

ANNA STROBIN

**BRONZE TRIPARTITE BELT HOOKS FROM POMERANIA
AS PROOF OF CULTURAL CONNECTIONS IN THE LATE PRE-ROMAN
AND ROMAN PERIOD**TRÓJCZŁONOWE BRĄZOWE KLAMRY DO PASA Z POMORZA
JAKO DOWÓD POWIĄZAŃ KULTUROWYCH W MŁODSZYM OKRESIE PRZEDRZYMSKIM
I OKRESIE WPŁYWÓW RZYMSKICH

Abstract: *Tripartite bronze belt hooks of type Kostrzewski III are indicators of female attire in the Late Pre-Roman Period in Pomerania. Here, belt hooks from 31 sites have been collected, all of them related to the Oksywie or Wielbark Cultures, or to the Oder Group of the Jastorf Culture. Finds from outside of Pomerania are also included as comparative objects. The most common form of such belt hooks in Pomerania was type IIIb, being in use from phase A2 of the Late Pre-Roman Period. Roughly at the same time, these belt hooks appeared in Brandenburg. Belt hooks of type IIIa are somewhat older, while belt hooks of type IIIc are younger, as they were in use from phase A3 up to phase B2 of the Roman Period. Chronology of the artefacts, indicates that Pre-Roman traditions persisted in the Roman Period, even though belt buckles had been already introduced.*

Keywords: *bronze tripartite belt hooks, Oksywie Culture, Jastorf Culture, Wielbark Culture, Late Pre-Roman Period, Roman Period*

Słowa kluczowe: *trójczłonowe brązowe klamry do pasa, kultura oksywska, kultura jastorfska, kultura wielbarska, młodszy okres przedrzymski, okres rzymski*

INTRODUCTION

Tripartite belt hooks made of bronze¹ are one of the main indicators of female attire in the Late Pre-Roman Period in Pomerania². They consist of three basic parts: a central open-work connector and two arms fastened on both sides with tape catches. Both arms end with hooks that serve to fasten the hook to the belt (Fig. 1). A character-

istic feature of the longer arm is its triangular shape or narrowing towards the hook, the presence of elongated middle rib and raised edges, as well as the presence of two to three ornamental rivets, and from the opposite side of the arm a short hook bent inwards. The shorter arm usually takes the form of a narrow tape, and a long profiled hook that connects the belt hook with the organic part of the belt is almost always bent outwards³.

At the beginning of the 20th century, belt hooks were described and categorised by Józef Kostrzewski, who due

¹ Chemical content analysis for belt hooks from two sites dated to the Late Pre-Roman Period has shown that they were made of tin bronze (see: below). This term (bronze) will be employed in further parts of this work.

² J. KOSTRZEWSKI 1919, 42 f.n. 1; D. BOHNSACK 1938, 23; R. WOŁĄGIEWICZ 1981a, 158, 162; R. MADYDA-LEGUTKO 1990, 157; R. WIŁOCH 1995, 26, table 3; E. BOKINIEC 2008, 217, 224.

³ This work is written in the aftermath of the research project *Brzyno, site 12. A Cemetery of Late Pre-Roman Iron Age, Roman Iron Age, Migration Period on the Żarnowiec Heights*, funded by National Science Center, Poland (No. 2015/18/E/HS3/00031).

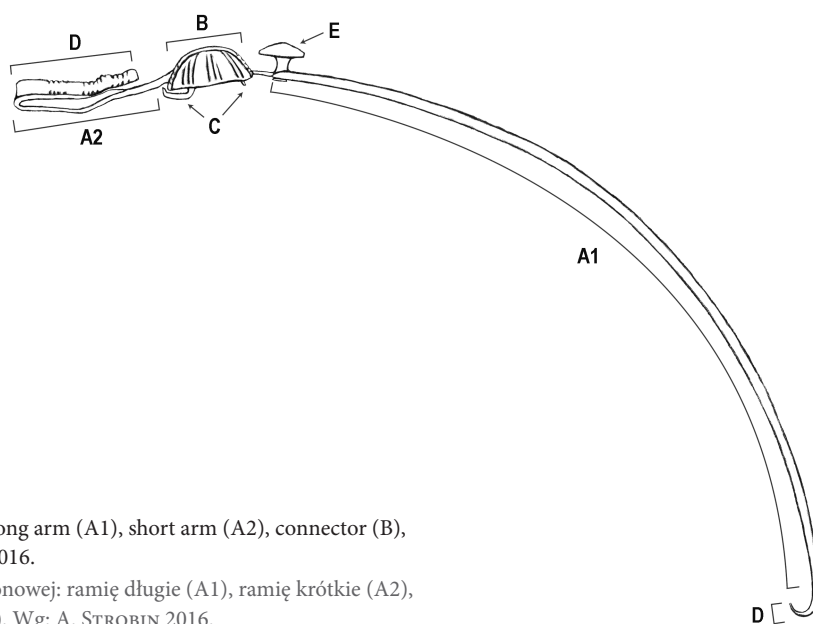


Fig. 1. Structure of a bronze tripartite belt hook: long arm (A1), short arm (A2), clips (C), hook (D), rivet (E). After: A. STROBIN 2016.

Ryc. 1. Schemat budowy brązowej klamry trójczłonowej: ramię długie (A1), ramię krótkie (A2), łącznik (B), uszko/ zaczep (C), haczyk (D), nit (E). Wg: A. STROBIN 2016.

to their material and the frame-shape of the connector identified them as type III⁴. Further analysis of the central element led to distinguishing type IIIa characterised by a rectangular frame-shaped connector, consisting of two horizontal tapes connected by shafts on both sides. At the time, Kostrzewski knew only two belt hooks of this type – from Dobropole Gryfińskie and Grudziądz-Rządź, grave 431. Much more common were type IIIb belt hooks, distinguishable by a connector made of two horizontally arranged segments (quarters) of sphere connected by shafts. Until 1914, Kostrzewski collected around 40 such forms, most from the Pomerania, but also from Brandenburg. As the final element in typological development of bronze tripartite belt hooks, the author mentions two other forms. In the first one, identified in the cemetery in Grudziądz-Rządź, grave D5, the connector was made of two opposite C-shape bars. In the other, exceptionally impressive one, found in the village of Maciejewo⁵, a open-work hexagonal connector was additionally decorated with rivets. During his analysis of type III belt hooks, Kostrzewski also noticed that certain structural variations occur, especially in the mounting of the longer arm to the connector with the help of a middle rivet, which has been interpreted as a trace of fixing or a characteristic feature of local workshops. Another variation consisted in the presence of a larger number of ribs on the longer arm in belt hooks found in Brandenburg. In his work, Kostrzewski also raised the issue of decorating belt hook arms, as well as rivets heads.

After over twenty years, the subject of bronze tripartite belt hooks became central to D. Bohnsack⁶, who stressed the ‘Burgundian’ character of this type of belt fittings and supplemented the list of discoveries with new examples, including the ones from „Zuckerfabrik“ (now: site 4) in Pruszcz Gdański, as well as those similar to the already mentioned find from Maciejewo, a belt hook from grave 72 found in Gdynia-Oksywie and a belt hook from an inhumation grave in Malbork-Wielbark cemetery.

In a study of belt hooks from the Oksywie Culture by R. Wiloch⁷, tripartite specimens made of bronze were included into types XIII⁸ and XIV; the latter type was further divided into variants. Variants XIVA and XIVC correspond with types IIIb and IIIa (respectively) by Kostrzewski, and variant XIVB includes the Maciejewo specimen as well as other similar forms. Categorisation of all belt hooks presented in the article by Wiloch is mainly based on their decorative elements, with morphological features treated only marginally⁹. Regarding bronze tripartite belt hooks, the classification draws on the system proposed by Kostrzewski, but since variant XIVB is dated to the Roman Period, it should be chronologically

⁴ D. BOHNSACK 1938, 32–33, list 22, pl. 4:2a.b.

⁷ R. WILOCH 1995. The title of this article can be misleading, as the work includes sites with belt hooks associated not only with this culture, but also with the Oder Group (the Jastorf Culture), as well as the Gustow Group (Prądno) and the Wielbark Culture (Lubowidz).

⁸ R. Wiloch includes a belt hook from Grudziądz-Rządź, grave D5 into her type XIII (R. WILOCH 1995, fig. 7:b), but describes it in one place as made of iron (R. WILOCH 1995, 22), while in another of bronze (R. WILOCH 1995, list 45 [type XII!]) – here also some mistakes in the grave assemblage). Cf. Catalogue.

⁹ See also: E. BOKINIEC 2008, 56.

⁴ J. KOSTRZEWSKI 1919, 57–62, fig. 44–47, list 29.

4 ⁵ Present day Pelplin-Maciejewo.

treated as the last rather than the second. In her work, the author also refers to the dating of individual types¹⁰.

The subject of belt hooks, including bronze specimens with a tripartite structure (types IIIa and IIIb) was raised by A. Reinecke in a study of the Late Pre-Roman Period in the south Baltic region¹¹. The author first of all notes their dispersion. Belt hooks of these types occur mainly on the estuary of the Vistula River, and less frequently, as Kostrzewski notices¹², in the Jastorf Culture area on the Saale and Havel Rivers. According to Reinecke, in Brandenburg multipartite belt fittings made of bronze date back to phase II b 2¹³ (i.e., phase A2 of the Oksywie Culture).

It should be noted that the issue of belt hooks from the Late Pre-Roman Period was also referred to by R. Madyda-Legutko in the context of discoveries of this element of attire in the Early Roman Period¹⁴. She notes that some forms of belt hooks typical of the Pre-Roman Period still remained in use in the Early Roman Period, which also includes bronze tripartite belt hooks of type IIIb. The persistence of these archaic forms, which also accompany finds from periods later than the Late Pre-Roman Period, is visible, according to the author, in different regions of Central European *Barbaricum*, and is documented much better for phase B2 than B1¹⁵.

Recently, the issue of this group of artefacts has been commented upon by E. Bokinić, especially regarding materials found in the Chełmno Land¹⁶. The author lists ca. 40 tripartite belt hooks made of bronze discovered in sites of the Oksywie Culture. Drawing on the categorisation system suggested by J. Kostrzewski¹⁷ and R. Wiloch¹⁸, based on variation in the shape of connector, Bokinić also distinguishes other features. Her observations concern the shape of arms, both the longer one, narrowed towards the hook or rectangular in shape¹⁹, and the shorter one. Similarly to other scholars, the suggested division into types IIIa–III d is based on the connector, which takes the form of rectangular plates (type IIIa), sphere segments (there: hemispheres, type IIIb), as well as C-shape, including bar-shape (type IIIc) and wire-shape (type III d). In her work, Bokinić also specified the chronology of

tripartite belt hooks made of bronze, and determined the timeframe as the end of the A1 phase, through A2 and A3, until the Early Roman Period. The author also draws attention to Celtic inspiration in producing decorative elements of this piece of attire.

CHARACTERISTIC FEATURES OF BELT HOOKS

This article includes a collection of bronze tripartite belt hooks from 31 sites from Pomerania²⁰. The majority are products of the Oksywie and Wielbark Cultures, and only five were identified as belonging to the Jastorf Culture, more specifically from the region along the Oder (Map 1). In one case (Podole Małe), there is not enough information to determine whether the cemetery was still in use in the Roman Period, from the other hand, so far only graves from the Early Roman Period have been excavated in Wolny Dwór. However, it seems that in both cases, the chronology of the sites may be broader. For comparison purposes, materials from outside of the Pomeranian are also included, notably from the Oder region, central Germany and Kujawy.

Altogether, from the Pomeranian region, data on 77²¹ belt hooks of type III according to Kostrzewski have been gathered; the belt hooks were found in 57 grave assemblages²², and the remaining ones were marked as cemetery finds or stray finds. In some cases, no drawings or photographs are available, and identification is based solely on written descriptions²³.

The preservation state of most finds is fragmentary, and traces of deformation caused by fire are very common. This is one of the reasons why identification of tripartite specimens is very difficult²⁴. Some degree of confirmation can be obtained by the presence of a connector, two arms or a long arm with rivets (or at least

¹⁰ R. WIŁOCH 1995, 22–24, list 45–49, fig. 7:c–e, 9.

¹¹ R. REINECKE 1988, 79, map 20, list 27.

¹² J. KOSTRZEWSKI 1919, 59–61, list 29.

¹³ H. SEYER 1982, 19–20, fig. 2.

¹⁴ R. MADYDA-LEGUTKO 1990.

¹⁵ R. MADYDA-LEGUTKO 1990, 157–158, table 1.

¹⁶ E. BOKINIĆ 2008, 74–76, 436–437, list 16, table 18.

¹⁷ J. KOSTRZEWSKI 1919.

¹⁸ R. WIŁOCH 1995.

¹⁹ This remark concerns mainly destroyed belt hooks. Some tripartite specimens have a long arm clearly narrowed towards the hook, which gives them a triangular shape, and others narrow more gently, and the change in shape is noticeable only halfway along the length of the arm.

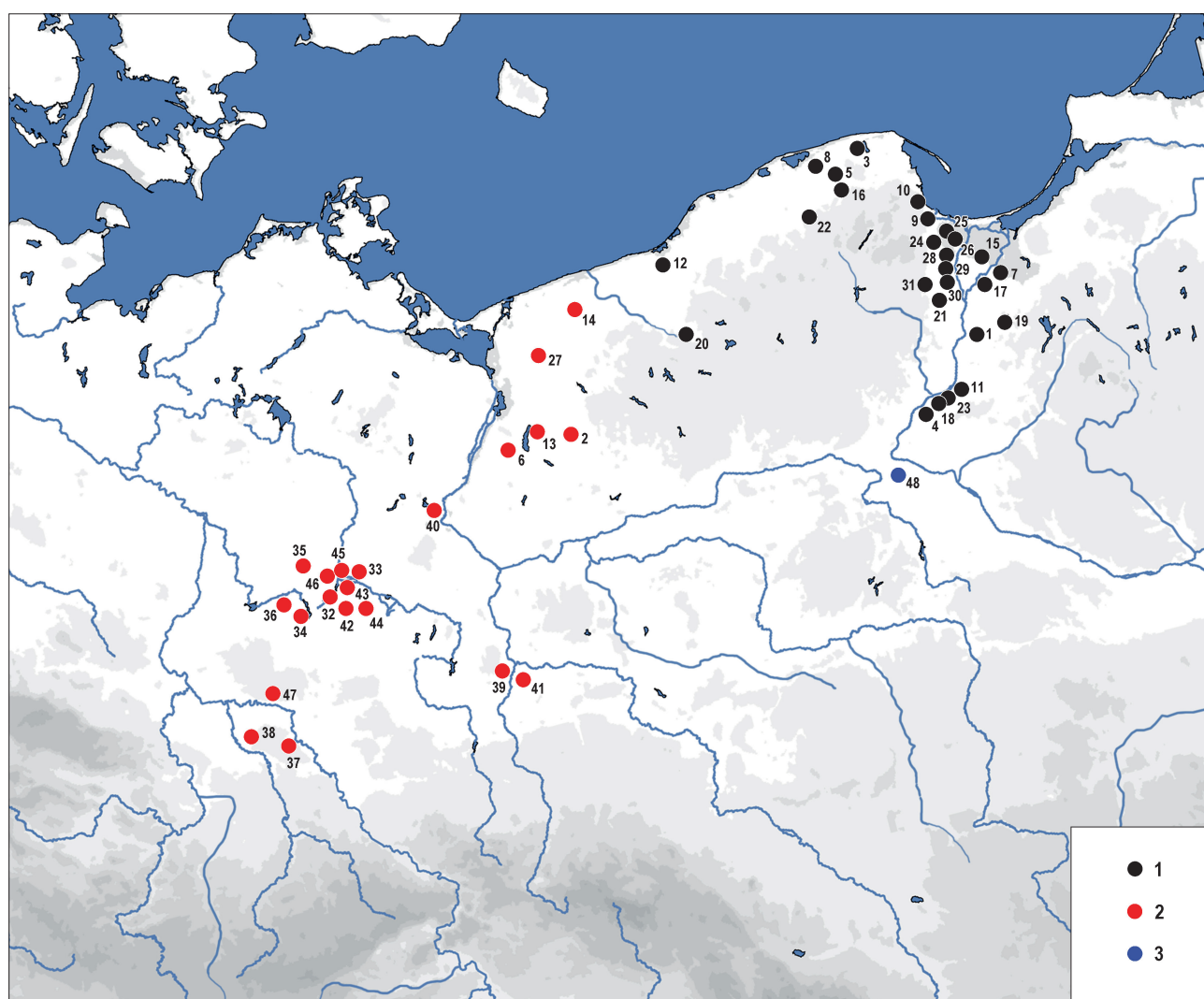
²⁰ Information concerning the character of finds, assembly inventories and archival sources and publications is included in the Catalogue.

²¹ Among the finds, there are also specimens from Biały Dwór and Lubieszewo (Cat. no. 14), grave 88, in source publications referred to as multipartite, as well as mentioned in the overview of type IIIb (J. KOSTRZEWSKI 1919, list 29) assemblages from Chełmno, grave 91, Grudziądz-Rządź, graves Ab8, C1, 451, 610 and 629, Lubieszewo (Cat. no. 15), grave IV, Parsęcko and Skowarcz, stray finds 1 and 2, in which cases illustrations stored in the Archive by J. Kostrzewski do not clearly confirm an affiliation to type III belt hooks.

²² Grave IV from Lubieszewo has been excluded from the count due to the inconsistent character of the assembly.

²³ D. BOHNSACK 1938 – see: Gdynia-Oksywie, graves 72 and 132; Skowarcz, grave 4/1913 and stray find 4.

²⁴ In Pomerania, unipartite belt hooks were also made of bronze; similarly to the tripartite ones, they have ribbed arms (see: J. KOSTRZEWSKI 1919, 48, list 23, fig. 35; R. WIŁOCH 1995, 17, fig. 4:h.i – here type VII).



Map 1. Distribution of bronze tripartite type III belt hooks in Oksywie and Wielbark Cultures (1), Jastorf Culture (2), and Przeworsk Culture (3). Numbers correspond to the Catalogue. Graphics: A. Strobin

Mapa 1. Rozprzestrzenienie brązowych klamer trójczłonowych typu III: kultury oksywiska i wielbarska (1), jastorfska (2) oraz przeworska (3). Numery na mapie odpowiadają numeracji w Katalogu. Oprac. graficzne: A. Strobin

traces of them). Complete or almost whole specimens were found only at twelve sites²⁵.

This work draws on the categorisation of bronze tripartite belt hooks proposed by J. Kostrzewski (types IIIa and IIIb)²⁶. Additionally, type IIIc has been added; here the characteristic feature is richly decorated open-work connector with rivets, and for many years the belt hook from Maciejewo was the only existing example.

Type IIIa

In this group, characterised by a rectangular, frame-shape connector, four specimens were included: from

²⁵ Bralęcín; Brzyno, grave 261; Dobropole Gryfińskie; Kunowo; Lubieszewo (Cat. no. 15), grave 26; Lubowidz, grave 280; Maciejewo; Podole Małe; Podwiesk, grave 119; Różyń, grave 45; Tczew; Wolny Dwór, graves 1 and 2.

²⁶ J. KOSTRZEWSKI 1919.

Dobropole Gryfińskie (Fig. 2:1), Grudziądz-Rządź, grave 431 (Fig. 3), Kunów (Fig. 2:3) and Podwiesk, grave 119 (Fig. 2:2)²⁷. The preservation state is fragmentary only in the case of Rządź, as only fractions of the long arm and connector were noted, together with a mention of a decorative rivet. None of the examples carries a trace of deformation caused by fire. In all four cases, the longer arm presents in the shape of an elongated triangle narrowed

²⁷ Fragment of a long arm from a belt hook found in a damaged grave 13 of the Oder Group cemetery at Długie, Starogard County (fmr. *Langenhagen, Kr. Saatzig*) is excluded from this overview. Reconstruction of the assembly by H.J. Eggers suggests the presence of a type IIIa belt hook, but a small fragment of the arm is insufficient to confirm such precise typological identification (H.J. EGGERS 1936, 18; 1964, table 2, plan 5; H.J. EGGERS, P.F. STARY 2001, 43 no. 191, pl. 135; B. ROGALSKI 2010, 332, 338. Collection of the National Museum in Szczecin, inv. no. MNS/A/6712).

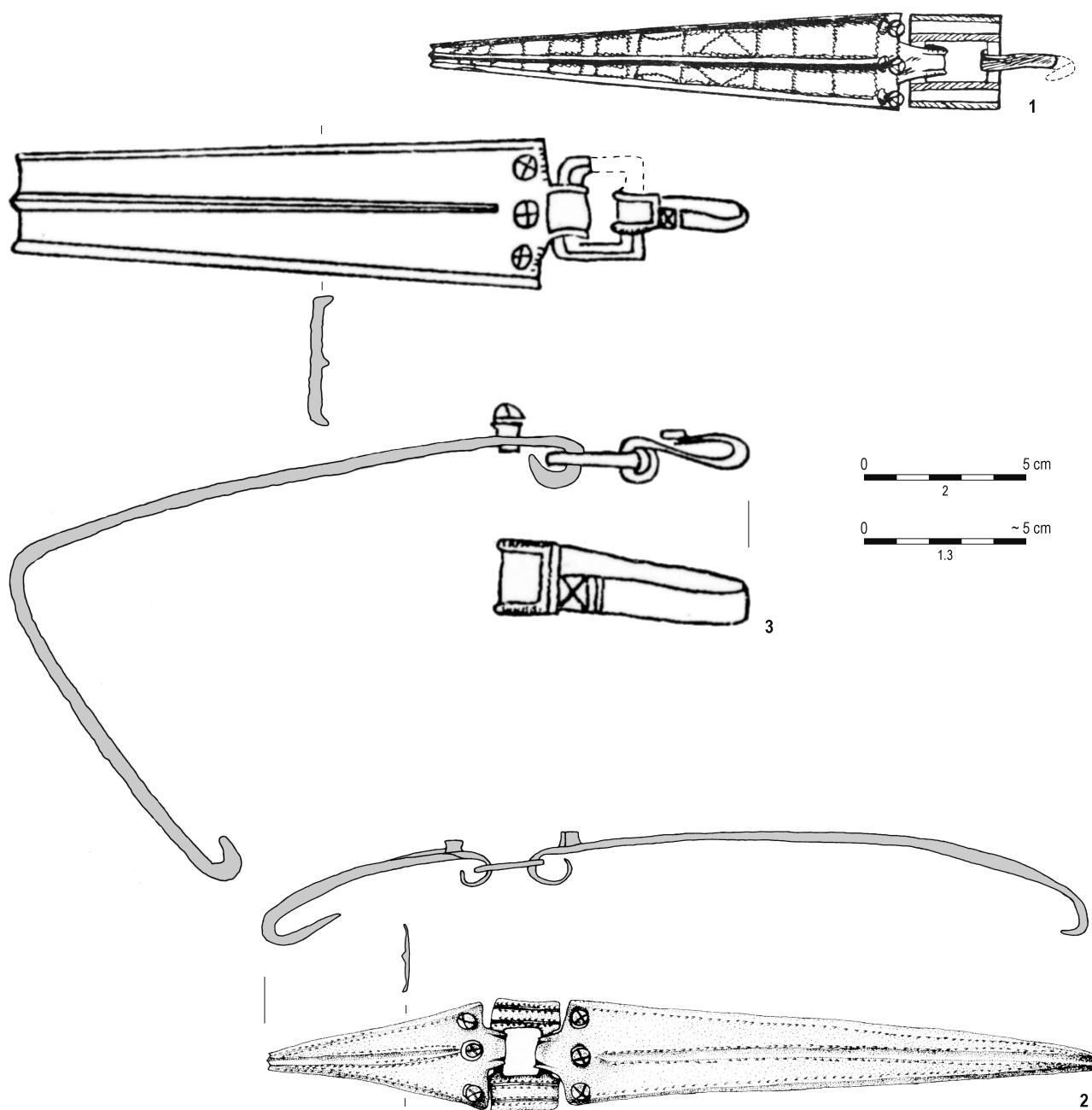


Fig. 2. Bronze tripartite type IIIa belt hooks. 1 – Dobropole Gryfińskie, grave; 2 – Podwiesk, grave 319; 3 – Kunowo, grave 16. After: J. KOSTRZEWSKI 1919 (1), E. BOKINIEC (2), T. ŁASZKIEWICZ 1973 (3).

Ryc. 2. Brązowe kłanry trójczłonowe typu IIIa. 1 – Dobropole Gryfińskie, z grobu; 2 – Podwiesk, grób 319; 3 – Kunowo, grób 16. Wg: J. KOSTRZEWSKI 1919 (1), E. BOKINIEC (2), T. ŁASZKIEWICZ 1971 (3).

towards the hook which is bent inwards. From the side of the connector, the arm at an obtuse angle transforms into a catch sometimes decorated with cross cuts²⁸ on wide edges. A large rib runs through the centre of the long arm and the edges are vividly raised and bent aside. Usually, both sides of the ribs and arms are ornamented with *tremolo*²⁹, sometimes preserved as traces of small points or

dashes. From the wider side of the arm, by the connector, there are small rivets arranged in a row, each specimen containing three rows. The shafts are bulky and profiled,

and consisting of a zigzag-like ornament in swinging moves, in literature referred to as 'wolf teeth'. The shape of the ornament is influenced by the placement of the cutter (stronger or weaker pressing, less or more frequent swings). Vital for the ornament interpretation is the preservation state of a given artefact. During heavy use, the belt hook surface became worn, and later, in post-deposition processes, patinated, so that the ornament preserved merely as a row of points or lines.

²⁸ Dobropole Gryfińskie.

²⁹ *Tremolo* – an engraved ornament made using a flat engraving cutter

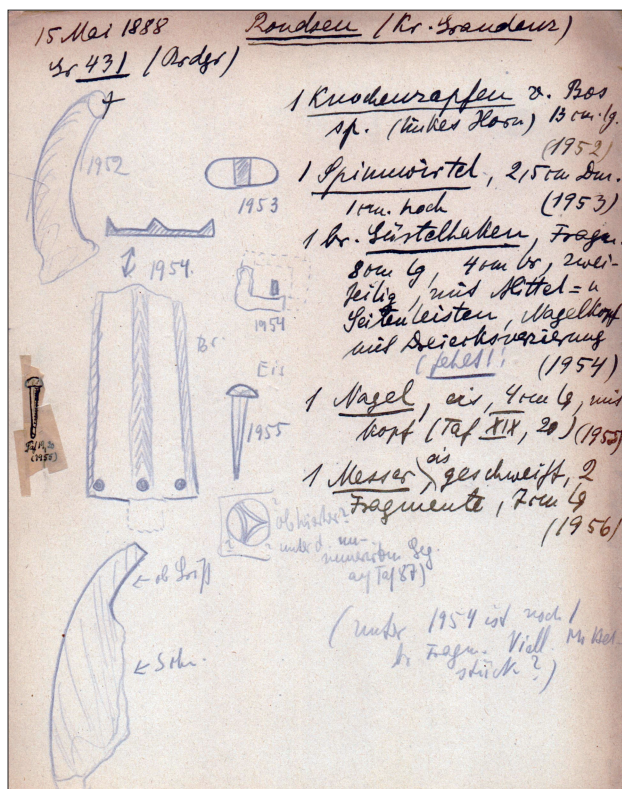


Fig. 3. Assemblage of grave 431 from Grudziądz-Rządź, including fragments of a bronze tripartite type IIIa belt hook. After: J. KOSTRZEWSKI, Archive.

Ryc. 3. Inwentarz grobu 431 z Grudziądza-Rządź z fragmentem brązowej klamry trójczłonowej typu IIIa. Wg: J. KOSTRZEWSKI, Archiwum.

and the heads are sphere-shaped, decorated with a cross or a triangle³⁰. A belt hook from Dobropole Gryfińskie is unique in terms of decorative elements on the longer arm – on the flat surface between the ribs it is covered in bands of *tremolo* ornament arranged in rectangles filled with triangles or arches (Fig. 2:1). The shorter arm in type IIIa belt hooks takes the form of a narrow tape³¹, 1.1–1.6 cm wide, on one end changing into a decorative catch, and on the other in a long, inward-bent hook, sometimes decorated with metope with crossed lines (Kunowo). A very different form is represented by the short arm of a belt hook from Podwiesk (Fig. 2:2), which in terms of form is analogical to the longer arm. It is triangular in shape, narrowed towards an inward-bent hook, and on the wider side transformed into a decorative catch; near the connector there is one row of three rivets, their heads decorated with a cross. The whole arm is ribbed and decorated with *tremolo*. The connector in type IIIa belt hooks is in the shape of a rectangular frame, formed from two tapes connected usually by narrow axes which

also serve to mount the arms. The elongated plates of the connector are ornamented with long and short lines (Fig. 2:1) or *tremolo* (Fig. 2:2). The length of these belt hooks ranges from 28 to 34 cm.

Belt hooks of type IIIa come from two sites in West Pomerania, identified as the Jastorf Culture, notably the Oder Group, and from two other sites from Chełmno Land attributed to the Oksywie Culture (Map 2). All sites are cemeteries, and in the case of Dobropole Gryfińskie, the finds come from a destroyed urn grave. In other locations, belt hooks were also found in urns³², and in one case in a pit (Grudziądz-Rządź). Although chronological analysis is difficult due to small number of closed finds, it seems that early dating of tripartite type IIIa belt hooks is valid. A grave from Kunowo, although destroyed by workers, corresponds to the Ripdorf stage, which according to Wołągiewicz covers phase IIB of the Oder Group³³ and phase A1 of the Late Pre-Roman Period. In this grave, two long brooches of type Kostrzewski B were found, including one with an elongated leg with two beads, a wing-shaped pin head and probably one more multipartite belt hook, but made of iron, type K.I. When it comes to dating the site in Podwiesk, it most probably reaches back to the late stage of phase A1, or possibly phase A2; additional elements of the inventory include two fibulae: long specimen, type A, with an arched bow, and short brooch type C (variants A-Ie and C-II according to E. Bokinić)³⁴. In the case of the site in Grudziądz-Rządź, it is impossible to provide more specific dating than the Late Pre-Roman Period.

Type IIIb

Much more common are belt hooks identified as type IIIb, whose quantity amounts to 45 specimens, 13³⁵ of which are included in list 29 by Kostrzewski; for the latter group, visual and descriptive documentation included in the archives is insufficient to determine whether the characteristic element of connector in the form of sphere segments is present (see: Fig. 4, 5). The preservation state of these specimens is usually only fragmentary (Fig. 6:3, 7, 8, 10, 11:1.3.4) and quite frequently, in at least 30% of cases, traces of deformation caused by fire are visible on the surface³⁶. Only a very small number of belt fittings

³² Kunowo; Podwiesk.

³³ R. WOŁĄGIEWICZ 1981b, 192, pl. XXVII; see also: B. ROGALSKI 2010, 140–141.

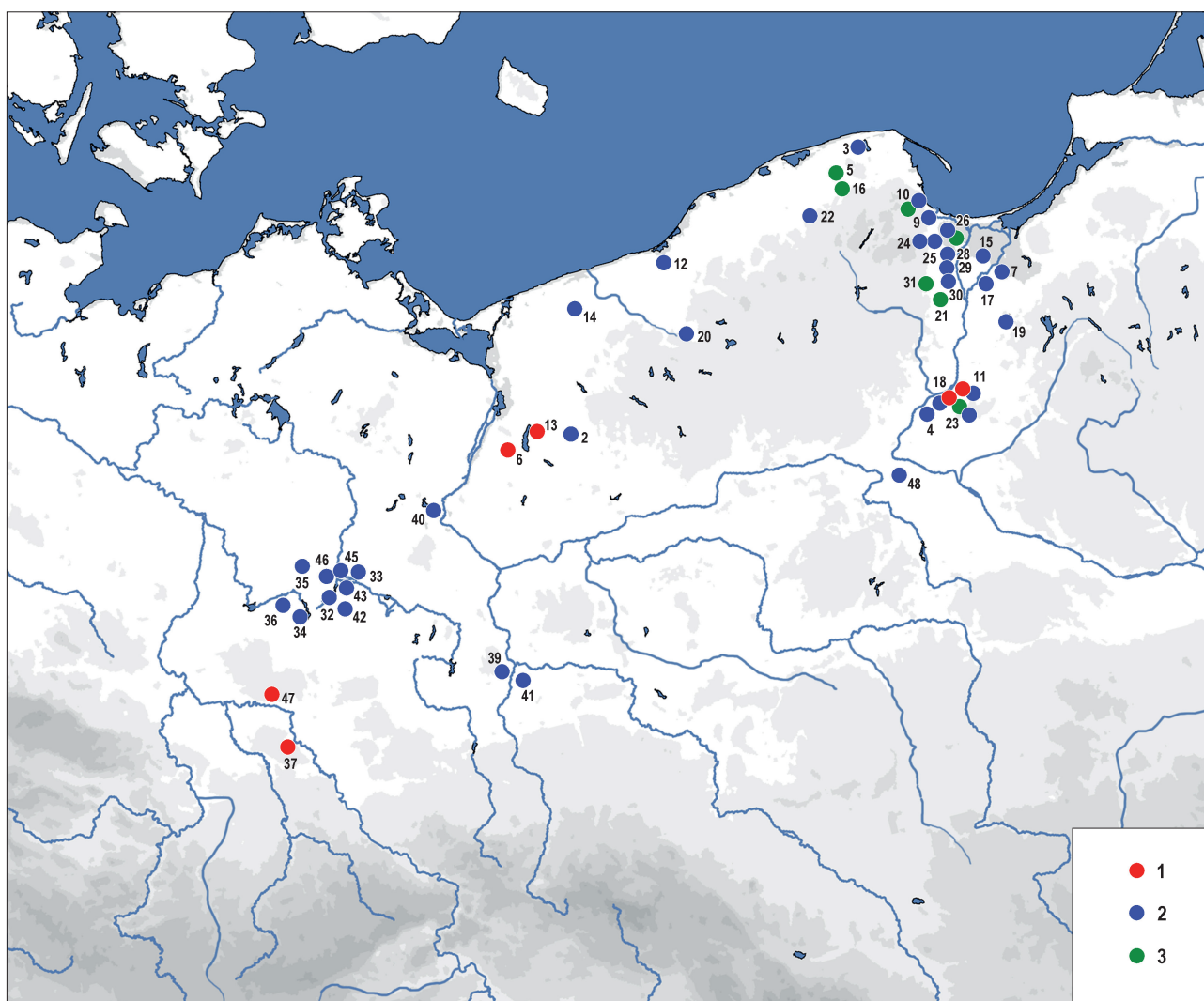
³⁴ E. BOKINIĆ 2005, 19, 32–33; 2008, 317 no. 23.

³⁵ Chełmno, grave 91 and stray finds; Grudziądz-Rządź, graves D4, C1, Ab8, 180, 451, 610 and 629; Lubieszewo (Cat. no. 15), grave IV; Parsecko, unnumbered grave; Skowarcz, stray finds 1 and 3.

³⁶ Brzyno, features 261 and 301; Konikowo, grave 60; Lubieszewo (Cat. no. 15), grave 9; Malbork-Wielbark, feature 53a/2018; Nowy Targ, feature 236; Podwiesk, graves 66 and 319; Pruszcz Gdański 4, grave 35; Pruszcz Gdański 7, grave 350; Pruszcz Gdański 10, grave 2; Różyń, features 5 and 45.

³⁰ Cross: Kunowo; Podwiesk. Triangle: Dobropole Gryfińskie; Grudziądz-Rządź.

³¹ Dobropole Gryfińskie; Kunowo.



Map 2. Distribution of bronze tripartite belt hooks, types IIIa (1), IIIb (2), and IIIc (3). Numbers correspond to the Catalogue. Graphics: A. Strobin

Mapa 2. Rozprzestrzenienie brązowych klamer trójczłonowych typów IIIa (1), IIIb (2) i IIIc (3). Numery na mapie odpowiadają numeracji w Katalogu. Oprac. graficzne: A. Strobin

were preserved whole or undisturbed³⁷, and they constitute 15.5% of the finds (Fig. 6:1.2, 9, 11:2.5). On the basis of the latter, the length of the belt hooks can be estimated at 30 or even up to 40 cm. Due to their poor state of preservation, it is considerably easier to determine the size of individual belt hook elements. In the well-preserved specimens, the length of the longer arm reaches over 20 cm (usually 27–28 cm); more data is available to determine its width, which oscillates between 2.2 cm and even up to 5 cm (Fig. 5 – Grudziądz-Rządź, grave C1), but usually amounts to 2.2–3.2 cm. The shorter arm is from 5.6 to 7.5 cm long, and its width from 1.2 cm to 1.8 cm, with a thickness of 0.3 cm. The sizes of the connector range from 2.1 cm to 3.4 cm in length, 3.2 to 4 cm

in width, and 1 cm to 1.3 cm in height. The average diameter of the rivet heads is between 1–1.3 cm, and in special cases it reaches 1.8 cm (Fig. 9 – Podole Małe).

Similarly to type IIIa belt hooks, the long arm is ribbed: through the centre runs a prominent middle rib, and its edges are raised. Usually, if a given specimen is preserved well enough, traces of *tremolo* can be found along the ribs. In a few cases, the shaping is more elaborate and, as a result, two additional ribs are present³⁸ (Fig. 6:3); this solution can also be observed in unipartite belt hooks made of bronze³⁹. The wider end of the arm runs at a right or obtuse angle, or presents as an arch (Fig. 6:3), and near the end forms a catch with its edges usually raised, and

³⁷ Bralęcín; Brzyno, feature 261; Lubieszewo, grave 26; Podole Małe; Pruszcz Gdański 10, grave 126; Różyny, feature 45; Tczew.

³⁸ Brzyno, feature 301; Gdańsk-Oliwa, stray finds 1; Pruszcz Gdański 7, grave 350 – only from the belt hook side.

³⁹ J. KOSTRZEWSKI 1919, 48, list 23, fig. 35.

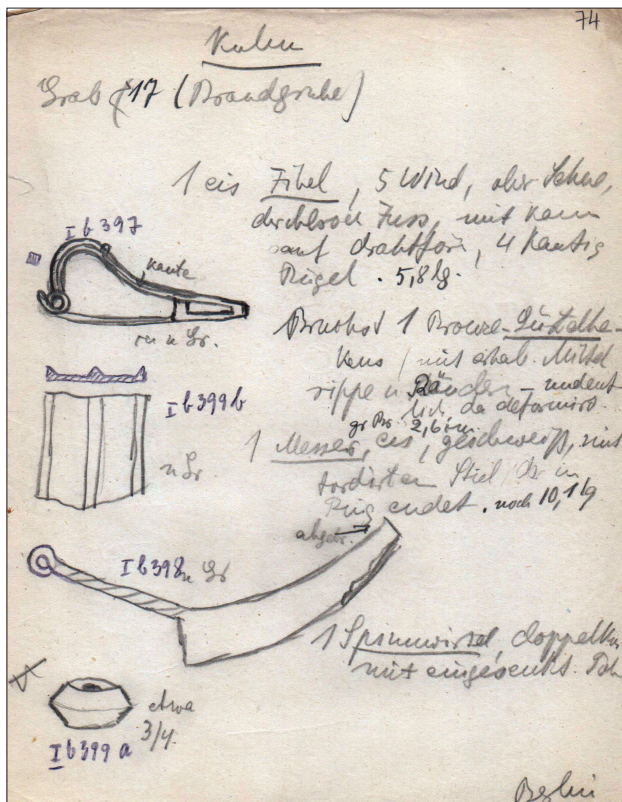


Fig. 4. Assemblage of grave 91 from Chełmno (Berlin, grave 17), including fragments of a bronze tripartite belt hook, according to Kostrzewski of type IIIb. After: J. KOSTRZEWSKI, Archive.
Ryc. 4. Inwentarz grobu 91 z Chełmna (Berlin, grób 17) z fragmentem klamry brązowej, według J. Kostrzewskiego trójczłonowej typu IIIb. Wg: J. KOSTRZEWSKI, Archiwum.

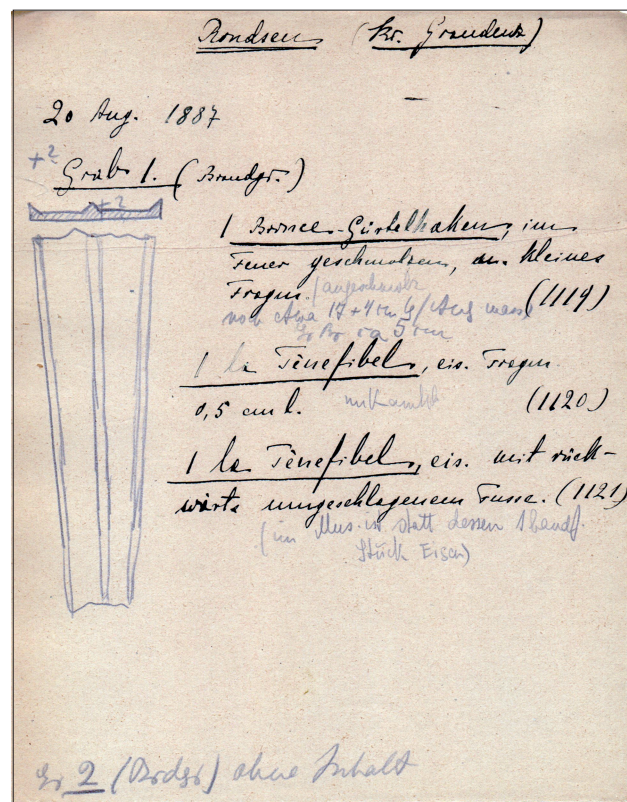


Fig. 5. Assemblage of grave C1 from Grudziądz-Rządza, including fragment of a bronze tripartite belt hook, according to Kostrzewski of type IIIb. After: J. KOSTRZEWSKI, Archive.
Ryc. 5. Inwentarz grobu C1 z Grudziądza-Rządza, z fragmentem klamry brązowej, zdaniem J. Kostrzewskiego trójczłonowej typu IIIb. Wg: J. KOSTRZEWSKI, Archiwum.

which sometimes carries traces of ornament: herringbone (Fig. 6:1), arches and wavy lines⁴⁰ (Fig. 10), a diagonal cross (Fig. 9) or grid (Fig. 7:6).

In rare cases, variations in the formation of a catch which connects to the middle part of the belt hook can be observed. This concerns finds from grave 126 in Pruszcz Gdański 10, where the clip is directed outwards (Fig. 11:2), as well as a belt mount in Tczew (Fig. 11:5) in which tape riveted from the bottom is folded upwards, forming a catch. An outward-bent catch secured by a middle rivet was also identified on the long arm of belt hook from grave D4 in Grudziądz-Rządza and among stray finds in Chełmno, feature 1 (Fig. 18:1.2)⁴¹; these three examples need further comment. The wider end of the arm was crowned with two⁴² (Fig. 6:2.3, 9, 11:1.2.4) or three⁴³

(Fig. 6:1, 7:3.5.6.8, 8, 10, 11:3.5) decorative rivets arranged in a row. Most often, large rivets protrude past the line of the arm. On their round heads, sometimes with a diameter reaching outside of the arm (Fig. 6:2.3, 11:5), a triangle can be seen, most often written in a circle⁴⁴ and formed out of single or double hemispheres (Fig. 6:1.2, 7:5, 10, 11:2.5), seldom in a cross⁴⁵ (Fig. 7:3), or corresponding star pattern⁴⁶ (Fig. 11:4, 18:1), or hatched triangle spaces⁴⁷ (Fig. 6:1, 7:8, 11:2). To the usual star pattern, J. Kostrzewski also adds ornament preserved on one of two rivets from a belt hook in Podole Małe⁴⁸ (Fig. 9). Its head is high, almost conical and decorated with a faceted grid, which differs from the usual hemispheric profile fitted on a narrow shaft. Analogical to this ornament are elements from

⁴⁰ Różyń, feature 5; Gdańsk-Oliwa, stray find 1.

⁴¹ See also: J. KOSTRZEWSKI 1919, 59 f.n. 7.

⁴² Brzyno, features 261 and 301; Gdańsk-Oliwa, stray find 1; Lubieszewo (Cat. no. 15), stray find 3; Podole Małe; Pruszcz Gdański 7, grave 350; Pruszcz Gdański 10, graves 2 and 126.

⁴³ Bralęc; Dolna; Lubieszewo, graves 9 and 26; Nowe Dobra; Nowy Targ; Podwiesk, graves 44 and 319; Pruszcz Gdański 4, grave 35; Różyń, features 5 and 45; Skowarcz, grave 12; Tczew.

⁴⁴ Brzyno, features 261 and 301; Gdańsk-Oliwa, stray find 1; Grudziądz-Rządza, graves Aa8 and 431; Lubieszewo, grave 26; Nowy Targ; Pruszcz Gdański 10, grave 126; Różyń, features 5 and 45; Tczew.

⁴⁵ Dolna.

⁴⁶ Grudziądz-Rządza, grave D4; Pruszcz Gdański 7, grave 350; Skowarcz, stray find 2.

⁴⁷ Bralęc; Podwiesk, graves 66 (?) and 319; Pruszcz Gdański 10, graves 2 (?) and 126.

⁴⁸ J. KOSTRZEWSKI 1919, p. 59 f.n. 6.

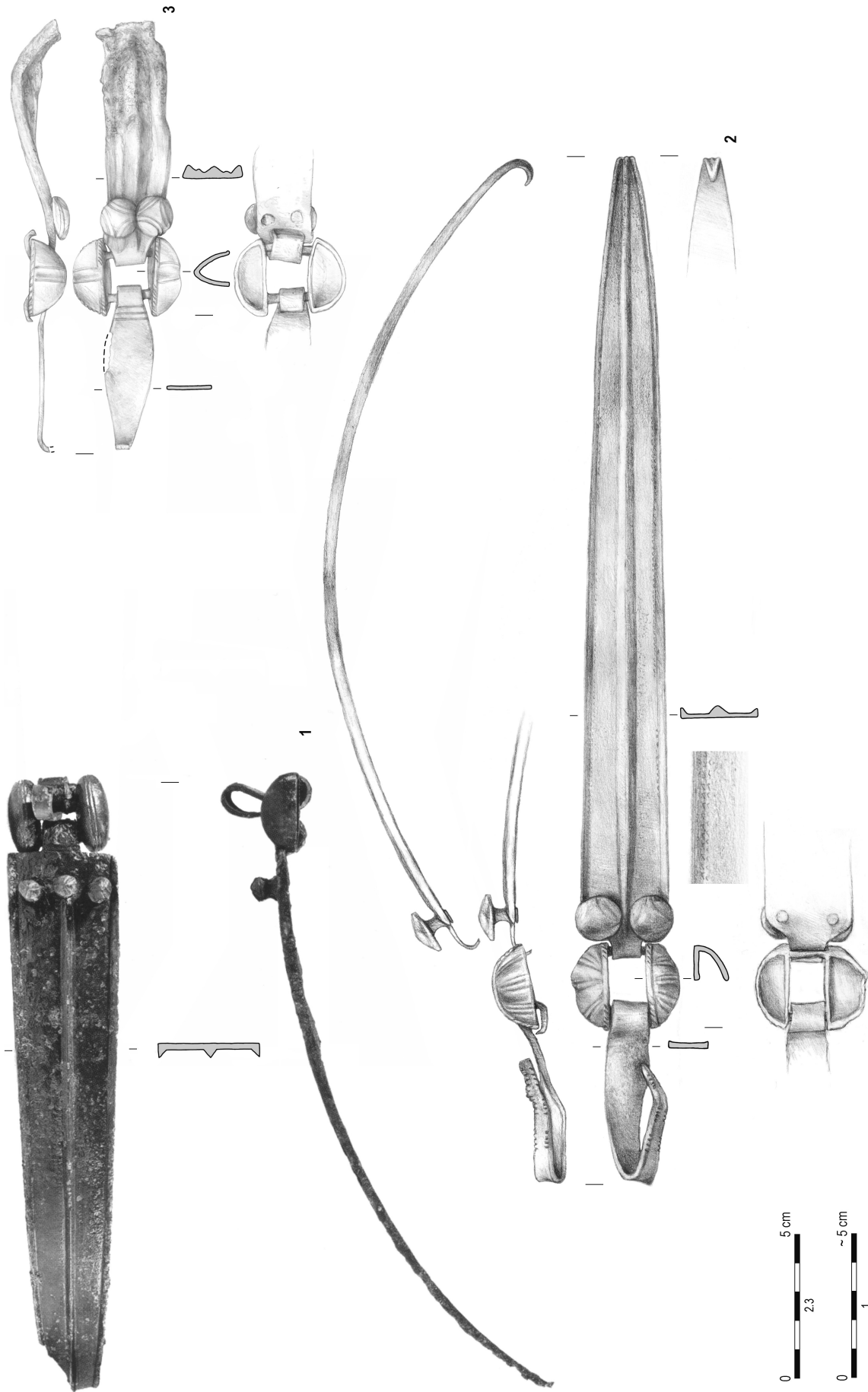


Fig. 6. Bronze tripartite type IIIb belt hooks. 1 – Bralecín, stray find; 2 – Brzyno, feature 261; 3 – Brzyno, feature 301. After: K. BUCKA 2016 (1), A. STROBIN 2016 (2).
 Drawing: J. Glinkowska-Kowalewska (3).

Ryc. 6. Klamry trójczłonowe z brązu typu IIIb. 1 – Bralecín, znal. luźne; 2 – Brzyno, ob. 261; 3 – Brzyno, ob. 301. Według K. BUCKA 2016 (1), A. STROBIN 2016 (2).
 Rys.: J. Glinkowska-Kowalewska (3).

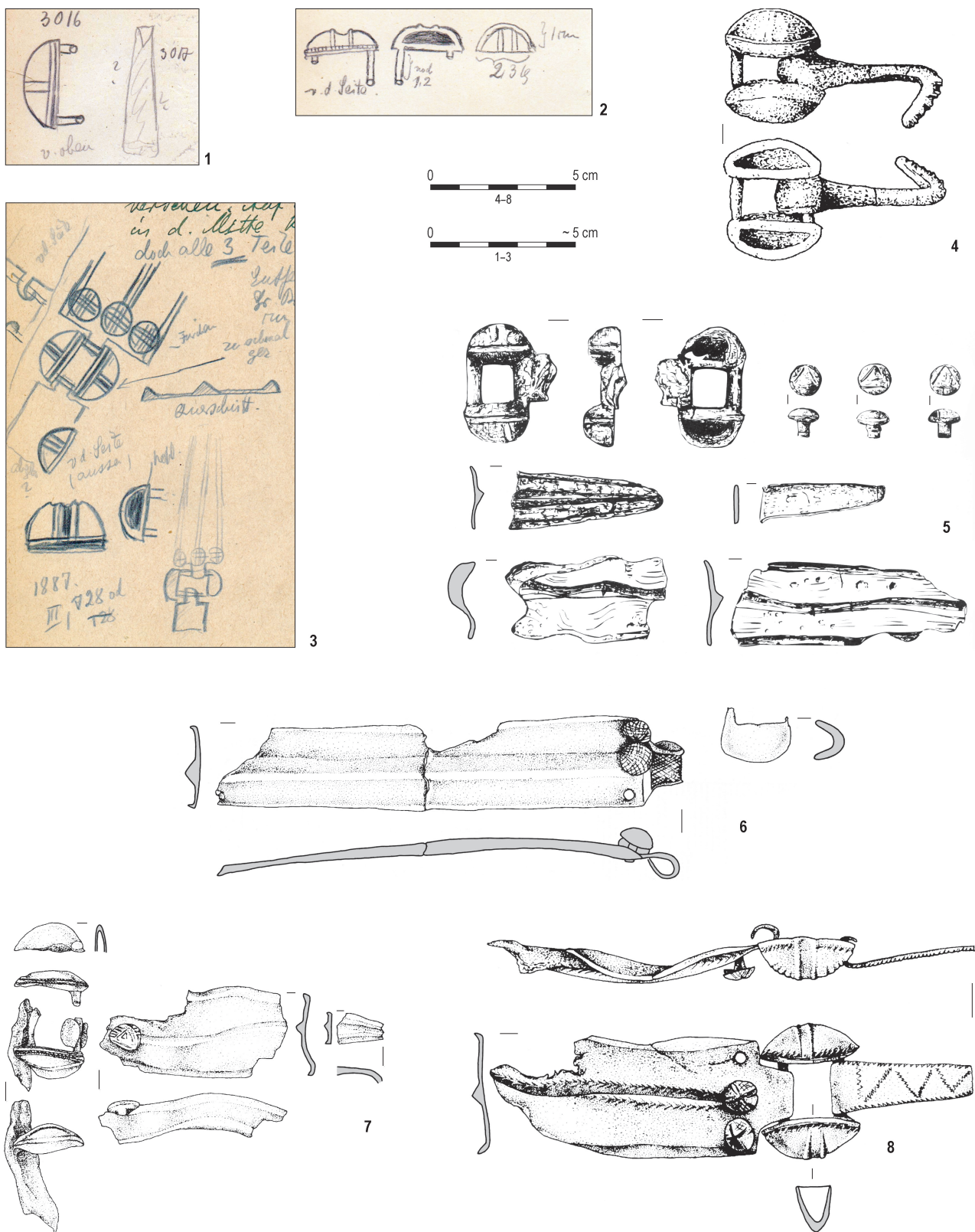


Fig. 7. Bronze tripartite type IIIb belt hooks. 1 – Chełmno, grave 130; 2 – Gdańsk-Oliwa, stray find 2; 3 – Dolna, stray find; 4 – Lubieszewo (Cat. no. 14), grave 81; 5 – Nowy Targ, grave 236; 6 – Podwiesk, grave 44; 7 – Podwiesk, grave 66; 8 – Podwiesk, grave 319. After: J. KOSTRZEWSKI, Archive (1-3), R. WOŁĄGIEWICZ 1997 (4), E. FUDZIŃSKA & P. FUDZIŃSKI 2013 (5), E. BOKINIEC 2005 (6-8).

Ryc. 7. Brązowe klamry trójczłonowe typu IIIb. 1 – Chełmno, grób 130; 2 – Gdańsk-Oliwa, znal. luźne 2; 3 – Dolna, znal. luźne; 4 – Lubieszewo (kat. 14), grób 81; 5 – Nowy Targ, grób 236; 6 – Podwiesk, grób 44; 7 – Podwiesk, grób 66; 8 – Podwiesk, grób 319. Wg: J. KOSTRZEWSKI, Archiwum (1-3), R. WOŁĄGIEWICZ 1997 (4), E. FUDZIŃSKA, P. FUDZIŃSKI 2013 (5), E. BOKINIEC 2005 (6-8).

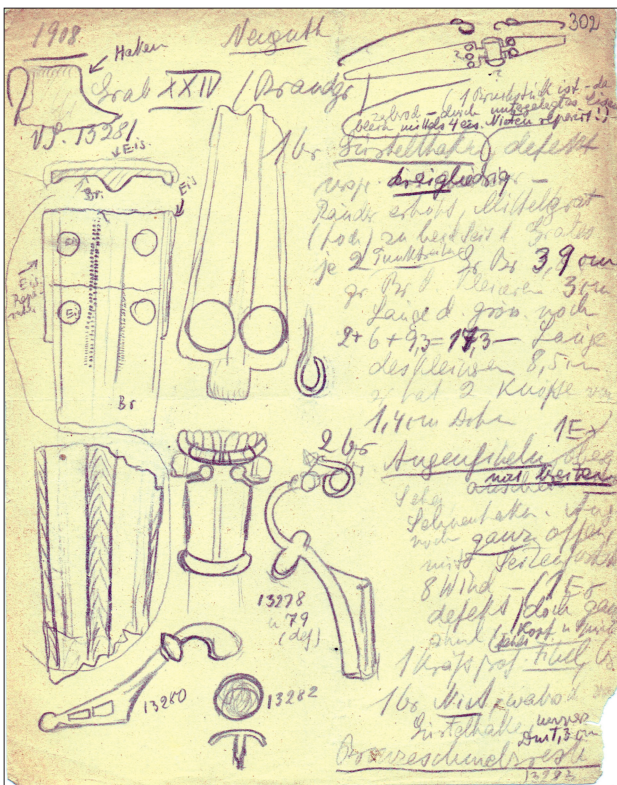


Fig. 8. Assemblage of grave 24/1908 from Nowe Dobra, including fragments of a bronze tripartite type IIIb belt hook. After: J. KOSTRZEWSKI, Archive.

Ryc. 8. Inwentarz grobu 24/1908 z Nowych Dóbr z fragmentem brązowej klamry trójczłonowej typu IIIb. Wg: J. KOSTRZEWSKI, Archiwum.

Lubieszewo (Cat. no. 15), grave 26, and, to some extent, the ornament of a rivet head from Podwiesk, grave 44, with a tight engraved grid (Fig. 7:6). Bulky and profiled rivet shafts, analogically to the ones found in type IIIa belt hooks, occur only occasionally (Fig. 6:1).

In the case of type IIIb belt hooks, the connector on a rectangular plan is composed of two horizontally arranged fragments of a sphere connected with two rods. In the lower, wider part of the segment there is a narrow roll (Fig. 6:2.3, 7:1.2.7, 10, 11:1–4), or a wider one formed by the emphasis of two relatively deep engraved lines (Fig. 6:1, 7:3, 9); most of all, when it comes to the narrow roll, diagonal incisions or notches can be visible⁴⁹ (Fig. 6:2.3, 7:2.7, 10, 11:1–4). The surface of the dome can be decorated. The most common are those with one centrally located group⁵⁰ of strips (Fig. 6:3, 7:1–3.5.8, 11:1.3.4),

⁴⁹ Brzyno, features 261 and 301; Gdańsk-Oliwa, stray find 2; Lubieszewo (Cat. no. 15), grave 26 and stray find 3; Podwiesk, graves 66 and 319; Pruszcz Gdański 7, grave 350; Pruszcz Gdański 10, graves 2 and 126; Różyny, features 5 and 45; Skowarcz, grave 12 and stray find 2.

⁵⁰ Brzyno, feature 301; Chelmno, grave 130; Dolna; Gdańsk-Oliwa; Lubieszewo (Cat. no. 14), grave 81; Lubieszewo (Cat. no. 15), graves 9 and 26 as well as stray find 1; Nowy Targ; Podwiesk, grave 319; Pruszcz

or, sporadically, three such groups (Fig. 6:2). There are also cases where the surface is smooth⁵¹ (Fig. 6:1, 9, 10, 11:2.5) or, as in the case of the belt hook from grave 151 from Podwiesk, covered with diagonal lines arranged in a herringbone pattern⁵².

The shorter arm, similarly to type IIIa belt hooks, takes the form of a tape narrowed towards a long inward-bent hook, and from the other end it bends inwards and forms a catch; less common are wider, spindle-shaped arms⁵³ (Fig. 6:3, 11:5). In some cases, the edges are slightly raised or notched⁵⁴ (Fig. 7:8, 9, 11:1.3). The surface of the short arm can also be decorated. On the collected belt hooks, parallel engraved lines or grooves by the catch can be seen⁵⁵ (Fig. 6:3, 10, 11:2), together with a zigzag-shape line running along the arm and made with the *tremolo* technique (Fig. 7:8), or stamped coaxial circles or half-circles and crossed zigzag⁵⁶ (Fig. 10, 11:2.5); the ornament seldom appears by the catch⁵⁷ (Fig. 10, 11:2). Another noticeable feature is a long hook profiled by tapering and traverse cutting⁵⁸ (Fig. 6:2, 9, 11:1.2); other forms of ornament are very rare⁵⁹. In this regard, unique forms can be found on a well-preserved hook of the shorter arm of the belt hook from Różyny, feature 5 (Fig. 10). The distinguishable zoomorphic representation can be interpreted as a horse head with clearly marked catches, the top of the head and a muzzle with nostrils. Due to the pipe-shape of the muzzle⁶⁰, the head could be identified as a sea fish known as the *hippocampus*, or seahorse. Another form deviating from the above-mentioned standards is a specimen carrying visible traces of repair, discovered in Nowe Dobra (Fig. 8); the shorter arm is triangular and ribbed, and by the connector there are two rivets with no ornament.

Gdański 4, grave 35; Pruszcz Gdański 10, grave 2; Różyny, feature 45; Skowarcz, grave 12 and stray find 2.

⁵¹ Bralęcín; Konikowo (?); Lubieszewo (Cat. no. 15), stray find 2; Podole Małe; Podwiesk, graves 44, 66 and 68; Pruszcz Gdański 10, grave 126; Różyny, feature 5; Tczew.

⁵² E. BOKINIEC 2005, table LXIII/151:3.

⁵³ Brzyno, feature 301; Tczew.

⁵⁴ Podole Małe; Podwiesk, grave 319; Pruszcz Gdański 10, grave 2; Skowarcz, grave 12.

⁵⁵ Brzyno, feature 301; Pruszcz Gdański 10, grave 126; Różyny, feature 5.

⁵⁶ Circles: Pruszcz Gdański 10, grave 126; Różyny, feature 5. Half-circles: Różyny, feature 45. Crossed zigzag: Tczew.

⁵⁷ Diagonal grid: Lubieszewo (Cat. no. 15), grave 9. Diagonal lines: Pruszcz Gdański 10, grave 126. Half-circles: Różyny, feature 5.

⁵⁸ Diagonal notches: Brzyno, feature 261; Grudziądz-Rządź, grave 120; Lubieszewo (Cat. no. 15), grave 26; Pruszcz Gdański 10, grave 126; Różyny, feature 45. Notches (only on edges): Podole Małe; Pruszcz Gdański 10, grave 2.

⁵⁹ Lubieszewo (Cat. no. 15), feature 9 – metopes filled with an hour-glass motif.

⁶⁰ The pipe-shape hook there is also on the belt hook from Lubieszewo (Cat. no. 14), grave 81 (Fig. 7:4).



Fig. 9. Bronze tripartite type IIIb belt hook from Podole Małe (stray find).

After: A. BURSCHE, H. MACHAJEWSKI & B. ROGALSKI 2012.

Ryc. 9. Brązowa klamra trójczłonowa typu IIIb z Podole Małego (znal. luźne).

Wg: A. BURSCHE, H. MACHAJEWSKI, B. ROGALSKI 2012.

In Pomerania, type IIIb belt hooks are also known from two sites attributed to the Oder Group of Jastorf Culture, which is from Brańcecin and Lubieszewo (Cat. no. 14) in Western Pomerania. All other finds were identified in the settlement area of the the Oksywie Culture, and later, of the Wielbark Culture (Nowe Dobra, Parsęcko), covering mainly the area of the Vistula estuary and Chełmno Land, and to a lesser degree Central Pomerania (Map 1, 2). Among 34 excavated graves, the majority (91%) represented pit cremation, and only one inhumation (Gdynia-Oksywie, grave 132), with the remaining three left undetermined. Using this type of belt fitting is confirmed for phase A2 of the Late Pre-Roman Period, up to phase B2 of the Roman Period. On the basis of well-dated (and brooch-based) grave assemblages, an assumption can be made that the belt hooks were popular especially in phase A2 where they accompany fibulae types G, D, E and K⁶¹; they were much more seldom found with fibulae A.65 and short specimens of type A, and presumably also H⁶². During phase A3, they still remained in use⁶³, as well as in the transitional phase from the Late Pre-Roman Period to the fully developed Roman Period⁶⁴. Their functioning in the Early Roman Period (phase B1 and B2) is indicated by the presence of fibulae type A.45, A.68 (Nowe

Dobra) and A.57⁶⁵ (or A.59 – see: Parsęcko). In the case of Lubieszewo, grave IV, according to J. Kostrzewski a belt hook type IIIb was found along objects from the Late Pre-Roman Period (fibula, hinged belt hook and spearhead), as well as Roman Period (bracelet, eight-shaped pendant) were found; coherence of this assemblage can be seen as arguable. Perhaps, as suggested by H. Jankuhn⁶⁶, due to its inhumation character grave 132 from Gdynia-Oksywie should be dated to the Roman Period. However, the inventory described by D. Bohnsack⁶⁷, with the second belt hook, made of iron, a crescent-shaped knife and bone spindle whorl, does not directly confirm this dating. It is also possible that in the group of latest-dated belt hooks (phase B2) we can also include the one from grave Aa8 in Grudziądz-Rządź, which used to be counted among stray finds from the cemetery⁶⁸; together with the belt hook identified as type IIIb, other finds include a shield-headed bracelet, knife and miniature vessel⁶⁹.

Type IIIc

In the newly distinguished type IIIc for tripartite belt hooks made of bronze, eight specimens can be included. In the classification by J. Kostrzewski, due to the state of research of the day, this type was described separately

⁶¹ See also: R. WOŁĄGIEWICZ 1981a, 136, pl. XX:14.15; TH. VÖLLING 1995, 156–159; E. BOKINIEC 2008, 33–34, 36, 39–41, 44.

⁶² E. BOKINIEC 2008, 19–20, 22, 36–37, 51; T. BOCHNAK 2014, 43–44.

⁶³ Chełmno, grave 91; Grudziądz-Rządź, grave 180 (?); Podwiesk, grave 66.

⁶⁴ Lubieszewo (Cat. no. 15), grave 26; Malbork-Wielbark, feature 53a.

⁶⁵ R. WOŁĄGIEWICZ 1968, 171, diagram 1; 1981a, pl. XXIII:3; 1993, fig. 1; M. MĄCZYŃSKA 2011, 23–30.

⁶⁶ H. JANKUHN 1933, 185.

⁶⁷ D. BOHNSACK 1938, 154, list 19, 22, 46, 52.

⁶⁸ S. ANGER 1890, 11, pl. 15:14.

⁶⁹ E. BOKINIEC 2008, 74.



Fig. 10. Bronze tripartite type IIIb belt hook from R ó ż y n y, feature 5 (1), and zoomorphic profiling of its hook (2; enlarged). Photo: J. Strobin.
Ryc. 10. Brązowa kłamra trójczłonowa typu IIIb z R ó ż y n y, ob. 5 (1) i zoomorficzne zdobienie haczyka (2; powiększone). Fot.: J. Strobin.

and interpreted as further stage in the development of type IIIb⁷⁰ belt hooks. In later years, these forms were described in literature as special versions related to type IIIb, and often referred to as belt hooks of the *Maciejewo* type, from the original site⁷¹. Most of the belt hooks of this type are preserved in very good condition⁷² (Fig. 12:1, 13, 14), since they come from inhumation burials⁷³; others are preserved in fragmentary form, partially disfigured in the pyre⁷⁴. The latter come from pit cremation graves⁷⁵ (Fig. 12:2) and urn cremation graves (Fig. 12:3). One distinguishable feature of type IIIc belt hooks is an open-work connector with decorative rivets. It is formed into a quadrilateral⁷⁶ (Fig. 12:3, 14) or hexagonal⁷⁷ shape (Fig. 12:1, 13). On its circuit there are four or six rivets, and another in the middle of the connector. From the

centre run diagonal arms⁷⁸ (Fig. 12:3, 13, 14), usually four or six, sometimes arched⁷⁹ (Fig. 12:1). Only in one case, from Podwiesk, grave 20 (Fig. 12:2), does the fitting form a frame closed only from the side of the arms with the remaining circuit closed by arched arms. The decorative character of the connector is stressed by additional elements on the frame and arms of some of the specimens, which take the form of pseudo-pearling or stamped points⁸⁰ (Fig. 12:3, 13, 14). In type IIIc, the longer arm is usually narrowed towards the hook⁸¹ and is ribbed: a rib runs through the centre and the edges are raised. Even more distinct is another feature, not very vivid in other types, consisting of noticeably thinner and unfolded edges⁸². In better preserved specimens, from the bottom side of the belt hook, usually on the level of the central rib, grooves are visible⁸³, which are traces of shaping of this element of the belt hook (Fig. 13). On the outer surface, remains of the *tremolo* ornament running along the

⁷⁰ J. KOSTRZEWSKI 1919, 60–61, fig. 47.

⁷¹ See also: D. BOHNSACK 1938, 32–33; R. WOŁĄGIEWICZ 1995, 34.

⁷² Lubowidz (currently preserved only fragmentary); Pelplin-Maciejewo; Wolny Dwór (two items).

⁷³ The state of preservation of the belt hooks from Pelplin-Maciejewo indicates that they most probably comes from an inhumation grave, and not, as some previous sources claimed (see: Catalogue), from an urn cremation grave.

⁷⁴ Czarnówko; Podwiesk, grave 20; Pruszcz Gdański 10, grave 112.

⁷⁵ Czarnówko; Podwiesk, grave 20.

⁷⁶ Czarnówko; Gdynia-Oksywie, grave 72; Pruszcz Gdański 10, grave 112; Wolny Dwór, graves 1 and 2.

⁷⁷ Lubowidz; Pelplin-Maciejewo.

⁷⁸ Czarnówko; Gdynia-Oksywie, grave 72; Pelplin-Maciejewo; Pruszcz Gdański 10, grave 112; Wolny Dwór, grave 1.

⁷⁹ Lubowidz; Wolny Dwór, grave 2.

⁸⁰ Pelplin-Maciejewo; Pruszcz Gdański 10, grave 112; Wolny Dwór, grave 1.

⁸¹ This feature is not clearly visible in the poorly preserved specimens from Podwiesk, grave 20, and Pruszcz Gdański 10, grave 112.

⁸² Czarnówko; Lubowidz; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2.

⁸³ Lubowidz; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2.

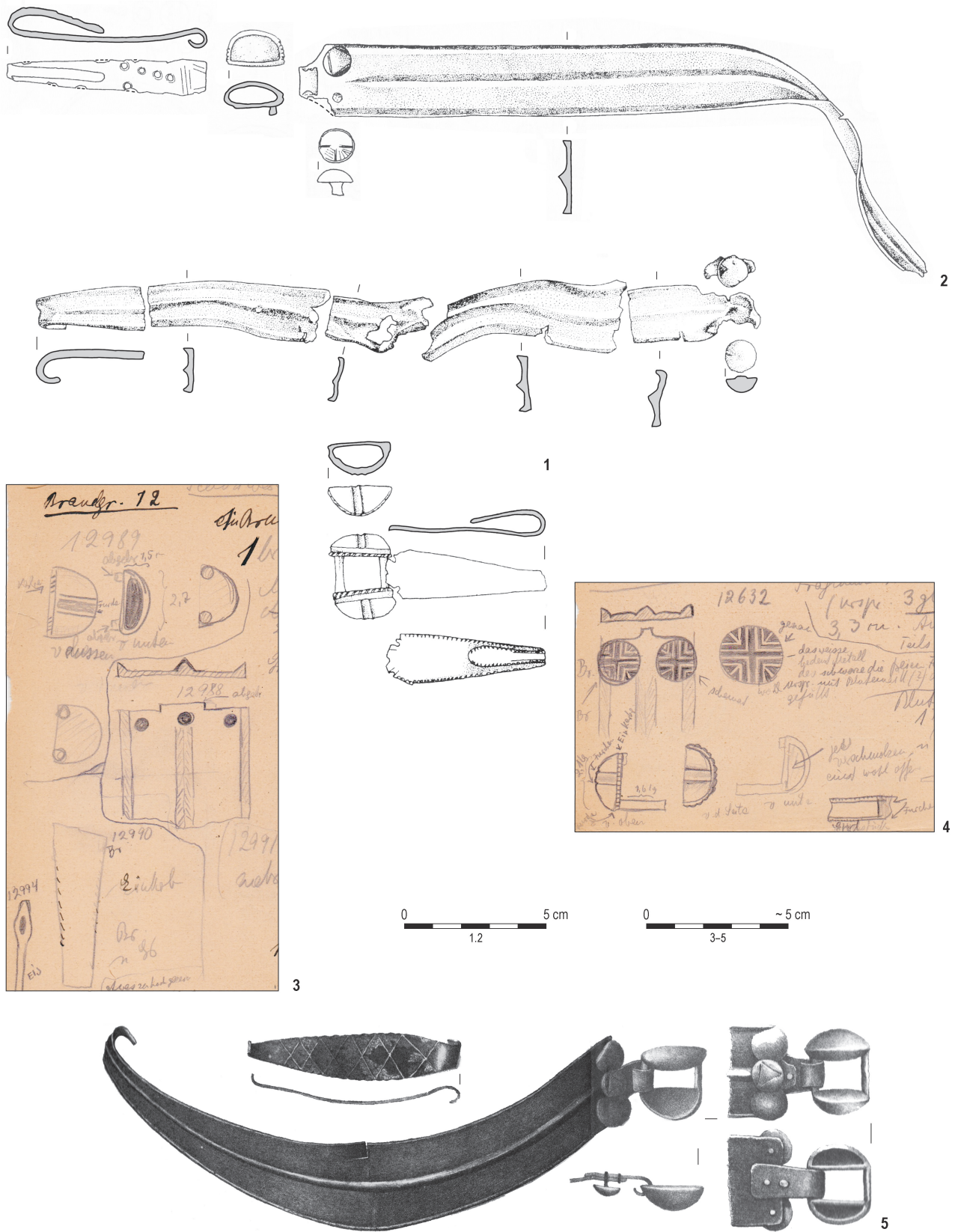


Fig. 11. Bronze tripartite type IIIb belt hooks. 1 – Pruszcz Gdański 10, grave 2; 2 – Pruszcz Gdański 10, grave 126; 3 – Skowarcz, grave 12/1908; 4 – Skowarcz, stray find 2; 5 – Tczew, grave. After: M. PIETRZAK 1997 (1, 2), J. KOSTRZEWSKI, Archive (3, 4), G. OSSOWSKI 1879 (5).

Ryc. 11. Brązowe klamry trójczłonowe typu IIIb. 1 – Pruszcz Gdański, stan. 10, grób 2; 2 – Pruszcz Gdański, stan. 10, grób 126; 3 – Skowarcz, grób 12/1908; 4 – Skowarcz, znal. luźne 2; 5 – Tczew, z grobu. Wg: M. PIETRZAK 1997 (1, 2), J. KOSTRZEWSKI, Archiwum (3, 4), G. OSSOWSKI 1879 (5).

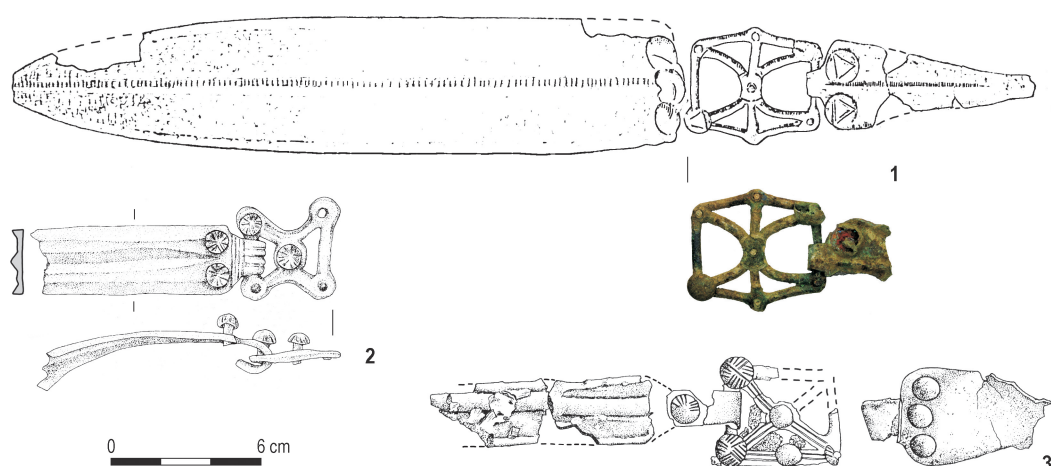


Fig. 12. Bronze tripartite type IIIc belt hooks. 1 – Lubowidz, grave 280; 2 – Podwiesk, grave 20; 3 – Pruszcz Gdański 10, grave 112. After: R. WOŁĄGIEWICZ 1995 and photo by A. Ryś (1), E. BOKINIEC 2005 (2), M. PIETRZAK 1997 (3). Photo: A. Ryś (1).

Ryc. 12. Brązowe klamry trójczłonowe typu IIIc. 1 – Lubowidz, grób 280; 2 – Podwiesk, grób 20; 3 – Pruszcz Gdański, stan. 10, grób 112. Wg: R. WOŁĄGIEWICZ 1995 (1), E. BOKINIEC 2005 (2), M. PIETRZAK 1997 (3). Fot.: A. Ryś (1).

protuberant elements can be traced⁸⁴ (Fig. 12:2, 13, 14). From the connector-end of the arm, there are rivets, in most cases three⁸⁵ or exceptionally two (Fig. 12:2). Past the rivets, the arm transforms into a catch with traces of ornament⁸⁶. Another feature which distinguishes IIIc belt hooks from other types is the shape of the shorter arm. In two cases⁸⁷, it takes the form of a tape (Fig. 12:3), and when it comes to the belt hook from grave 72 from Gdynia-Oksywie, the long and outward-bent hook was grooved at the end⁸⁸. In the remaining belt hooks, it has been noted that the arm comes in the shape of a triangle and, similarly to the longer one, is ribbed⁸⁹ (Fig. 12:1, 13, 14). Interestingly, whenever the outward-bent hook is preserved, it takes the form of the letter T (Fig. 13, 14). Visibly displayed hook in all three analysed cases⁹⁰ is also richly decorated with stamped coaxial circles, engraved lines or notches. From the catch side, on the preserved short arms there were two to three rivets⁹¹. On the catch, apart from raised and notched edges, additional orna-

ment can be located, e.g. an angle⁹² (Fig. 13). Frequently occurring rivets also deserve special attention when it comes to this type. Their diameter ranges from 1.2 to 1.4 cm, but also in this case smaller ones can be found, even 0.5 cm (Czarnówko). The rivet heads bear a triangle pattern that can be traced⁹³ (Fig. 12:1, 13), as well as a star pattern⁹⁴ (Fig. 12:2) and hatched triangle fields⁹⁵ (Fig. 12:3, 14). Most often, within one specimen, particular elements of the ornament correspond. Exceptional in this regard is the belt hook from Pruszcz Gdański 10, grave 112 (Fig. 12:3), where no ornament on the short arm rivets or fitting is visible, but here the non-ornamental rivets are considerably smaller. In this case, it cannot be excluded that the preservation state is a decisive factor, as the hook was exposed to fire and disfigured. An interesting case of a re-marked rivet is the belt hook from Pelplin-Maciejewo, where on one of the triangle-ornamented heads an additional cross is engraved (Fig. 13). There is one more feature that distinguishes type IIIc from the rest⁹⁶. Decorative rivets have shorter shafts which do not protrude outside of the line of the arms and the connector, and the round head directly touches the surface⁹⁷. Naturally, there are exceptions to this rule, including the belt hook from Podwiesk, grave 20, dated

⁸⁴ Czarnówko; Lubowidz; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2.

⁸⁵ Czarnówko (originally three); Gdynia-Oksywie, grave 72; Lubowidz; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2.

⁸⁶ Engraved lines: Czarnówko; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2 (raised edges of the catch, in the case of grave 1, grooved); Podwiesk, grave 20 (elongated profiling).

⁸⁷ Gdynia-Oksywie, grave 72; Pruszcz Gdański 10, grave 112.

⁸⁸ D. BOHNSACK 1938, 32–33.

⁸⁹ Lubowidz; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2. A similar short arm form was identified in the belt hooks from Podwiesk, grave 119 (type IIIa), but the hook is bent to the inside.

⁹⁰ Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2.

⁹¹ One (Gdynia-Oksywie, grave 72) or three rivets (Pruszcz Gdański 10, grave 112), usually two (Lubowidz; Pelplin-Maciejewo; Wolny Dwór, graves 1 and 2).

⁹² Pelplin-Maciejewo. J. KOSTRZEWSKI (1919, fig. 47) sketched the triangle incorrectly.

⁹³ Lubowidz; Pelplin-Maciejewo; Wolny Dwór, grave 2.

⁹⁴ Czarnówko; Podwiesk, grave 20.

⁹⁵ Pruszcz Gdański 10, grave 112; Wolny Dwór, grave 1.

⁹⁶ Rivets adjacent to the arm's edge: Brzyno, feature 301 (type IIIb); Podole Małe (type IIIb: high, cone-shaped rivet head).

⁹⁷ Czarnówko; Lubowidz; Pelplin-Maciejewo; Pruszcz 10, grave 112 (here smaller rivets on the connector are clearly exposed); Wolny Dwór, graves 1 and 2.

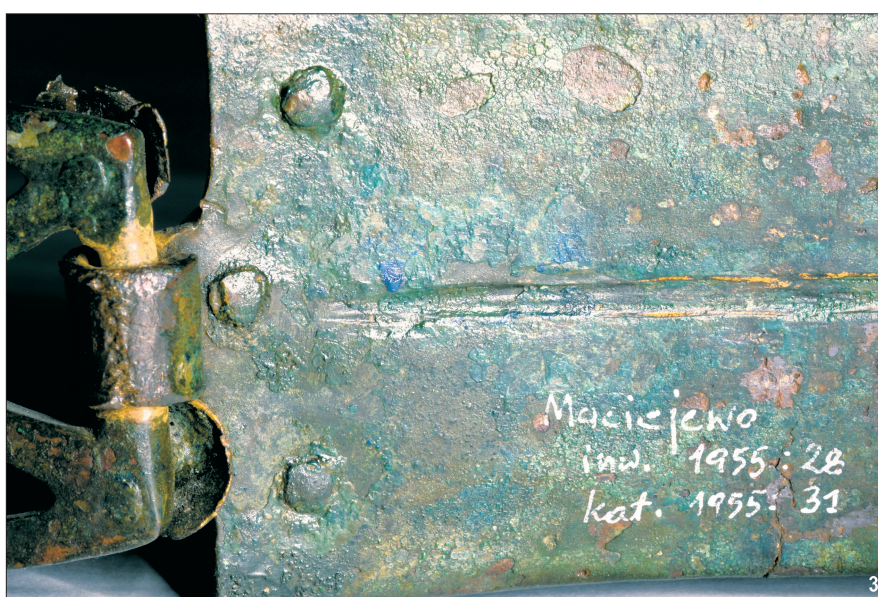


Fig. 13. Bronze tripartite type IIIc belt hook from Pelpin-Maciejewo, grave (1), its open work riveted connector (2; enlarged), and arm with traces of forming (3; enlarged). Photo: J. Strobin.

Ryc. 13. Brązowa kłamra trójczłonowa typu IIIc z Pelpina-Maciejewa, grób (1) i zbliżenia jej ażurowego łącznika z nitami (2) oraz śladów po formowaniu ramienia kłamry (3). Fot.: J. Strobin.

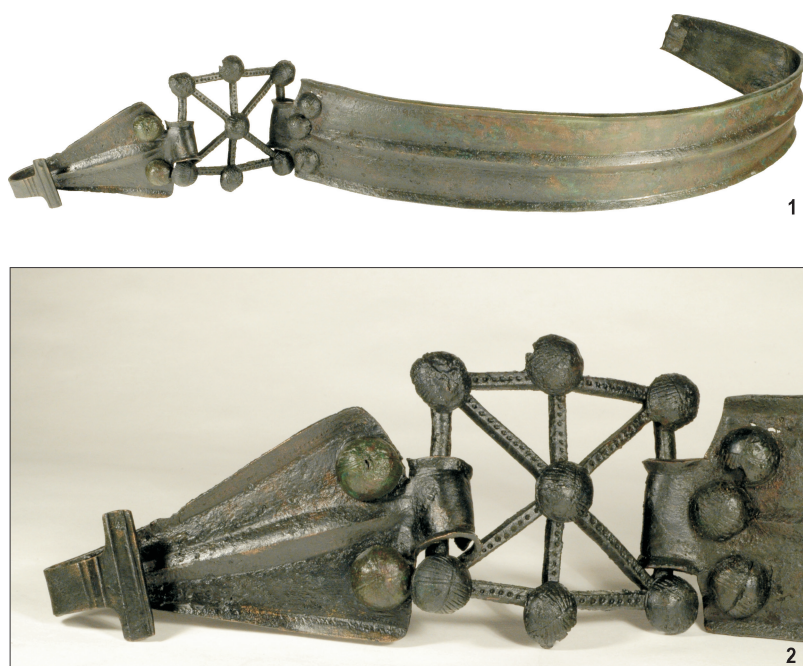


Fig. 14. Bronze tripartite type IIIc belt hook from Wolny Dwór, grave 1 (1), and its open work riveted connector with short arm (2; enlarged). Photo: J. Strobin.

Ryc. 14. Brązowa klamra trójczłonowa typu IIIc z Wolnego Dworu, grób 1 (1) oraz zbliżenie jej ażurowego łącznika z nitami i krótkiego ramienia (2). Fot.: J. Strobin.

to phase A3. Consequently, it seems that this feature concerns only specimens in use during the Roman Period.

Due to the good state of preservation, the considerable size of type IIIc belt hooks from inhumation graves can be fully appreciated. This concerns not only the length of the whole belt hook, but also the width of individual arms, which even reaches up to 5.5 cm⁹⁸. The total length of complete specimens ranges from 39 cm to 42 cm, but the size of the connector varies; the smallest one comes from Czarnówko (3.7×3.1 cm) and the largest from Wolny Dwór, grave 1 (7×7 cm).

Type IIIc belt hooks should be dated from phase A3 of the Late Pre-Roman Period to phase B2 of the Roman Period. Only belt hooks from two sites can be dated to the former: Podwiesiek, grave 20, and Gdynia-Oksywie, grave 72. In the first, a type M-a brooch was found, which suggests that the accompanying belt hook should be dated to phase A3⁹⁹. The second one supposedly contained a spear butt and miniature clay vessel with a lid. Most of spear butts known from the Oksywie Culture come from phase A2, less commonly such fittings are found with phase A3 markers¹⁰⁰. Dating of bi-conical vessels is analogical¹⁰¹. It seems that the popularity of belt hooks with open-work connector was the highest in the Early Roman Period. This is confirmed by grave assemblages dated to phase B1 in which eye-fibulae type A.46 and A.50–52 as well as strongly profiled fibulae type A.71

and A.73¹⁰² were found¹⁰³. At the latest, type IIIc belt hooks were in use in phase B2, which is confirmed by grave 69 from Czarnówko, where fibulae type A.38–39 and A.110 were found¹⁰⁴. Distribution range of these belt hooks, contrary to other types, is smaller (Map 2). It is limited to Chełmno Land, the proglacial stream valleys of Reda and Łeba Rivers, and most of all in the region of the Vistula estuary.

Special form

At the beginning of the 20th century, two belt hooks were considered to be special forms: one from Pelplin-Maciejewo (Fig. 13) and one from Grudziądz-Rządź, grave D5 (Fig. 15). When it comes to the first one, the number of corresponding forms has increased significantly, which led to their separate description and categorisation as type IIIc. The case of the belt-hook from Grudziądz-Rządź is very different. Despite the increase in available source materials, the shape of the connector is still considered an isolated case. The belt hook was fragmented and disfigured in fire. The unique connector consisted of two C-shaped rods placed oppositely and connected by a frame. On the preserved end of the connector was a conical head decorated with radiantly arranged lines. By the catch of the longer arm, two rivets were placed, decorated analogically. The longer arm also included

⁹⁸ The narrowest belt hook arm – only 2.5 cm – was noted in a specimen from Gdynia-Oksywie (see D. BOHNSACK 1938, 33).

⁹⁹ Th. VÖLLING 1995, 193–194; E. BOKINIEC 2008, 46–47, table 10.

¹⁰⁰ M.D. & R. WOŁĄGIEWICZ 1964, 32; P. ŁUCZKIEWICZ 2006, 145–146; E. BOKINIEC 2008, 123.

¹⁰¹ A. STROBIN 2011, 41, list 49.

¹⁰² R. WOŁĄGIEWICZ 1968, 171, diagram 1; 1981a, pl. XXIII:1.2.4.5; 1993, fig. 1; T. SKORUPKA 2001, 134; M. MĄCZYŃSKA 2011, 23–24.

¹⁰³ Lubowidz; Pruszcz Gdański 10, grave 112; Wolny Dwór, graves 1 and 2.

¹⁰⁴ R. WOŁĄGIEWICZ 1968, 171, diagram 1; 1981a, pl. XXIII:19.27–29; T. SKORUPKA 2001, 133–134, 137; A. CIEŚLIŃSKI 2010, 53–54, 58; M. MĄCZYŃSKA 2011, 33–35, 43–44.



Fig. 15. Bronze tripartite belt hook of special form from Grudziądz-Rządza, grave D5. After: J. KOSTRZEWSKI, Archive.
Ryc. 15. Brązowa klamra trójczłonowa z Grudziądz-Rządza, grób D5 – forma specjalna. Wg: J. KOSTRZEWSKI, Archiwum.

a central rib and raised edges, while the shorter one was most probably tape-shaped. The estimated length of the belt hook according to the Archive was 24 cm, and according to E. Bokinić – ca. 30 cm¹⁰⁵. Bokinić¹⁰⁶ identifies the belt hook as a type IIIId bronze tripartite belt hook and, although it was accompanied only by a spindle whorl, she dates it possibly to phase A3. Due to the lack of clear analogies to other forms of tripartite belt hooks, I suggest categorising this example as a special form of type III.

BRONZE TRIPARTITE BELT HOOKS OUTSIDE OF POMERANIA

Altogether, outside of Pomerania, bronze tripartite belt hooks were discovered on 17 sites¹⁰⁷ (Catalogue no. 31–48; Map 1). They sporadically appear in the context of the Przeworsk Culture (Kujawy – find from the area of Żnin), and equally seldom in the Gubin Group of the

Jastorf Culture¹⁰⁸. Their appearance is much better confirmed in the area of the Jastorf Culture to the east from the Oder River, in two connectors: along the Havel River and between the Elbe and Saale Rivers; the former centre is much richer¹⁰⁹. Belt hooks discovered there belong most often to type IIIb, and form IIIa is much less common (Map 2) and limited to two finds in Saxony-Anhalt (Wittenberg) and Saxony (Dommitzsch). The specimen from Wittenberg (Fig. 16:1) in terms of rich ornament of the longer arm with geometrical patterns in *tremolo* is very similar to the belt hook from Dobropole Gryfińskie (Fig. 2:1), the site identified as the Oder Group of the Jastorf Culture. What draws attention is the presence of only one short and bulky rivet by the catch.

Among some of the type IIIb belt hooks coming from the area of present-day Germany one can observe the appearance of a larger number of ribs on the longer arm¹¹⁰, which may suggest a continuation of traditions connected with West Germanic unipartite belt hooks¹¹¹. Sporadically, sphere segments made of bronze are connected by iron shafts (Börnicken). Another feature worth noting concerns the longer arm and consists of additional ornament in the form of zigzag or rhomboids in *tremolo*, located between protuberant elements¹¹² (Fig. 16:2). Such placement is not common among belt hooks from Pomerania, with the exception of the aforementioned type IIIa belt hook from Dobropole Gryfińskie (Fig. 2:1) and IIIb from Podole Małe (Fig. 9), where angle-shaped ornament is applied by the rivets¹¹³. There are two or three rivets in the belt hook arm, however in some cases, there is only one rivet (type IIIa from Wittenberg; Fig. 16:1). Their decorative elements are analogical¹¹⁴ (Fig. 16:3.4) to the ones from the area east of the Oder River, although there are also cases with no ornament on the head¹¹⁵; much less popular is the triangle-shaped pattern that is so common in Pomerania. However, it should be stressed that shafts are most often bulky and profiled¹¹⁶. Yet another notable aspect is the catch, which in some cases is attached to the arm with a central rivet¹¹⁷ (Fig. 16:2.3). There are no direct traces of destruction, which suggests that this is

¹⁰⁸ Jazów; Guben.

¹⁰⁹ J. KOSTRZEWSKI 1919, 59–60; H. SEYER 1982, 73; R. MÜLLER 1985, 89; A. REINECKE 1988, 79, map 20.

¹¹⁰ Jütchendorf; Leest; Brandenburg, unknown site (see also: J. KOSTRZEWSKI 1919, 59 f.n. 9).

¹¹¹ See also: J. KOSTRZEWSKI 1919, 59–60.

¹¹² Börnicke; Löwenbruch; Bochow; Hohenwutzen (see also: J. KOSTRZEWSKI 1919, 59 f.n. 2 and 3).

¹¹³ *Tremolo* ornament appears also on the short arm of type IIIb belt hook from Podwiesek, grave 319 (Fig. 7:8).

¹¹⁴ Star pattern (Börnicken), relief grid (Uetz).

¹¹⁵ Börnicke; Hohenwutzen; Brandenburg, unknown site; Gräfenhainichen.

¹¹⁶ I.e. Börnicke; Uetz; Brandenburg, unknown site.

¹¹⁷ Hasso; Hohenwutzen; Uetz; Brandenburg, unknown site.

¹⁰⁵ E. BOKINIĆ 2008, 336.

¹⁰⁶ E. BOKINIĆ 2008, 74, 336, list 16 no. 5.

¹⁰⁷ The state of research from the 1980s is included.

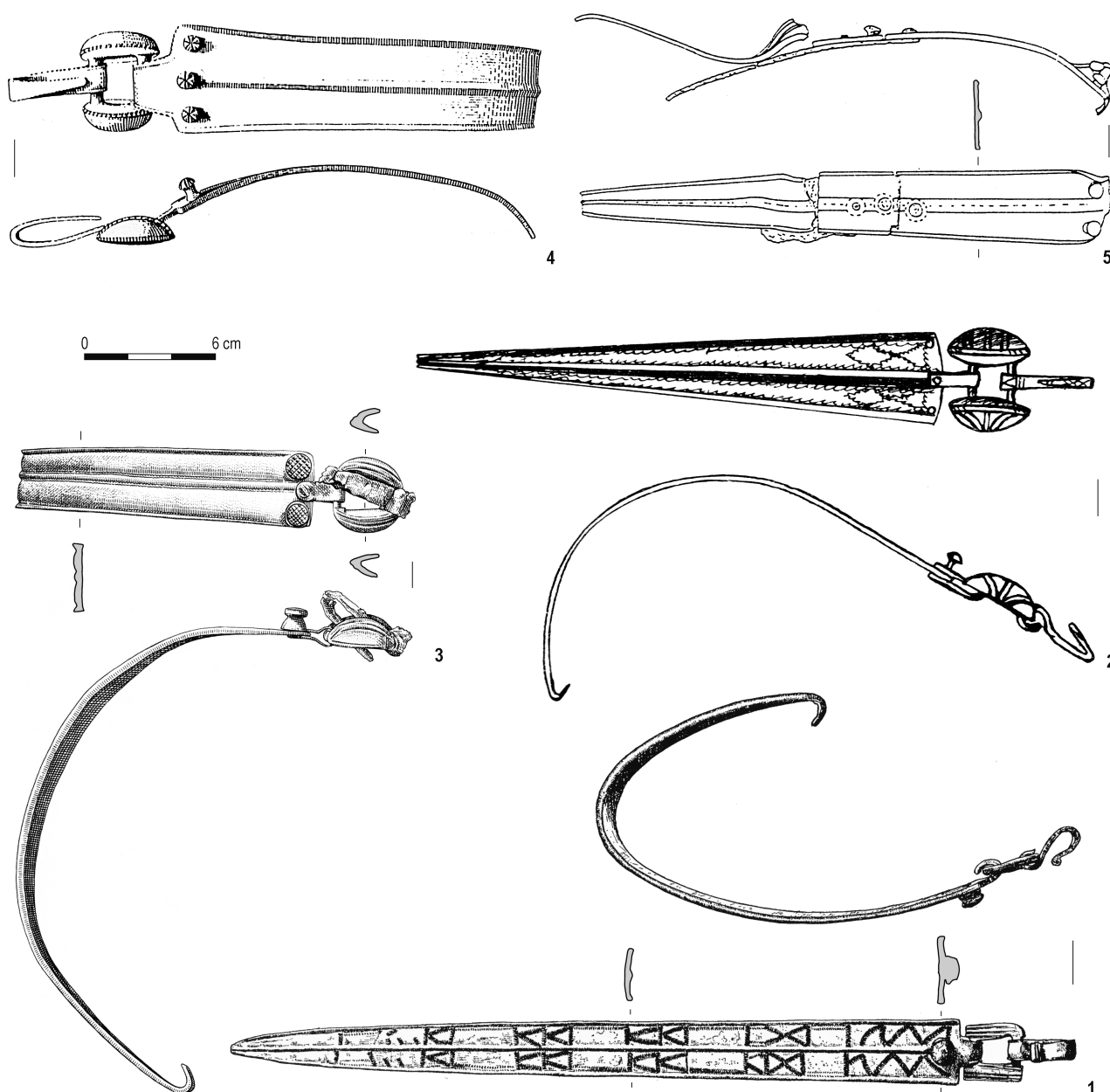


Fig. 16. Bronze tripartite belt hooks from present-day Germany. Type IIIa (1), type IIIb (2–4), type III (5). 1 – Wittenberg, grave; 2 – Hohenwutzen, stray find; 3 – Uetz, grave 101; 4 – Börnicke, stray find; 5 – Gräfenhainichen, grave 68.

After: R. MÜLLER 1985 (1), J. KOSTRZEWSKI 1919 (2), H. SEYER 1982 (3), E. REINBACHER 1963 (4), G. & S. GUSTAVS 1976 (5).

Ryc. 16. Brązowe klamry trójczłonowe z terenów dzisiejszych Niemiec. Typ IIIa (1), typ IIIb (2–4), typ III (5). 1 – Wittenberg, grób; 2 – Hohenwutzen, znal. luźne; 3 – Uetz, grób 101; 4 – Börnicke, znal. luźne; 5 – Gräfenhainichen, grób 68.

Wg: R. MÜLLER 1985 (1), J. KOSTRZEWSKI 1919 (2), H. SEYER 1982 (3), E. REINBACHER 1963 (4), G. I S. GUSTAVS 1976 (5).

a unique feature of the western regions. Summing up, it can be argued that some of the belt hooks from Brandenburg reveal features that distinguish them from specimens discovered in the areas of the Oksywie Culture and the Oder Group of the Jastorf Culture. Consequently, it can be argued that not all type IIIb belt hooks from the area of present-day Germany are imports, but they may be imitations of more impressive belt hooks from the region of the southern Baltic coastland.

Setting the timeframe for tripartite type IIIb belt hooks in the Przeworsk Culture and Gubin Group of the Jastorf Culture causes difficulties due to the character of the finds. In both cases, belt hooks come from stray finds, and the only piece of information on site 3/1881 from Guben is that the accompanying element of the inventory was a “small” brooch¹¹⁸. Most probably, however, taking

¹¹⁸ G. DOMAŃSKI 1975, 25, 130 no. 31, pl. XXXV:b.

Fig. 17. Fragments of a bronze tripartite type III belt hook from Pruszcz Gdański 7, grave 103, with arm perforations.

Photo: J. Strobin.

Ryc. 17. Fragmenty brązowej klamry trójczłonowej typu III z Pruszcza Gdańskiego, stan. 7, grób 103, z otworami w ramionach.

Fot.: J. Strobin.



into account finds from the Oksywie Culture, their appearance with reference to the Gubin Group should not be later than phase A2. In the case of the Przeworsk Culture, due to its strong connections with the Oksywie Culture, the timeframe can include the middle and late phase of the Late Pre-Roman Period. Type IIIa and IIIb belt hooks from the region of Havel River and the area between Elbe and Saale Rivers are dated, based on type K and G¹¹⁹ brooches, to phase IIb2 (IIb) of the Jastorf Culture, which coincides with phase A2 for the Oksywie and Przeworsk Cultures¹²⁰. However, it should be noted that in the case of type IIIa belt hooks, their appearance can be earlier and include phase IIa of the Jastorf Culture, which is suggested by the already mentioned finds from Kunowo, as well as Podwiesk, grave 119, dated to the late stage of phase of A1 at the earliest.

ANCIENT REPAIRS AND SECONDARY MANIPULATION

Among the metal finds from the Late Pre-Roman Period and Roman Period, one can observe traces of repairs and reinforcement aimed at maintaining and prolonging the effective use or aesthetic value of an object, or simply to provide additional protection against wearing out. It is noticeable that not all improvements were introduced with the necessary skill, which means that they were performed not only by experienced craftsmen, but also less competent amateurs. It must be noted that capturing these attempts causes serious difficulties due to cremation burial rite and ritual destruction, as well as the ritual destruction of funerary offerings and the property

of the deceased. Ancient repairs concern various categories of artefacts: elements of attire, weaponry and tools¹²¹.

On a few tripartite belt hooks made of bronze, remains of secondary manipulation were noted. J. Kostrzewski argued that the introduction of a rectangular, frame-shaped connector offered more increased arm stabilisation than in tripartite specimens, but made of iron, where the connector was circular in shape (types I and II)¹²². In spite of this, the considerable size and weight of this type of belt fastening, as well as its multipartite construction and daily use contributed to its rapid deterioration. Most susceptible to damage was the longer arm together with the catch. A very clear repair attempt was noted in grave 24/1908 from Nowe Dobra (Fig. 8). It consisted in supporting the broken area with an iron plate fixed from below by four rivets¹²³. Traces of similar work are visible on the belt hook fragments from Czarnówko¹²⁴ and Lubieszewo (Cat. no. 14), grave 88¹²⁵; in both cases, an iron plate was fixed with iron rivets. Another example comes from a cemetery of the Jastorf Culture in Gräfenhainichen¹²⁶ (Fig. 16:5); here, the arm was broken in two places, and the repair consisted in adding a long iron tape from below, and attaching it with three rivets along the middle rib. Another form of secondary manipulation can be seen on fragments of the belt hook from Pruszcz Gdański 7, grave 103 (Fig. 17), where on both preserved fragments of the long arm there are traces of drilled holes, perhaps indicating an attempt to

¹²¹ See also: A. KARPİŃSKA 1922; T. DĄBROWSKA 2004; K. CZARNECKA, B. KONTNY 2009; T. BOCHNAK, P. HARASIM 2015.

¹²² J. KOSTRZEWSKI 1919, 57.

¹²³ J. KOSTRZEWSKI, Archive, file 13, card 302; 1919, 61 f.n. 1, list 29.

¹²⁴ Only a fragment of arm remained (stray finds from 1973), which makes it impossible to determine whether the specimen was uni- or tripartite (collection of Archaeological Museum in Gdańsk, inv. MAG/OWR/1973:53/156).

¹²⁵ R. WOŁĄGIEWICZ 1997, pl. XI/88 (collection of the National Museum in Szczecin, inv. MNS/A/6957).

¹²⁶ G. & S. GUSTAVS 1976, 78, 115, fig. 17/68:1.

¹¹⁹ J. KOSTRZEWSKI 1919, list 29; G. & S. GUSTAVS 1976, 78, 115, fig. 17/68:1; H. SEYER 1982, table 18:1.

¹²⁰ R. HACHMANN 1957, 41; H. SEYER 1982, table 25; A. REINECKE 1988, 79.

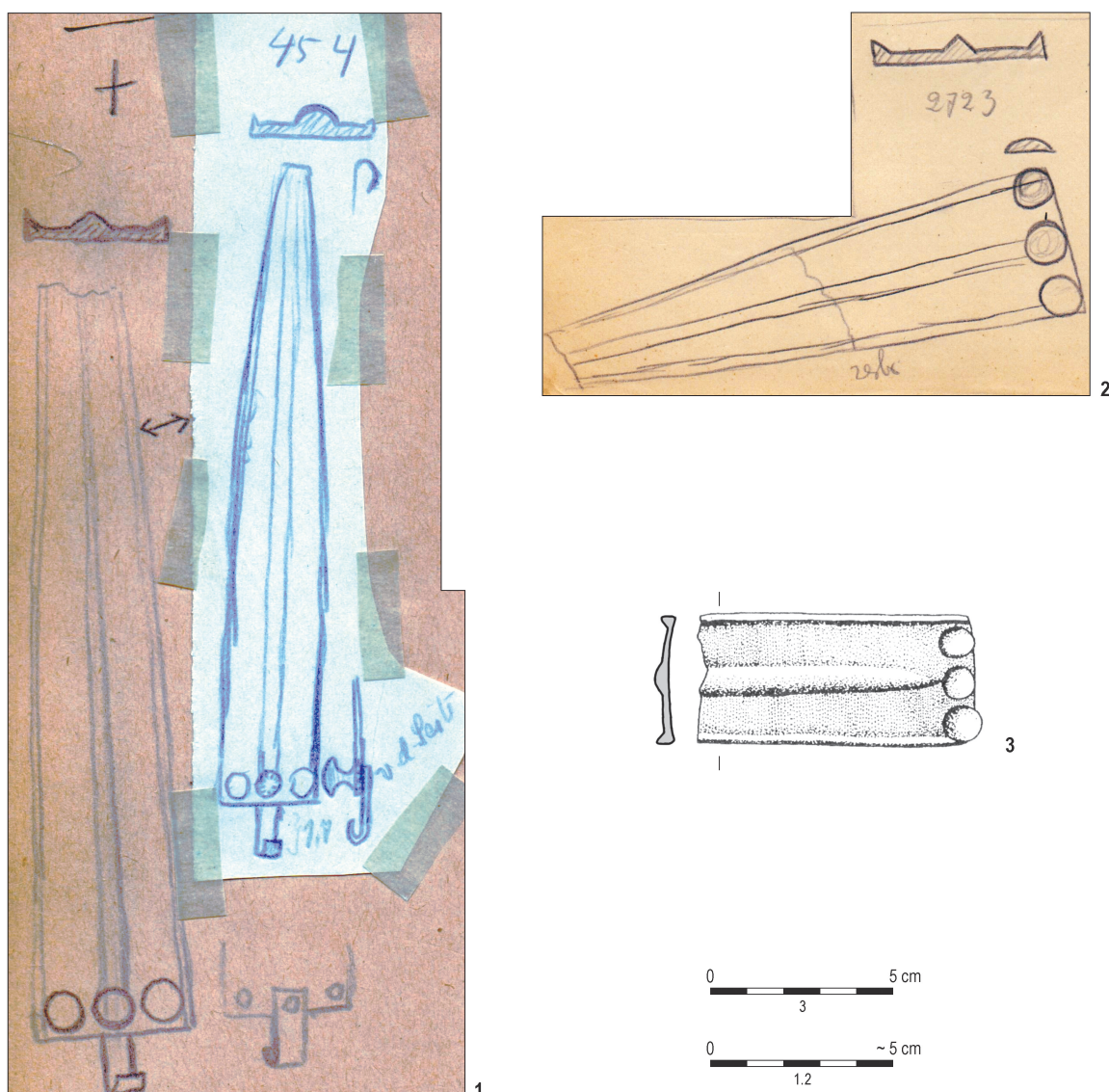


Fig. 18. Selected bronze tripartite type III belt hooks with riveted hook. 1 – Grudziądz - Rządź, grave D4; 2 – Chełmno, stray find; 3 – Pruszcz Gdański 10, grave 459. After: J. KOSTRZEWSKI, Archive (1, 2), M. PIETRZAK (3).

Ryc. 18. Przykłady brązowych klamer trójczłonowych typu III z osobno montowanym zaczepem. 1 – Grudziądz - Rządź, grób D4; 2 – Chełmno, znal. luźne; 3 – Pruszcz Gdański, stan. 10, grób 459. Wg: J. KOSTRZEWSKI, Archiwum (1, 2), M. PIETRZAK (3).

connect the broken parts into one belt hook arm. In this case, the lack of an iron plate, which would suggest that the repair was permanent, is noticeable¹²⁷. Manipulation most probably connected with supporting the structure of the catch can be seen on the belt hook from Pruszcz Gdański 7, grave 298. The long arm crowned with two rivets transitions into the catch (now only fragmentary,

¹²⁷ An interesting modern procedure of reinforcing the longer arm was employed in the case of a belt hook from Pelplin-Maciejewo (Fig. 13). Before WWII, the then conservator propped the cracked arm which is preserved till today in the collection of the Archaeological Museum in Gdańsk. From the inside, attached along the arm by four rivets, are two brass stripes. This intervention is not visible en face, and it surely prevented the artefact from further damage.

originally bent to the inside); on the catch there is a hole with a shaft protruding from it.

Another example concerns the repair of a catch connecting the long arm with the connector, which is visible on the belt hook from Tczew¹²⁸ (Fig. 11:5). Visual documentation (drawings)¹²⁹ suggests that the clip was largely broken off. In order to replace it, a rectangular tape was applied from below, connected to the arm with the middle rivet and an additional supporting shaft, at the

¹²⁸ G. OSSOWSKI 1879, 58–59, table XLIII:1.2; J. KOSTRZEWSKI, Archive, file 13, cards 555 and 556; 1919, 59 f.n. 4, 7, 8, list 29; A. KARPIŃSKA 1922, 31–32, fig. 11.

¹²⁹ G. OSSOWSKI 1879, pl. XLIII:1.2; J. KOSTRZEWSKI, Archive, portfolio 13, cards 555 and 556; A. KARPIŃSKA 1922, fig. 11.

same time connecting the preserved part of the original clip. What draws attention is the size of the rivet, as it is smaller than the others and is the only one decorated; presumably, it was added during the repair.

Similar attempts to re-connect the catch from below with the use of the central rivet can be observed on a few other belt hooks¹³⁰ (Fig. 18), but these examples do not necessarily have to suggest repairs. It seems that they can also present another – more permanent – way of shaping the catch, which was employed by the Jastorf Culture societies inhabiting the region west of the Oder, most of all present-day Brandenburg¹³¹ (see: Fig. 16:2.3). In these cases, the folded narrow tape strapping the connector shaft created a catch fixed to the arm from the outside and from below with the middle rivet.

In some cases, secondary manipulation performed by craftsmen also involved smaller parts which did not cause significant damage to the object, and did not prevent its further use. Traces of such changes were observed on the belt hook connector from Pruszcz Gdański 10, grave 112¹³². The attached rivets vary in size (Fig. 12:3); larger ones are decorated, while smaller ones bear no trace of ornament; presumably, would have been added later.

CHEMICAL COMPOSITION ANALYSIS OF BRONZE TRIPARTITE BELT HOOKS

The aim of metallurgical analyses was to determine the uniformity or diversity of the alloy used in production, and to confirm assumptions as to the applied technological procedures. Among tripartite belt hooks made of bronze, the analysis concerns only two sites: Podwiesk¹³³ (nine specimens) and recently, Brzyno¹³⁴ (two specimens) (Table 1). Samples were taken from the longer as well as the shorter arm, the connector and, in some cases, rivets. The analysis of belt hooks from Brzyno was connector with a portable spectrometer XRF ARTAX, while artefacts from Podwiesk were analysed with the EDS Spectrometer by EDAX¹³⁵. On the basis of the results from Brzyno, it can be assumed that the belt hooks were produced from bronze – two-component alloys of copper and tin. In dif-

ferent parts of the belt hooks, the alloy composition is analogical. The copper content ranges from 88% to 92%, and tin from 6% to 10%. The proportions of other alloy components barely exceed 1%. Lead constitutes merely 0.45–1.28% and zinc 0.75–0.8% of the total alloy content.

The only element which is unique in terms of composition is the short arm of the belt hook from Brzyno, feature 301, made from an alloy with 95.33% of copper and 2.51% of tin. Such composition differs from the other elements of this belt hook (Cu 88–90%, Sn 7.03–9.39%), and in its physical properties it resembles copper. The short arm carries on its surface multiple traces of hammer strikes and was most probably forged separately, from a bar folded on one end to form the catch and on the other end shaped as a long hook. Due to the thickness of this short arm, reaching up to 3 mm, although made of relatively flexible material, it did not deform as a result of use of the belt hook. Other parts of this belt hook, as well as elements of the belt hook from feature 261, are bulky, strongly profiled and have been cast. Traces of this technique are reflected in the rough surface of the hemispherical parts of the connector underside, typical of clay formation.

The last element that reveals certain technological features of belt hook production, in this case from Brzyno, feature 261, is a decorative rivet attached to the end of the long arm. The elemental composition of this element (Cu 88.43%, Sn 8.72%) is similar to other, larger parts. Therefore, it can be safely assumed that it has been cast from the same material which, apart from excellent casting properties, is also relatively plastic. Two-component copper alloys, with share of tin up to 10% and with no significant share of lead or zinc, are a good combination for casting smaller forms as well as larger objects. Their advantage also lies in being plastic, making them good for forging and stretching¹³⁶.

Two-component bronze alloys with a small share of tin were commonly used starting from the Bronze Age, through the Hallstatt Period, up to the Pre-Roman Iron Age. The latter can be characterised by the rising share of tin, up to 10%, and the low lead content indicates that the raw material originally comes from the Bohemian Basin, more specifically from the Ore Mountains where the extraction of tin was common¹³⁷. Imports to the region of Pomerania arrived through centres of distribution and exchange in Kujawy or, from the West, along the Oder. It is much more difficult to determine the form of the material, which could be acquired separately as copper and tin, or as a ready alloy. In the Late Pre-Roman Period, in spite of very dynamic cultural changes in the Polish lands, low-tin bronze alloys (Sn 4.6–8.5%) were based on

¹³⁰ Chełmno, stray find 1 (Fig. 18:2) and Grudziądz-Rządź, grave D4 (Fig. 18:1) – see: J. KOSTRZEWSKI 1919, 59 f.n. 7. Another find that can be presumably included in this group is a belt hook fragment from Pruszcz Gdański 10, grave 459 (Fig. 18:3) – the wider end of the arm is cut straight, and traces of the catch are now indistinct.

¹³¹ Hasso; Hohenwutzen; Uetz; Brandenburg, unknown site.

¹³² M. PIETRZAK 1997, 24, pl. XXXVI/112.

¹³³ E. BOKINIEC 2005, 161–164.

¹³⁴ J. STROBIN 2019.

¹³⁵ Chemical content analysis of finds from Podwiesk and Brzyno was executed in Bio- and Archeometric Laboratory of the Polish Academy of Sciences in Warsaw by Elżbieta Pawlicka and Paweł Gan, supervised by Eng. Zdzisław Hensel PhD.

¹³⁶ L.A. DOBRZAŃSKI 2008, 120–121.

¹³⁷ A. NIEWĘGŁOWSKI, Z. HENSEL 1997, 97.

Alpine copper and distributed from the South of Kujawy, and further to the region of Gdańsk Pomerania, as well as to Western Pomerania and Mazovia¹³⁸.

Quite different and more diverse forms of raw materials were employed in the production of ribbed tripartite belt hooks from the cemetery in Podwiesk. The finds were made of tin bronze, but their high lead and zinc content indicates that, in a few cases, they can be regarded as compound alloys. Lead content oscillates from merely small traces (0.17%), as in the case of the belt hook from grave 15, up to 17.22% in grave 274N. A higher amount of zinc is also noticeable, reaching 2.6%. Belt hook fragments from grave 15 contained 1.11–2.15% of zinc, from grave 20 – 1.06–1.32%, and from grave 44 – 2.32–2.61%.

Higher zinc content in tin bronze alloys used from the end of the Bronze Age until the Late Pre-Roman Period comes from high-zinc copper ore deposits. The state of technological advancements of the day did not allow the elimination of this element in the process of smelting. Copper deposits rich in zinc were located in the Italian Alps (Province of Trento), in the Low Tatras in Slovakia, on the Czech and Moravia border, and in Transylvania. The copper materials or ready alloys with tin content that were used in Pomerania¹³⁹ probably come from these regions. Compound alloys of copper and tin, supplemented with zinc and lead are a perfect material for casting, but if these additional components exceed 5%, the mechanical qualities of the material deteriorate¹⁴⁰.

CONCLUSIONS

Multipartite belt hooks made of bronze and discovered in Pomerania come from graves with female inventory. Among the 53 analysed burials¹⁴¹, 77% can be identified as female, based on such grave goods as crescent-shaped knives, needles and pins, bracelets, spindle whorls, beads, smoothing stones, and in some cases also a second belt hook¹⁴², as well as type G fibulae which are often treated as element of female attire¹⁴³. Grave 72 in Gdynia-Oksywie differs considerably, as its inventory includes a spear butt. The amount of anthropological analyses made for these burials seems scarce, and barely reaches 28%. The presence of female remains is presumed or confirmed

in only six cases¹⁴⁴. In one case, the analysis suggested a male presence¹⁴⁵. Age identification is somewhat clearer. Among 15 cases, 10 represented *adultus* or *matures* class of age; there are also a few double burials of an adult and a child¹⁴⁶. Only children bones was identified in three cases, and the belt hooks recovered in these graves were only fragmentary¹⁴⁷ (Fig. 7:4, 18:3).

Analysing the inventory of Pomeranian graves containing belt hooks, one can safely assume that the wider popularity of attire fastened with a metal belt hook can be dated to phase A2 of the Late Pre-Roman Period¹⁴⁸. In the same time period, wider dissemination of hinged, tripartite and unipartite belt hooks can be observed¹⁴⁹. This view is supported by a considerable number of cemeteries established in this period. Contrary to the majority of brooches and elements of weaponry which was made according to the La Tène style, the appearance of belt hooks in Pomerania is attributed to the influence of the Jastorf Culture. It seems justified to assume that at least some of the belt hooks used in the Late Pre-Roman Period in the area of the Oksywie Culture originated from the tongue-shaped belt hooks¹⁵⁰, widely popular in the Jastorf Culture already from the beginning of the Pre-Roman Period, which, it should be stressed, are also present in graves of the Pomeranian Culture, although very rarely¹⁵¹. Therefore, the validity of the statement by Wołągiewicz that “The appearance of band-shaped belt hooks in the Pomeranian Culture as well as the Oksywie Culture can be attributed to the Jastorf Culture (...)”¹⁵² seems undeniable.

It has already been argued that tripartite belt hooks made of bronze that represent types IIIa and IIIb were common elements of attire dispersed over a large area from Chełmno Land, through the Lower Vistula region and its estuary, further to the west through Central and Western Pomerania, up to central Germany (Maps 1 and 2). In this area, two key regions can be distinguished: one in the Lower Vistula region, the other in present-day Brandenburg¹⁵³.

¹³⁸ A. NIEWĘGŁOWSKI, Z. HENSEL 1997, 125.

¹³⁹ A. NIEWĘGŁOWSKI, Z. HENSEL 1997, 77.

¹⁴⁰ L.A. DOBRZAŃSKI 2008, 122.

¹⁴¹ Graves IV and 9 from Lubieszewo (Cat. no. 15) as well as graves 33 and 66 from Podwiesk were excluded from this overview due to inconsistency of the assembly and insufficient information on other elements of the inventory.

¹⁴² Gdynia-Oksywie, grave 132; Konikowo; Kunowo (?); Podwiesk, graves 44 and 68.

¹⁴³ TH. VÖLLING 1995, 152, 162.

¹⁴⁴ Czarnówko; Malbork-Wielbark, grave 53a/2018; Podwiesk, graves 15, 44, and 119; Pruszcz Gdański 10, graves 2 and 112.

¹⁴⁵ Brzytno, feature 261.

¹⁴⁶ Podwiesk, graves 15 and 119; Pruszcz Gdański 10, grave 112.

¹⁴⁷ Lubieszewo (Cat. no. 14), graves 81 and 88; Pruszcz Gdański 10, grave 459.

¹⁴⁸ See: R. HACHMANN 1957, 41, table 8, map 8; 1961, fig. 12; R. WOŁĄGIEWICZ 1981a, 162, pl. XX.

¹⁴⁹ R. WIŁOCH 1995, 26–27, table 4; E. BOKINIEC 2008, 56–76, table 19.

¹⁵⁰ See: R.-H. BEHRENDTS 1968, 25–26; H. KEILING 1969, 39–42; H. SEYER 1982, 15; R. MÜLLER 1985, 84.

¹⁵¹ R. WOŁĄGIEWICZ 1979, fig. 5.

¹⁵² R. WOŁĄGIEWICZ 1979, 44.

¹⁵³ It cannot be excluded that the present state of research heavily influences such a view.

Table 1. Chemical composition of tripartite belt hooks from Brzyno and Podwiesk. Elements in percentage by weight – wt. %.
 Tab. 1. Analizy składu chemicznego klamer trójczłonowych z Brzyna i Podwieska. Składniki podano w procentach wagowych – wt. %.

BRZYNO																			
CL no.	Object	Feature	Cu	Al	Si	Ti	Cr	Mn	Fe	Ni	Zn	As	Ag	Sn	Sb	Pb	Au	Co	Σ
119937	Belt hook (connector)	261	91.80					0.02	0.02	0.09	0.79	0.07	0.15	5.97	0.29	0.69		0.12	100.01
19937	Belt hook (hook)	261	88.21					0.01	0.02	0.09	0.77	0.07	0.05	10.11	0.09	0.45		0.14	100.01
19937	Belt hook (long arm)	261	88.01					0.01	0.04	0.09	0.78	0.05	0.05	9.96	0.48	0.35		0.18	100.00
19937	Belt hook (rivet)	261	88.43					0.02	0.03	0.11	0.79	0.10	0.07	8.72	0.65	0.96		0.13	100.01
19943	Belt hook (long arm)	301	88.03					0.02	0.01	0.08	0.75	0.11	0.06	9.39	0.17	1.28		0.09	99.99
19943	Belt hook (hook)	301	95.33					0.02	0.02	0.11	0.80	0.05	0.06	2.51	0.34	0.62		0.13	99.99
19943	Belt hook (connector)	301	90.32					0.02	0.02	0.08	0.77	0.09	0.06	7.03	0.23	1.25		0.14	100.01
PODWIESK																			
CL no.	Object	Grave	Cu	Al	Si	Ti	Cr	Mn	Fe	Ni	Zn	As	Ag	Sn	Sb	Pb	Au	Mg	Σ
12257.01	Belt hook	15	93.58		0.21				0.07	0.97	1.11			3.54	0.46	0.07			100.01
12257.02	Belt hook	15	89.90						0.52	1.35	2.15		0.42	3.98	1.66	0.12			100.01
12301.01	Belt hook	20	91.20		0.13				0.20	0.72	1.06			6.58		0.11			100.00
12301.02	Belt hook (rivet)	20	85.32		0.23					1.08	1.62		0.36	7.50	2.01	1.88			100.00
12301.03	Belt hook (short arm)	20	87.69		0.31		0.05	0.07	0.14	0.13	0.38			7.46		3.77			100.00
12301.04	Belt hook (connector rivet)	20	87.76		0.32				0.13	0.51	0.75		0.09	7.98	0.35	2.07		0.04	100.00
12260.01	Belt hook (fragment)	44	85.85		0.07				0.54	1.55	2.61		0.32	5.31	2.14	1.47		0.14	100.00

12260.02	Belt hook (rivet)	44	85.26	0.03													5.59	1.81	2.27		0.11	100.00	
12260.03	Belt hook (connector rivet)	44	82.52	0.10								0.46						7.81	3.42	1.29		0.11	100.00
12261.01	Belt hook	66	89.67	0.34					0.02									8.13	0.36	0.23			99.71
12261.01	Belt hook (rivet)	66	91.13	0.30					0.05									3.88	0.19	2.18			99.41
12263.01	Belt hook (connector)	68	76.55	0.43														16.59	2.86	1.23			99.99
12307.01	Belt hook (long arm)	119	85.08	0.46														6.31	0.31	6.62			100.00
12307.02	Belt hook (rivet)	119	85.19	0.26														5.49	0.41	6.38		0.03	99.28
12307.03	Belt hook (connector)	119	89.83								0.04							5.02	0.15	2.39		0.05	100.00
12307.04	Belt hook (short arm)	119	86.51	0.36						0.02								5.80	0.52	5.23			100.00
12307.05	Belt hook (rivet)	119	82.39	0.31							0.03							7.28	0.48	7.13		0.10	100.00
12272.00	Belt hook (connector)	151	92.89	0.25														3.77	0.21	0.89			100.01
12283.00	Belt hook	274N	73.10	0.16														4.33	1.49	17.22			100.01
12284.00	Belt hook (rivet)	274N	77.90															3.90	1.25	12.68			100.01
12247.02	Belt hook (long arm)	319	90.05	0.38														7.57		0.73			100.00
12247.03	Belt hook	319	86.44	0.41														11.62		0.70			100.00
12281.00	Belt hook	319	87.04	0.39														11.17		0.48		0.4	100.35
12282.01	Belt hook (connector)	319	93.29	0.08														4.52		1.24			100.00

It seems that chronologically the earliest are the still relatively poorly represented type IIIa belt hooks with rectangular-shaped connectors. It should be noted, however, that when compared to the early discoveries of J. Kostrzewski¹⁵⁴, their number has doubled. In spite of incomplete data on their chronology, it can be assumed that they were in use already in the early and then in the middle stage of the Late Pre-Roman Period. The large number of these belt hooks found in the area influenced by the Jastorf Culture¹⁵⁵, although largely dispersed, indicates that the introduction of these forms relied heavily on this group. Consequently, the presence of type IIIa belt hooks in Chełmno Land was the result of connections with the Jastorf Culture, which has been earlier argued elsewhere¹⁵⁶. References to bronze specimens, especially through the rectangular form of the connector, are seen for instance in the iron belt hook from Jarzyce, Koszalin County, but in this case the arms are not characteristically profiled¹⁵⁷. The belt hook came from a destroyed cemetery of the Oksywie Culture, and the preserved finds indicate that the place was in use mainly during phase A3. Another example of a similar belt hook comes from Parsęcko, from a grave dated to phase B2 of the Roman Period¹⁵⁸. On the basis of the latter, it can be assumed that belt hooks with rectangular connectors were in use in the whole Late Pre-Roman Period, but bronze was not always used in their production.

We have much better recognition when it comes to type IIIb belt hooks. The finds from Pomerania indicate that this form was particularly common in phase A2, and was later used less frequently. The case of grave 24/1908 from Nowe Dobra (Fig. 8) dated to the Early Roman Period (phase B1) is notable, as the short arm of this belt hook, contrary to other similar specimens, is equipped with rivets, which characterises type IIIc¹⁵⁹ being in use in the same time. The exact form of the belt hook from Parsęcko, categorised by J. Kostrzewski as type IIIb, has not been determined. Certain doubts as to the coherence of the inventory of grave Aa8 from Grudziądz-Rządź undermine its dating to the Roman Period. In spite of these discrepancies, it can be argued that the 'archaic' forms from the Oksywie Culture remained in use within the so-

cieties of the Wielbark Culture. It can be also argued that standard forms of belt hooks were prone to slight modifications connected with changing fashions. Regarding type IIIb belt hooks used in the area of the Jastorf Culture, it can be observed that some of the specimens are unique in terms of their structure, notably in the separate fixing of the catch to the longer arm (Fig. 16:2.3). However, this feature is not entirely unknown in the Lower Vistula region (see: Fig. 18). Other differences include various forms of rivets (Fig. 6:1, 16:2.3), whose heads seem to be smaller and shafts more bulky when compared to the Oksywie Culture finds.

Decoration of belt hook surfaces in the Jastorf Culture can also be significant, both in type IIIa and IIIb, especially in terms of geometrical patterns in *tremolo* which often appear in spaces between ribs (Fig. 2:1, 16:1.2) as well as, as was already argued by J. Kostrzewski, a higher number of ribs, especially arched ribs, on belt hook arms¹⁶⁰. All these features help to trace and determine the origins of type IIIb belt hooks in the Jastorf Culture, in particular their clear cluster in Brandenburg. It seems that in this region belt hook forms were largely inspired by traditions of the Oksywie Culture disseminated as a result of cultural interaction. However, one cannot exclude that at least some of the belt hooks were imports, for instance from the near-Vistula region, which abounds in such finds. In order to establish more clearly how the belt hooks were disseminated, it may be useful a thorough analysis of finds from the modern Germany, as well as further, more detailed analyses of the chemical content of these finds. Dynamic cultural relations between people of the Oksywie and Jastorf societies are confirmed by type G brooches that often accompany multipartite type IIb belt hooks. If we assume that these fibulae reached the Vistula region mainly from Brandenburg¹⁶¹, the possibility of inspiration and transferring certain appealing forms of belt hook ornament becomes very plausible. Such intensive cultural transposition should be dated particularly to phase A2.

When analysing particular elements of bronze tripartite belt hooks, certain correspondences to La Tène Culture can be noted. A very good example of such inspiration is the zoomorphic ornament on a hook of the shorter arm of belt hook from Różyny, feature 5, identified as a horse head (Fig. 10). Similar ornament appeared on two Celtic bronze belt hooks discovered in Kujawy, in Wszedzień¹⁶² and Świerkówiec¹⁶³, both in Mogilno County; other similar decorations come from La Tène Culture sites in Central Europe, including its sites from

¹⁵⁴ J. KOSTRZEWSKI 1919, 58.

¹⁵⁵ Dobropole Gryfińskie; Kunowo; Dommitzsch; Wittenberg.

¹⁵⁶ R. WOŁĄGIEWICZ 1979, 48–49; 1981a, 142–143; E. BOKINIEC 2008, 229–233, 235–240; H. MACHAJEWSKI 1999; M. STAPOREK 2007; A. STROBIN 2011, 71–76; A. MACIAŁOWICZ 2011.

¹⁵⁷ Fmr. *Geritz*, Kr. *Köslin*. In literature, this site also occurs under the name *Jeżyce* (J. KOSTRZEWSKI, Archive; G. MAGDALINSKI 1934, 155, fig. 17:5; D. BOHNSACK 1938, 32, 153, list 22, fig. 10; H.J. EGGERS, P.F. STARY 2001, 55 cat. no. 251, pl. 170:9a; R. WIŁOCH 1995, list 44; B. ROGALSKI 2010, 352).

¹⁵⁸ J. KOSTRZEWSKI, Archive, file 6, card 238; 1919, list 29.

¹⁵⁹ This construction is an exception to the belt hook from grave 319 in Podwiesk (Fig. 2:2).

¹⁶⁰ J. KOSTRZEWSKI 1919, 59.

¹⁶¹ See: H. SEYER 1982, 68–69, fig. 24; R. BOCKIUS, P. ŁUCZKIEWICZ 2004, 26–31, map 8 and 10, list 7; E. BOKINIEC 2008, 36.

¹⁶² J. KOSTRZEWSKI 1919, 45–46, fig. 29.

¹⁶³ E. BOKINIEC 1999, 117, fig. 5:4.

southern Poland¹⁶⁴. Very clear resemblance to the ornament from Różyń is visible in the belt hook from Świerkówiec, discovered in a grave complex dated by E. Bokinić to the early A1 phase¹⁶⁵. A different opinion is voiced by T. Bochnak, who considers the possibility of changing the timeframe to phase A2, which seems valid¹⁶⁶. Cultural identification of this grave is also notable, due to clear references to the Jastorf Culture, which suggests that the dispersion of zoomorphic belt hooks could originate in the West¹⁶⁷. It is also possible that in the case of at least some specimens, what is now seen as profiling on long hooks was in fact zoomorphic representation (Fig. 6:2, 7:4, 9, 11:2).

Moreover, Celtic or Celtic-Germanic references can be also identified in the special type III form from Grudziądz-Rządź, grave D5 (Fig. 15)¹⁶⁸. The similarities consist in the shape and decoration of arches, similar to *Löchgürtelhaken* known from Czech oppida and the Jastorf Culture sites in Germany¹⁶⁹. Perhaps the structure of arches in the latter, in common use at the end of the Late Pre-Roman Period and Roman Period, initiated the fashion for impressive open work connectors of type IIIc belt hooks. This concerns in particular the specimens having inner arms or frame arched (see: Fig. 12:1.2). E. Bokinić indicates that the source of the latter can be traced to pendants in the form of spoke wheel known from sites of La Tène and Jastorf Cultures¹⁷⁰. However, the round shape of these adornments does not support the connection between the two forms¹⁷¹, as round connectors do not appear in type III bronze belt hooks. There are in fact no direct indications as to what inspired the production of belt hooks with such a mutable central element. Decoration of rivets is also notable. The most common, especially in type IIIb in Pomerania, and to a lesser degree type IIIc, is the triangular pattern ornament. Others, like the star-shaped pattern, hatched areas or a cross are much less common, but they are still known both in the Celtic and Jastorf world. Consequently, it can be assumed that the idea for spherically-shaped belt hook connectors (type IIIb) has its autonomic origins in the Oksywie Culture and incorporated decorative forms typical of *Barbaricum*.

The dispersion of type IIIc belt hooks reveals very interesting features. Contrary to other forms (Map 2), their concentration is near the Gulf of Gdańsk. In isolation from this group, the oldest belt hook of this type (phase A3) comes from Podwiesk in Chełmno Land (Fig. 12:3). Perhaps the belt hook from Gdynia-Okisywie, grave 72, can be dated similarly. Half of the belt hooks with open-work connector are preserved relatively well, to which the inhumation character of graves surely contributed (Fig. 12:1, 13, 14). Due to this, on the bottom side of the arms we can see traces of forging and profiling in moulds, which indicates different production techniques than in the case of old, bulky and cast objects (Fig. 13). Type IIIc belt hooks are also characterised by the presence of rivets on decorative connector and the shorter arm. Defining the weight of these belt hooks is not without meaning. Finds from Wolny Dwór, graves 1 and 2, weigh 348 and 159 g respectively, and the one from Maciejewo 241 g, but in the latter case the weight is not definite¹⁷². For comparison, the weight of a well-preserved belt hook from feature 261 from Brzyno reaches 160 g. This data suggests that belt hooks used in the Roman Period, although they tend to be bigger, in terms of weight are comparable with specimens from the Late Pre-Roman Period, and in some cases are even heavier. It should be also noted that type IIIc belt hooks dated to the Roman Period can be found not only in the already mentioned inhumation graves, but also in cremation graves (both pit and urn).

It is worth considering that the majority of type IIIb belt hooks found in the context of the Oksywie Culture comes from pit graves, which corresponds to the tradition of burying women in non-urn graves¹⁷³. Clear cultural changes connected with introducing bi-ritual burial in the Early Roman Period suppressed older burial traditions. However, despite the growing popularity of other forms, the custom of using belt hooks in female attire was preserved. It should be mentioned that people of the Wielbark Culture communities were not the only ones to use multipartite belt hooks in the Roman Period. Some of the iron belt hooks of type II according to Kostrzewski may serve as good examples. One of them, with both arms ribbed and rivets decorated with triangle ornament, was found in grave 24b from the cemetery of the Gustow Group in Prądno, Myślibórz County, together with brooches similar to type A.74/75¹⁷⁴. Another belt hook from this site, also dated to late phase B1b, has its arms connected with a ring, but there are no rivets or

¹⁶⁴ E. BOKINIĆ 1999, 122; T. BOCHNAK 2014, 65–66, fig. 24.

¹⁶⁵ E. BOKINIĆ 1999, 121–122, 126.

¹⁶⁶ T. BOCHNAK 2014, 67.

¹⁶⁷ E. BOKINIĆ 1999, 121, 123, 127.

¹⁶⁸ Por. E. BOKINIĆ 2008, 75.

¹⁶⁹ TH. VOIGT 1971, R. MÜLLER 1985, 92; R. BOCKIUS, P. ŁUCZKIEWICZ 2004, 15, 17–19, fig. 3, map 4.

¹⁷⁰ See: E. BOKINIĆ 2008, 75.

¹⁷¹ Spoke wheel-shaped pendants come from the cemetery in Krusza Zamkowa in Kujawy – A. KOKOWSKI 1991, fig. 16:b; see also: T. BOCHNAK 2014, 64–65.

¹⁷² As was mentioned earlier, in the renovation process, two brass tapes were added to secure the long arm from further damage – see f.n. 128.

¹⁷³ R. WOŁĄGIEWICZ 1981a, 139, 158.

¹⁷⁴ Fmr. *Rahmhütte*, Kr. *Soldin*. J. KOSTRZEWSKI 1919, fig. 43, list 28 (there: graves 24a and 24b); R. WILCOCH 1995, list 46; TH. HAUPTMANN 2002, 40, 92, table 6/24b.

decoratively shaped arms¹⁷⁵. Ribbed iron belt hooks imitating bronze forms are also found in a few cemeteries of the Oksywie and Wielbark Cultures. This includes finds from Drawsko Pomorskie, Drawsko Pomorskie County¹⁷⁶ and Parsęcko, Szczecinek County¹⁷⁷. The latter, dated to the Roman Period, is 41 cm long, and has a rectangular-shaped fitting and two rivets on a ribbed arm.

In spite of the fact that metallurgical analyses are scarce, it can be assumed that this element of female attire was produced of tin bronze, which corresponds to technological traditions of the Pre-Roman Period. Unfortunately, there is no database for the exact content of alloys of belt hooks found in the Roman Period assemblages, when brass (an alloy of copper and zinc) became a dominant material in the production of metal elements of attire in the Roman Empire and *Barbaricum*.

In some cases, the fragmentary state of preservation and deformation caused by fire create substantial difficulties in tracing traseological marks on belt hooks. When it comes to well-preserved specimens, signs of wearing can be visible, especially near short hooks, on catches and decorative rivet surfaces. Daily use of belts fastened with multipartite belt hooks of bronze is confirmed by traces of repairs, which most commonly concern the longer, heavier arm with catch, as well as providing more support to a clip by attaching an additional rivet to the arm. Certain difficulties also rise when attempting to recreate the exact way belts with belt hooks were worn. Some finds from inhumation graves clearly confirm the placement of belt hooks along the waist. It seems that, due to the weight of belt hooks, belts must have rested on hips. Fasteners attaching the belt hook to the organic part of the belt were shaped like hooks at the end of the longer arm, while permanent attachment to a strap or fabric was placed on the bend of a hook on the shorter arm. This solution is indicated by its larger size and form. This particularly concerns type IIIc belt hooks in which the hook widens to form the letter T (Fig. 13, 14). Such a shape effectively prevented the hook from disengaging from the organic part of the belt.

Tripartite belt hooks of bronze are counted among characteristic elements of female attire in Pomerania. The popularity of fastening belts with the use of metal belt hooks was brought to this region from the Jastorf Culture

and intensified in the Late Pre-Roman Period. Belt hooks with connector in the shape of connected spherical segments can be considered characteristic indicators of female attire in Oksywie Culture communities. Interestingly, the same impressive pattern is used among the Jastorf Culture communities as well, not only in the Oder Group, but also further to the west, in Brandenburg. Such resemblance clearly confirms connections between these two cultures when it comes to bronze belt hooks, especially in phase A2. Some attachment to impressive multipartite belt hooks can still be observed in the Early Roman Period, but the dominant form was modified. However, the tradition of using the 'archaic' fastening clearly continued in times when buckles became the prevailing fashion.

ACKNOWLEDGEMENTS

For permission to study the belt hooks and publish information on them, I would like to express my sincere gratitude to the following institutions and staff members: Małgorzata Tuszyńska, Ewa Adamska-Grzymała, and Mirosław Pietrzak (Archaeological Museum in Gdańsk), Bartłomiej Rogalski PhD (The National Museum in Szczecin), Andrzej Kasprzak (Museum in Koszalin), Agnieszka Krzysiak (Museum in Lębork), Mirosław Jonakowski (The Museum of Copernicus in Frombork), Grzegorz Stasielowicz (Archaeological-Historical Museum in Elbląg), Assoc. Prof. Piotr Łuczkiwicz (Institute of Archaeology, Maria Curie-Skłodowska University in Lublin), and Assoc. Prof. Jörg Kleemann (Institute of History and International Relations, University of Szczecin). For the opportunity to use materials from records by J. Kostrzewski stored in The Cyprian Norwid Regional and City Public Library in Zielona Góra, I would like to express my gratitude to Andrzej Buck, PhD. At last, but not least, I would like to say thank to Jarosław Strobin (Archaeological Museum in Gdańsk) for fruitful consultations regarding the precise definition and interpretation of *tremolo*.

Translation: Aleksandra Słyszewska

*Dr Anna Strobin
Institute of Archaeology and Ethnology,
University of Gdańsk
ul. Bielańska 5
PL 80-851 Gdańsk
anna.strobin@ug.edu.pl
<https://orcid.org/0000-0001-6273-0744>*

¹⁷⁵ TH. HAUPTMANN, 40, 111, pl. 20/143.

¹⁷⁶ Fmf. *Dramburg, Kr. Dramburg* – M.D. WOŁĄGIEWICZ 1969, 27, 30–31, fig. XV:1–4.

¹⁷⁷ J. KOSTRZEWSKI, Archive, file 6, card 238; 1919, list 29.

Received: 19.08.2019 / Reviewed: 9.11.2019 / Accepted: 15.11.2019

CATALOGUE¹⁷⁸

- MAG Archaeological Museum in Gdańsk (*Muzeum Archeologiczne w Gdańsku*)
 MA-HE Museum of Archaeology and History in Elbląg (*Muzeum Archeologiczno-Historyczne w Elblągu*)
 MNS National Museum in Szczecin (*Muzeum Narodowe w Szczecinie*)
 IAE UG Institute of Archaeology and Ethnology, University of Gdańsk

1. **Biały Dwór**, Kwidzyn County (fmr. Bystrzec – *Weißhof*, Kr. *Marienwerder*)

Grave 100

Inventory: fragments of a bronze belt hook (type Heym III); iron brooch of late La Tène type; bronze brooch of late La Tène type; crescent-shaped iron knife, type Ib.

Literature: W. HEYM 1961, 152, fig. 7:5–8; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 437.

2. **Brańcin**, Starogard County

Stray find: tripartite bronze type IIIb belt hook (Fig. 6:1).

Literature: K. BUCKA 2016, 467–468, fig. 3:2.

3. **Brzyno**, Puck County

Grave 261 (cremation pit)

Inventory: tripartite bronze type IIIb belt hook (Fig. 6:2); iron brooch, type D; crescent-shaped iron knife, type III (?); moon-shaped iron razor; iron needle fragment; bronze tweezers; clay spindle whorl, biconical; sandstone spindle whorl, disc-shaped; smoothing stone of Pomeranian flint ('swallow egg'); pottery sherd.

Anthropology: male (?), *maturus* I (age 30–40).

Note: the needle was not mentioned by A. STROBIN (2016) as it was found during anthropological examination of the bones completed later.

Literature: A. STROBIN 2016.

Collection: IAE UG.

Grave 301 (cremation pit)

Inventory: bronze tripartite type IIIb belt hook (Fig. 6:3); iron brooch, type A.65; fragment of a crescent-shaped iron knife; clay spindle whorl, biconical.

Anthropology: age and/or sex could not be determined.

Literature: unpublished, excavation by A. Strobin.

Collection: IAE UG.

4. **Chełmno**, Chełmno County (fmr. *Kulm*, Kr. *Kulm*)

Grave 91 (Berlin 17) (cremation pit)

Inventory: fragment of a bronze belt hook, Kostrzewski type IIIb (Fig. 4); fragments of bronze objects (presumably belt hook elements); iron brooch, type M-a; crescent-shaped iron knife, type Ib; clay spindle whorl, biconical.

Literature: J. KOSTRZEWSKI, Archive, portfolio 13, card 74; 1919, 356–357 no. 25, list 15, 29, 81, 91, fig. 149; W. ŁĘGA 1938, 27, 69, pl. XIII:3; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 284, 436.

Grave 130 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 7:1); fragments of an iron brooch, type D; crescent-shaped iron knife, type IIb; fragment of a tubular iron object.

Literature: J. KOSTRZEWSKI, Archive, portfolio 13, card 44; 1919, list 29; W. ŁĘGA 1938, 33–34, 69, pl. VIII:8.8a; R. WIŁOCH 1995, list 47; E. BOKINIEC 2008, 74, 285, 436, pl. X/130.

Stray find: fragment of bronze tripartite belt hook (Fig. 18:2) (Kostrzewski type IIIb).

Literature: J. KOSTRZEWSKI, Archive, portfolio 13, card 33; 1919, 59 f.n. 3, list 29; A. KARPIŃSKA 1922, 8; W. ŁĘGA 1938, 55, 69, pl. VIII:7; E. BOKINIEC 2008, 74, 289, 436, pl. XVI:7.

5. **Czarnówko**, Lębork County

Grave 69 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIc belt hook; two bronze brooches, type A.38/39; bronze brooch, type A.110. Anthropology: female (??), adult (?).

Literature: unpublished, excavation by A. Krzysiak (see: F. ROŻNOWSKI, L. CYMEK 2015, table 1).

Collection: Museum in Lębork, inv. ML/793/4045–4050.

6. **Dobropole Gryfińskie**, Gryfino County (fmr. *Dobberphul*, Kr. *Greifenhagen*)

Grave find: tripartite bronze belt hook type IIIa (Fig. 2:1).

Note: ca. six urn graves were found which yielded iron tripartite belt hook, wing pin, iron necklace, iron razor, bronze necklace with truncated terminals (*Kolbenhalsring*), stone spindle whorl. Literature: H. SCHUMANN 1889, 136–137, pl. VII:1; J. KOSTRZEWSKI, Archive, portfolio 6, card 85; 1919, 58, 329, fig. 44; R. HACHMANN 1961, pl. 6:4; R. WIŁOCH 1995, list 49; H.J. EGGERS, P.F. STARY 2001, 38 no. 151; B. ROGALSKI 2010, 338–339.

7. **Dolna**, Malbork County (fmr. *Liebenthal*, Kr. *Marienburg*)

Stray find: bronze tripartite type IIIb belt hook (Fig. 7:3).

Note: acc. to J. KOSTRZEWSKI (Archive) from pit grave IV.

Literature: J. KOSTRZEWSKI, Archive, portfolio 13, card 129; 1919, 59 f.n. 5, list 29; R. WIŁOCH 1995, list 47; E. BOKINIEC 2008, 437.

8. **Dychlino**, Lębork County (fmr. *Heinrichswerder*, Kr. *Lauenburg*)

From cemetery: fragment of a bronze tripartite type III belt hook.

Literature: J. KOSTRZEWSKI, Archive, portfolio 6, card 128; D. BOHNSACK 1938, 154 no. 40; K. HAHUŁA 2003, 164, fig. 8; H.J. EGGERS, P.F. STARY 2001, 73 no. 322; B. ROGALSKI 2010, 345.

9. **Gdańsk-Oliwa**, Gdańsk County (fmr. *Oliva*, Kr. *Danzinger Höhe*)

From graves: 1 – (from cremation pit) fragments of a bronze tripartite belt hook (acc. to Kostrzewski – type IIIb); 2 – fragment of a bronze tripartite type IIIb belt hook (Fig. 7:2).

Literature: A. LISSAUER 1874, 10–11, 18, pl. III:7, IV:19; 1887, pl. 31

¹⁷⁸ The objects are classified after: brooches – J. KOSTRZEWSKI 1919 (with changes by TH. VÖLLING 1995), O. ALMGREN 1923 (A.); crescent-shaped knives and belt hooks – J. KOSTRZEWSKI 1919; glass beads and Celtic bracelets – TH.E. HAEVERNICK 1960; pottery – A. STROBIN 2011 and R. WOŁAGIEWICZ 1993 (RW).

IV:8; I. UNDSET 1882, 141, pl. XV:7.8; J. KOSTRZEWSKI, Archive, portfolio 13, cards 156 and 163; 1919, 59 f.n. 4, list 29; R. WIŁOCH 1995, list 47; E. BOKINIEC 2008, 437 (here as one specimen).

10. Gdynia-Oksywie, town Gdynia (fmr. Oxhöft, Kr. Putzig)

Grave 72

Inventory: bronze tripartite type IIIc belt hook; spear fitting (iron?); miniature biconical clay vessel, type VIII.K, with a lid. Literature: D. BOHNSACK 1938, 32–33, 154, list 22, 36, 66, 67, pl. 18:9; T. DĄBROWSKA 1993, 110–111, 113, fig. 1:c; R. WIŁOCH 1995, list 46; P. ŁUCZKIEWICZ 2006, 336 no. 290.

Grave 132 (inhumation)

Inventory: bronze tripartite belt hook (acc. to Jankuhn – similar to type IIIb); iron unipartite belt hook, type IIb; crescent-shaped knife (iron?); bone spindle whorl.

Literature: H. JANKUHN 1933, 185; D. BOHNSACK 1938, 154, list 19, 22, 46, 52; R. MADYDA-LEGUTKO 1990, table 1:9; R. WIŁOCH 1995, list 46.

11. Grudządz-Rządź, town Grudziądz (fmr. Ronsden, Kr. Graudenz)

Grave Aa8 (cremation pit)

Inventory: fragments of a bronze tripartite belt hook (acc. to Kostrzewski – type IIIb); bronze shield-headed bracelet; iron knife; miniature clay vessel.

Note: acc. to S. ANGER (1890) the belt hooks is a stray find, acc. to E. BOKINIEC (2008, 333 – after archival sources from *Muzeum im. ks. dr. Władysława Łęgi* in Grudziądz) it belonged to a grave assemblage. Grave number after E. BOKINIEC (2008). Mixed assemblage (?).

Literature: S. ANGER 1890, 11 no. 442, pl. 15:14; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, 59 f.n. 4, list 26; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 333, 334, 436.

Grave Ab8 (cremation pit)

Inventory: fragment of a bronze belt hook (acc. to Kostrzewski – type IIIb); crescent-shaped iron knife, type IIc; miniature clay vessel.

Note: grave number after E. BOKINIEC (2008).

Literature: S. ANGER 1890, 18, pl. 18:19; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, 156, fig. 153; list 29; R. HACHMANN 1951, 91; R. WIŁOCH 1995, list 46 (incorrect grave inventory); E. BOKINIEC 2008, 74, 346, 436.

Grave D4 (cremation pit)

Inventory: fragment of a bronze tripartite belt hook (Fig. 18:1) (acc. to Kostrzewski – type IIIb).

Note: acc. to S. ANGER (1890) and J. KOSTRZEWSKI (Archive; 1919) – grave 3 from 2.04.1884, acc. to R. HACHMANN (1951) – grave D3 (incl. also iron brooch type N [?], crescent-shaped iron knife type Ib, iron needle, and clay spindle whorl), acc. to E. BOKINIEC (2008, 333, 336 – after archival sources from *Muzeum im. ks. dr. Władysława Łęgi* in Grudziądz) – grave 4 (i.e. grave D4 after R. HACHMANN).

Literature: S. ANGER 1890, 12; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, 59 f.n. 6, list 29, 81, 100; A. KARPIŃSKA 1922, 31–32; R. HACHMANN 1951, 9; E. BOKINIEC 2008, 74, 336, 342, 436.

Grave D5 (cremation pit)

Inventory: fragments of a bronze tripartite belt hook, variant of type III (Fig. 15); clay spindle whorl, biconical.

Note: R. WIŁOCH (1995) incorrectly describes the belt hook as iron.

Literature: S. ANGER 1890, 12, pl. 15:5; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, 59 f.n. 6, 60, fig. 46; R. HACHMANN 1951, 91; R. WIŁOCH 1995, 22; E. BOKINIEC 2008, 74, 336, 436, pl. XXXVII:D5.

Grave C1 (cremation pit)

Inventory: fragments of a bronze belt hook (Fig. 5) (acc. to Kostrzewski – tripartite, type IIIb); fragment of an iron brooch; fragment of an iron brooch of middle La Tène type.

Literature: S. ANGER 1890, 15; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, list 29; R. HACHMANN 1951, 91; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 344, 436.

Grave 180 (cremation pit)

Inventory: fragments of a bronze tripartite belt hook (acc. to Kostrzewski – tripartite, type IIIb); fragments of an iron brooch type N (?); crescent-shaped iron knife; clay spindle whorl, biconical.

Literature: S. ANGER 1890, 28, pl. 17:21; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, list 29, 91; R. HACHMANN 1951, 92; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 349, 436.

Grave 431 (cremation pit)

Inventory: fragments of a tripartite type IIIa belt hook (Fig. 3); fragment of an iron knife; spindle whorl, disc-shaped; iron nail; bone object.

Note: R. HACHMANN (1951) incorrectly describes the belt hook as hinged.

Literature: S. ANGER 1890, 36, pl. 19:20; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, 58, 59 f.n. 4; R. HACHMANN 1951, 93; E. BOKINIEC 2008, 74, 351, 436.

Grave 451 (cremation pit)

Inventory: fragments of a bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb); four iron fittings (horseshoe nails?); clay spindle whorl, cushion-shaped; fragment of an ornamented clay vessel.

Note: mixed inventory (?).

Literature: S. ANGER 1890, 38–39, pl. 9:16–18; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, list 29, 95; R. HACHMANN 1951, 93; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 352, 436, pl. LIII/451.

Grave 610 (cremation pit)

Inventory: fragments of a bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb); fragment of a bronze brooch, type G.

Literature: S. ANGER 1890, 47; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, list 7, 29; R. HACHMANN 1951, 94; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 355, 436.

Grave 629 (cremation pit)

Inventory: fragment of a bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb); iron needle; iron hooked pin; iron knife (sickle?); clay spindle whorl, biconical.

Literature: S. ANGER 1890, 47; J. KOSTRZEWSKI, Archive, portfolio 14, unnumbered card; 1919, list 29, 91, 100; R. HACHMANN 1951, 94; R. WIŁOCH 1995, list 46; E. BOKINIEC 2008, 74, 355, 436.

12. Konikowo, Koszalin County (fmr. Konickow, Kr. Köslin)
Grave 60 (cremation pit?)

Inventory: fragments of a bronze tripartite type IIIb belt hook; fragment of another bronze belt hook.

Literature: G. MAGDALINSKI 1911, 181–182, pl. III:3.3a.5; 1934, 150–151, 159, fig. 4:60, 9; J. KOSTRZEWSKI, Archive, portfolio 6, card 132; 1919, 330, list 29; R. WIŁOCH 1995, list 47; H.J. EGGERS, P.F. STARY 2001, 57 no. 252, pl. 175:1–8a; E. BOKINIEC 2008, 437; B. ROGALSKI 2010, 356.

13. Kunowo, Starogard County
Grave 16 (urn cremation)

Inventory: bronze tripartite type IIIa belt hook (Fig. 2:3); fragment of an iron tripartite (?) belt hook, type I; iron brooch type B, long, with short foot; iron brooch type B, long, with two ‘balls’ and long foot; fragment of a bronze wing pin; bottom part of a clay vessel (urn).

Note: damaged grave; it is not sure if the belt hook type I belongs to this grave assemblage.

Literature: T. ŁASZKIEWICZ 1973, 24, 46, pl. II, III:1; B. ROGALSKI 2010, 360.

Collection: MNS, inv. MNS/A/7023.

14. Lubieszewo, Gryfice County
Grave 81 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 7:4); fragment of a bronze brooch, type G; iron brooch, type K; sandstone spindle whorl, disc-shaped; pebble; shard of a clay vessel.

Anthropology: *infans* II (age 7–14).

Literature: R. WIŁOCH 1995, list 47; R. WOŁĄGIEWICZ 1997, 22, pl. X/81, XXI/81; B. ROGALSKI 2010, 368.

Collection: MNS, inv. MNS/A/6951.

Grave 88 (damaged)

Inventory: fragment of a bronze belt hook (acc. to Wołągiewicz – tripartite).

Anthropology: *infans* I (age ca. 7).

Literature: R. WOŁĄGIEWICZ 1997, 23, pl. XI/88; B. ROGALSKI 2010, 369.

Collection: MNS, inv. MNS/A/6957.

15. Lubieszewo, Nowy Dwór Gdański County
 (fmr. Ladekopp, Kr. Marienburg)

Grave IV

Inventory: fragments of a bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb); iron hinged belt hook; fragments of an iron brooch with lower chord; iron spearhead; bronze band bracelet; fragment of a bronze ring type *Knotenring*; iron knife; eight-shaped amber pendant.

Note: mixed inventory (?).

Literature: A. LISSAUER, H. CONWENTZ 1886, 213, pl. IV:7; J. KOSTRZEWSKI, Archiwum, portfolio 13, card 197; 1919, 80, list 26, 29, 50; E. BOKINIEC 2008, 437.

Grave 9

Inventory: bronze tripartite type IIIb belt hook.

Note: no data on other possible grave goods.

Literature: unpublished, excavation by M. Jonakowski; personal comm. from G. Stasielowicz, MA-HE.

Collection: MA-HE.

Grave 26 (cremation pit)

Inventory: bronze tripartite type IIIb belt hook; fragment of an iron brooch, type M (?); fragment of an iron brooch, type N-a; iron brooch, type N-b; fragment of an iron brooch, type N-c; bronze brooch, type O; moon-shaped iron razor; iron scissors; shards of four clay vessels.

Literature: unpublished, excavation by M. Jonakowski.

Collection: MA-HE, inv. L/83/92.

From cemetery: 1. Fragment of a bronze tripartite type IIIb belt hook; 2. Fragment of a bronze tripartite type IIIb belt hook; 3. Fragment of a bronze tripartite type III belt hook.

Literature: unpublished, excavation by M. Jonakowski.

Collection: MA-HE, inv. 135/L/92 (1), inv. 12/L/92 (2).

16. Lubowidz, Lębork County (fmr. Luggewiese, Kr. Lauenburg)

Grave 280 (inhumation)

Inventory: fragments of a bronze tripartite type IIIc belt hook (Fig. 12:1); pair of bronze brooches similar to type A.71; bronze brooch, type A.51; two different bronze plain bracelets; crescent-shaped iron knife; iron ring; necklace of 75 glass and amber beads; three clay spindle whorls, biconical; clay beaker, type RW XIIIIC.

Literature: J. KOSTRZEWSKI, Archive, portfolio 6, card 180; R. WOŁĄGIEWICZ 1995, 34, pl. XXXII/280; R. WIŁOCH 1995, list 48; R. MADYDA-LEGUTKO 1990, table 1:7; E. BOKINIEC 2008, 437.

Collection: MNS, inv. MNS/A/20559; the longer arm of the belt is store in the Museum in Koszalin as an unprovenanced find.

17. Malbork-Wielbark, Malbork County (fmr. Willenberg, Kr. Marienburg)

Grave 917/1929 (cremation)

Inventory: fragments of a bronze tripartite type III belt hook; iron object.

Note: acc. to J. KLEEMANN (2017) inhumation; part of handled clay vessel type VB discovered in 2008 included in this grave assemblage. J. ANDRZEJOWSKI and J. MARTENS (1996, 27 f.n. 46) mistakenly identified this belt hook as the one found in 1936 and preserved in MAG (see below).

Literature: D. BOHNSACK 1938, list 22; J. ANDRZEJOWSKI, J. MARTENS 1996, 27, pl. XX/917; J. KLEEMANN 2017, 132, 205, pl. 65/917.

Grave from 1936 (inhumation)

Inventory: fragment of a bronze tripartite type III belt hook.

Literature: D. BOHNSACK 1938, 33 f.n. 3; M. SEKULA 2006, 182, 193 no. 36, fig. 4:1; J. KLEEMANN 2017, 193, 205, pl. 111:1.

Collection: MAG, inv. MAG/OWR/1955:139/178.

Feature 53a/2018 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook; bronze brooch, type O; fragments of an iron brooch, type M/N (?); clay spindle whorl.

Anthropology: female, *maturus*.

Literature: unpublished, excavation by P. Łuczkiwicz (Institute of Archaeology, Maria Skłodowska-Curie University in Lublin) and J. Kleemann (Institute of History and International Relations, University of Szczecin).

Collection: Castle Museum in Malbork (*Muzeum Zamkowe w Malborku*).

**18. Nowe Dobra, Chełmno County (fmr. Neuguth, Kr. Kulm)
Grave 24/1908 (cremation pit)**

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 8); two bronze brooches, type A.45; bronze brooch, type A.68; iron bar bracelet with profiled terminals; crescent-shaped iron knife, type Ib; iron needle; glass beads, i.a. one barrel-shaped with eyes and two melted down; miniature clay vessel. Literature: J. KOSTRZEWSKI, Archive, portfolio 13, cards 302 and 305; 1919, 61 f.n. 1, list 29; A. KARPIŃSKA 1922, 31, fig. 10 (here as *Nowydwór*); D. BOHNSACK 1938, s. 33 f.n. 2; R. MADYDA-LEGUTKO 1990, table 1:8; R. WIŁOCH 1995, list 47; E. BOKINIEC 2008, 74, 305–306, 436.

19. Nowy Targ, Sztum County

Feature 236 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 7:5); fragment of a bronze brooch, type G; fragments of a crescent-shaped iron knife with ring-ended handle; fragments of an iron object, including one with round cross-section (needle?); clay spindle whorl; clay handled pot, type I.B; pottery shards from Late Pre-Roman Period and Early Iron Age.

Anthropology: adult.

Literature: R. WIŁOCH 1995, list 47; E. BOKINIEC 2008, 437; E. FUDZIŃSKA, P. FUDZIŃSKI 2013, 71–72, pl. XXXVI/236, XXXVII/236.

20. Parsęcko, Szczecinek County (fmr. Persanzig,

Kr. Neustettin)

Grave (cremation pit)

Inventory: fragment of a bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb); two bronze brooches, type A.57; iron needle; crescent-shaped knife (iron?); two clay beads.

Note: acc. to B. ROGALSKI (2010) – two brooches type A.59.

Literature: F.W. KASISKI 1873, fig. 16–21; A. VOSS 1880, pl. VI:4; I. UNSET 1882, pl. XXV:2; J. KOSTRZEWSKI, Archive, portfolio 6, card 262; 1919, list 29; R. MADYDA-LEGUTKO 1990, table 1:10; R. WIŁOCH 1995, list 47; H.J. EGGERS, P.F. STARY 2001, pl. 186:9.10; B. ROGALSKI 2010, 383–384.

21. Pelplin-Maciejewo, Tczew County (fmr. Maciejewo,

Kr. Dirschau)

From inhumation (?) grave: bronze tripartite type IIIc belt hook (Fig. 13).

Note: acc. to AMTL. BER. (1895) 16 graves were excavated (inhumations and one urn cremation). The belt hook supposedly belonged to a cremation grave, but its state of preservation indicates that it actually came from an inhumation grave.

Literature: AMTL. BER. XV, 1894 (1895), 32, fig. 16; “Nachrichten über deutsche Alterthumsfunde” 7, 1896, 22; H. CONWENTZ 1905, pl. 68:2; E. BLUME 1915, 155; J. KOSTRZEWSKI, Archive, portfolio 13, card 207; 1919, 60–62, 334, fig. 47; D. BOHNSACK 1938, 32, 155 no. 70; R. WIŁOCH 1995, list 48.

Collection: MAG, inv. MAG/OWR/1955:28/31.

22. Podole Małe, Słupsk County (fmr. Klein Podel, Kr. Stolp)

Stray find: bronze tripartite type IIIb belt hook (Fig. 9).

Literature: H. SCHUMANN 1889, s. 154–155, pl. IX:13; 1897, 64, pl. 4:20; J. KOSTRZEWSKI, Archive, portfolio 6, cards 268 and 269;

1919, s. 59 f.n. 6, 330, list 29; O. KUNKEL 1931, 79, pl. 78:8; M.D. & R. WOŁĄGIEWICZOWIE 1964, 101 no. 13; R. WIŁOCH 1995, list 47 (incorrectly two specimens!); H.J. EGGERS, P.F. STARY 2001, 72 no. 309, pl. 221:3.3a; E. BOKINIEC 2008, 437 (incorrectly two specimens!); B. ROGALSKI 2010, 386; A. BURSCHE, H. MACHAJEWSKI, B. ROGALSKI 2012, 243 no. 85. Collection: MNS, inv. MNS/A/22137.

23. Podwiesk, Chełmno County

Grave 15 (cremation pit)

Inventory: bronze tripartite type III belt hook; fragments of an iron brooch, type K (?); fragments of a bronze brooch, type G; fragments of a bronze pin (?); fragment of a bronze wire; shards of ca. six clay vessels.

Anthropology: female (?), *maturus + infans* I.

Literature: R. WIŁOCH 1995, list 47E; E. BOKINIEC 2005, 14, pl. VIII/15; 2008, 312, 436.

Grave 20 (cremation pit)

Inventory: bronze tripartite type IIIc belt hook (Fig. 12:2); fragments of an iron brooch, type M-a; clay spindle whorl, biconical; clay vessel, type I.L; fragment of a handled clay vessel.

Anthropology: adult.

Literature: R. WIŁOCH 1995, list 48; E. BOKINIEC 2005, 15, pl. IX/20; 2008, 312, 436.

Grave 33 (cremation pit)

Inventory: fragments of a bronze tripartite part III belt hook; iron brooch with perforated catch-plate, type N-a; iron brooch, type M-a; fragments of a brooch type A, short (missing); iron *Stufenfibel* (?); fragment of a bronze brooch; fragments of a bronze brooch, type O (?); fragment of an iron belt hook, hinged; iron tweezers; fragment of a crescent-shaped iron knife; two iron rivets; two iron rings (?); two bronze rings; five bronze rings type *Knotenring*; gold wires; melted bronze; melted glass; fragments of an iron objects; three glass beads, type 23 and 25; fragments of glass beads; melted glass; two clay spindle whorls, biconical; clay pot, type I.B; miniature clay vessel, type VIII.H; shards of two clay vessels.

Anthropology: adult.

Note: mixed inventories of graves 33 and 35.

Literature: R. WIŁOCH 1995, list 46; E. BOKINIEC 2005, 17–18, pl. XV/33; 2008, 313 no. 23, 436.

Grave 44 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 7:6); iron belt hook, hinged, ornamented; fragments of an iron brooch type H (?); fragment of a bronze pendant or binocular brooch; iron ring; iron tweezers; fragment of a bronze band, ornamented; fragment of a bronze adornment; melted bronze; clay bead (?); clay spindle whorl, biconical, ornamented; miniature clay vessel, type VIII.B; shards of three clay vessels.

Anthropology: female (?), *adultus*.

Literature: R. WIŁOCH 1995, list 47; E. BOKINIEC 2005, 20, 99, pl. XX/44; 2008, 74, 314, 436.

Grave 66 (66N) (cremation pit, or two separate graves partly damaged)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 7:7); fragment of an iron brooch type M-a; fragment of an iron brooch, type Kostrzewski fig. 18 (L-IIa); fragment of an iron brooch type O; bronze bracelet; bronze ring; iron hooked

pin; iron needle; bronze openwork pendant with melted glass; melted bronze; fragment of glass bead, type 25; melted glass; fragment of a glass bracelet type 3a (?); two clay spindle whorls, biconical; clay pot, type I.A.; clay cup, type VI.B.; pottery shards. Anthropology: two persons, both female (?), *iuvenis*.

Literature: R. WIŁOCH 1995, list 47; E. BOKINIEC 2005, 24, 99, pl. XXXI/66; 2008, 74, 315, 436.

Grave 68 (cremation pit)

Inventory: fragment of a bronze tripartite type IIIb belt hook; iron hinged belt hook; fragment of an iron brooch, type E; fragments of a bronze brooch, type G (?); clay pot, type I.B.; shards of two clay vessels.

Anthropology: adult.

Literature: E. BOKINIEC 2005, 24, 99, pl. XXX/68; 2008, 74, 315, 436.

Grave 119 (urn cremation)

Inventory: bronze tripartite type IIIa belt hook (Fig. 2:2); iron brooch, type C, short; fragments of an iron brooch, type A, long; two clay pots, type I.B.; clay cup, type VI.J.; pottery shards.

Anthropology: female (?), *adultus + infans*.

Literature: R. WIŁOCH 1995, 57, list 49; E. BOKINIEC 2005, 32, pl. L/119, CLXXIII:1.3; 2008, 317, 436.

Grave 151 (cremation pit)

Inventory: fragment of a bronze tripartite type IIIb belt hook; fragment of an iron object (tweezers?); shards of a clay vessel.

Literature: E. BOKINIEC 2005, 37, 99, pl. LXIII/151; 2008, 74, 318, 436.

Grave 274N (cremation pit)

Inventory: fragments of a bronze tripartite type III belt hook; fragment of a bronze brooch, type G; clay pot, type I.B.

Literature: E. BOKINIEC 2005, 55, pl. XC/274N; 2008, 323, 436.

Grave 319 (cremation pit)

Inventory: bronze tripartite type IIIb belt hook (Fig. 7:8); bronze bar, ornamented; glass bead; shards of a clay vessel.

Literature: R. WIŁOCH 1995, list 47; E. BOKINIEC 2005, 63, 99, pl. CX/319; 2008, 74, 325, 436, list 16/3.

24. Pruszcz Gdański, Gdańsk County, site 4 (fmr. *Praust* „Zuckerfabrik“, Kr. Danziger Höhe)

Grave 35 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook; iron brooch, type D, with crescent-shaped protrusion by the catch-plate; spindle whorl; smoothing stone.

Note: D. BOHNSACK (1938, 23) incorrectly includes in the grave assemblage a spear head sleeve which actually came from grave 31.

Literature: W. LA BAUME 1926, pl. II:b; D. BOHNSACK 1938, 23, 32, 94, 151, list 1, 22, 50, pl. 2:2, 4:1–4; R. WIŁOCH 1995, list 46.

25. Pruszcz Gdański, Gdańsk County, site 7

Grave 103 (cremation pit)

Inventory: fragments of a bronze tripartite type III belt hook (Fig. 17).

Literature: unpublished, excavation by M. Pietrzak and M. Tuszynska.

Collection: MAG, inv. MAG/OWR/1985:56/7.

Grave 111 (cremation pit, disturbed)

Inventory: fragments of a bronze tripartite type III belt hook;

bronze brooch, type G; fragment of a bronze brooch, type G; fragment of an iron needle; clay spindle whorl, cylindrical; smoothing stone of Pomeranian flint ('swallow egg').

Literature: unpublished, excavation by M. Pietrzak and M. Tuszynska.

Collection: MAG, inv. MAG/1985:56/46–49.

Grave 298 (cremation pit, disturbed)

Inventory: fragment of a bronze tripartite type III belt hook; cylindrical iron fitting.

Literature: unpublished, excavation by M. Pietrzak and M. Tuszynska.

Collection: MAG, inv. MAG/1990:71/14.15.

Grave 350 (cremation pit)

Inventory: bronze tripartite type IIIb belt hook; fragment of an iron brooch, type D/E.

Literature: unpublished, excavation by M. Pietrzak and M. Tuszynska.

Collection: MAG, inv. MAG/OWR/1990:71/120.

26. Pruszcz Gdański, Gdańsk County, site 10

Grave 2 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 11:1); fragments of one or two iron brooches; crescent-shaped iron knife, type IIc.

Anthropology: female (?), *adultus–maturus*.

Literature: R. WIŁOCH 1995, list 47; M. PIETRZAK 1997, 12, 81, pl. I/2, CLVIII:3.

Collection: MAG/OWR/1967:1/3.

Grave 112 (urn cremation)

Inventory: fragments of a bronze tripartite type IIIc belt hook (Fig. 12:3); two iron brooches similar to type A.73; fragment of a bronze brooch, type A.52; fragment of an iron fitting; clay bowl, type VII.K; clay handled cup, type VI.B.

Anthropology: female, *adultus + infans* I.

Literature: R. WIŁOCH 1995, list 48; M. PIETRZAK 1997, 24, 81, pl. XXXVI/112.

Collection: MAG, inv. MAG/OWR/1967:1/227.

Grave 126 (cremation pit)

Inventory: bronze tripartite type IIIb belt hook (Fig. 11:2); crescent-shaped iron knife, type IIc (?).

Literature: R. WIŁOCH 1995, list 47; M. PIETRZAK 1997, 26, 81, pl. XLI/126.

Collection: MAG, inv. MAG/OWR/1967:1/254.

Grave 459 (cremation pit, damaged)

Inventory: fragment of a bronze tripartite type III belt hook (Fig. 18:3); fragment of a bronze brooch deformed in fire; fragments of a bronze pin; spiral bronze ring.

Anthropology: *infans* II.

Literature: M. PIETRZAK 1997, 65, 81 pl. CXXXVIII/ 459.

Collection: MAG, inv. MAG/OWR/1972:113/380.

27. Redło, Goleniów County (fmr. *Pflugrade, Kr. Naugard*)

Stray finds: 1. Fragment of a bronze tripartite type III belt hook.

2. Fragment of a bronze tripartite type III belt hook.

Note: Acc. to B. ROGALSKI (2010) belt hooks came from one assemblage with crown-shaped bronze necklace.

Literature: J. KOSTRZEWSKI, Archive, portfolio 6, card 273;

D. BOHNSACK 1938, 36; H.J. EGGERS, P.F. STARY 2001, 48 no. 35

204, pl. 147:1–3; B. ROGALSKI 2010, 436 (mistakenly as Redło, Świdwin County!).

28. Różyny, Gdańsk County

Feature 5 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 10); two iron brooches, type K; fragment of an iron brooch, type K (?); miniature clay vessel, type VIII.J.

Literature: unpublished, excavation by M. Pietrzak and M. Tuszyńska.

Collection: MAG, inv. MAG/OWR/109/2–6.

Feature 8a (cremation pit)

Inventory: fragments of a bronze tripartite type III belt hook; fragment of an iron brooch, type J; fragment of an iron brooch, type J; fragments of an iron brooch, type M (?); fragment of a bronze needle (?); fragments of a iron needle; disc-shaped amber bead.

Literature: unpublished, excavation by M. Pietrzak and M. Tuszyńska.

Collection: MAG, inv. MAG/OWR/109/15.

Feature 45 (cremation pit)

Inventory: bronze tripartite type IIIb belt hook; two bronze brooches type K, with iron spring and needle; fragment of an iron brooch; fragment of a crescent-shaped iron knife; smoothing stone of Pomeranian flint ('swallow egg').

Literature: unpublished, excavation by M. Pietrzak and M. Tuszyńska.

Collection: MAG, inv. MAG/OWR/109/84–89.

29. Skowarcz, Gdańsk County (fmr. *Schönwarling*, *Kr. Danziger Höhe*)

Grave 12/1908 (cremation pit)

Inventory: fragments of a bronze tripartite type IIIb belt hook (Fig. 11:3); iron brooch type A, short, with triangle protrusion by the catch-plate; crescent-shaped iron knife, type Ia; iron needle; clay spindle whorl, cushion-shaped.

Literature: J. KOSTRZEWSKI, Archive, portfolio 13, card 534; 1919, 366–367 no. 107, list 1, 29, 80 (brooch incorrectly classified as type M!), 95, 100, fig. 172; R. WILOCH 1995, list 47.

Grave 4/1913

Inventory: bronze tripartite type III belt hook; brooch type D; biconical spindle whorl; two small clay vessels (*Beigefäße*).

Literature: D. BOHNSACK 1938, list 1, 22, 49.

Stray finds from 1908: 1. Fragment of a bronze belt hook (acc. to J. Kostrzewski – tripartite, type IIIb). 2. Fragments of a bronze tripartite type IIIb belt hook (Fig. 11:4). 3. Fragment of a bronze belt hook (acc. to J. Kostrzewski – tripartite, type IIIb).

Literature: J. KOSTRZEWSKI, Archive, portfolio 13, cards 425, 431 and 433; 1919, 59 f.n. 6, list 29; R. WILOCH 1995, list 47.

From the cemetery: bronze tripartite type III belt hook.

Literature: D. BOHNSACK 1938, list 22.

30. Tczew, Gdańsk County (fmr. *Dirschau*, *Kr. Dirschau*)

From the grave: bronze tripartite type IIIb belt hook (Fig. 11:5).

Literature: G. OSSOWSKI 1879, 58–59, pl. XLIII:1.2; J. KOSTRZEWSKI, Archive, portfolio 13, cards 555 and 556; 1919, 59 f.n. 4, 7, 8, list 29; A. KARPIŃSKA 1922, 31–32, fig. 11; R. WILOCH 1995, list 47; E. BOKINIEC 2008, 437 (incorrectly two specimens).

31. Wolny Dwór, Starogard Gdański County

Grave 1 (inhumation, damaged)

Inventory: bronze tripartite type IIIc belt hook (Fig. 14); a pair of bronze brooches, type A.50/51; fragment of a bronze needle; fragment of bronze tweezers or fitting; fragment of a crescent-shaped iron knife; three glass beads.

Literature: M. TUSZYŃSKA, A. STROBIN, J. STROBIN 2016, 44 no. 98 (belt hook); unpublished, excavation by E. Adamska-Grzymała.

Collection: MAG, inv. MAG/OWR/143/1.

Grave 2 (inhumation)

Inventory: bronze tripartite type IIIc belt hook; a pair of bronze brooches, type A.46; bronze disc brooch; a pair of bronze rings type *Knotenring*; a pair of bronze rings type *Şimleul Silvaniei*; bronze pendant type *Knotenring*; fragments of a bronze pin or brooch pin; glass beads; amber beads.

Literature: unpublished, excavation by E. Adamska-Grzymała.

Collection: MAG.

BRONZE TRIPARTITE BELT HOOKS TYPE III OUTSIDE OF POMERANIA

32. Alt Töplitz (at present Werder-Töpliz), Lkr. Potsdam-Mittelmark, Brandenburg

Bronze tripartite type IIIb belt hook.

Literature: A. REINECKE 1988, list 27, map 20.

33. Berlin-Lichterfelde (fmr. *Groß-Lichterfeld*, *Kr. Teltow*)

Bronze belt hook (acc. to J. Kostrzewski – tripartite, type IIIb).

Literature: J. KOSTRZEWSKI 1919, list 29; A. REINECKE 1988, list 27, map 20.

34. Bochow, Kr. Potsdam-Mittelmark, Brandenburg (fmr. *Bochow*, *Kr. Zauch-Belzig*)

Bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb).

Literature: J. KOSTRZEWSKI, Archive, portfolio 89, unnumbered card; 1919, 59, f.n. 3, list 29; A. REINECKE 1988, list 27, map 20.

35. Börnicke (at present Nauen-Börnicke), Kr. Havelland, Brandenburg (fmr. *Börnicke*, *Kr. Osthavelland*)

Grave 18: bronze tripartite type IIIb belt hook.

From cemetery: two bronze tripartite type IIIb belt hooks (Fig. 16:4).

Literature: J. KOSTRZEWSKI, Archive, portfolio 89; 1919, 59, f.n. 1, 2, list 29; E. REINBACHER 1963, pl. 57/C(?) 545, 55/E9, 60/E8; A. REINECKE 1988, list 27, map 20.

36. Brandenburg (location unknown)

Bronze tripartite type IIIb belt hook.

Literature: I. UNSET 1882, 204, pl. XXI:6a,b; J. KOSTRZEWSKI 1919, list 29.

37. Domnitzsch, Lkr. Nordsachsen, Saxony

Bronze tripartite type IIIa belt hook.

Literature: R. MÜLLER 1985, 89; A. REINECKE 1988, list 27, map 20.

38. **Gräfenhainichen**, Lkr. Wittenberg, Saxony-Anhalt
Grave 68: bronze tripartite type III belt hook (Fig. 16:5).
 Literature: G. & S. GUSTAVS 1976, 78, 115, fig. 17/68:1; R. MÜLLER 1985, 89; A. REINECKE 1988, list 27, map 20.
39. **Guben**, Kr. Spree-Neiße, Brandenburg (fmr. *Wilhelm-Pieck-Stadt Guben, Kr. Guben*)
Grave 3/1881: fragment of a bronze belt hook (acc. to J. Kostrzewski – tripartite, type IIIb).
 Literature: J. KOSTRZEWSKI 1919, list 29; G. DOMAŃSKI 1975, 25, 130 no. 31, pl. XXXV:b.
40. **Hohenwutzen** (at present Bad Freienwalde-Hohenwutzen), Lkr. Märkisch-Oderland, Brandenburg (fmr. *Hohenwutzen, Kr. Königsberg i. N.*)
 Bronze tripartite type IIIb belt hook (Fig. 16:2).
 Literature: A. VOSS 1880, 106, pl. VI:6; I. UNDSSET 1882, pl. XXI:7 (here as *Hohensaten*); J. KOSTRZEWSKI, Archive, portfolio 89; 1919, 58, 59, f.n. 3, 339, list 29, fig 45; A. REINECKE 1988, list 27, map 20.
41. **Jazów**, Krosno County (fmr. *Haaso, Kr. Guben*)
From cemetery: fragment of bronze belt hook (acc. to J. Kostrzewski – tripartite, type IIIb).
 Literature: J. KOSTRZEWSKI 1919, list 29; G. DOMAŃSKI 1975, 25, 109 no. 14, pl. II:g.
42. **Jütchendorf** (at present Ludwigsfelde-Jütchendorf), Lkr. Teltow-Fläming, Brandenburg
 Bronze tripartite type IIIb belt hook from grave.
 Literature: W. HINDENBURG 1910, 198, fig. 15; J. KOSTRZEWSKI, Archive, portfolio 89; 1919, list 29; A. REINECKE 1988, list 27, map 20.
43. **Leest** (at present Werder-Töpliz), Lkr. Potsdam-Mittelmark, Brandenburg
 A few bronze belt hooks (acc. to Kostrzewski – tripartite, type IIIb).
 Literature: J. KOSTRZEWSKI, Archive, portfolio 89; 1919, list 29; A. REINECKE 1988, list 27, map 20.
44. **Löwenbruch** (at present Ludwigsfelde-Löwenbruch), Lkr. Teltow-Fläming, Brandenburg
 Bronze tripartite type IIIb belt hook.
 Literature: W. HINDENBURG 1910, 198, fig. 16; J. KOSTRZEWSKI, Archive, portfolio 89; 1919, 59 f.n. 2, list 29; A. REINECKE 1988, list 27, map 20.
45. **Neu Töpliz** (at present Werder-Töpliz), Lkr. Potsdam-Mittelmark, Brandenburg
 Bronze tripartite type IIIb belt hook.
 Literature: A. REINECKE 1988, list 27, map 20.
46. **Uetz** (at present Potsdam-Uetz-Paaren), Stadt Potsdam, Brandenburg
Grave 101: bronze tripartite type IIIb belt hook (Fig. 16:3).
 Literature: H. SEYER 1982, pl. 18:1; A. REINECKE 1988, list 27, map 20.
47. **Wittenberg**, Kr. Wittenberg, Saxon-Anhalt
From grave: bronze tripartite type IIIa belt hook (Fig. 16:1).
 Literature: R. MÜLLER 1985, 89–90, pl. 87:6; A. REINECKE 1988, list 27, map 20.
48. **Żnin** (surroundings), Żnin County
 Fragment of bronze belt hook (acc. to Kostrzewski – tripartite, type IIIb).
 Literature: J. KOSTRZEWSKI 1919, list 29.

BIBLIOGRAPHY

ARCHIVAL SOURCES

J. KOSTRZEWSKI, Archive – personal files of Józef Kostrzewski, in The Cyprian Norwid Regional and City Public Library in Zielona Góra.

LITERATURE

- ALMGREN, O. 1923: *Studien über nordeuropäische Fibelformen der ersten nachchristlichen Jahrhunderte mit Berücksichtigung der provinzialrömischen und südrussischen Formen*, Mannus-Bibliothek 32, Leipzig².
- ANDRZEJOWSKI, J., MARTENS, J. 1996: *The Wielbark Cemetery. Information on Unpublished Material from the Personal Files of Carl-Axel Moberg*. In: A. Kokowski (ed.), *Studia Gothica I*, Lublin, 18–72.
- ANGER, S. 1890: *Das Gräberfeld zu Ronsden im Kreise Graudenz*, Abhandlungen zur Landeskunde der Provinz Westpreussen 1, Graudenz (Reed. R. Hachmann, F. Stein, *Ronsden-Rządz. Gräberfeld und Fürstengräber*, Bonn 1972, [1]–[70]).
- BEHRENDTS, R.-H. 1968: *Schwissel. Ein Urnengräberfeld der vor-*

römischen Eisenzeit aus Holstein, Offa-Bücher 22, Neumünster.

- BLUME, E. 1915: *Die germanischen Stämme und die Kulturen zwischen Oder und Passarge zur römischen Kaiserzeit, II Teil: Material* (ed. M. Schultze), Mannus-Bibliothek 14, Würzburg.
- BOCHNAK, T. 2014: *Importy celtyckie w kulturze przeworskiej i oksywskiej na ziemiach polskich w młodszym okresie przedrzymskim. Zróżnicowanie – drogi napływu – kontekst kulturowy*, Rzeszów.
- BOCHNAK, T., HARASIM, P. 2015: *Reparierte Waffen der vorrömischen Eisenzeit in der Przeworsk- und Oksywie-Kultur*, “Archäologisches Korrespondenzblatt” 45/4, 519–533.
- BOCKIUS, R., ŁUCZKIEWICZ, P. 2004: *Kelten und Germanen im 2.–1. Jahrhundert vor Christus*, *Archäologische Bausteine zu einer historischen Frage*, Römisch-Germanisches Zentralmuseums Mainz. Monographien 58, Mainz.
- BOHNSACK, D. 1938: *Die Burgunden in Ostdeutschland und Polen*, *Quellenschriften zur ostdeutschen Vor- und Frühgeschichte* 4, Leipzig.

- BOKINIEC, E. 1999: *Cmentarzysko z młodszego okresu przedrzymskiego w Świerkówcu, gm. Mogilno*, In: J. Andrzejowski, (ed.), *COMHLAN. Studia z archeologii okresu przedrzymskiego i rzymskiego w Europie Środkowej dedykowane Teresie Dąbrowskiej w 65. rocznicę urodzin*, Warszawa, 115–140.
- BOKINIEC, E. 2005: *Podwiesk, Fundstelle 2. Ein Gräberfeld der Oksywie-Kultur im Kulmer Land*, Monumenta Archaeologica Barbarica XI, Warszawa-Toruń.
- BOKINIEC, E. 2008: *Kultura oksywska na ziemi chełmińskiej w świetle materiałów sepulkralnych*, Toruń.
- BUCKA, K. 2016: *Odkrycia i badania archeologiczne: Epoka żelaza*, "Stargardia" X (2015), 467–468.
- BURSCHE, A., MACHAJEWSKI, H., ROGALSKI, B. 2012: *Okres przedrzymski – okres wędrówek ludów – katalog zabytków / The Pre-Roman Iron Age – Migration Period – Catalogue of the Archaeological Finds*, In: K. Kowalski, D. Kozłowska-Skoczka (eds.), *Zaginione – ocalone. Szczecińska kolekcja starożytności pomorskich / Lost – Saved. The Pomeranian Antiquities Collection of Szczecin*, Szczecin, 237–312.
- CIEŚLIŃSKI, A. 2010: *Kulturelle Veränderungen und Besiedlungsabläufe im Gebiet der Wielbark-Kultur an Łyna, Pasłęka und oberer Drwęca*, Berliner Beiträge zur Vor- und Frühgeschichte NF 17, Berlin.
- CONWENTZ, H. 1905: *Das Westpreussische Provinzial-Museum 1880–1905*, Danzig.
- CZARNECKA, K., KONTNY, B. 2009: *Traces of Combat or Traces of Ritual Destruction? The Damage of Weapons in the Przeworsk Culture*, In: H.-J. Schalles, A. W. Busch (eds.), *Waffen in Aktion. Akten des 16. Roman Military Equipment Conference (ROMECC), Xanten, 13.–16. Juni 2007*, Xantener Berichte XVI, Mainz am Rhein, 29–40.
- DĄBROWSKA, T. 1993: *Uwagi o genezie pokryw w kręgu przeworsko-oksywskim w młodszym okresie przedrzymskim*, In: F. Rożnowski (ed.), *Miscellanea archaeologica Thaddaeo Malinowski dedicata*, Słupsk-Poznań, 109–117.
- DĄBROWSKA, T. 2004: *O naprawach przedmiotów metalowych kultury przeworskiej*, In: Z. Kobyliński (ed.), *Hereditatem cognoscere. Studia i szkice dedykowane Profesor Marii Miśkiewicz*, Warszawa, 169–175.
- DOBZAŃSKI, L.A. 2008: *Metaloznawstwo opisowe stopów metali nieżelaznych*, Gliwice.
- DOMAŃSKI, G. 1975: *Studia z dziejów Środkowego Nadodrza w III–I wieku p.n.e.*, Wrocław.
- EGGERS, H.J. 1936: *Das Gräberfeld von Langenhagen Kr. Saatzig*, Zweites Beiheft zum "Erwerbungs- und Forschungsbericht", 13–27.
- EGGERS, H.J. 1964: *Das Gräberfeld von Langenhagen, Kr. Saatzig*, "Baltische Studien" NS 50, 7–12.
- EGGERS, H.J., STARY, P.F. 2001: *Funde der vorrömischen Eisenzeit, der römischen Kaiserzeit und der Völkerwanderungszeit in Pommern*, Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns 38, Lübstorf.
- FUDZIŃSKA, E., FUDZIŃSKI, P. 2013: *Wielokulturowe cmentarzysko w Nowym Targu, stan. 6, gm. Stary Targ, Malbork*.
- GUSTAVS, G. & S. 1976: *Das Urnengräberfeld der Spätlatènezeit von Gräfenhainichen, Kreis Gräfenhainichen*, JmV 59, 25–172.
- HACHMANN, R. 1951: *Das Gräberfeld von Ronsden (Rządź), Kreis Graudenz (Grudziądz) und die Chronologie der Spätlatènezeit im östlichen Mitteleuropa*, "Archaeologia Geographica" 2, 79–96 (Reed. R. Hachmann, F. Stein, Ronsden-Rządź. Gräberfeld und Fürstengräber, Bonn 1972, [85]–[102]).
- HACHMANN, R. 1957: *Ostgermanische Funde der Spätlatènezeit in Mittel- und Westdeutschland. Ein Beitrag zum Problem des Nachweises von Bevölkerungsbewegungen aufgrund des urgeschichtlichen Grundstoffs*, "Archaeologia Geographica" 5/6 (1956/1957), 55–68.
- HACHMANN, R. 1961: *Die Chronologie der jüngeren vorrömischen Eisenzeit. Studien zum Stand der Forschung im nördlichen Mitteleuropa und in Skandinavien*, BerRGK 41 (1960), 1–276.
- HAHULA, K. 2003: *Losy zabytków i archiwaliów dotyczących schyłku starożytności na terenie powiatu łęborskiego*, Biuletyn Historyczny 23, Łębork, 159–172.
- HAEVERNICK, Th.E. 1960: *Die Glasarmringe und Ringperlen der Mittel- und Spätlatènezeit auf dem europäischen Festland*, Bonn.
- HAUPTMANN, Th. 2002: *Das germanische Gräberfeld von Prądnio, Kr. Międzybórz (ehem. Rahmhütte, Kr. Soldin)*, Poznań.
- HEYM, W. 1961: *Drei Spätlatènegräberfelder aus Westpreußen*, "Offa" 17/18 (1959/1961), 143–170.
- HINDENBURG, W. 1910: *Neue Funde der Latène-Zeit aus dem Kreis Teltow*, "Mannus" II, s. 194–199.
- JANKUHN, H. 1933: *Gürtelgarnituren der älteren römischen Kaiserzeit im Samland*, Prussia 30, 166–201.
- KARPIŃSKA, A. 1922: *Reparacje prehistoryczne w Polsce*, PArch. II/1, 25–37.
- KASISKI, F.W. 1873: *Bericht über die im Jahre 1872 fortgesetzten Untersuchungen von Alterthümern in Pommerellen*, "Schriften der naturforschenden Gesellschaft in Danzig" NF III/2, 1–38.
- KEILING, H. 1969: *Die vorrömische Eisenzeit im Elde-Karthane-Gebiet (Kreis Perleberg und Kreis Ludwigslust)*, Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 3, Schwerin.
- KLEEMANN, J. 2017: *Die Ausgrabungen des Städtischen Museums Marienburg im Gräberfeld Malbork-Wielbark, Fundstelle 1 in den Jahren 1927–1932, 1934 und 1936*, Lublin.
- KOKOWSKI, A. 1991: *Udział elementów celtyckich w strukturze cmentarzyska brytualnego w Kruszy Zamkowej, woj. Bydgoszcz, st. 13 (próba falsyfikacji pojęcia „grupy kruszańskiej")*, APolski XXXVI/1–2, 115–149.
- KOSTRZEWSKI, J. 1919: *Die ostgermanische Kultur der Spätlatènezeit*, Mannus-Bibliothek 18–19, Leipzig-Würzburg.
- KUNKEL, O. 1931: *Pommersche Urgeschichte in Bildern*, Schriften aus dem Provinzialmuseum Stettin, Stettin.
- LA BAUME, W. 1926: *Ausgrabungen bei Praust, Kreis Danziger Höhe (1925 und 1926)*, "Blätter für deutsche Vorgeschichte" 4, 1–9.
- LISSAUER, A. 1874: *Beiträge zur westpreussischen Urgeschichte. 2: Das Gräberfeld auf dem Zywietschen Acker bei Oliva*, "Schriften der naturforschenden Gesellschaft in Danzig" NF III/3, 8–16.

- LISSAUER, A. 1887: *Die Prähistorischen Denkmäler der Provinz Westpreussen und der angrenzenden Gebiete*, Leipzig.
- LISSAUER, A., CONWENTZ, H. 1886: *Das Weichsel-Nogat-Delta*, "Schriften der naturforschenden Gesellschaft in Danzig" NF VI/3, 204–243.
- ŁASZKIEWICZ, T. 1973: *Cmentarzysko ludności kultury jastorfskiej w Kunowie, pow. Stargard Szczeciński*, MZP XVII (1971), 17–75.
- ŁĘGA, W. 1938: *Cmentarzysko lateńsko-rzymskie z Chełmna*, Prace Prehistoryczne Pomorskie 1, Toruń.
- ŁUCZKIEWICZ, P. 2006: *Uzbrojenie ludności ziem polskich w młodszym okresie przedrzymskim*, Archaeologia Militaria II, Lublin.
- MACHAJEWSKI, H. 1999: *Stosunki kulturowe w dorzeczu Parsęty w młodszym okresie przedrzymskim*, In: J. Andrzejowski, (ed.), COMHLAN. *Studia z archeologii okresu przedrzymskiego i rzymskiego w Europie Środkowej dedykowane Teresie Dąbrowskiej w 65. rocznicę urodzin*, Warszawa, 233–245.
- MACIAŁOWICZ, A. 2011: *Pomorze Gdańskie na przełomie starszego i młodszego okresu przedrzymskiego w świetle analizy zewnętrznych oddziaływań kulturowych*, In: M. Fudziński, H. Paner (eds.), *Między kulturą pomorską a kulturą oksywską. Przemiany kulturowe w okresie lateńskim*, Gdańsk, 79–120.
- MADYDA-LEGUTKO, R. 1990: *Gürtelhaken der frühromischen Kaiserzeit im Gebiet des mitteleuropäischen Barbaricum*, PArch. 37, 157–180.
- MAGDALINSKI, G. 1911: *Zwei prähistorische Grabstätten in der Parochie Schwessin, Kreis Köslin*, "Monatsblätter der Gesellschaft für pommersche Geschichte und Altertums-kunde" XXV, 177–184.
- MAGDALINSKI, G. 1934: *Die drei Latènefriedhöfe von Konikow, Geritz und Mersin, Kr. Köslin (Pomm.)*, "Mannus" 26, 145–160.
- MĄCZYŃSKA, M. 2011: *Der frühvölkerwanderungszeitliche Hortfund aus Łubiana, Kreis Kościerzyna (Pommern)*, Ber RGK 90 (2009), 7–481.
- MÜLLER, R. 1985: *Die Grabfunde der Jastorf- und Latènezeit an unterer Saale und Mittelbe*, Veröffentlichungen des Landesmuseums für Vorgeschichte in Halle 38, Berlin.
- NIEWĘGŁOWSKI, A., HENSEL, Z. 1997: *Zróżnicowanie i pochodzenie surowca wyrobów „brązowych” w okresach hal-sztackim i przedrzymskim w Polsce*, APolski XLII/1–2, 63–139.
- OSSOWSKI, G. 1888: *Zabytki Przedhistoryczne Ziem Polskich, Seryja I: Prusy Królewskie / Monuments Préhistoriques de l'Ancienne Pologne, I^e Serie: Prusse Royale*, vol. 4, Kraków.
- PIETRZAK, M. 1997: *Pruszcz Gdański, Fundstelle 10. Ein Gräberfeld der Oksywie- und Wielbark-Kultur in Ostpommern*, Monumenta Archaeologica Barbarica IV, Kraków.
- REINBACHER, E. 1963: *Börnische. Ein ältereisenzeitlicher Urnenfriedhof im Havelland, Teil I*, Schriften der Sektion für Vor- und Frühgeschichte 14, Berlin.
- REINECKE, A. 1988: *Studien zur vorrömischen Eisenzeit im Umland der südlichen Ostsee. Forschungsstand–Chronologie–Kulturhistorische Beziehungen*, typescript of unpublished PhD dissertation, Humbolt-Universität, Berlin.
- ROGAŁSKI, B. 2010: *Przemiany kulturowe na Pomorzu Zachodnim i Przednim w młodszym okresie przedrzymskim (III–I w. p. n. e.)*, Szczecin.
- ROŻNOWSKI, F., CYMEK, L. 2015: *Analizy antropologiczne szczątków kostnych z cmentarzyska w Czarnówku, stan. 5, pow. lęborski (materiały z lat 2008–2015)*, In: J. Andrzejowski (ed.), *Cmentarzyska z późnej starożytności na Pomorzu. Część I*, Monumenta Archaeologica Barbarica, Series Gemina V, Lębork-Warszawa, 69–137.
- SEYER, H. 1982: *Siedlung und archäologische Kultur der Germanen im Havel-Spree-Gebiet in den Jahrhunderten vor Beginn u. Z.*, Schriften zur Ur- und Frühgeschichte 34, Berlin.
- SCHUMANN, H. 1889: *Urnenfriedhöfe in Pommern*, "Baltische Studien" 39, 81–255.
- SCHUMANN, H. 1897: *Die Kultur Pommerns in vorgeschichtlichen Zeit*, Berlin.
- SEKUŁA, M. 2006: *Ocalałe zabytki pochodzące z badań niemieckich na cmentarzysku w Malborku-Wielbarku w zbiorach muzeów polskich*, In: W. Nowakowski, A. Szela (eds.), *Pogranicze trzech światów. Kontakty kultur przeworskiej, wielbarskiej i bogaczewskiej w świetle materiałów z badań i poszukiwań archiwalnych*, ŚWIATOWIT Suppl. Series P: Prehistory and Middle Ages XIV, Warszawa, 175–223.
- SKORUPKA, T. 2001: *Kowalewko 12. Cmentarzysko birytualne ludności kultury wielbarskiej (od połowy I w. n.e. do początku III w. n.e.)*, Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego, vol. II: Wielkopolska, part 3, Poznań.
- STĄPOREK, M. 2007: *Z problematyki kontaktów między Pomorzem a Skandynawią na przełomie er (I wiek p.n.e. – I wiek n.e.)*, In: M. Fudziński, H. Paner (eds.), *Nowe materiały i interpretacje. Stan dyskusji na temat kultury wielbarskiej*, Gdańsk, 199–209.
- STROBIN, A. 2011: *Ceramika naczyniowa kultury oksywskiej*, Gdańskie Studia Archeologiczne. Monografie 2, Gdańsk.
- STROBIN, A. 2016: *Ciekawy zespół grobowy kultury oksywskiej z nekropolii w Brzynie, pow. pucki*, In: L. Domańska et alii (eds.), *Archaeologia et Pomerania. Studia ofiarowane Profesorowi Tadeuszowi Grabarczykowi w 70. rocznicę urodzin i 45-lecie pracy naukowo dydaktycznej*, Łódź, 147–163.
- STROBIN, J. 2019: *Analiza technologiczna i interpretacja badań metaloznawczych wybranych zabytków z cmentarzyska w Brzynie, pow. pucki*, unpublished typescript, Institute of Archaeology and Ethnology, Gdańsk University.
- TUSZYŃSKA, M., STROBIN, A., STROBIN, J. 2016: *Rzemieślnicy czy artyści? Ozdoby kobiece z Pomorza u schyłku starożytności. Katalog skrócony wystawy*, Gdańsk.
- UNDESET, I. 1882: *Das erste Auftreten des Eisens in Nordeuropa*, Hamburg.

- VOIGT, TH. 1971: *Zwei Formengruppen spätlatènezeitlicher Gürtel*, JmV 55, 221–270.
- VÖLLING, TH. 1995: *Studien zu Fibelformen der jüngeren vorrömischen Eisenzeit und ältesten römischen Kaiserzeit*, Ber RGK 75 (1994), 147–282.
- VOSS, [A.] 1880: *Über Gürtelhaken*, In: *Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, "Zeitschrift für Ethnologie" 12/IV, (106)–(108), pl. VI.
- WIŁOCH, R. 1995: *Klamry do pasa kultury oksywijskiej*, PomAnt XVI, 9–60.
- WOŁĄGIEWICZ, M.D. 1969: *Cmentarzysko z okresu późnolateńskiego i rzymskiego w Drawsku Pomorskim*, MZP XIII (1967), 7–76.
- WOŁĄGIEWICZ, R. 1968: *Chronologia względna okresu wczesnorzymskiego na Pomorzu Zachodnim w świetle niektórych jej wyznaczników*, MZP XII (1966), 169–192.
- WOŁĄGIEWICZ, R. 1979: *Kultura pomorska a kultura oksywska*, In: T. Malinowski (ed.), *Problemy kultury pomorskiej*, Koszalin, 33–69.
- WOŁĄGIEWICZ, R. 1981a: *Kultura oksywska i wielbarska: Chronologia; Systematyka kulturowa; Kultura oksywska*, In: *Prahistoria ziem polskich V*, 135–191.
- WOŁĄGIEWICZ, R. 1981b: *Kultura jastorfska: Grupa nadodrzańska*, *Prahistoria ziem polskich V*, 192–196.
- WOŁĄGIEWICZ, R. 1993: *Ceramika kultury wielbarskiej między Bałtykiem a Morzem Czarnym*, Szczecin.
- WOŁĄGIEWICZ, R. 1995: *Lubowidz. Ein birituelles Gräberfeld der Wielbark-Kultur aus der Zeit vom Ende des 1. Jhr. v.Chr. bis zum Anfang des 3. Jhs. n.Chr.*, *Monumenta Archaeologica Barbarica I*, Kraków.
- WOŁĄGIEWICZ, R. 1997: *Lubieszewo. Materiały do studiów nad kulturą społeczności Pomorza Zachodniego w okresie od IV w. p.n.e. do I w. n.e.*, Szczecin.
- WOŁĄGIEWICZOWIE, M.D. & R. 1964: *Uzbrojenie ludności Pomorza Zachodniego u progu naszej ery*, MZP IX (1963), 9–166.

TRÓJCZŁONOWE BRĄZOWE KLAMRY DO PASA Z POMORZA JAKO DOWÓD POWIĄZAŃ KULTUROWYCH W MŁODSZYM OKRESIE PRZEDRZYMSKIM I OKRESIE WPŁYWÓW RZYMSKICH

STRESZCZENIE

Trójczłonowe klamry do pasa wykonane z brązu są jednym z podstawowych wyznaczników stroju kobiecego w młodszym okresie przedrzymskim na Pomorzu. Zbudowane są z trzech podstawowych części: centralnego, ażurowego łącznika oraz dwóch ramion mocowanych po jego bokach za pomocą taśmowatych uszek; oba ramiona są zakończone haczykami służącymi do zaczepiania w pasie (Ryc. 1).

W pracy zebrano trójczłonowe klamry do pasa wykonane z brązu, pochodzące z 31 stanowisk z Pomorza (por. Katalog). Większość z nich należy do kultury oksywijskiej i wielbarskiej, a jedynie pięć do grupy nadodrzańskiej kultury jastorfskiej (Mapa 1). Dla celów porównawczych uwzględniono znaleziska spoza północnej Polski, z terenu Nadodrza, środkowych Niemiec i Kujaw (Katalog nr. 32–48, Mapa 1).

Łącznie z Pomorza zebrano informacje o 77 takich klamrach, pochodzących z 57 zespołów grobowych oraz luźnych znalezisk z cmentarzysk bądź bez określonego kontekstu. W wypadku niektórych klamer brak dokumentacji rysunkowej i fotograficznej, a włączenie ich do omawianej grupy oparto na zachowanych opisach (por. Gdynia-Oksywie, groby 72 i 132; Skowarcz, grób 4/1913 i znal. luźne 4). W większości wypadków klamry zachowały się fragmentarycznie, często też noszą ślady deformacji w ogniu. Kompletnie lub niemal kompletne okazy (13) pochodzą jedynie z 12 stanowisk.

W pracy przyjęto podział klamer trójczłonowych z brązu zaproponowany przez J. Kostrzewskiego (typy IIIa i IIIb), wydzielając kolejny typ IIIc, tj. okazy z bogato zdobionym ażurowym łącznikiem z nitami.

Do klamer typu IIIa, z łącznikiem w kształcie prostokątnej ramki, zaliczono cztery okazy (Ryc. 2, 3); na żadnej z nich nie stwierdzono śladów deformacji w ogniu. We wszystkich wypadkach długie ramię klamry ma kształt wydłużonego trójkąta, zwężającego się w kierunku haczyka zagiętego do wewnątrz. Przez środek długiego ramienia klamry przebiega wydatne żebro, a brzegi są wyraźnie podniesione do góry i delikatnie rozchylają się na zewnątrz. Zazwyczaj po bokach żeber i ramion widoczny jest ornament *tremolo*, niekiedy zachowany w postaci drobnych punktów lub ukośnych kresek. Od strony szerszej ramienia, przy łączniku, znajdują się nieduże nity mocowane w jednym rzędzie, we wszystkich czterech wypadkach po trzy. Ich trzpienie są masywne,

przewężone, a główki koliste, ozdobione krzyżem (Ryc. 2:2.3) lub trójkątem (Ryc. 2:1, 3). Wyjątkowa pod względem zdobienia jest klamra z Dobropola Gryfińskiego pokryta na płaskiej powierzchni długiego ramienia, między żeberkami, pasmami *tremolo* układającymi się w czworokąty wypełnione trójkątami i lukami (Ryc. 2:1). Krótkie ramie klamer typu IIIa przybiera zazwyczaj kształt wąskiej taśmy. Inną formę reprezentuje krótkie ramię klamry z Podwieska (Ryc. 2:2), które jest podobne do długiego ramienia; przy łączniku znajdują się ustawione w jednym rzędzie trzy nity, całe ramię jest żebrowane a wzdłuż plastycznych żeberk zdobione w technice *tremolo*. Całkowita długość tych klamer waha się od 28 do 34 cm.

Klamry typu IIIa pochodzą z dwóch cmentarzysk z Pomorza Zachodniego, należących do grupy nadodrzańskiej kultury jastorfskiej, i dwóch kolejnych z ziemi chełmińskiej, zaliczanych do kultury oksywijskiej (Mapa 2). Trzy z nich znaleziono w ciałopalnych grobach popielnicowych (Dobropole Gryfińskie, Kunowo, Podwiesk), jedną w grobie jamowym (Grudziądz-Rządź). Z uwagi na niewielką liczbę zespołów zwartych ustalenie chronologii tego typu jest utrudnione, niemniej wydaje się, należy je odnosić do fazy A₁.

Zdecydowanie liczniejsze są klamry typu IIIb, z łącznikiem zbudowanym z dwóch ustawionych poziomo segmentów (ćwiartek) kuli połączonych ze sobą trzonami – łącznie zarejestrowano 45 egzemplarzy. Z reguły zachowały się one fragmentarycznie (Ryc. 6:3, 7, 8, 10, 11:1.3.4), stosunkowo często są też zdeformowane w ogniu – dotyczy to nie mniej niż 13 okazów; tylko siedem egzemplarzy zachowało się w całości lub niemal w całości (Ryc. 6:1.2, 9, 11:2.5). Te ostatnie pozwalają oszacować długość klamer typu IIIb na ok. 30 do niemal 40 cm.

Podobnie jak w wypadku klamer typu IIIa, długie ramię klamer IIIb jest żebrowane. Zazwyczaj wzdłuż żebrowania biegnie zdobienie *tremolo*. W kilku wypadkach profilowanie ramienia jest bogatsze – pojawiają się na nim dwa kolejne żeberka (Ryc. 6:3). Szerszy koniec ramienia wieńczyły dwa (Ryc. 6:2.3, 9, 11:1.2.4) lub trzy (Ryc. 6:1, 7:3.5.6.8, 8, 10, 11:3.5) ustawione w jednym rzędzie ozdobne nity, najczęściej z wysokimi główkami wystającymi poza obrys ramienia klamry. Na kolistych główkach nitów widoczny jest najczęściej wpisany w koło

trójkąt (Ryc. 6:1.2, 7:5, 10, 11:2.5), rzadko krzyż (Ryc. 7:3) bądź nawiązujący do niego wzór gwiazdasty (Ryc. 11:4, 18:1), czy zakreskowane trójkątne pola (Ryc. 6:1, 7:8, 11:2).

W wypadku klamer typu IIIb łącznik na planie prostokąta wykonany jest z dwóch ustawionych horyzontalnie wycinków kuli, połączonych ze sobą dwoma prętami. W dolnej, szerszej części segmentu znajduje się wąski wałeczek (Ryc. 6:2.3, 7:1.2.7, 10, 11:1–4), lub zdecydowanie szerszy, podkreślony dwoma stosunkowo głębokimi liniami rytmami (Ryc. 6:1, 7:3, 9). Zdobiona może być również powierzchnia kopułki łącznika. Najczęściej dekoracja ta ma postać umieszczonej centralnie jednej grupy plastycznych listewek (Ryc. 6:3, 7:1–3.5.8, 11:1.3.4), a sporadycznie trzech grup (Ryc. 6:2). W niektórych wypadkach powierzchnia kopułki jest gładka (Ryc. 6:1, 9, 10, 11:2.5) lub pokryta ukośnymi kreskami (Podwieski, grób 151).

Krótkie ramię klamer typu IIIa przybiera zwykle kształt wąskiej taśmy zwężającej się delikatnie w stronę zagiętego do wewnątrz długiego haczyka, rzadziej to ramię jest szersze i ma kształt wrzecionowaty (Ryc. 6:3, 11:5). Powierzchnia krótkiego ramienia może być zdobiona (Ryc. 6:3, 7:8, 10, 11:2.5), a długi haczyk profilowany – przewężony i poprzecznie nacinany (Ryc. 6:2, 7:4, 9, 11:1.2). Wyjątkowy charakter ma, bardzo zresztą dobrze zachowane, profilowanie haczyka krótkiego ramienia klamry z obiektu 5 z nekropoli w Różynach (Ryc. 10). Widoczne przedstawienie zoomorficzne można interpretować jako głowę konia, na której zaznaczono uszy, ciemię, oczy oraz pysk z chrapami; ze względu na rurkowato odwzorowany pysk, głowa ta kojarzyć się także może z konikiem morskim.

Pomorskie znaleziska klamer typu IIIb odnotowano na dwóch stanowiskach grupy nadodrzańskiej kultury jastorfskiej na Pomorzu Zachodnim, pozostałe zaś pochodzą z zasięgu kultury oksywijskiej (a później wielbarskiej – Nowe Dobra, Parsęcko), głównie z rejonu ujścia Wisły i ziemi chełmińskiej, w mniejszym stopniu z Pomorza Środkowego (Mapa 1, 2). Spośród 34 zespołów grobowe z klamrami IIIb zdecydowana większość (30) kryła ciała palne pochówki bezpopielnicowe, tylko jeden był inhumacyjny (Gdynia-Oksywie, grób 132), a kolejne trzy nie zostały określone. Używanie tego typu zapięć pasa jest potwierdzone od fazy A₂ młodszego okresu przedrzymskiego po fazę B₂ okresu wpływów rzymskich.

Do wydzielonego w tej pracy typu IIIc klamer trójczłonowych zaliczono osiem okazów. Niektóre, znalezione w grobach inhumacyjnych, zachowały się w bardzo dobrym stanie (Ryc. 12:1, 13, 14), inne, z grobów ciałopalnych popielnicowych (Ryc. 12:3) lub bezpopielnicowych (Ryc. 12:2), przetrwały we fragmentach, często z wyraźnymi śladami przepalenia. Cechą wyróżniającą klamry typu IIIc jest ażurowy łącznik z ozdobnymi nitami, wykonany na planie czworo- (Ryc. 12:3, 14) lub sześcioboku (Ryc. 12:1, 13). Tylko w jednym wypadku (Ryc. 12:2) łącznik ma ramę zamkniętą jedynie od strony ramion klamry. Zwraca uwagę cecha, która u wcześniejszych typów nie była wyraźnie uchwytna, a mianowicie wyraźnie cieńsze i delikatnie rozchylone na zewnątrz podniesione brzegi długiego ramienia – dotyczy to klamer z Czarnówka, Lubowidza, Pelpina-Maciejewa (Ryc. 13:1.2) i Wolnego Dworu, groby 1 (Ryc. 14) i 2. W wypadku lepiej zachowanych okazów na spodniej stronie, zazwyczaj na wysokości środkowego żeberka, widoczne są wgłębienia, będące śladami po formowaniu tej części klamry (Ryc. 13). Kolejną cechą odróżniającą klamry typu IIIc od obu pozostałych typów jest forma krótkiego ramienia. Przyjmuje ono postać wydłużonej taśmy (Ryc. 12:3) lub ma zarys trójkątny i, podobnie jak ramie długie, jest żebrowane (Ryc. 12:1, 13, 14). Co ciekawe, tam gdzie na krótszym ramieniu zachowane są odgięte na zewnątrz haczyki do zapięcia klamry, przybierają one kształt litery T (Ryc. 13, 14). Większość klamer typu IIIc wyróżnia jeszcze jedna cecha – z reguły ozdobne nity mają krótsze trzpienie, które nie wystają ponad powierzchnię ramion i łącznika, co powoduje, że koliste ich główki przylegają do powierzchni. Zwracają też uwagę znaczne rozmiary do brzo zachowanych klamer typu IIIc pochodzących z grobów inhumacyjnych – całkowita długość kompletnych okazów wynosi od 39 do 42 cm, przy czym dość zróżnicowana jest wielkość łącznika, wynosząca od 3,7×3,1 cm (Czarnówka) do 7×7 cm (Wolny Dwór, grób 1). Datowanie klamer typu IIIc należy zamykać się w ramach faz A₃–B₂, przy czym większość z nich pochodzi z okresu wczesnorzymskiego. Ich zasięg ogranicza się on do rejonu ujścia Wisły, ziemi chełmińskiej oraz pradoliny Redy i Łeby (Mapa 2).

Poza Pomorzem trójczłonowe klamry z brązu odkryto na 17 stanowiskach (Mapa 1). Jeden egzemplarz zarejestrowano na stanowisku kultury przeworskiej, równie nieliczne są w grupie gubińskiej kultury jastorfskiej, natomiast zdecydowanie częściej potwierdzone są na zachód od Odry, w dwóch skupiskach na terenie kultury jastorfskiej: liczniejszym nad Hawelą oraz w międzyczeczu Łąby i Solawy. Odkryte tam klamry reprezentują przede wszystkim typ IIIb, tylko dwie – typ IIIa (Mapa 2). Warto zauważyć, że okaz z Wittenbergi (Ryc. 16:1) pod względem bogatego zdobnictwa długiego ramienia klamry wzorami geometrycznymi wykonanymi w technice *tremolo* jest bardzo podobny do klamry z Dobropola Gryfińskiego (Ryc. 2:1), ze stanowiska grupy nadodrzańskiej kultury jastorfskiej. Niektóre z tych klamer typu IIIb mają większą liczbę żeberk na długim ramieniu, co może świadczyć o kontynuowaniu tradycji zachodniogermańskich klamer jednoczłonowych. Zupełnie wyjątkowa jest klamra z Börnicke, gdzie segmenty kuli wykonane z brązu połączone są żelaznymi trzpieniami. W kilku wypadkach zaczep mocujący ramie do łącznika jest osobnym elementem połączonym z ramieniem za pomocą nitu (Ryc. 16:2.3). Brak ewidentnego śladów zniszczenia tych klamer skłania do przypuszczenia, że jest to indywidualna cecha technologiczna klamer „zachodnich”.

Na kilku klamrach zauważono dowody wtórnych manipulacji, będących wynikiem starożytnych napraw. Wielkość i ciężar takich zapięć pasa oraz ich wieloczęściowa budowa sprzyjały możliwości ich uszkodzenia podczas codziennego użytkowania. Najbardziej narażone na złamanie było długie ramie klamry wraz z zaczepem, czego dobrym przykładem jest klamra z grobu 24/1908 z Nowych Dóbr. Naprawa ramienia polegała na podłożeniu od spodu, w miejscu złamania, żelaznej płytki i przymocowaniu jej za pomocą czterech żelaznych nitów (Ryc. 8). Kolejny przykład pochodzi z Gräfenhainichen; tu podwójnie złamane ramie naprawiono przez dodanie od spodu długiej taśmy żelaznej, przymocowanej doń trzema nitami rozmieszczonymi wzdłuż środkowego żeberka (Ryc. 16:5). Z inną formą ingerencji mamy do czynienia w wypadku klamry z Pruszczu Gdańskiego, stan. 7, grób 103, gdzie na każdym z zachowanych dwóch fragmentów długiego ramienia widoczne są pary wywierconych otworów (Ryc. 17), być może będących śladem reperacji polegającej na wtórnym połączeniu obu złamanych części tego ramienia klamry. Klamra z Tczewa (Ryc. 11:5) jest przykładem naprawy uszka/zaczepu mocującego długie ramie klamry do łącznika; z nitowaniem uszka do ramienia mamy zresztą do czynienia częściej (Ryc. 18). Nie wszystkie takie wypadki muszą jednak dowodzić naprawy klamry, mogą bowiem świadczyć o innym – bardziej trwałym – sposobie konstrukcji uszka, praktykowanym zresztą przez społeczności kultury jastorfskiej z obszar na zachód od Odry.

Badania składu chemicznego surowca trójczłonowych klamer brązowych przeprowadzono jedynie dla dwóch stanowisk – Podwieska i Brzyna. W wypadku pierwszego analizy wykonano dla dziewięciu klamer, w wypadku drugiego tylko dwóch (Tab. 1). Wyniki analiz klamer z Brzyna pozwalają stwierdzić, że wykonano je z brązów cynowych – dwuskładnikowych stopów miedzi z cyną. W poszczególnych częściach klamer skład stopów jest zbliżony: zawartość miedzi wynosi od 88% do 92% a cyny od 6% do 10%, zaś pozostałych składników sięga niewiele ponad 1% – ołów stanowi 0,45–1,28%, a cynk 0,75–0,80% stopu. Jedynym, wyróżniającym się po względem surowcowym elementem jest krótkie ramie klamry z obiektu 301, odlane ze stopu o 95,33% zawartości miedzi i 2,51% cyny. Skład tego surowca jest odmienny od składu pozostałych elementów tej klamry (Cu 88–90%, Sn 7,03–9,39%) i właściwościami fizycznymi przypomina czystą miedź. Odmiennie

i bardziej zróżnicowane rodzaje surowca zastosowano do wykonania trójczłonowych klamer żebranych z cmentarzyska w Podwiesku. Analizowane zabytki wykonano także z brązów cynowych, jednak o wysokiej zawartości ołowiu i cynku, a więc stopów wieloskładnikowych.

Wielocłonowe klamry wykonane z brązu odkryte na Pomorzu pochodzą z grobów o kobiecym modelu wyposażenia. Dotyczy to 41 spośród 53 zespołów poddających się takiej analizie. Zawierały one nożyk sierpikowaty, igłę i szpilę, bransoletę, przęślik, paciorki, gładzik, a niekiedy także drugą klamrę do pasa oraz uznawaną za element stroju kobiecego fibulę typu G. Skromnie wygląda na tym tle liczba analiz antropologicznych, wykonano je bowiem jedynie dla 15 spośród 57 zespołów grobowych z brązowymi klamrami trójczłonowymi.

Inwentarze pomorskich grobów z brązowymi klamrami trójczłonowymi pozwalają stwierdzić, że do upowszechnienia się stroju, w którym używano pasa spinanego taką klamrą doszło w ciągu trwania fazy A₂ młodszego okresu przedrzymskiego. Ich pojawienie się na Pomorzu przypisuje się oddziaływaniom kultury jastorfskiej.

Jak wykazano wyżej, klamry trójczłonowe brązowe typów IIIa i IIIb używane były na dość rozległym terenie rozciągającym się od ziemi chełmińskiej przez rejon dolnej Wisły, Pomorze Środkowe i Zachodnie, po obszar środkowych Niemiec (Mapa 1, 2). Wyraźnie rysują się ich dwie koncentracje: pierwsza nad dolną Wisłą, druga na terenie dzisiejszej Brandenburgii. Wydaje się, że najwcześniejszą metrykę mają, wciąż niezbyt liczne, klamry typu IIIa, o łączniku w kształcie prostokąta. Można sądzić, że były używane już w starszej i środkowej fazie młodszego okresu przedrzymskiego. Większa liczba egzemplarzy tego typu znajdowana w zasięgu kultury jastorfskiej, choć na znacznie od siebie oddalonych stanowiskach, pozwala przypuszczać, że genezę klamer typu IIIa wiązać należy właśnie z tym ugrupowaniem, zaś ich pojawienie się na ziemi chełmińskiej było wynikiem kontaktów z kulturą jastorfską. Zdecydowanie lepiej rozpoznane są klamry typu IIIb. Największą popularnością cieszyły się one w fazie A₂, później używane były rzadziej. Uwagę zwraca datowany już na fazę B₁ okaz z grobu 24/1908 z Nowych Dóbr (Ryc. 8), którego krótkie ramię, w odróżnieniu od pozostałych, zaopatrzone było w nity, co cechuje podobnie datowane klamry typu IIIc. Nie wiadomo wprawdzie, jaką konstrukcję miała klamra z Parsęcka, datowana na fazę B₂, która zdaniem J. Kostrzewskiego reprezentowała typ IIIb, niemniej można stwierdzić, że formy „archaiczne” – oksywskie – przeżywały się jeszcze w zespołach identyfikowanych już z kulturą wielbarską.

W odniesieniu do klamer typu IIIb z obszaru kultury jastorfskiej zauważyć można, że niektóre wyróżniają się odmienną konstrukcją – zaczep łączący długie ramię klamry z łącznikiem jest osobnym elementem, przynitowanym do ramienia (Ryc. 16:2.3). Cecha ta nie jest jednak zupełnie obca na obszarach nad dolną Wisłą (por. Ryc. 18). Inne różnice dotyczą nitów (Ryc. 6:1, 16:2.3), których główki wydają się być mniejsze, a trzpienie bardziej masywne w porównaniu do znalezisk z terenu kultury oksywskiej. Zauważyć też trzeba, że jastorfskie klamry typu IIIb, ale też typu IIIa, w przestrzeniach pomiędzy żeberkami bawąją zdobione wzorami geometrycznymi wykonanymi w technice

tremolo (Ryc. 2:1, 16:1.2), miewają też większą liczbę żeberek na długim ramieniu, w tym o zaokrąglonych grzbietach. Wydaje się, że klamry typu IIIb pojawiły się w środowisku jastorfskim w wyniku wzajemnych kontaktów z ludnością oksywską. Niektóre z nich są zapewne importami z terenów nadwiślańskich, skąd pochodzi ich największa liczba. Okres tych relacji przypadał przede wszystkim na fazę A₂.

Niezwykle interesująco przedstawia się występowanie klamer typu IIIc. W przeciwieństwie do pozostałych form (Mapa 2) ich koncentracja znajduje się nad Zatoką Gdańską, z odizolowanym od tego zgrupowania, lecz chronologicznie najstarszym egzemplarzem (faza A₃) w Podwiesku na ziemi chełmińskiej (Ryc. 12:3). Połowa klamer o ażurowym łączniku jest bardzo dobrze zachowana, pochodzą one bowiem z grobów inhumacyjnych (Ryc. 12:1, 13, 14). Na spodniej stronie ramion tych egzemplarzy widoczne są ślady kucia i profilowania w formniku, a więc zastosowania metody wykonania odmiennej w stosunku do masywnych, odlewanych klamer typów starszych (Ryc. 13). Klamry typu IIIc cechuje także obecność nitów umieszczanych na efektywnym łączniku i na krótkim ramieniu. Klamry tego typu datowane na okres wpływów rzymskich pochodzą zarówno z grobów inhumacyjnych, jak i ciałopalnych, popielnicowych i bezpopielnicowych. Warto przypomnieć, że oksywskie klamry typu IIIb w zdecydowanej większości pochodzą z grobów bezpopielnicowych, co jest zgodne z preferowaną w tym ugrupowaniu regułą grzebania zmarłych kobiet.

Fragmentaryczny stan zachowania niektórych klamer i ich deformacje w ogniu nie pozwalają na obserwację śladów traseologicznych. Niemniej na okazach dobrze zachowanych zauważa się ślady starcia, w szczególności przy krótkim haczyku, na uszkach i na powierzchni ozdobnych nitów. Codzienne używanie pasa spinanego wielocłonową klamrą z brązu potwierdzają zadokumentowane reperacje, które dotyczą przede wszystkim cięższego długiego ramienia wraz z uszkiem, a także stosowanie trwalszej konstrukcji zaczepu, polegającej na przymocowaniu go nitem do ramienia. Pewne trudności sprawia próba odtworzenia sposobu noszenia pasa spinanego taką klamrą. Znaleziska z grobów inhumacyjnych wyraźnie potwierdzają miejsce ułożenia klamry wzdłuż obwodu pasa. Wydaje się, że ze względu na znaczny ciężar klamry, pas nią spinany musiał opierać się na biodrach.

Trójczłonowe klamry do pasa z brązu stanowiły charakterystyczny element stroju kobiecego na Pomorzu. Moda na pas zapinany metalową klamrą została przeniesiona na ten obszar z kultury jastorfskiej i upowszechniła się w młodszym okresie przedrzymskim. Za typowy wyznacznik regionalnego stroju społeczności kultury oksywskiej należy uznać klamry o łączniku w postaci połączonych ze sobą segmentów kuli. Co ciekawe, ten atrakcyjny wzór używany był również w środowisku jastorfskim, nie tylko w grupie nadodrzańskiej, ale także w grupach osiadłych na terenie dzisiejszej Brandenburgii. Potwierdza to, w odniesieniu do brązowych klamer pasa, wyraźne powiązania oksywsko-jastorfskie, jakie łączyły oba ugrupowania w ciągu fazy A₂. Przywiązanie do pasa spinanego efektywną, wielocłonową klamrą obserwuje się nadal w okresie wczesnorzymskim, przy czym jej forma ulega pewnej modyfikacji.