (Muzeum Archeologiczno-Historyczne w Elblągu) and the wood is still clearly visible.

32 EHRlich 1931, 34.
33 HEYM 1938, 63, p. 9:95, 34:245; KULAKOV 1990, 69, p. XV-10, XIX:7. Single-edged swords were also reportedly found in grave 435a and 466 but in these cases the details of the description are missing or there are ambiguities as to the grave numbers, see: HEYM 1938, 19.
34 HEYM 1938, 63.
35 EHRlich 1932, 412; KNÖRR 1938, 522; collection of the Museum of Warmia and Mazury in Olsztyn (Muzeum Warmii i Mazur w Olsztynie), cat. no 646.
36 According to the author of the publication it is analogous to the sword from Łęcze, grave 63, see: HOLLACK 1914, 283; cf. Prussia Archiv PM-A 282/1, 275 (in collection of Museum of Vor- und Frühgeschichte in Berlin).
37 Both in the Sambian-Natangian area.
in a scabbard decorated with a gold embossed sheet was found in the former Tengen, grave 9, while the others were recorded in grave 28 in the former Tengen and in the former Eisliethen (both sites in the Sambian-Natangian region). Besides similar swords mentioned in archival sources (usually without any specific data) concerning the drainage basin of the lower Neman River (the Lower Neman group), e.g., Rzhevskoye, ray. Slavsk (former: Linkuhnen), grave 39, grave 96, and excavations from 1939: in grave 15, grave 59, grave 420, grave 448, grave 457, grave 476, grave 481, grave 484, they were also reportedly found at other sites attributed to this cultural unit: Vėžaičiai, r. Šilutė (former Weszeiten), grave 667 and Barvai, r. Šilutė (former: Barwen), grave 34. Lithuanian single-edged swords were analyzed by Vytautas Kazakievičius, but he did not study the chronological and typological differences. These swords were very numerous, and were said to have appeared from the sixth (or even fifth) to the early eleventh centuries. They were concentrated in the area of the West Lithuanian group, but they were also found in the area of the Lower Neman group, the Central Lithuanian group and the Samogitian Flat Cemeteries group. In Samogitia and Semi-gallia they were not numerous; instead in these areas wide swords similar to falchions became popular. Naturally, seaxes were also found in western Europe and Scandinavia.

The origins of seaxes are believed to be connected to the Huns, who used long knives in the fifth century. It was believed that the direct predecessors of seaxes were the long knives known both in Scandinavia and in western Europe from the late fifth century or even earlier. They gave rise to short seaxes, which in fact were large knives accompanying double-edged swords. These in turn yielded the forms included in type SAX1 after Anne Nørgård Jørgensen, i.e., narrow swords up to 52 cm long, which happened before 575 AD. Such a view appears too simple, and it could be set more correctly. As Zdeněk Čízmář and Jaroslav Tejral proved, seaxes have their predecessors in long and narrow Asian forms (so-called straight sabres), dated as far back as the first century AD and linked to the Huig-nu tribes. Later forms, dated to the fourth century, were shorter, approximately 35 cm in length, attributed to the nomadic (e.g., Alan or Hunnish) milieu. They appeared in Central Asia (Dzhey-Asar culture), the steppe region in the Volga River basin (south Russia) and later also in the northern Caucasus (Alans) or Crimean Peninsula. The majority of the latter has been dated to the first half of or the mid-fifth century. Narrow seaxes have been confirmed in the central Danube region in Phase D12, i.e., the later part of the first half of the fifth century, although they were rare here. In the central Danube basin there is also an evidence of the use of narrow, longer forms, approximately 50 cm or more (Schmalsaxe), i.e., Wien-Simmering, Bez. Simmering; Blučina-Cezavy, okr. Brno-Venkov; Prostějov-Držovice, okr. Prostějov, graves 2 and 4; Levice, okr. Levice, etc., already in the first half of the fifth century. Shorter forms (ca 30-40 cm) seem to be slightly earlier in the fifth century than the longer ones, appearing also in the latter half of the fifth century. Later, from the second third of the fifth up to the second third of the sixth century, very long but very narrow seaxes, reaching 60-70 cm in length, are known also from the Gepidic cemeteries in the Tisa basin, although they were not very frequent there. This was probably a case of continuity and further development of older, Hunnish

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38 HOLLACK 1914, 284, Fig. 127. Another analogy to the sword from grave 63 in Lęczec was said to be the seax in a scabbard adorned with a silver embossed sheet and decorated in animal Style I from grave 1 in the former Warnikam, see: TISCHLER - KEMKE 1902, 42.
40 KLEBS 1877, 53, Pl. 1:5.
41 GAERTE 1929, Fig. 242g.
42 EHRLICH 1932, 409.
43 ENGEL 1932, Fig. 86, right.
44 Prussia Archiv PM-A 1472/1, 128.
45 Prussia Archiv PM-A 1472/1, 112.
46 Prussia Archiv PM-A 1472/1, 212.
47 Prussia Archiv PM-A 1472/1, 228.
48 Prussia Archiv PM-A 1472/1, 229.
49 Prussia Archiv PM-A 1472/1, 221.
50 Prussia Archiv PM-A 1472/1, 234.
51 Prussia Archiv PM-A 1472/1, 236; - see: F. Jaensch’s report in Prussia Archiv.
52 GAERTE 1929, Fig. 242f; OLSÉN 1945, 64, Fig. 299.
53 HOLLACK 1914, 284; KNORR 1938, Fig. 42; OLSÉN 1945, 64, Fig. 298; KAZAKIEVIČIUS 1981, 95.
55 KAZAKYAVICHYUS 1988, 101-104.
56 KAZAKYAVICHYUS 1988, Map XVI.
57 KAZAKYAVICHYUS 1988, 106.
60 BONÁ, NAGY 2002, 112.
forms. Narrow seaxes have also been observed quite early in western Europe, e.g., Pouan, dép. Aube but they became more popular beginning with Childeric’s grave in Tournai, prov. Hainaut namely during the Flonheim-Gültlingen phase (ca 480-510 AD),\(^{61}\) where they were treated as Danubian imports or imitations.\(^{62}\) Apart from them, wide seaxes (Breitsaxe) became typical of the Merovingian area and in the latter half of the sixth century and the first half of the seventh century. They were the most important type of seaxes here. Before the mid seventh century, wide seaxes in western Europe began to become longer (more than 50 cm).\(^{63}\) Already in the early seventh century the paths of development of single-edged weapons in Scandinavia and the Merovingian world, similar in the latter half of the sixth century, diverged: in western Europe wide seaxes with long, sometimes double-handed hilts appeared and in the Nordic zone forms SAX2, similar to earlier (latter half of the sixth century) SAX1 forms (27-52 cm long, 2.3-3.6 cm wide) but clearly longer and wider, reaching up to 69 cm in length.\(^{64}\) Type SAX3, however, to which Anne Nørgård Jørgensen classified some of the items from Nowinka, encompassed forms with broad blades, up to 81 cm long, analogous to western Europe, Langsaxes. It appeared in western Europe after the mid-seventh century, and before 680 AD,\(^{65}\) whereas its copies were first made in Scandinavia in the late seventh century.\(^{66}\) The copies, however, were not made with the use of the Damascene technology known in western Europe, but more simply.

Here we arrive at the question of the origin of the Elblag group seaxes. It seems that adopting the western and northern European scheme does not entirely explain the problem and does not precisely fit the reality of the Baltic milieu. On the one hand, the seaxes from Nowinka are attributed to its Phase 3, i.e., probably to the turn of the sixth into the seventh century and the early seventh century,\(^ {67}\) and this is the case of the items from Łęcze.\(^ {68}\) On the other hand, we have at our disposal their most probable forerunners, i.e., so-called dagger-knives (Germ. Dolchmesser): a typical form of a knife with a long and very narrow point and several grooves spaced out along the blade of the back or slightly obliquely with respect thereto. The possibility that single-edged swords developed from knives of the Dolchmesser type was suggested by Vytautas Kazakievičius, who stressed that at about the mid-first millennium they began to lose the features of knives and gain the morphological elements typical of swords: greater length and width, thickened back, wider point.\(^ {69}\) Valdemaras Šimėnas, in turn, indicated that the reason for the appearance of dagger-knives was the migration of human groups from the central Danube area in the fifth/sixth centuries,\(^ {70}\) which seems unjustified due to the fact that in the Danube area no similar weapons were found. Moreover, in his publications he did not clearly distinguish dagger-knives from single-edged swords, which resulted in such misunderstandings such as treating the items from Elblag-Zytno and Łęcze as dagger-knives.\(^ {71}\) The interpretation put forward by Vytautas Kazakavichyus is much more probable. He mentions the examples of long dagger-knives,\(^ {72}\) which suggests that still longer forms were in use in the following chronological stages, beginning in the fourth century.\(^ {73}\) Moreover it is possible to cite specimens which have to be considered swords due to their considerable length (starting at roughly 50 cm) and at the same time they possess certain archaic features, typical of dagger-knives such as the presence of fullers.\(^ {74}\) Thus the most probable hypothesis is that seaxes developed locally from dagger-knives,\(^ {75}\) which most likely occurred in the Early Migration Period, for it is in Phase D (i.e., late fourth cent., from ca 375 AD) that Dolchmesser were used,\(^ {76}\) including the actual swords from grave 28 in the former Tengan" and

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\(^{62}\) WESTPHAL 2002, 216.

\(^{63}\) WESTPHAL 2002, 217.

\(^{64}\) NØRGÅRD JØRGENSEN 1999, 44-45, 50-53, 147.

\(^{65}\) WESTPHAL 2002, 213, Table 2.3a.

\(^{66}\) NØRGÅRD JØRGENSEN 1999, 46, 53-57, Fig. 110.

\(^{67}\) KONTNY - OKULICZ-KOZARYN - PIETRZAK 2011, 123-124.

\(^{68}\) KOWALSKI 2000, 220.

\(^{69}\) KAZAKIEVIČIUS 1981, 45, 57-58; KAZAKYAVICHYUS 1988, 99-100.

\(^{70}\) ŠIMĖNAS 1996, 71.

\(^{71}\) ŠIMĖNAS 1996, 65-66.

\(^{72}\) KAZAKYAVICHYUS 1988, 100.

\(^{73}\) This was also proven by Jaroslav Prassolov’s studies (Humboldt-Universität Berlin) presented during the conference “Archaeology of the Baltic Region: New Investigations and Discoveries” held in Kaliningrad (17-19 Nov. 2010).

\(^{74}\) Dobroe-Gora Velikanov, ray. Zelenogradsk, grave N-1, see: KULAKOV, forthcoming, 8, Fig. 22; Lithuanian finds from Kališkių, r. Plungė, Pakalniškių, r. Šiauliai and Vidišiai, r. Šilutė, see: ŠIMĖNAS 2006, Fig. 30, 54-1, 2; Povarovka, ray. Zelenogradsk (former: Kirpehnen), site 2, grave 92, see: PRUSSIA Archiv PM-A 1730/2, 120; Rzhevskoye, grave 457, see: PRUSSIA Archiv PM-A 1472/1, 229; Svovorovo, see: HEYM 1938, 63; former Tengan, grave 1, see: KLEBS 1877, Pl. 1:5. In the latter, the find from Povarovka, and possibly also the find from grave 9 in the former Tengan, see: BERENDT 1873, Pl. 1:3a, the blade is T-shaped in cross-section, which was typical of many dagger-knives.

\(^{75}\) For a similar opinion see: EHRLICH 1931, 34-35.

\(^{76}\) NOWAKOWSKI 1996, 58.

\(^{77}\) NOWAKOWSKI 1996, Pl. VIII:b, XVI:d.
Povarovka, mentioned above. The next finds of ‘Balt’ seaxes known so far are from the former Warnikam, and Rzhevskoye, grave 484. They have been dated to Phase E, i.e., late fifth/sixth centuries. Later finds from the Elblag group and the neighbouring Balt areas are also known.

The process of ‘elongating’ Balt swords stands complied with the general European-wide trend of lengthening weapons, but evidently it transpired earlier than in Scandinavia or western Europe’s second attempt (after leaving the idea of narrow seaxes), moreover it had a different antecedent. The area where dagger-knives and later single-edged swords appeared basically comprises the zone along the south-east coast of the Baltic Sea. It was probably from there and not only from the eastern part of the Merovingian circle that the tendencies to lengthen single-edged weapons came to Scandinavia, although – taking into account chronology – one may also take into consideration certain Gepidic influences or even direct nomadic short seaxes. It is worthwhile recalling here that, according to Jordanes (“Getica” V, 36) the Aetuziri, identified as Hunnish tribe, dwelled south of the Aestii.

As indicated above, sometimes scabbard elements may be found in Elblag group graves. The arrangements of preserved fittings indicate that swords in scabbards were deposited in graves. The fittings include U-shaped iron chapes and embossed bronze sheets placed between the chips and the chape. There were also bronze elements used for fastening the scabbard. In some cases the organic components of the scabbards were preserved: remains of wooden chips on blades (Nowinka grave 17, 60 and 85) or the back (Nowinka, grave 105); fragments of scabbards made of wood and leather were observed by Robert Dorr in Leče. Wooden parts of scabbards also survived in Elblag-Zytno on sword I, II and III. Notable in the case of the sword from Nowinka, grave 105, is that no metal scabbard fittings were found, which supports the hypothesis that some scabbards were made of wood and did not have any additional fittings. In turn, in graves 21 and 84 from Nowinka, no traces of wooden chips were found, which suggests that the swords were deposited without scabbards or that their organic elements became completely decomposed. The second possibility is supported by the fact that in grave 21 an organic outline of a structure used to suspend the sword found in the forte part was recorded. In grave 17 at Nowinka, the leather covering the wooden scabbard was also found, while in grave 85 leather with remains of oak was discovered in the area of the forte, which may be linked to the structure used to suspend the scabbard. In the point section of the latter, the scabbard was made of oak or lime wood chips. The state of preservation of the organic parts precludes any determination as to whether the wooden parts of the scabbards were decorated.

Iron chapes (e.g., Nowinka, graves 17, 60, 85, Elblag-Zytno, Leče, graves 63 and 76) had the form of U-shaped, one-piece fittings embracing approximately 0.4 of the length of the blade. Their arms were originally of equal length.

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85 Dorr 1898, 23. At present the finds of Leče are much more poorly preserved and the remains of the U-shaped chape are preserved only at the point section (collection of the Elblag Museum).
86 Knorr 1938, 521.
87 Ehrlich 1931, 1.21.21
89 Kontny - Okulicz-Kozaryn - Pietrzak 2011, 19.
90 Kontny - Okulicz-Kozaryn - Pietrzak 2011, 15-16.
92 This cannot be entirely excluded, as the instances of placing decorative motifs on the organic parts of the scabbards are known in the Baltic zone from the Migration Period: in its earlier part (Phase D), e.g., bog deposits of Nydam I and IV, see: Jorgensen - Petersen 2003, Figs. 25, 36; Petersen 2003, Fig. 1-2, and also later, e.g., Norre Sandegård Vest, Bornholms amt, grave 62, see: Jorgensen - Norgaard Jorgensen 1997, Figg. 57.
94 Ehrlich 1931, 19-25; Ehrlich 1932, Fig. 5i.
95 Dorr 1898, 23, Pl. I:16.
96 It is different in the case of the item from Nowinka, grave 60, but there the chape is incomplete and it is difficult to determine whether it was much longer on either of the sides. Also the best preserved sword from Elblag-Zytno (no 1) was different: it appeared in a scabbard with a U-shaped chape with one arm longer (on the side of the back - 26 cm) and one shorter (18 cm).
Some of the scabbards were additionally decorated (Fig. 4:5-6, 5:1-2) with bronze sheets featuring embossed ornaments (Nowinka, grave 17 and 85,\(^97\) Łęczce, graves 63 and 76\(^98\)) placed in the lower parts of the scabbards. Seaxes from Nowinka were equipped with combinations of razing patterns and pear-like lines,\(^99\) whereas the item form Łęczce, grave 76, was decorated with a pattern of embossed concentric circles and a damier pattern of rhombuses separated by dotted lines (Fig. 5:2). Decorative metal sheets were also made of more precious metals. Silver plates were placed on either sides of the scabbards found in Elblag-Żytno.\(^100\) In the case of sword I they were decorated with a railing ornament, concentric circles, embossed lines and lines of horizontal and oblique dots;\(^101\) the scabbard of sword II was decorated with the railing motif and straight lines, that of sword III with embossed concentric circles surrounded by rings of dots, and that of sword IV with a pattern of concentric circles placed between the borders of double dotted lines.\(^102\) In contrast to the finds from Nowinka, in Elblag-Żytno the metal sheets covered the entire lengths of the scabbards. It was also noticed that the ends of the metal sheets overlapped;\(^103\) this solution was probably also used in decorative scabbards from Nowinka, which is suggested by the way in which the topmost sheets on the sword from grave 85 were affixed. It should be noted that decorated scabbards appeared concurrently only with long slim swords.

Both seaxes and scabbards with U-shaped chapes, including those decorated with embossed metal sheets, occurred in Balt areas, especially in Sambia, Natangia and in the drainage basin of the lower Neman River.\(^104\) One of them is the find from the former Sørensen, grave 15. During the excavations of 1931, together with a flask-shaped vessel, a sword in a scabbard was discovered, decorated with an embossed zigzag pattern and concentric circles interspersed with dotted lines.\(^105\) According to Heinz Knorr, two swords with fittings were discovered during Carl Engel’s excavations.\(^106\) The swords preserved in the collection of the Museum of Warmia and Mazury in Olsztyn (cat. no 646) are unfortunately in very poor condition. It may be said that these seaxes belong to the group of longer swords and that the embossed sheets probably covered the whole blades; as in the case of sword I from Elblag-Żytno, they were made of overlapping sheets, in the lower part held in place by an iron chape. They were decorated (Fig. 5:3-4) with vertical and horizontal plain and dotted lines, plain oblique lines and a motif of concentric circles ringed with pear-like ornaments (as on sword II from Elblag-Żytno). Due to their poor state of preservation it is difficult to say which raw material was used to make the metal sheets. In turn, in grave 1 from Vetrovo a sword in a scabbard decorated with a gold sheet was found; according to the author of the publication it is analogous to the sword from Łęczce, grave 63.\(^107\) A scabbard decorated with an embossed gold sheet was found also in former Tengen grave 9.\(^108\) Another decorated scabbard was found with the seax from grave 1 in the former Warnikam: it was decorated with an embossed silver sheet with ornaments\(^109\) in animal Style I after B. Sa-

\(^97\) KONTNY - OKULICZ-KOZARYN - PIETRZAK 2011, Pl. X:12, LX:9, 9c.
\(^98\) DORR 1898, 23, Fig. 6.
\(^99\) In both scabbards a combination of embossed a double railing pattern and double pear-like lines in horizontal and vertical arrangements were used. Such motifs were also used on sheets decorating the sheath of a knife (grave 60) and headgear fittings (graves 82, 117, 120, 147) as well as a drinking horn (graves 17, 21, 83); the railing ornament appeared on the fittings of drinking horns also in combination with other motifs - graves 11, 62A, 82; see: KONTNY - OKULICZ-KOZARYN - PIETRZAK 2011, Pl. V:11, IX:19, XI:5, XXXVII:4, XLI:1, II:4, 9, LIV:4, LXXIII:16, XCIV:2.
\(^100\) EHRlich 1931, 19-20, Fig. 2; EHRlich 1932, 404, Figs. 2, 4.
\(^101\) EHRlich 1932, 19-20, Fig. 2.
\(^102\) EHRlich 1931, 21-22.
\(^103\) KNORR 1938, 521-522, Fig. 37.
\(^104\) They are also known from Scandinavia and the Merovingian circle, yet the items from these areas clearly differ from the Baltic artefacts in the use of a fitting placed along the entire length of the scabbard, see: OLSEN 1945, Figs. 125-169; NØRGÅRD JØRGENSEN 1999, Figs. 19, 25, 34.
\(^105\) EHRlich 1932, 412.
\(^106\) KNORR 1938, 522.
\(^107\) HOLLACK 1914, 283; see: Prussia Archiv PM-A 282/1, 275.
\(^108\) BERENDT 1873, Pl. I:9, II:4.
\(^109\) TISCHLER - KEMKE 1902, 42.
\(^110\) SALIN 1904.
\(^111\) Prussia Archiv PM-A 1472/1, 236.
\(^112\) GAERTE 1929, Fig. 242g.
\(^113\) EHRlich 1931, 25-34, 39-42.
Olsztyn group, at the Sambian-Natangian area and in the drainage basin of the lower Neman.\textsuperscript{113} There are no similarities to the decorations on the seax scabbards from Scandinavia and the Merovingian circle.\textsuperscript{114} The ornaments found on the scabbards from the Elbląg group were examined by Przemysław Urbańczyk, who came to the conclusion that whereas the construction of the scabbard was derived from the Germanic, west European milieu, the decorations found on the scabbards were drawn from the nomadic, basically Avar milieu from the Carpathian Basin, which was proven by the lack of local prototypes.\textsuperscript{115} This concept seems to be debatable, namely because of the erroneous dating of the artefacts in question.\textsuperscript{116} This does not mean that the possibilities of certain, probably greatly modified nomadic inspiration in the decorative style should be completely rejected, but – as the earliest scabbards decorated with embossed ornaments appeared in Sambia already in Phase E\textsubscript{1} – the Avar influence has to be excluded: the Avars settled in the Carpathian Basin as late as 567 AD. It should also not be forgotten that in the late part of Phase D the Germans adopted many features of the nomadic culture, including weapons\textsuperscript{117}

\textsuperscript{113} See: OLSEN 1945, Figs. 125- 169; NØRGÅRD JØRGENSEN 1999, Figs. 19, 25, 34.
\textsuperscript{114} URBAŃCZYK 1978, 113-128.
\textsuperscript{115} The author treated chronology too freely and the finds accompanying the scabbards were only considered ancillary in determining the chronology, see: URBAŃCZYK 1978, p. 109. As a result his dating of the scabbards to the latter half of the seventh century – see: URBAŃCZYK 1978, 127-128 – should not be deemed proven and, in the light of the remarks made above, strongly suggesting the adoption of decorative motifs on scabbards from the Sambian-Natangian area, erroneous.
\textsuperscript{116} See, e.g., BITNER-WRÓBLEWSKA – KONTNY 2006, 112, 117.
thus some motifs made in the nomadic style may have reached the Baltic areas via the Germans (perhaps the Gepids, taking into account the idea of seaxes passing between them in the sixth century).¹¹⁸

In as much as there are considerable data concerning the decoration of scabbards, the grounds for reconstruction of their manner of suspension are tenuous. The only adequate observations were made at the cemetery in Nowinka. From grave 17 comes a thin bronze plate (fragmentarily preserved) placed in its lower part, originally pushed between the chips and the U-shaped chape. The case of grave 85 was similar, in which metal sheets were preserved on either side; here also another decorative metal foil occurred. The latter was superimposed on the U-shaped fitting near its upper end; it embraces the scabbard along its entire width and its ends slightly overlap. The construction of the part of the scabbard above the chape and its manner of suspension are problematic, but some possibilities are given only by the analysis of the context of the finds from graves 17 and 85, and to some extent also grave 21. In the case of the scabbard from grave 17, in the forte part a rectangular organic outline was noticed. It had the dimensions of approximately 16 x 4.5 cm and adjoined the back with its longer side. At its top there was a yoke fitting (Fig. 6:2) and below an openwork X-shaped fitting (Fig. 6:1) — both placed along the longer axis of the organic outline. Most likely the scabbard had in this part an organic clasp (made of leather or leather and wood), fixed with an X-shaped fitting on the underside and a yoke fitting on the upper side: both fittings were probably joined with the same pair of rivets — the distances between the preserved rivets and holes are identical. Very close to these fittings, the remains of a belt were found. It most likely served to fasten the scabbard, together with its fittings. The buckle found nearby may have been used to fasten the

¹¹⁸ The local character of the decorations of the Baltic scabbards is also supported by Pär Olsén, who accepted the similarities in the construction of the scabbards to those used in the Merovingian circle, see: OLSÉN 1945, 68.
strap on which the scabbard was suspended. In grave 85, the construction for suspending the scabbard was made of oak coated with leather (which suggests that a similar material was used in grave 17) and bound from the side of the blade with an arched bronze plate with openwork ornament (Fig. 6:3) with remains of leather adjoining it; the fastenings consisted of straps combined with buckles. As the construction was very fragmentarily preserved, it is impossible to reconstruct its details but it is possible to assume that two of the buckles belonged to the belt from which the scabbard was suspended and the third may have been part of the strap to which the drinking horn was affixed. In the vicinity of the forte of the sword from grave 21, however, a rectangular organic outline was recorded. It had dimensions 30 x 8 cm and no additional fittings. This suggests that there was a scabbard with a wider part, probably used to fasten it.

Other elements discovered at the cemetery in Nowinka which have analogies in the Elblag group are components of the scabbard suspension system. In Elblag-Zytno, a decorative fitting made of an openwork silver plate was found; it strongly resembled the bronze suspension plate from grave 17 in Nowinka but it had longer terminals bent inwards, owing to which it has the shape of a triple rhombus (Fig. 6:4). The ornament is also similar. It consists of a double row of stamped triangles filled with a dot motif. Although there are minor differences in length (Elblag-Zytno: 8.2 cm, Nowinka: 6 cm), shape and manner of fastening (Elblag-Zytno: eight rivets, Nowinka: two rivets), undoubtedly the two items were used for the same purpose. As the item from Elblag-Zytno is a chance find, Bruno Ehrlich could not identify its function, but in light of the discoveries from Nowinka it is obvious that they were used to suspend the scabbard. The yoke fitting from Nowinka (Fig. 6:2) also has an analogy at the cemetery in Elblag-Zytno. Precisely this type of item is represented in Bruno Ehrlich’s publication among the artefacts classified as strap fittings and buckles.

but it is more plausible, on the basis of the find from Nowinka, that this is an element of the sword’s suspension system. It should be noted that the yoke fitting from grave 17 has some functional analogies in the Merovingian circle. This place was probably reinforced on the underside with an attached X-shaped suspension plate, as in the case of the openwork plate from grave 85. From the other side the organic outline from grave 21 resembles the solution from the cemetery at Oberflacht, Lkr. Tuttingen in Württemberg, where the sheath of a knife with a similar organic wider portion but additionally reinforced with borders made of metal sheeting was found. Closer analogies to this construction are known in the Olsztyn group, e.g., Tumiany, Barczewo com., grave 38.

Analogies for the suggested seax scabbard suspension system from the Elblag group can be seen in finds from other parts of Europe. In the late Migration Period, scabbards were fastened usually at their sides, especially in the case of knives and seaxes. This way of fastening can be observed in the Balts (including the Olsztyn group), Finnish, Scandinavian, and Slavic areas as well as in the Merovingian circle and also among the Avars, where, however, the projections are of a different shape (P-shaped). On the basis of these analogies and some observations made for the materials from the Elblag group, it is worthwhile to attempt to ascertain the manner in which seax scabbards from that group were fastened. It has already been stressed

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124 Bruno Ehrlich states that at Suvorovo, grave 385, together with a seax an openwork scabbard fitting was discovered, decorated with T-shaped patterns, see: EHRlich 1932, 412. This information suggests that this is a similar plate as in grave 85 at Nowinka, but there are no other data to confirm this: the sword is not mentioned by other authors who examined the materials from Suvorovo, see: HEYM 1938; KULAKOV 1990; BITNER-WROBLEWSKA 2008b.

125 A similar bronze artefact was found in grave XVI at a Thuringian cemetery at Obermühlern, Lkr. Burgenlandkreis, where it was riveted to a wooden projection placed in the upper back part of the scabbard of a knife/short seax, see: HOLTER 1925, 94, Fig. 53, Pl. VIII:16, XVI; OLSén 1945, Figs. 45, 289; SCHMIDT 1976, 105. A pair of similar yoke fittings was recorded also at the cemetery of Duisburg-Walsum, Lkr. Duisburg Stadt, grave 32, and Krefeld-Gellep, Stadt Gellep, grave 43, see: BÖHME 1997, Pl. 71. Similar forms were sometimes classified as P-shaped metal extensions of Avar scabbards, e.g., Kishegyes, kom. Bács-Bodrog, see: OLSén 1945, 64, Fig. 40.

126 VEECK 1931, Pl. O:3; OLSén 1945, Fig. 290.

127 OLSén 1945, p. 65, 68.

128 HEYDECK 1895, Pl. IX:1; JAKOBSON 2009, Pl. 24:m.

129 See: EHRlich 1920; KNORR 1938; URBANCZYK 1978; OLSén 1945; BÖHNER 1958, 140, 144, Fig. 7.

that a two-point system of fastening is suggested by the space free of decorative metal sheets located between the chape and metal sheets attached higher up on the scabbard of the sword from Elblag-Żytno. According to Bruno Ehrlich,131 this is where an iron band with a ring to which the strap for fastening the scabbard was placed; the second strap was to be close to the hilt, above the upper metal sheets (but the traces of fastening were not found). As he believed – these bands may look similar to the one from the seax scabbard from Vėžaičiai, grave 667,132 where a two-point system of suspending the scabbard was used. The idea that in the Elblag group the two-point system of fastening scabbards was used is supported by Przemysław Urbaniczyk,133 who linked it not with local traditions but with German influences from the Rhineland, reflected in the construction of weapons.134 In light of the considerations suggesting the early dating of Baltic seaxes and their local genesis, the latter hypothesis should no longer be deemed valid. Also, the hypothesis of the two-point fastening of scabbards need not necessarily be supported. Although it is assumed that this system was used for double-edged spathae135 and seaxes,136 yet for the latter, there were also known cases of use of two systems at single cemetery, e.g., at Nørre Sandegård Vest, Bornholms amt: grave 36 – one-point system, grave 24 and grave 31 – two-point system.137 Use of both systems is also suggested by the iconographic representations (Fig. 7).138 The one-point system is depicted on representations of warriors/werewolves with seaxes in scabbards preserved on the scabbard of a spatha-type sword from an Alamanni grave in Gutenstein, Lkr. Sigmaringen, or on a plate from Toslund, Torslundan sn on Oland, and the two-point system on a depiction on the Frankish stele from Niederdollendorf, Lkr. Rhein-Sieg-Kreis.139 This state of affairs is also supported by the aforementioned Baltic discoveries: swords from Vėžaičiai, grave 667 and Lazdininkiai, grave 73, were fastened in two points but the find from Barvai, grave 34, only in one.140 In such a situation, the possibility that both systems were also represented in the Elblag group cannot be excluded. Whereas it is possible to consider two-point fastening in grave 85 from Nowinka, due to the presence of buckles, in graves 17 and 21 this is not as certain, and fastening in the upper part alone is also possible.

The question arises why a weapon like the seax began to appear in the grave goods of the Elblag group so late and what this meant. Worthwhile noting is that in the late sixth/early seventh century, the peoples of the lower Vistula area were engaged in the amber trade.141 This is demonstrated by pieces of amber found in graves, as well as the opulence of grave goods. Apart from amber, salt may also have been a source of affluence. This seems to be supported by toponyms such as Lake Drużno (Druso) in the vicinity of Elblag and the trade port Truso, names related to salt, e.g., the Lithuanian word Drusk means ‘salt’. As there were shortages of salt in Scandinavia (it was obtained only in Denmark and not from salt mines but from sea water or possibly marine plants), it was necessary to import it. Salt trade center could have been placed in the neighbourhood of Elblag inhabited by the Balts. It is difficult to ascertain whether salt was imported from that area at the time when the necropolis at Nowinka was in use, yet the presence of Scandinavian imports seems to be a strong argument in favour of this idea. Foreign contacts are confirmed by, e.g., Scandinavian forms such as beak brooches, S-shaped, disc and equal-armed brooches as well as tongue-shaped strap ends, but also Merovingian elements, such as a belt with a set of Frankish fittings from the necropolis at

131 EHRlich 1931, 20.
132 GAERTE 1929, 301, Fig. 242:f; EHRlich 1931, Fig. 19.
133 URBANICZYK 1978, 118.
134 URBANICZYK 1978, 122.
136 STOLL 1940.
137 JØRGENSEN - NØRGÅRD JØRGENSEN 1997, 72.
138 Noticing this contradiction, Pär Olsén came to the conclusion that iconographic representations did not reflect reality but had a purely ornamental function, see: OLSEN 1945, 63-64, which seems to be an evasion of the issue.
139 See: OLSEN 1945, Figs. 257-259; SCHIENERL 1990; RASCH 1991, Fig. IV:21; BERTRAM 2007, Fig. 3.
140 The bow-shaped fastening in the upper part of the scabbard is treated as a nomadic influence, see: KNORR 1938, Fig. 42; OLSEN 1945, 64. Pär Olsén also considers one of the finds from Rzhevskoye treated as a nomadic influence, see: KNORR 1938, Fig. 42; OLSEN 1945, 64. Pär Olsén also considers one of the finds from Rzhevskoye.
141 KONTNY - OKULICZ-KOZARYN 2011, 127-129.
Additionally, the topography favoured the people of the Elbląg group, situated near the sea shore (Družno Bay), at a location safe for sailing while simultaneously facilitating easy control of trade. One cannot exclude the possibility that they took part in trade as merchants/sailors, although so far there are no grounds to prove this. Nevertheless, it is quite possible that local dwellers became wealthy enough not to economize on grave goods (and place them lavishly in graves) and additionally that military force was needed to protect trade routes, at least near the coast where boats landed. This hypothesis is bolstered by the potential use of small but durable horses, useful for scouts exploring the territory. The high social position of warriors, possibly members of retinues, was underscored in burial rites by furnishing the dead with seaxes. Surely this was not proof of subordinate status (semi-free man), as sometimes suggested with reference to western Europe.¹⁴³

¹⁴² KONTNY - PIETRZAK, forthcoming; KONTNY 2012.
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