

Cemetery at Luzino – the easternmost located site of the Dębczyno Group in Poland (Pomerania)

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CEMETERY AT LUZINO – THE EASTERNMOST LOCATED SITE OF THE DĘBCZYNO GROUP IN POLAND (POMERANIA)

ABSTRACT

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The Luzino burial ground is the easternmost site of the Dębczyno group, located in Wejherowo county, in the northern Polish province of Pomerania. The cemetery occupied the summit of a slightly elevated terrain ridge. The remains of 20 graves, most probably only skeletal burials, were recorded, in which, apart from one case, no bone material survived. Grave goods were recorded in five of them. In four graves, small-sized hand-made vessels were recorded whose state of preservation allowed their reconstruction, while in one burial an elaborate necklace of beads (glass and amber), a brooch and probably a belt buckle were discovered.

The materials found at the Luzino site should be associated with the late stages of the Migration Period. The burials with grave goods, however, show mainly links to the Elbe circle, while Scandinavian influences are lacking in the mobile materials.

Keywords: Dębczyno group, Pomerania, Cemetery, Migration Period

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INTRODUCTION

The village of Luzino, Wejherowo county, is located in the northern part of the Kashubian Lake District, right on the border with the Łeba and Reda Proglacial Valley (Fig. 1). Site 93 is located on the western, rather steep slope of the large valley of the Bolszewka River, approximately 400 m west of its bed. The cemetery occupied the summit of a slightly elevated terrain ridge located between the steeply sloping valley slope to the east and the gently sloping westward slope between the hills situated on the upland. The burial ground was arranged along an approximate northwest-southeast axis (Figs 2 and 3).

The recent publication of Henryk Machajewski's book on the Dębczyno group (2021) comprises a study of the eponymous settlement at Dębczyno, in the county of Białogard, northern Poland. Although this subject has been covered by the above-mentioned archaeologist's publications on previous occasions, his latest work supplements earlier findings with an analysis of materials from Site 6 (see Machajewski 1992; 1993; 2021, 13). The material that is the subject of this article perfectly extend the knowledge contained in the

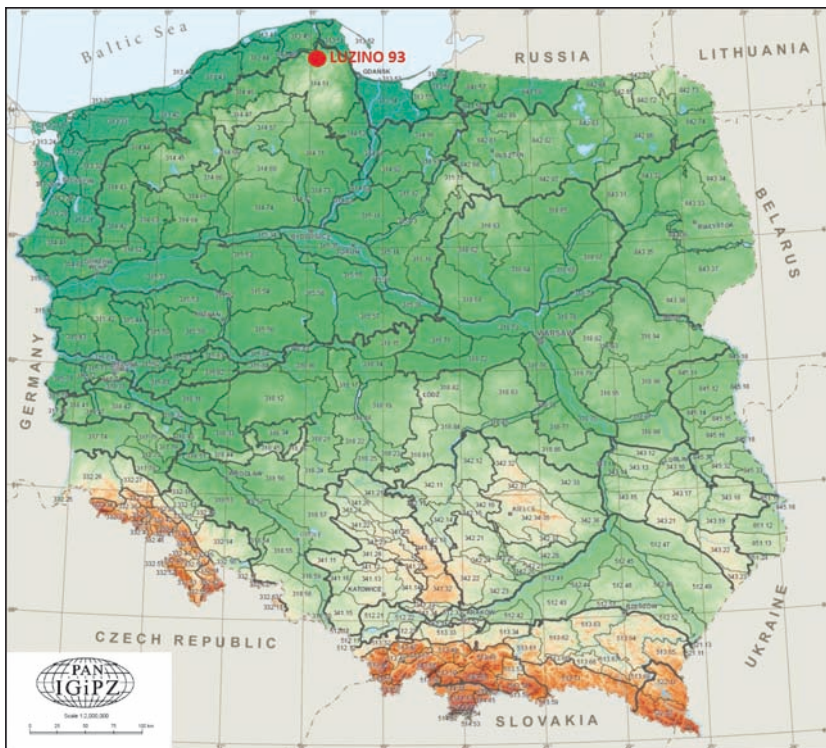


Fig. 1. Luzino, Site 93. Location of the site (after: Solon *et al.* 2018; by M. Piotrowska)

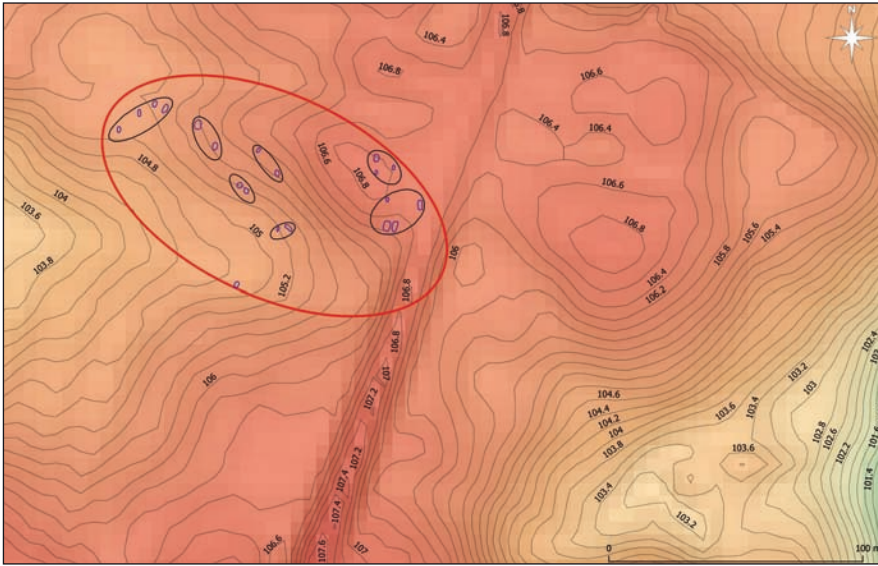


Fig. 2. Luzino, Site 93. Contour map of the site. Legend: blue – burial, black – clusters of graves, red – range of cemetery (prepared by K. Waszczuk and D. Żychliński)

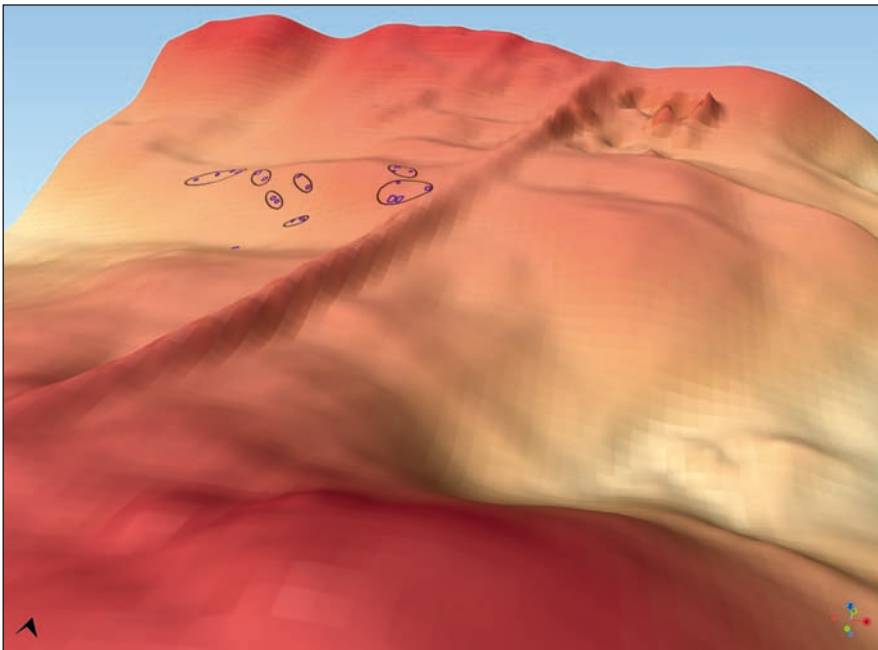


Fig. 3. Luzino, Site 93. Digital elevation model showing the location of the cemetery (prepared by K. Waszczuk and D. Żychliński)

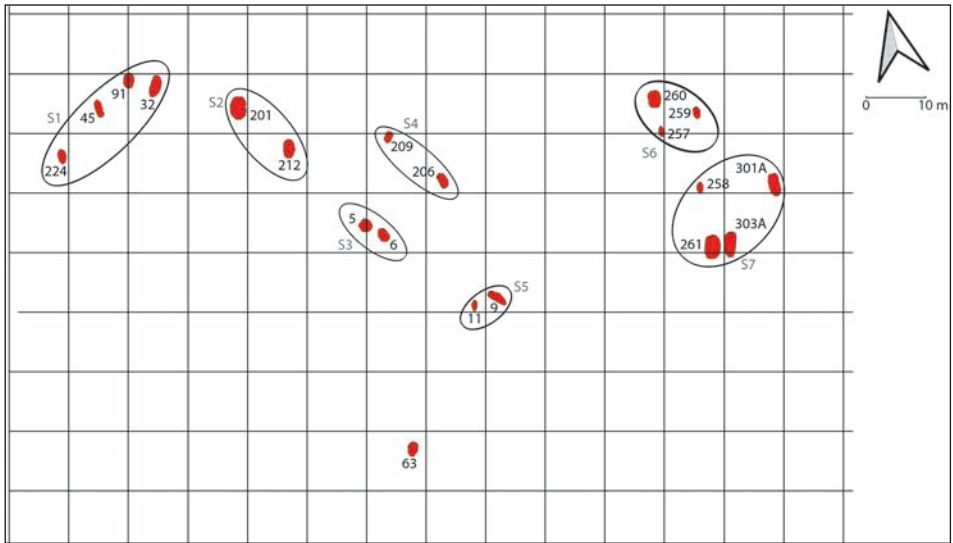


Fig. 4. Luzino, Site 93. Location of the burials and clusters of graves within the cemetery. Legend: red – burial, black – clusters of graves, violet – number of clusters (prepared by M. Wołoszyńska-Far and D. Żychliński)

above-mentioned publication, with the Luzino burial ground being the easternmost site of the Dębczyno group.

Rescue excavations at Site 93 in Luzino (AZP 7-39/160), in the northern Polish province of Pomerania, were undertaken in connection with the construction of the S6 expressway between Gdańsk and Łębork. The research was carried out in several stages from 2020. As a result, evidence connected with the Bronze Age, the Iron Age, the Migration Period, the Middle Ages, as well as the modern and contemporaneous periods, were recorded. The remains of the burial ground which is the subject of this article were discovered in 2021, when nine graves, most probably inhumation graves, were recorded. A total of 337 pottery sherds were recovered from five vessels, a bronze fibula, a buckle and a necklace consisting of 174 beads, as well as an undetermined bronze object in a very poor state of preservation (although an attempt was made to preserve the artefact, unfortunately the object disintegrated). After a careful analysis of the features, both securely dated (nine) and containing no finds, but characterized by analogous dimensions, shapes, orientation, and construction of the fills, a further 11 graves were identified (Fig. 4). Eventually, 20 graves were recorded that should be linked to the population of the Dębczyno group (Features 5, 6, 9, 11, 32, 45, 63, 91, 201, 206, 209, 212, 224, 257, 258, 259, 260, 261, 301A and 303A). It should be mentioned, however, that the authors believe that there must have been more graves, but that they have not survived to the present day. This is indicated by their distribution in the burial space. Features which are presumed to be potential burials, as well as their dating, are marked in the text and the catalogue table with a question mark (?).

All of the graves are inhumation graves in which, apart from one case, no bone material survives. Grave goods were recorded in five of them, while the others produced none. In four graves (Features 5, 45, 257, 303A), small handmade vessels were recorded whose state of preservation allowed their reconstruction, while in one burial (No. 206), an elaborate necklace of beads (glass and amber, see below), a brooch and probably a belt buckle were discovered. A brief characterization of the graves is included in the table, hence only the grave equipment will be discussed in detail and the internal structure of the sepulchral space with grave clusters will be presented below the finds.

GRAVE GOODS

Pottery

In discussing the pottery from the Luzino burial ground, the scheme proposed by Henryk Machajewski was applied (see 1992, 75-77; 2021, 24, 25). In Luzino, two types of such vessels were distinguished – namely, vases and a single pot (Machajewski 1992, 78-101).

1. A low vase-like vessel (from Feature 5) characterised by good-quality firing and a smooth surface of a light brown colour (Figs 5 and 6). The diameter of the rim is 18 cm, while its height is 12 cm. The largest diameter of the body is located at the mid-height point



Fig. 5. Luzino, Site 93. Vessel from Grave 5 (photo by B. Pachulski)

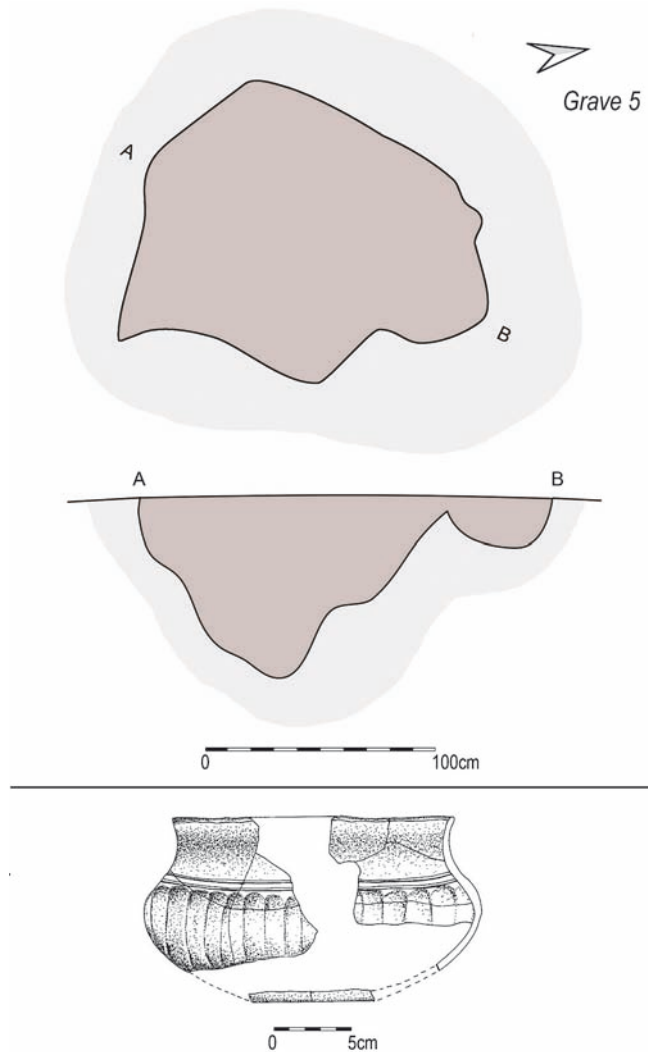


Fig. 6. Luzino, Site. 93. Burial no. 5 – plan, section and grave goods (prepared by M. Piotrowska and M. Wołoszyńska-Far)

of the vessel. The rim is gently everted with a rounded edge. The neck is clearly marked and smoothed. At the transition of the neck to the belly there is a circumferential decoration in the form of two parallel engraved lines emphasising the structural features of the vessel. Below, around the belly, are densely placed rather wide vertical grooves, extending to the base. The vessel should be included in group A, *i.e.*, type II vases with a bulbous body, variety 3 – squat forms according to Machajewski (1992, 194, pl. 6: i). Similar forms were recorded in graves at a site in Kowalki, Białogard county and at the settlement in

Dębczyno, with their occurrence being linked to the later phase of the Late Roman Iron Age (Machajewski 1992, 79, 80, 218, pl. 30: 7, 219, pl. 31: 7).

2. A vase-like vessel (from Feature 45) characterised by careful workmanship, good-quality firing, and a smooth surface with a brown outer colour (Figs 7 and 8). Its rim is 17 cm in diameter and it is 12 cm in height. The largest swell of the belly is placed slightly above the mid-height point. The rim is slightly everted with a rounded edge. Above the largest swelling of the body there is a circumferential decoration in the form of an engraved line, from which short, diagonal, fairly densely spaced incisions diverge. The form is most similar to a type II, variety 4 vessel from Grave 17 in Dębczyno dated to the later phase of the Late Roman Iron Age (Machajewski 1992, 80, pl. 6: j). Similar forms are known from the Late Roman Iron Age and the Migration Period from Mecklenburg (Schuldt 1974, plates 64: 5 and 66: 2).

3. A vessel (from Feature 257) with a rim diameter of 10 cm, characterised by careful workmanship and good-quality firing and a brown surface colour (Figs 9 and 10). The largest swell of the belly was probably at its mid-height point. The rim was everted outwards with a rounded edge and the neck was quite high. The vessel displays ornament in the form of a circular rhythmic line at the bottom of the neck and another line at the transition of the neck to the belly. Between these lines is engraved ornament in the form of double triangles. Below, in the upper part of the belly, there is stamped ornament composed of pairs of circular and rectangular impressions bordered from below by another line of engraving. The vessel from feature 257, although fragmentarily preserved, is most likely a Group D



Fig. 7. Luzino, Site 93. Vessel from Grave 45 (photo by B. Pachulski)

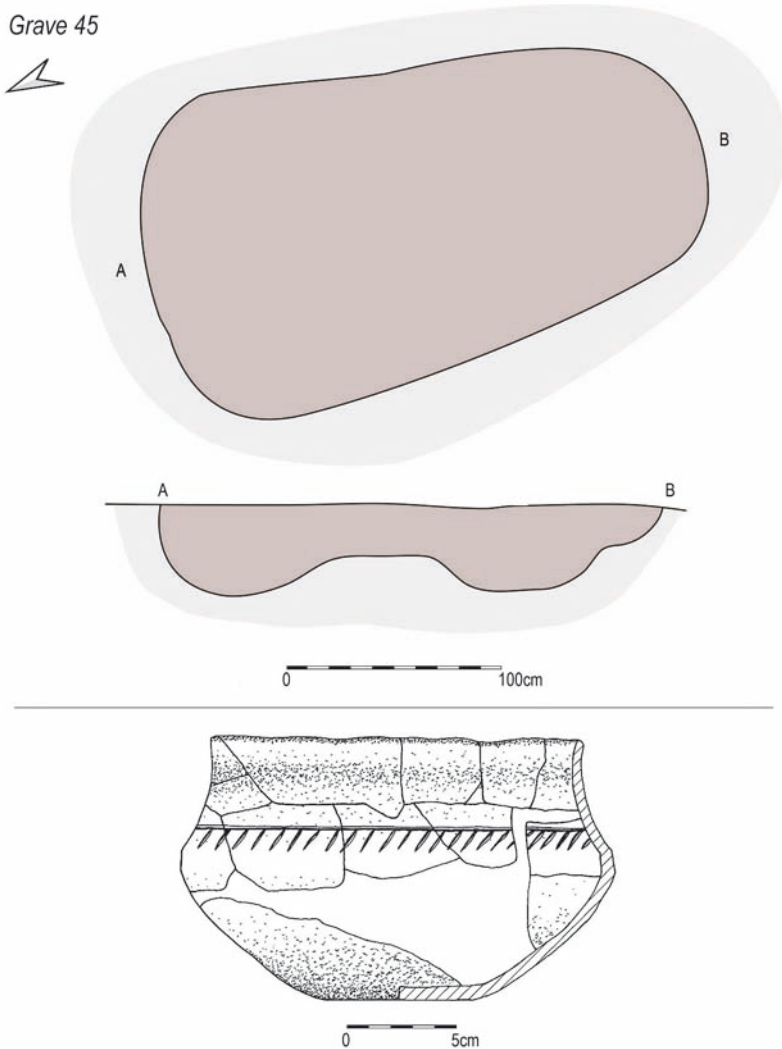


Fig. 8. Luzino, Site 93. Burial no. 45 – plan, section and grave goods (prepared by M. Piotrowska and M. Wołoszyńska-Far)

pot (Machajewski 1992, 90). This partially preserved form is most similar to pots of type III, variety 1 (see Machajewski 1992, 92, 195, pl. 7: v). A vessel of this type and variety comes from the cemetery in Kowalki and, like the specimen from Luzino, was decorated in the same place with stamped and linear ornament. Such pots have also been recorded at the cemetery in Dzierżęcín, Sławno county (Machajewski 1992, 93). The appearance of such forms in the Parsęta valley is linked to phase D according to Ryszard Wołągiewicz

(Machajewski 1992, 93). A grave with a similar vessel from the burial ground in Kowalki is linked to phase IIa of the Dębczyno group and dated to phase D (Machajewski 1993, 135, fig. 6, 162, pl. 24: 7, Grave 6; Machajewski 2001, 371). These vessels are rare in the Dębczyno group, come from the northern Polish Lake District and should be dated to the beginning of the Migration Period (Machajewski 1993, 94, 95). They are also encountered in Lower Saxony (Machajewski 2001, 364). The vessel from Feature 257, due to its bulbous body, cylindrical neck and the presence of complex ornamentation, can be referred to the Kuhbier style, which falls into subphases Ib and IIa of the Dębczyno group (Machajewski 1985, 197, 198).

4. A low vase-like vessel (from Feature 303A; vessel no. 1 – Figs 11 and 12: 1) was characterised by a rim diameter of 11 cm and a height of 10 cm. The largest swelling of the belly is located above its mid-height point. The neck is very short, while the rim with rounded edge is vertical. The ceramic vessel presented above is a small, undecorated vase of group B, type I, variety 1 according to Machajewski (1992, 195, pl. 7: a). Such vessels are rare and their chronology is not specified (Machajewski 1992, 87).

5. A low biconical vase-like vessel (from Feature 303A; vessel no. 2 – Figs 12: 2 and 13), 11 cm in height with a rim diameter of 18 cm. The rim is strongly everted with a rounded top. At the transition of the short neck into the belly, decoration is visible in the form of a circumferential engraved line, from which groups of three diagonal engraved lines diverge. From below, the decoration is bordered by a double, circumferential engraved line. The ornamentation is located above the largest swelling of the body. The surface is dark brown. This form can be assigned to group A, type II, variety 5 according to Machajewski (1992, pl. 6: k). In the Dębczyno group, two similar vessels are dated on the basis of a multiform



Fig. 9. Luzino, Site 93. Vessel from Grave 257 (photo by B. Pachulski)

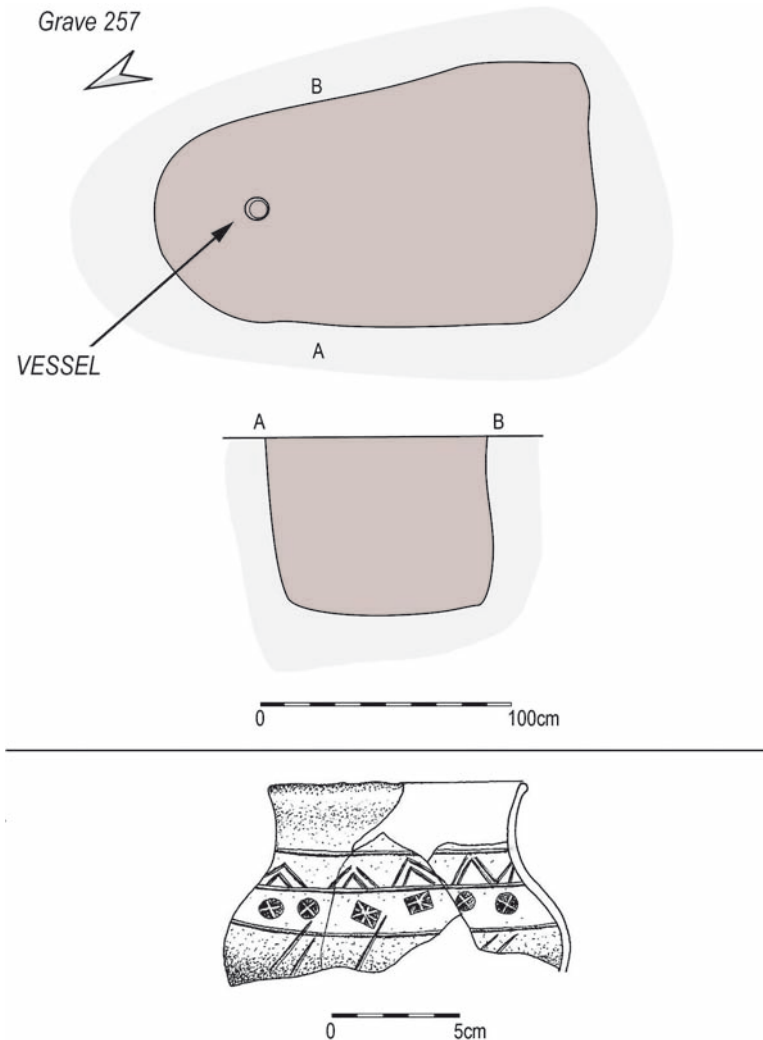


Fig. 10. Luzino, Site 93. Burial no. 257 – plan, section and grave goods (prepared by M. Piotrowska and M. Wołoszyńska-Far)

ornamental thread, which differs from the ornament on the vessel from Luzino – with only the form of these vessels being similar (Machajewski 1992, 80). In the case of the vessel in question, although its rim is strongly tilted outwards, it is not as horizontally aligned as in some specimens known from Dębczyno and several other sites (Machajewski 1992, 215, pl. 27: 10; 2021, 188, pl. 43: 10). At its most swollen point, the belly is vertically truncated, which emphasises the structure of the vessel and allows reference to be made to biconical forms (see Machajewski 1993, 93; 2021, 28). Specimens with a horizontally

aligned rim and a biconical body in the eponymous deposits are linked to the C3/D and D phases. Similar vessels are known from the Cecelska phase of the Wielbark culture and from the Elbe Circle (Machajewski 1993, 93; 2021, 28). The presented vessel differs morphologically from the specimens with biconical bellies and horizontal rims, also in terms of its decorative thread, which is poor in relation to the rich, multifaceted decorations in the form of, for example, stamps or decorative bands found on this type of vessel (Machajewski 2021, 28, 29). The artefact from the necropolis in question may constitute a reference to the vessels cited above. A very similar form, only with a slightly less outwardly everted rim, but with analogous decoration, comes from Mecklenburg, from a site in Perdöhl, in the north-eastern German district of Ludwigslust (Schuldt 1974, pl. 53: 1). A vase-like vessel similar to the form from Grave 303A occurred in the cemetery at Kowalki in a grave linked to phase Ib of the Dębczyno group (Machajewski 1993, 135, fig. 6, 165, pl. 27: 22, grave 11).

The vessels from the cemetery presented here are characterised by thin walls, well-prepared pottery fabric and a smooth surface finish. In the upper parts – the necks – the vessels are usually smoothed. Their colour comprises various shades of brown. Fine-grained crushed stone and sand were added to the pottery fabric as an admixture. Fractures were monochrome in colour, indicating good-quality firing and the craftsmanship of the potters. The technical features of the pottery indicate that it belongs to the Dębczyno group. The similarity is evident in their colour, admixture, fractures and surface treatment (Machajewski 2021, 39).



Fig. 11. Luzino, Site 93. Vessel no. 1 *in situ* from Grave 303A (photo by K. Zbróg)

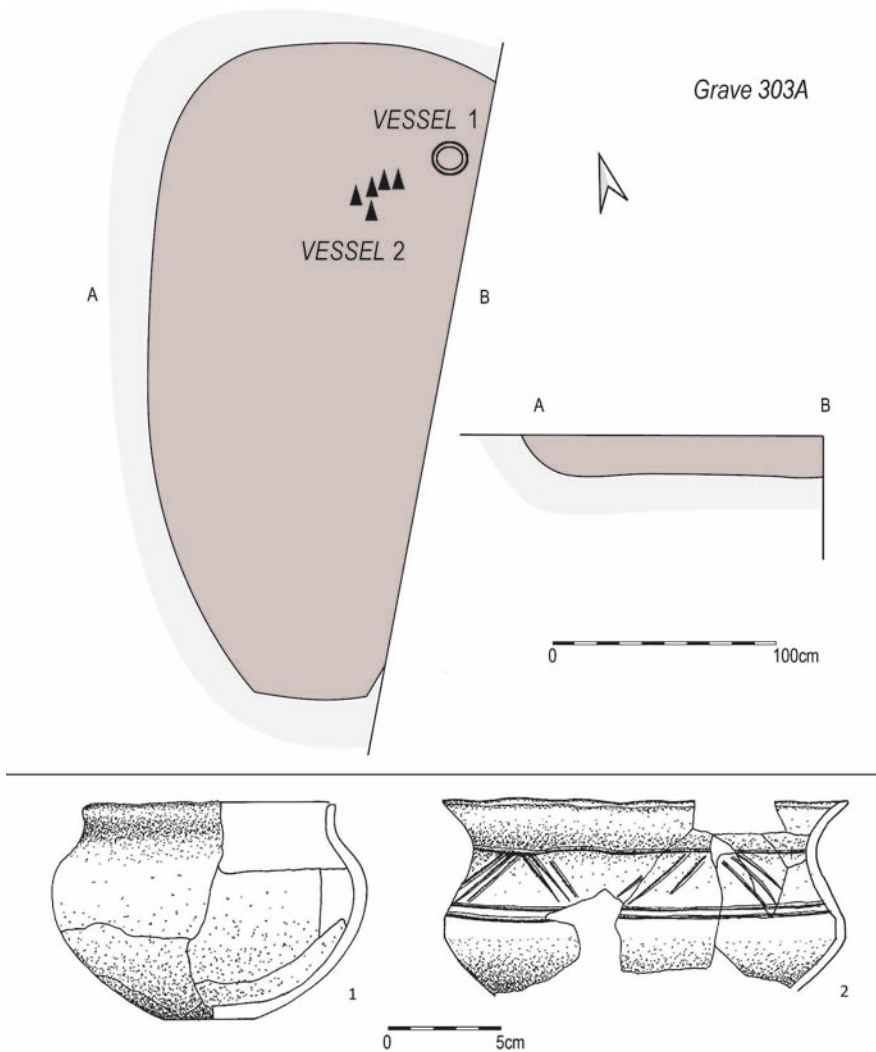


Fig. 12. Luzino, Site 93. Burial no. 303A – plan, section and grave goods (prepared by M. Piotrowska and M. Wołoszyńska-Far)

Their micromorphological features are also worth noting. Indeed, the high arched mouth of the vessel from Feature 257 and rounded bottoms are features that can be associated with the late stages of the Migration Period (Machajewski 2021, 39).

Most vessels from Luzino were decorated. The dominant ornament was engraved, which also occurred in the company of decorative forms – on a vase with wide grooves and on the only pot discovered with stamped ornament.



Fig. 13. Luzino, Site 93. Vessel no 2 from Grave 303A (photo by B. Pachulski)

A multi-line zigzag in combination with a horizontal line was recorded in Luzino on two vessels, namely a vase from Grave 303A and a pot from Grave 257, on which it occurred in combination with another form of decoration. At Site 6 in Dębczyno, such a decorative motif was most common on vase-like vessels in all phases of settlement, this decoration possessing a broad chronological framework in Pomerania (Machajewski 2021, 34). It is ornament frequently found in the Dębczyno group, and similar motifs are recorded in materials from the Elbe River area, the Danish Islands and in the Wielbark culture (Machajewski 1993, 53; 2021, 34). It was also recorded on vessels from a burial ground in Dahlhausen, Ostprignitz district (Matthes 1931, pl. 6: b). An ornament of short, diagonal incisions was also recorded at the same site, which can be compared with the decoration found on a vessel from Grave 45 in Luzino (see Matthes 1931, pl. 6: c). The vessel form from this burial also meets its analogues in the cemetery at Kuhbier, Ostprignitz district (see Matthes 1931, pl. 7: a, b). In the area between the lower Elbe and the Oder, such ornament in the form of a multi-line zigzag and horizontal lines is frequently recorded (see, among others, Schach-Döriges 1970, 181, fig. 32, 202, fig. 48).

On a single vessel, as mentioned above, there was stamp decoration in the form of a simple cross within a circle and a double cross – one multi-armed, enclosed in a rectangle, for which no direct analogues have been found in Pomerania, with the only similar ornament described as a rosette (see Machajewski 2001, 362, fig. 2). Similar ornamentation framed within a circle occurred on a fragmentary vessel from a site at Barzowice, Sławno county, dated to phases C2-D (Machajewski 2001, 365, fig. 4: 3, 371 – Catalogue: 1). Stamps

in the form of crosses are found in the Elbe circle (Machajewski 2001, 362). The ornament made with a stamp in the Dębczyno group is combined with the C2-D phase (Machajewski 2001, 371). The vessel from Luzino displays multi-faceted ornament – in addition to the stamped ornamentation described above, there was also a circumferential multi-line zig-zag, as well as single and double diagonal lines engraved on the body.

Grooves are often found on vase-like vessels in the Dębczyno group. In the case of the sort of ornament in the form of wide grooves that is visible on the vessel from Grave 5 in Luzino, Machajewski (1985, 196), suggested that perhaps it is related to the ornamentation of bronze cauldrons found in large numbers on the Danish Isles and in Polish Eastern Pomerania. Such ornamentation in the Dębczyno group has been dated to phases C₂ and D (Machajewski 1993, 95). Kowalki is a cemetery where similarly decorated vessels were discovered in graves associated with phases Ib and IIa according to Machajewski (1993, 166, pl. 27a: 1, 167, Grave 10, pl. 28: 1, 2, grave 13, 169, pl. 30: 2, Grave 17). Such decoration is also found in the Elbe circle on vessels associated with the Dahlhausen style, as well as on Jutland and Bornholm (Machajewski 2021, 33 and further literature there).

Brooch

1. A brooch (from Feature 206) made of bronze is a fibula of the second series of group VI in the classification of Oskar Almgren (1923). This artefact is undecorated on the bow, which may indicate its local production, as imported specimens were richly decorated. There is a knob on the bow as are two more on the ends of the spring axis (Figs 14 and 15: 1).



Fig. 14. Luzino, Site 93. Fibula from Grave 206 (photo by B. Pachulski)

The brooch is 6 cm long. The knob on the bow of the fibula discussed here is riveted, in a similar manner to the brooch discovered at the site in Janów Pomorski, Elbląg county (see Jurkiewicz and Machajewski 2012, 222, fig. 21, 223). The aforementioned fibula found near the eastern bank of the Vistula delta, as well as the specimen discussed here, resemble Bügelknopf-fibeln-type brooches, which are associated with the Elbe circle, Scandinavia, Polish Western Pomerania, Bohemia and the Rhine and Danube basins (Meyer 1960, 216-349; Schulze-Dörlamm 1986, 593-720; Cieśliński and Rau 2019, 47-60). There is also known an Eastern European variant of this fibula (Schuster 2017, 215-221). These artefacts are rarely found in the Wielbark, West Baltic and Chernyakhiv cultures (Machajewski 1992, 29).

The way of fixing the knob is alluding to Zwiebelknopffibeln. Usually in the case of Bügelknopffibeln-

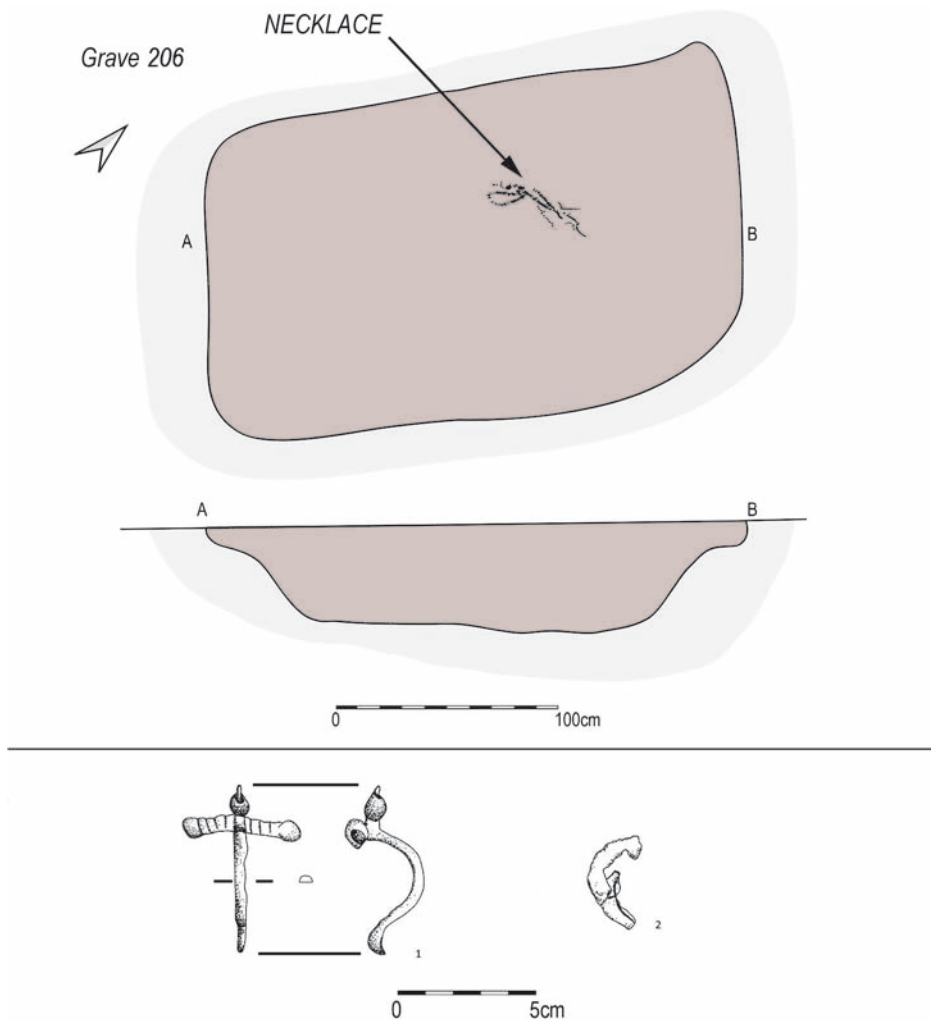


Fig. 15. Luzino, Site 93. Burial no. 206 – plan, section and grave goods (prepared by M. Piotrowska and M. Wołoszyńska-Far)

type brooches the knobs are cast together with the bow, while Zwiebelknopffibeln-type fibulae bear traces of riveting knobs, as in the case of the brooch in question (Prötter 1988, 347-372, fig. 2: 4, 4a: 2, 4, 5, 7). A knob, different from that of the Luzino brooch, but coming from a fibula described as a Bügelknopffibel-type brooch, was found in a hearth at Site 6 at the settlement in Dębczyno (Machajewski 2021, 41). Brooches with knob at the ends of the bow are quite common in the Dębczyno group (Machajewski 2021, 42). A bronze fibula with knobs on the bow and spring ends (Bügelknopffibel) occurred in one of the graves in

the cemetery at Dzierżęcín (Hahula and Machajewski 2006, 176, 179, 191, fig. 3: 26). These ornaments are associated with phase D of the Migration Period (Jurkiewicz and Machajewski 2012, 224). The brooch from Luzino presented here should also be dated similarly.

Belt buckles

1. This belt buckle (Feature 206) is characterised by a significant degree of deterioration (Fig. 15: 2). It was made of iron and its state of preservation does not allow assigning it to a specific type according to Renata Madyda-Legutko (1987). Buckles are among the artefacts recorded at sites of the Dębczyno group, almost exclusively in cemeteries (Machajewski 1992, 36).

A necklace of glass and amber beads

1. A necklace of 174 beads (from Feature 206), which included amber, glass and a single, bone specimen (Figs 16, 17 and 18). The beads recorded ‘in their original’ arrangement were numbered from 1 to 141 (labelled P1-P141, including P55a in addition to P55). The



Fig. 16. Luzino, Site 93. Necklace *in situ* from Grave 206 (photo by K. Zbróg)

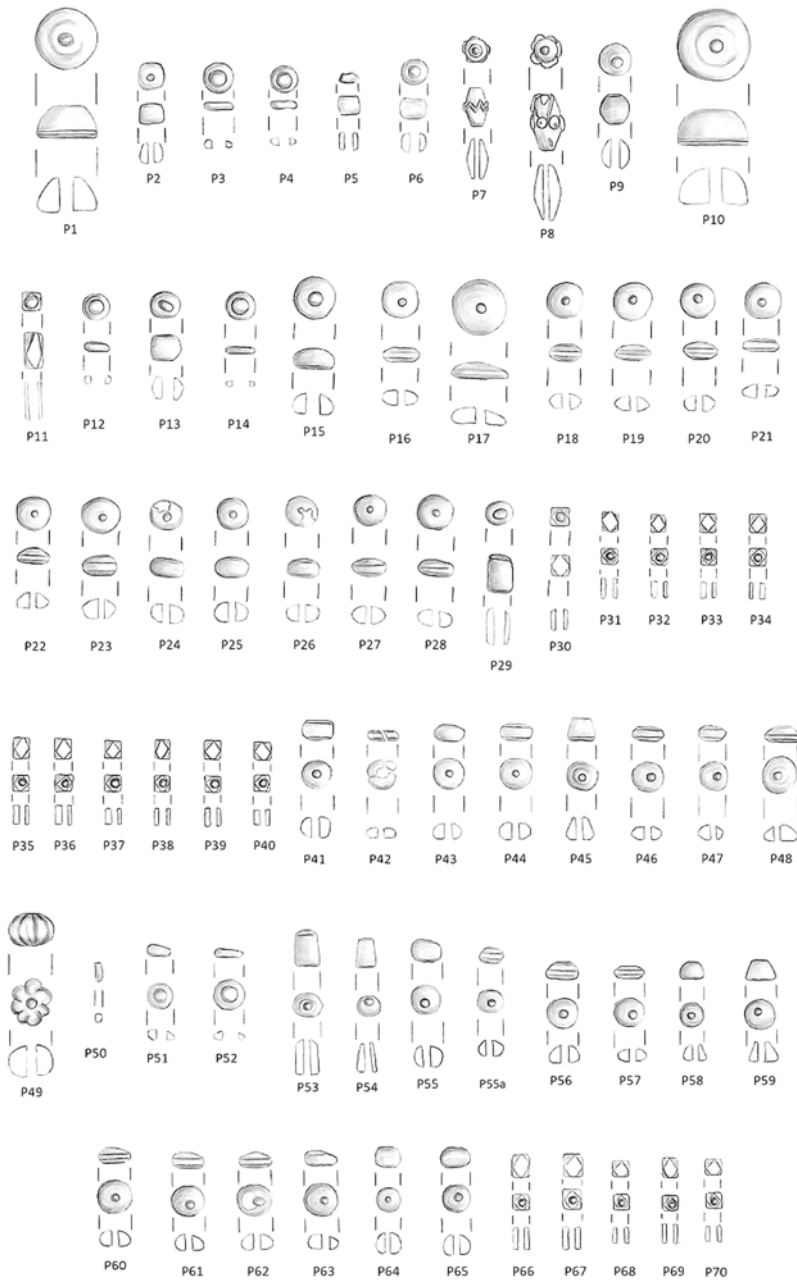


Fig. 17. Luzino, Site 93. Beads from Grave 206 (prepared by M. Piotrowska and M. Wołoszyńska-Far)

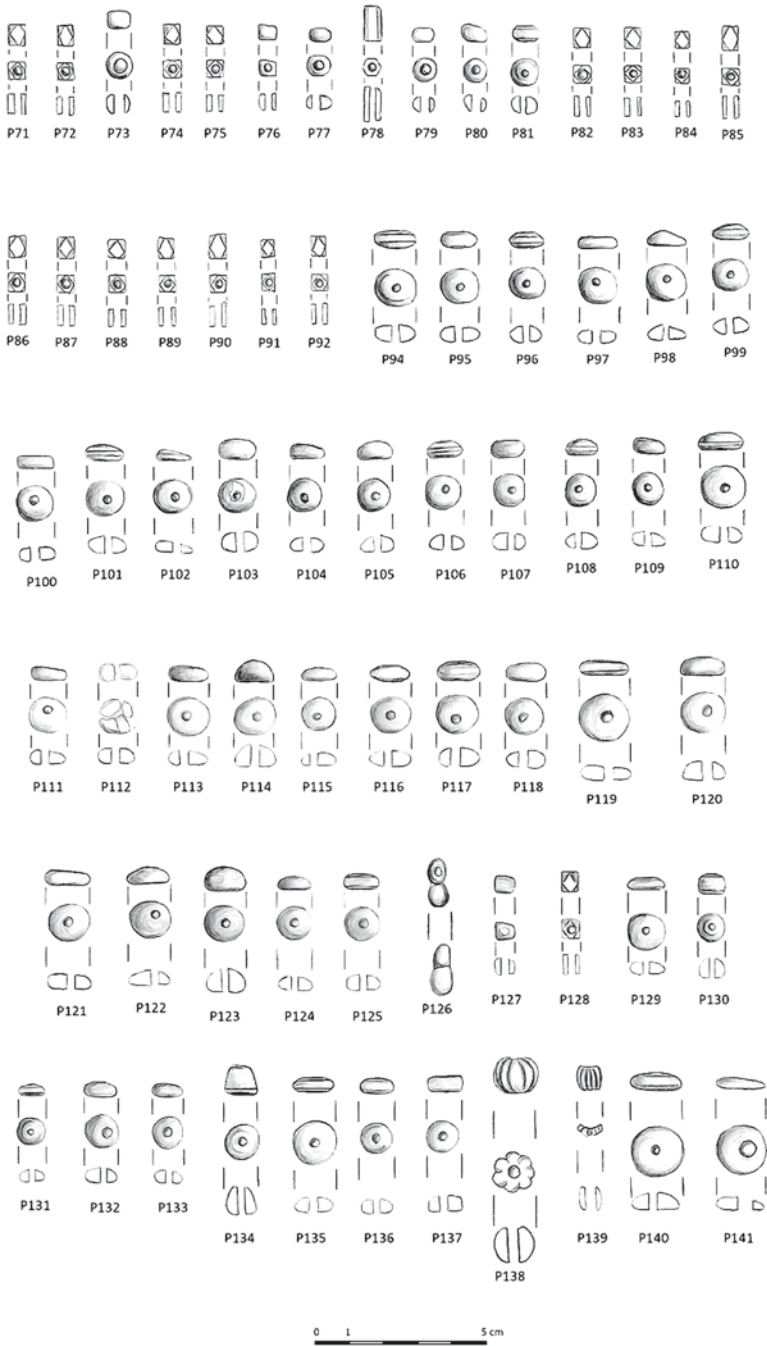


Fig. 18. Luzino, Site 93. Beads from Grave 206 (prepared by M. Piotrowska and M. Wołoszyńska-Far)

remaining 32 specimens were recorded 'loose' in the vicinity of the necklace and it was not possible to reconstruct their place in the 'string' of these ornaments. Almost all the beads find their analogues in the classification by Magdalena Tempelmann-Mączyńska (1985). However, bead P8 and bead P139 proved difficult to classify.

Amber beads: TM388 (P16, P18-P28, P41-P44, P46-P48, P55 and P55a-P57, P60-P64, P94-P113, P115-P118, P120-P122, P124, P125, P129, P131-P133, P135-P137), TM389 (P17, P81, P119, P140, P141), TM392 (P123), TM394 (P58, P65, P130, P134), TM400 (P1, P9, P59, P114), TM402a (P45), TM406 (P53, P54), TM465 (P126).

Glass beads: TM6 (P5), TM10 (P73, P79), similar to TM12 or TM10? (P2), TM12 (P6, P9, P13, P80), TM28 (P77), TM30a (P3, P4, P12, P14, P15, P51, P52), TM75 (P29), similar to TM106 (P76), similar to TM107 (P127), TM115 (P78), TM126 (P11, P30-P40, P66-P72, P74, P75, P82-P92, P128), TM158b (P49), TM158b (P138), TM165? (P139 damaged), TM335 (P7), similar in shape to type TM335 (?) and ornamentation to type TM279? (P8), TM? (P50 damaged).

The beads that were recorded as "loose" were mainly glass beads of type TM126 (P161-P173), small red and orange coloured glass beads of opaque glass similar to type TM106 (P142-P145), TM107 (P155-P157), TM30a (P146), TM58 (P155), TM88 (P156), TM12 (P160) and amber beads of type TM388 (P149, 150, P153), TM389 (P51), TM407 (P152) and TM393 (P154). Two damaged amber beads were undefined.

There was also one bone bead characterised by its poor state of preservation, which perhaps corresponds to type TM516 (P174). Bone beads have been found in Pomerania since the early phase of the Roman Iron Age but are not among the specimens frequently encountered (Tempelmann-Mączyńska 1985, 90, 91).

In summary, the most numerous groups of beads forming the necklace are amber specimens. Beads of group XXX, *i.e.*, disc-shaped specimens of types TM388 and TM389, dominate. These specimens became widespread in Pomerania during the Roman Iron Age and can be found after the Migration Period (Tempelmann-Mączyńska 1985, 24, 65-67, tables 5 and 15, 58-59). Amber disc beads are known from sites of the Dębczyno group and are among those specimens considered widely distributed (Machajewski 1992, 57, 58).

Regarding the necklace under discussion, TM392 and TM394 beads are modestly represented here. Only one specimen (P123) has been assigned to the former type. Barrel beads of type TM392 are found in grave assemblages with beads of group XXX mainly in Pomerania from the B1 phase to the Migration Period – they have a wide chronological framework (Tempelmann-Mączyńska 1985, 24, 67, 68, plates 15 and 60; Machajewski 1992, 58). Among the beads forming the necklace was one TM402a specimen. Small beads made of blue glass of type TM126 were also numerous. Beads of the last type, referred to as cuboctahedral beads, were found in the burial ground of the Dębczyno group population in Dzierżęcín and are among the specimens frequently found in Pomerania from the B2/C1 phase until the Migration Period (Machajewski 1992, 50; Hahula and Machajewski 2006, 180). A bead necklace was discovered in a cemetery from the Migration Period in

Brzyno, Puck county (Strobin and Machajewski 2017, 552, fig. 3, 568; Strobin 2021). Among the beads were blue glass specimens similar to type TM126 (Strobin and Machajewski 2016, 553, 554, fig. 5).

The collection of beads forming the necklace also included two specimens referring to melon beads of type TM158b made of clear glass – P49 and P138 – which are also found in the Dębczyno group (Machajewski 1992, 51; Hahula and Machajewski 2006, 181). A bead characterised by bands made of glass threads and knobs made of dark glass and decorated with yellow, red and white elements was also recorded. One of these specimens refers to type TM335.

Human bone

The only human bone found in the analysed cemetery was obtained from Feature 303A. A closer assessment of its anatomical affiliation is not possible due to its small size and significant degree of deterioration. It comprised a few extremely thin and fragile flakes of a few millimetres each. The residually preserved structure of the spongy substance characteristic of human bone helped in assessing the species affiliation. The examined fragment was highly weathered, decalcified and brittle. The structure of the compact substance had a tendency to fracture and delaminate. As a result of sub-depositional taphonomic factors, the bone had acquired a white colouration. With a high degree of caution, this specimen can be classified as a long-bone shaft fragment.

INTERNAL STRUCTURE OF THE SEPULCHRAL SPACE

In the burial ground in question, most of the graves were oriented on a north-south axis with some deviation to the west. Seven clusters were identified here, which appear to form closed structures (Fig. 4). Starting from the west, they are:

- Cluster No. 1, located in the western part of the study area, oriented on a northeast-southwest axis, comprising four graves numbered as follows: 32 (Fig. 19), 45, 91 (Fig. 20) and 224. The distances between the individual burials did not exceed 10 m;
- Cluster No. 2, located in the western part of the necropolis, east of the one described above at a distance of just over 10 m, oriented on a northwest-southeast axis, consisting of two graves numbered 212 (Fig. 21) and 213, respectively. The distances between the burials were approximately 7 m;
- Cluster No. 3, located in the central part of the cemetery, to the southeast of cluster No. 2 at a distance of less than 20 m, oriented on a northwest-southeast axis, consisted of two graves, Nos. 5 and 6 (Fig. 22). The distance between these graves was approximately 5 m;



Fig. 19. Luzino, Site 93. Plan of Grave 32 (photo by K. Zbróg)



Fig. 20. Luzino, Site 93. Plan of Grave 91 (photo by K. Zbróg)



Fig. 21. Luzino, Site 93. Plan of Grave 212 (photo by K. Zbróg)



Fig. 22. Luzino, Site 93. Plan of Grave 6 (photo by K. Zbróg)

- Cluster No. 4, located in the central part of the necropolis, to the northeast of cluster No. 3 at a distance of approximately 12 m, oriented on a northwest-southeast axis, consisted of two graves, Nos. 206 and 209. The distance between them was approximately 10 m;
- Cluster No. 5, located in the central part of the cemetery, to the southeast of cluster No. 3 at a distance of almost 20 m, oriented on a northeast-southwest axis, consisted of two graves, Nos. 9 and 11. The distance between the graves was approximately 3 m;
- Cluster No. 6, located in the eastern part of the necropolis, to the northeast of cluster No. 4, at a distance of approximately 40 m, oriented on a northwest-southeast axis, consisted of three graves with the following numbers: 257, 259 and 260. The distances between them were from 3 to 5 m;
- Cluster No. 7, located in the eastern part of the cemetery, to the southeast of cluster No. 6, at a distance of approximately 10 m, consisted of four graves numbered: 258, 261, 301A and 303A, respectively.

DISCUSSION

As can be surmised, the depicted clusters of graves may be an expression of the social connections of a 'living community', the quality of which is difficult to discuss at the moment. However, it is possible to assume the simplest solution indicating emotional-familial links, which have already been pointed out in the literature (Kokowski 1999, 105, 109; 2007, 135, 136; Leather 2014, 66), and which were extremely important in shaping the cemetery space and funerary rituals in honour of one's ancestors (Żychliński 2018, 199).

In addition, a single grave, Feature 63, located far south of the above-described clusters (c. 30 m), was also recorded (see Fig. 4). It was located in a small hollow in the ground, as can be assumed, on the southern edge of the necropolis and marked its southern boundary (Fig. 3). With some caution, it can be assumed that a person of somehow socially excluded status or even foreign origin was deposited there. Such a hypothesis is supported by its location below the other graves, on the slope of the hollow, and thus by its inferior or even negligible visibility, which, as already indicated in the literature, may be very important in the funerary sphere (Cieśliński 2016, 88; Smaruj and Żychliński 2023). Moreover, the 'unusual nature' of the person buried in this grave is indicated by the presence of two very large stones originally placed on the body of the deceased (Figs 23 and 24). A very similar feature interpreted as a potential grave was recorded in Czarnówko, Łęborg county (see Schuster 2015, 38, pl. 2: feature R156). No human bones were preserved and the only grave goods comprised an uncharacteristic, thick-walled, barrel-shaped vessel (Schuster 2015, 15, 16). On the basis of indirect indications, the site has been linked to a small necropolis from the Migration Period dating from the second half of the fifth century, where newcomers from Scandinavia were buried (Schuster 2015, 17, 29). This burial, analogously to the site at Luzino, was characterised by the presence of two



Fig. 23. Luzino, Site 93. Plan of Grave 63 (photo by K. Frątczak)

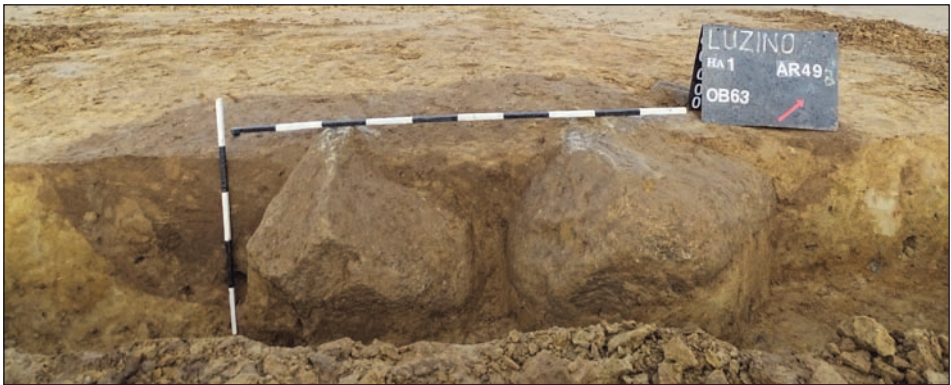


Fig. 24. Luzino, Site 93. Section of Grave 63 (photo by K. Frątczak)

large stones and additionally one small one next to the burial pit. It was oriented on a north-south axis with a slight deviation to the west. It differed from the other burials, similarly to the presumed Grave 63 (see Table 1), by its smaller dimensions, namely 1.1×0.4 m (Schuster 2015, 16, 18, fig. 1).

One issue of great importance for determining the structure of the burial space of the Luzino necropolis, is the correlation of the location of the graves and their clusters with the

form of terrain they occupy. An analysis of the contour map (Fig. 2) and the 3D model of the necropolis area and its surroundings (Fig. 3) allows one to conclude that the vast majority of the graves were placed on the summit and the south-western slope of a small elevation within the upland, at a considerable distance from local watercourses. The only deviation from this rule is the above-mentioned Feature 63, situated on the opposite slope of another terrain elevation with northern exposure, as if facing the other graves included in the clusters. It seems that such a situation can be interpreted as being in opposition to the 'centre' of the burial ground, with the hollow between the two arrangements of graves representing a clear obstacle/boundary separating the zone used by fully-fledged members of the community founded on the larger of the terrain elevations and the area of the cemetery intended for other people, perhaps those not fully accepted.

Furthermore, based on an analysis of the terrain of the necropolis and its vicinity, it can be assumed with a high degree of probability that graves may also have been located further east. However, this area was completely destroyed during the construction of the road to Luzino (Figs 2 and 3). It can be assumed that this was at a distance of about 15 m, where, given the distribution of the discovered grave assemblages, there may have been at least one or even two further clusters.

The structure of clusters described above appears to be quite distinctly scattered. This is an unprecedented situation for the Dębczyno group, as other known, albeit few, investigated cemeteries such as Dębczyno, Site 2 and Kowalki, Site 1 (Machajewski 1993) do not represent such diluted internal structures, and the individual graves are located much closer together. While it is also difficult to find clear clusters of graves at Dębczyno (Machajewski 1993, pl. 1), six such examples can be distinguished with some caution at Kowalki (Machajewski 1993, pl. 22). Thus, this is an analogous situation to that recorded at Luzino and further confirms the affiliation of the studied necropolis to the Dębczyno group.

The burial ground in nearby Brzyno, which also dates to the Migration Period but is not directly linked to the grouping discussed here, contained seven inhumation graves with a north-south orientation with a westward tilt. Stone constructions in the graves in the form of cobblestones were recorded. Human bones were recorded in only one feature. The situation is analogous at the already mentioned cemetery in Czarnówko, where out of six graves, bones were preserved in only two (see Schuster 2015, 15-17). It seems, therefore, that the situation observed at the eponymous necropolis is encountered quite commonly at sites from the Migration Period in Pomerania (Strobin and Machajewski 2017, 566). In Brzyno, only four vessels were discovered in burial pits (Strobin and Machajewski 2017, 569). Furthermore, the graves at this necropolis, like those at Luzino, form two clusters that are quite far apart (Strobin and Machajewski 2017, 566).

This raises the question of cremation burials, which, however, also occurred in the Dębczyno necropolis, albeit rarely (Machajewski 1993, 57, 58, 100, 101). In Dębczyno an interesting phenomenon of locating two cremation burial complexes on the periphery of grave clusters was observed (Machajewski 1993, 57, 58; pl. 21), in the extreme western

Table 1. Luzino, Site 93. Catalogue of the graves

Burial no/ Fig.	Location	Dimensions			Shape		Fill	Burial type/ bones	Finds/other	Chronology
		length [m]	width [m]	depth* [m]	plan	profile				
5/ 5, 6	Central part of cemetery—cluster 3	2.40	1.50	0.80	irregularly rectangular	irregular	clayey sand	inhumation/ no bones preserved	1 clay vessel	phase D
6/ 22	Central part of cemetery—cluster 3	2.30	1.40	0.36	oval elongated	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
9	Central part of cemetery—cluster 5	2.66	1.40	0.88	irregularly elongated	irregular	clayey sand	inhumation/ no bones preserved	none/ 3 stones in the upper fill	phase D(?)
11	Central part of cemetery—cluster 5	2.00	0.72	0.32	irregularly elongated	irregular	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
32/ 19	Western part of cemetery—cluster 1	2.60	1.50	0.20	irregularly elongated	irregular	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
45/ 7, 8	Western part of cemetery—cluster 1	2.20	1.50	0.42	irregularly rectangular	irregular	clayey sand	inhumation/ no bones preserved	1 clay vessel	phase D
63/ 23, 24	Southern part of cemetery— isolated burial	1.60	0.88	0.36	irregularly rectangular	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none/ 2 big stones in the fill	phase D(?)
91/ 20	Western part of cemetery—cluster 1	1.78	0.90	0.40	irregularly elongated	concave	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
201	West-central part of cemetery—cluster 2	2.44	1.60	0.82	irregularly oval	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)

206/ 14-18	Central part of cemetery-cluster 4	2.48	1.54	0.50	irregularly rectangular	trapezoidal	clayey sand	inhumation/ no bones preserved	Bronze fibulae, iron buckle, necklace of 174 beads made of glass and amber, undefined iron object	phase D
209	Central part of cemetery-cluster 4	2.20	1.14	0.26	oval elongated	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
212/ 21	West-central part of cemetery-cluster 2	2.20	1.98	0.34	oval elongated	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
224	Western part of cemetery-cluster 1	2.28	1.28	0.60	oval elongated	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
257/ 9, 10	Eastern part of cemetery-cluster 6	1.60	0.94	0.60	irregularly rectangular	trapezoidal	clayey sand	inhumation/ no bones preserved	1 clay vessel	phase D ₂
258	Eastern part of cemetery-cluster 7	1.80	0.80	0.28	irregularly rectangular	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
259	Eastern part of cemetery-cluster 6	1.76	0.98	0.32	irregularly rectangular	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
260	Eastern part of cemetery-cluster 6	2.40	1.80	0.56	irregularly rectangular	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
261	Eastern part of cemetery-cluster 7	1.94	1.41	0.32	irregularly elongated	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
301A	Eastern part of cemetery-cluster 7	1.68	0.77	0.28	irregularly rectangular	trapezoidal	clayey sand	inhumation (?)/ no bones preserved	none	phase D(?)
303A/ 11-13	Eastern part of cemetery-cluster 7	2.93	1.27	0.15	irregularly rectangular	concave	clayey sand	inhumation/ part of the long bone	2 clay vessels	phase D

*The depths of the graves are marked in bold font to emphasize the very poor preservation of the burials

part of the necropolis. No cremation burials at all were recorded at Luzino. With some caution, however, it can be assumed that there were also complexes of this type here, but as they were deposited at much shallower level than skeletal burials, they have been completely destroyed, both by natural processes and during the modern period by intensive farming.

To conclude our considerations concerning the internal structure of the Luzino cemetery, it should be stated that due to the lack of preservation of skeletons in the graves and the damage done in the course of modern ploughing, as well as a significant number of chronologically undetermined features that do not contain any archaeological materials, it can be assumed that the number of graves of the Dębczyno group may have been higher than the recorded 20 assemblages. This is due to the fact that it is possible that a certain group of features was not recognised as comprising burials, and a certain number of them, including the hypothetical above-mentioned cremation burial complexes lying at shallower levels than skeletal burials, have been completely destroyed. Despite these disruptions, the characterisation of the burial space presented above appears to have been reconstructed in accordance with past reality.

The issue of the absence of human bones in graves

Although the arrangement of the bead necklaces in burial 206 clearly indicates that they were deposited in the grave together with the body of the deceased, no bones have survived. This is a clear indication that we are dealing with inhumation burials, originally containing human corpses, and not cenotaphs. Following this line of thought, it is important to consider the reasons for the complete decomposition of the bodies deposited in the graves in the Luzino cemetery. The soil substrate here was clayey sand, which is characterised by considerable water permeability. And at the same time, its pH level, *i.e.*, acidic, was unfavourable for the preservation of human bone over longer time intervals (White and Hannus 1983, 319; Jerszyńska 2004, 10). In addition, what seems to be the most significant factor destructively affecting human bones already after the bodies had been skeletonised was low ground frost resistance - the penetration of ground frost was high. All the burials described above reached a depth (range between 0.08 and 0.88 m – see Table 1) above the minimum ground frost depth in Poland, which is 0.8 m (Gontaszewska 2010, 46, fig. 5.1). Although only features 5 and 9 reached this limit, combined with the unfavourable reaction of the soil environment, here too human bone was not preserved until the site was exposed during the rescue survey. To summarise these considerations, the absence of human bone or the presence of only negligible traces of it (see Feature 303A) can be explained by a combination of two unfavourable factors, namely the acidic soil environment and the shallow deposition of skeletons in the context of ground frost.

Furthermore, it is worth mentioning that, in addition to the unfavourable soil conditions and low ground frost resistance mentioned above, one can also take into account the

custom of extracting human bones from graves, commonly encountered during the period of Roman influence within the environment of the Wielbark culture (Schuster 2018, 28; Skóra 2017; Żychliński 2015; 2018), and traces of which were also discovered during the Migration Period precisely in the cemeteries of the people of the Dębczyno group (Żychliński 2021). Leaving aside the purpose for which the human bones were obtained, it can be assumed that those that remained in a grave may have decomposed far more quickly due to their structure and characteristics (Knüssel 2014, 32, 33, fig. 3). As a result, not the slightest trace would have remained of the skeleton for archaeologists to record. Furthermore, accepting such a hypothesis, it should be noted that disturbed burial pits are much more quickly affected by external factors such as seepage/water flow or freezing than graves with undisturbed original fills (see *e.g.*, Skóra 2014; 2017; 2018; 2019).

Although no traces of burials having been opened were observed in the burial ground presented here, their insignificant preserved ground depth and sub-depositional processes may have influenced the lack of evidence for such funerary behaviour.

Chronology of the cemetery

Pottery and, in the case of one grave, a beaded necklace and a brooch, form the basis for determining the functional period of the cemetery. The assemblages devoid of grave goods were associated with the Dębczyno group due to their location, the orientation of the grave pits and their similarity to securely dated features. The sparse ceramic assemblage recovered from the Luzino graves finds links with the Dahlhausen and Kuhbier stylistics dated from the late C₁ phase to the D phase (Machajewski 1985, 188). Despite the modest assemblage of artefacts, cultural links can be seen here, namely with the Elbe circle and areas of northern and central Germany, with which the aforementioned styles evident in the ceramics are linked (Machajewski 1985, 202).

The burial ground at Luzino is situated between areas where elements from the west and north flowed in, and the lower Vistula, where the Wielbark culture continued to develop (Machajewski 1985, 188; 2006). The eastern boundary of this area as well as the extent of the Dębczyno group in this direction is defined by the Łeba basin (Machajewski 2006). As the boundary of this area is in the vicinity of the site located at Luzino, it seems that the findings of Machajewski concerning the phases of settlement can also be applied to the presented site (see 2006, 35). For the area of central Pomerania, Machajewski distinguishes several phases – stages of settlement and seven chronological phases – the most important of which, in the context of the materials presented here, is phase VI.

Phase VI is an earlier stage of the early phase of the Migration Period and is associated with destabilisation of settlement and a paucity of grave goods (Machajewski 2006, 41). During this phase, *Bügelknopffibeln*-type fibulae appear and, in addition to the pottery of the older style of the Dębczyno group, vessels of the younger stylistic stage are recorded (Machajewski 2006, 42). In this phase, stamp motifs are visible in the decoration, cylindrical-

necked vessels and vase-like vessels occur (Machajewski 2001, 359-371; 2006, 42). Moreover, it is characterised by a certain destabilisation of settlement and is associated with Phase D of the Migration Period. During this period, references to the Scandinavian circle are evident, and then, at the end of the early phase of the Migration Period, allochthonous tribes – namely, Scandinavian tribes – appear in the area (Wołagiewicz 1981, 151-153; Machajewski 1992, 83-91; Schuster 2015). However, Scandinavian influences are not visible in the materials presented.

The settlement of the Dębczyno group in the eastern part of central Pomerania does not appear until the end of the C₂ or even the beginning of the D phase, as in this area we are still dealing with the Cecelska phase of the Wielbark culture, as exemplified by the necropolis in Głuszyno, Słupsk county used from the C₁b to D phase (Machajewski 2006, 46 and further literature there). It can therefore be inferred that further east, the Dębczyno group appears even later.

The materials found at the Luzino site, on the basis of analogies from other Dębczyno sites, should be linked to phase IIa of the Dębczyno group, *i.e.*, stages C₃ and D (see Machajewski 2021a, 83, Table 1). In conclusion, the grave goods presented above are culturally homogeneous – dated from the D₁-D₂ phase of the Migration Period.

In the case of the necropolis presented here, its peripheral location should be taken into account – it is, as already written in the title of this paper, the easternmost cemetery of this grouping. Therefore, it should be associated with the Migration Period – seemingly rather with the late stages of this period.

FINAL CONCLUSIONS

The burial ground at Luzino was used by a small community of the Dębczyno group, as indicated by the number of graves discovered. We are dealing here with a small inhumation burial ground and a probable lack of cremation burials. We find a parallel with the grave featuring two large stones in the fill in the necropolis at Czarnówko, where such a burial has been tentatively linked to a Scandinavian element. The burials with grave goods, however, show mainly links to the Elbe circle, while Scandinavian influences are lacking in the finds.

The Dębczyno group formed in areas previously occupied by the Gustowska group and the Wielbark culture (zone B, abandoned by the Wielbark culture community during the B₂/C₁-C_{1a} phase), excluding, among others, areas of the Kashubian-Krajeńskie Lake District (Machajewski 1985, 188). The discovery of the burial ground at Luzino shows that the formative settlement of the Dębczyno group, which then occupied areas to the east, did not completely bypass the Kashubian-Krajeńskie Lake District and reached further east beyond the Łeba basin (see Machajewski 2006, 46). Thus, the necropolis discussed here 'shifts' the range of the eponymous cultural grouping further eastwards.

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