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AN AXE HEAD FROM A PRZEWORSK CULTURE SETTLEMENT IN JANOWIEC: PICTURES FROM THE LIFE OF WARRIORS OF EUROPEAN BARBARICUM

ABSTRACT

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The paper presents a stray find of an axe head from the Przeworsk culture settlement at Janowiec. It is a medium weight head attributed to sub-Group II.2 after B. Kontny (2018), dated generally to the Roman Period (Phases B2-C1a). Its shape does not allow the function to be determined univocally. Most probably it was a multifunctional tool. The aforementioned axes were used mainly in the Balt milieu, but they were also known but rather not used as weapons in the Przeworsk culture. Single finds from northern Europe may be explained by the participation of the Balt warriors in the military events at these areas. One may consider the possibility that the axes and some other parts of the military equipment became commonly used thanks to multi-ethnic military expeditions and the migrations with a military background connected, among other things, with the crisis of the Roman Empire in the 3rd century.

Keywords: ancient weapons, Germanic tribes, crisis of the third century, blunt weapons, West Balt Circle, Wielbark culture

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So far archaeologists have focused their interest on the historic periods in Janowiec, Puławy district (*cf.*, Supryn 2008; Cichomski 2014; Kruppé 2017). The issues of prehistoric settlement were dealt with only when prehistoric materials were discovered during the excavations conducted in the old town. Until recently the materials connected with the Przeworsk culture coming from Janowiec were not numerous. They included an accidental discovery of a Roman denarius in the vicinity of Janowiec (Gurba 1959, 96; Kokowski 2021, 138) and the finds made during the excavations near Wolności Square (*cf.*, Balke 1991, 79, pl. 3: 6-9; Dąbrowska 2017, 54-56). One should also mention more than a dozen fragments of Przeworsk culture pottery discovered during a field survey at Site 3 (Bargiel and Zakościelna 1995, 318). Some new perspectives on the problems of prehistoric, Early Mediaeval, but also modern settlement have been opened by the excavations near Janowiec, especially at Site 3 (*cf.*, Kuś 2019; 2021a; 2021b; Kuś *et al.* 2022).

Site 3 (AZP 76-75/47) in Janowiec, Puławy district, is located at a sandy edge of a terrace enclosing the Vistula valley from the north-west. In the vicinity there is a small river called Nieciecz, flowing into the Plewka river, which joins the Vistula above Janowiec. At present the bed of the Vistula is c. 2 km away from the site (Fig. 1). In geographical terms, the site is located within the Vistula River Gorge of Lesser Poland (Gajek and Chabudziński 2021, 425-427).

Site 3 was discovered in 1981 during a field survey conducted within the framework of the Polish Archaeological Record (Bargiel and Zakościelna 1995, 318). Successive field sur-

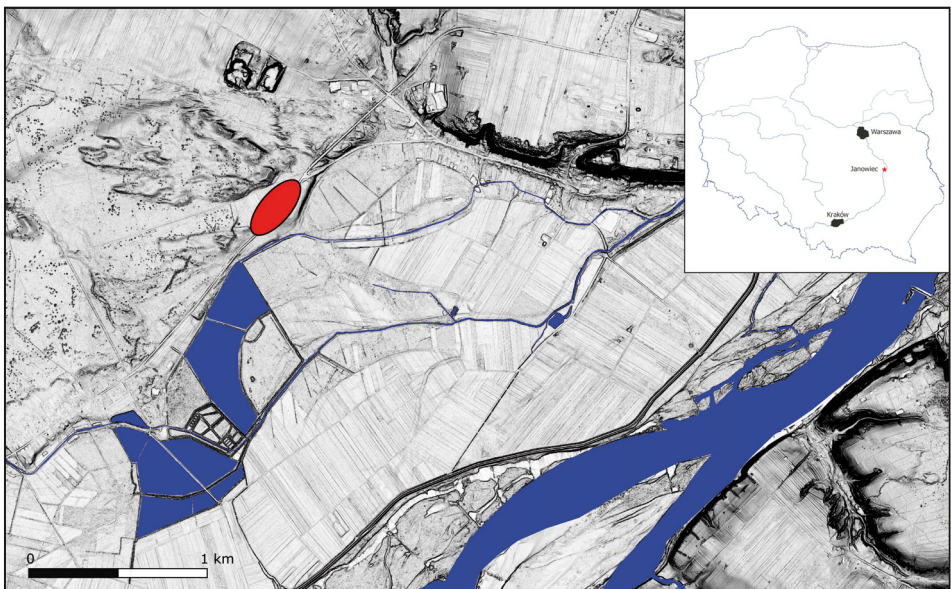


Fig. 1. Position of Site 3 in Janowiec, Puławy district with the application of a digital terrain model (DTM)

veys were conducted in 1986, 1996 and 2016, whereas since 2017, archaeological excavations and detailed surface prospection with metal detectors have been carried out. So far the excavations embraced an area of 2,1 ares and uncovered 66 settlement features and a sepulchral one. The majority of the features are connected with a settlement dating to the Roman Period and the Early Middle Ages (the 11th-12th century). The sepulchral feature, which consisted only of burnt human and animal bones, has been tentatively dated to the Early Middle Ages. The field survey (including the work with metal detectors) was conducted over the whole available area of the site, which is estimated at c. 3 hectares. The finds from that research embrace a broad time span from the Bronze Age till the modern times. The earliest materials connected with the Przeworsk culture are single pottery fragments from the Younger Pre-Roman Period, which represent the so-called Early Pottery Cycle (Dąbrowska 1988, 28, 29). The most numerous materials are those dated to Phases B2 and B2/C1-C1a, whereas the youngest horizon of the Przeworsk culture settlement is determined by the Almgren 158 brooch, Jakuszowice variant (Almgren 1923, 74-76, pl. 6: 158; Jakubczyk 2014, 139, pl. 30), and a buckle similar to Type H12 (Madyda-Legutko 1987, 64, pl. 19: 12). It is also worth mentioning two Balt brooches dated to the Migrations Period, which, however, cannot be conclusively related to the Przeworsk culture settlement (*cf.*, Kuś 2021b).

Of the several dozen finds related to the Roman Period (not including pottery fragments), some are particularly interesting because they differ from the standard Przeworsk culture finds from Central Poland. One of them is an iron axe head, discovered during a field survey with the use of a metal detector. It was located in the topsoil at the depth of c. 20 cm and was not accompanied by any other artefact.

This artefact has a symmetrical head, faceted at the butt (as a result of which this part is octagonal in cross section), with a relatively narrow blade, oval-shaped eye (clearly separated from the neck), and a slightly flattened butt (Fig. 2). The head was made from a single piece of iron, bent in half along the axis of the future eye, which is indicated by a seam visible in the bottom part of the eye and the neck, close to the longitudinal axis of symmetry (*cf.*, Nørbach 2009, fig. 123:a; Kotowicz 2018, 25, fig. 5). Dimensions: length 15.5 cm; width of the blade 5.2 cm; height of the butt: 4.7 cm; length of the butt: 4.7 cm; width of the eye: 3.4 × 2.3 cm (upper part), 3.2 × 2.3 cm (lower part); weight: 0.441 kg. The artefact represents Type II.2 according to B. Kontny (2018). It is not practical to use G. Kieferling's classification (1994) due to the fact that as the boundaries between many of the types distinguished in it are unclear; the discussed artefact can be assigned to Group 1-2 (Kieferling 1994, fig. 3: 6, 8) of the western series of Group 5 (Kieferling 1994, fig. 7: 1, 3) and Type Żarnowiec (Kieferling 1994, fig. 6: 5), which makes it impossible to make clear conclusions about the dating and distribution of the analogical forms.

The different diameters of the butt indicate that it narrowed down to the bottom, which is related to the way the hafts were fastened in the Roman Period. The sources (in their majority coming from water sacrificial sites) indicate that the handles narrowed down-



Fig. 2. Axe-head from Janowiec, Puławy district

wards, thanks to which they were wedged in the eye of the butt with their upper wider part. To increase this effect sometimes the upper part of the haft was dome-shaped rather than tapering and sometimes nails or rivets were used as wedges. No traces of the use, known from the Middle Ages, of leather straps to fasten the haft to the head (Kontny 2018, 80, 81, fig. 12, with further literature) have been found. As no remains of wood have been traced, it is not possible to determine which species were used to make the haft. On the basis of the 64 finds from northern Europe (Vimose, Nydam, Illerup, Kragehul) it may be assumed that hard wood was used, mainly of ash and fruit trees (*pomaceae*) less frequently hazel or oak wood, and very rarely beech, maple and holly; the same materials were used to make hafts of socketed axes (Malmros 2020, 97, 118, fig. 3: 26, table 3: 6, 18). One should mention

here the 30 hafts from Thorsberg in Schleswig, mostly made from ash (for the remaining ones it was not possible to determine the kind of tree – see Westphal 2008, fig. 2; Matešić 2015, 225, 552, pl. 109; M1184). The find from the sacrificial site of Alken Enge is radiocarbon dated to the Pre-Roman Period, but also in this case the haft is made from ash wood (Iversen 2019, 94, fig. 6). The handle of the axe abandoned during a robbery of a rich burial in Poprad-Matejovce was made from oak wood (Lau *et al.* 2022, 89, pl. 158: 417). The hafts are usually 60-90 cm long. The analysis of the West Balt finds (the Bogaczewo and Sudovian cultures) indicate that heads usually weighed 500-600 g, but there are also much lighter specimens and, more rarely, heavier ones (Kontny 2018, 81, with further literature). The majority of the finds from the south Scandinavian lake sacrificial site in Illerup are specimens weighing 400-500 g, but there are also quite a few lighter ones (200-400 g) as well as some heavier ones, going beyond the standards and reaching up to 1225 g (Nørbach 2009, 262, 263, fig. 122).

The artefact belongs to the category of medium weight heads but its shape does not allow us unequivocally to determine its function. Most probably it was a multifunctional tool used rather for agricultural jobs (cutting wood for fuel, making clearings in the forest, *etc.*) rather than for some specific craft, albeit it was possible to use it to work with wood. It was natural that such tools had many functions in the context of the busy life of the warriors, so it may be also inferred that axes were also effective weapons. In some regions of European Barbaricum they were the main kind of offensive weapon and even replaced the sword. This concerns the West Balt Circle (Kontny 2018), the Luboszyce culture (Domański 1979, 51, 52), the Elbe Circle in the Younger and Late Roman Period (Bemmann 2007, 76, 77), the Wielbark culture and Gothic cultural circle in general, also in the Younger and Late Roman Period (Kontny in print) and of the Tsebelda culture in Abkhazia (Voronov and Shenkao 1982, 127, 128, fig. 3), located beyond the European Barbaricum but strongly influenced by it, including in military equipment (Kazanskii 2015). The sources (especially the archaeological ones, but to some extent the iconographical and written ones as well), however, do not confirm any substantial military use of combat axes among the *Germani* as they are extremely rare in burials (also those with weapons) (Kontny 2008, 130, diagram 15; 2019a, 39). Thus the find from Janowiec was rather a tool, but its secondary use as a weapon cannot be excluded.

Interesting conclusions may be drawn from the distribution of the analysed axe heads (Fig. 4; List 1). The axe heads from Group II.2 are the most numerous in the West Balt Circle (Fig. 3: 2-4, 8). They can be found in the Bogaczewo (Fig. 3: 2, 3, 8), Sudovian (Fig. 3: 4) and Dollkeim-Kovrovo cultures, but not in Lithuania (*cf.*, Malonaitis 2008, figs. 13, 14, 16). In the Przeworsk culture they are considerably less numerous (Fig. 3: 5), especially if we take into account thousands of known burials with weapons from that culture. The recent studies show that they were also present in the Gothic circle, namely the Wielbark (Fig. 3: 1), Sântana de Mureş and Cherniakhiv cultures. One should also mention the few finds from northern Europe: single axes from sub-Group II.2 are known from the

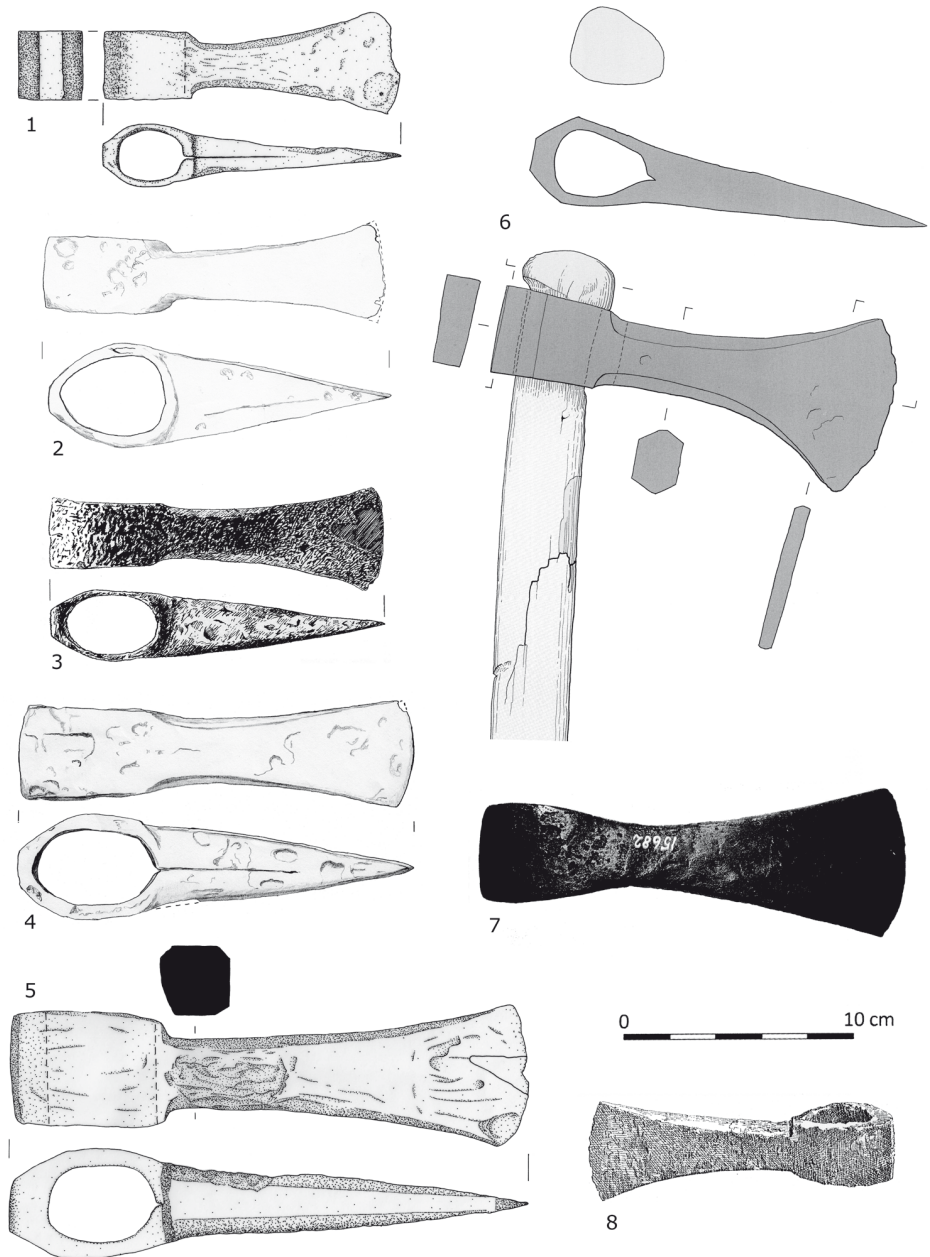


Fig. 3. Examples of axe heads Type Kontny II.2. 1 – Żuków, stray find (Wielbark culture); 2 – Bargłów Dworny, stray find (Bogaczewo culture); 3 – Judziki, Grave 12a (Bogaczewo culture); 4 – Suwałki region (Sudovian culture); 5 – Radymno (Przeworsk culture); 6 – Illerup; 7 – Vimose; 8 – Spychówko, stray find? (Bogaczewo culture). 1, 5 – drawing: P. Kotowicz; 2, 4 – drawing: B. Kontny; 3 – after Engel, Iwanicki and Rzeszotarska-Nowakiewicz 2006; 6 – after Nørbaek 2009; 7 – after Kontny 2017; 8 – after Gaerte 1929

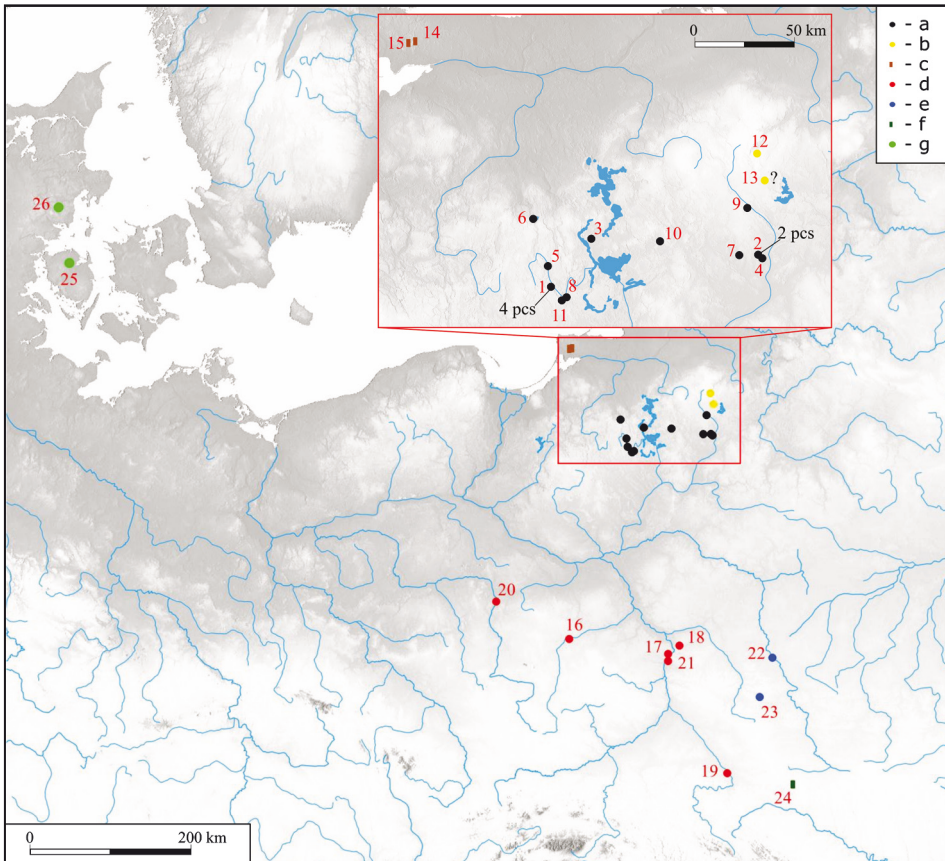


Fig. 4. Distribution of axe heads Type Kontny II.2 (List 1)

a – Bogaczewo culture; b – Sudovian culture; c – Dollkeim-Kovrovo culture; d – Przeworsk culture;
e – Wielbark culture; f – Sântana de Mureş and Cherniakhiv cultures; g – Scandinavia.

Map background: <https://maps-for-free>

sacrificial sites at Vimose (Fig. 3: 7) in Fünen and Illerup (Fig. 3: 6) in Eastern Jutland. At the site of Vimose, some other Balt culture artefacts were found, including axes, which allows us to suggest that the deposits from Phase B2 there (Vimose 1 and 2a) contain weapons won from the Balt invaders, who invaded the island together with the Przeworsk culture warriors (Kontny 2017, 34-40), and possibly also Wielbark culture ones, as that culture occupied the coastal areas and probably was able to build boats (Kontny 2019b: 164, 176, fig. 5). This may be also the explanation of the presence of a ‘Balt’ axe Kontny II.2 in Illerup, even if there were no other Balt artefacts. However, there can be another answer: the axe may have reached Scandinavia with a single warrior who came from the areas to the south or southeast of the Baltic. The axe head should be linked rather to the

early deposits of Illerup A or B from sub-Phase C1b than with the later Illerup C, from the turn of the Roman Period and the Migrations Period (Ilkjær 1990, 333-337), as they are dated to Phases B2-C1a (Kontny 2018, 76, 78); similar artefacts from the Dollkeim-Kovrovo culture allow us to suppose that they were used even till as late as the end of the Roman Period (Kontny 2018, 79, 80), yet still earlier than Illerup C. A good example of such contacts is Grave 1 from Barrow 2 in Szwajcaria, the richest known burial in the Sudovian culture. It is dated to sub-Phase C1b, and the eclectic character of the military equipment indicates that the deceased had broad military contacts, suggesting that he took part in long-distance military expeditions, especially to southern Scandinavia (Kontny 2013a).

The case of the Przeworsk culture is quite different. There are many more finds and they come from burials, and not from sacrificial deposits which consist of the invaders' weapons captured by the locals, as in Scandinavia. It seems that in the Przeworsk culture such weapons were used for military purposes only in some cases, but the form was quite well known there. Their finds from the Gothic circle were not deposits made in the sacrificial contexts either, even though weapons, including axes, were found in water-related contexts in the Wielbark culture (Kontny in print). It seems that this may be connected with another phenomenon, namely, the crisis of the third century. There were in those times, among other things, large-scale military undertakings shared by warriors from different parts of European Barbaricum, fighting in ethnically mixed retinues. Besides southern Scandinavia where military activities were of inter Barbarian character, the martial activity was directed southwards, which can be exemplified by the clashes with the Romans in 236 near today's Harzhorn in Lower Saxony where Germanic military equipment, including heads of shaft weapons were found (Meyer and Moosbauer 2013). The southern direction is confirmed by population movements of the Przeworsk culture to the Middle Danube region (Ołędzki 1996). The shifts to the south-east are confirmed by the appearance of the Przeworsk settlement in the Tisa river basin (Madyda-Legutko and Rodzińska-Nowak 2019) and the process of the migrations of the Goths that started in the early 2nd century (Godłowski 1994, 72; Kontny 2005, 228; Madyda-Legutko and Rodzińska-Nowak 2019). They are confirmed by the changes in the areas occupied by the Przeworsk and Wielbark culture at the beginning of the Younger Roman Period (Andrzejowski 2019, with further literature). The pressure from the north was probably one of the causes of the Marcomannic Wars, but these migration trends continued also after those wars, which is exemplified by the military activity in the Middle Danube in 188 and then in 196-203 and 214-215 (Kozłowski and Kaczanowski 1998, 239). Besides the Wielbark culture warriors, those from the Przeworsk culture also contributed to weakening the limes; some probably fought together with the Goths. This idea is based on the finds of the scarce cremation burials in the Cherniakhiv culture (Magomedov 2001, 34, 82). However, this is not so simple as these weapons are not direct copies of the Przeworsk culture originals. It is also worth mentioning the Przeworsk culture, and Balt artefacts together with Wielbark culture, north-European, Sarmatian and Roman ones found at the necropolis of Chatyr-Dah

in Ukrainian Crimea, which probably belonged to the multi-ethnic retinues, attacking these lands together with the Goths in the mid-3rd century and then settled there (Kontny 2013b). These events may be also related to the adaptations of the Germanic military equipment by the inhabitants of the Ancient Tsebelda region.

The analysis of the axe head from Janowiec, presented at a broad cultural background, shows the popularity of sub-Group II.2. Even though the aforementioned axes were used mainly in the Balt milieu, they were also known but rather not used as weapons in the Przeworsk culture. Single finds from northern Europe may be explained by the participation of the Baltic warriors in the military events in these areas. However, the artefacts found in the Wielbark culture are probably adaptations of those weapons from the West Balt Circle (Kontny in print). It is not possible to determine whether they came to the southeast with the migrating Goths or with the Baltic or Przeworsk culture mercenaries who accompanied them (in the latter case, regardless of whether they were used as tools or weapons included in the military equipment under the influence of the Baltic or Wielbark culture models). It seems clear, however, that the axes and some other parts of the military equipment became commonly used thanks to the multi-ethnic military expeditions and the migrations with a military background (*cf.*, Kontny 2019b).

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List 1. Distribution of axe heads Type Kontny II.2

Bogaczewo culture

1. Babięta (ex-Babienten), Piecki commune, Mrągowo district, Site I, grave 48a and a stray find, also Site II, grave 50 and stray find.
2. Bargłów Dworny, Bargłów Kościelny commune, Augustów district, grave 4b and stray find.
3. Bartlikowo (ex-Bartlickshof), Ryn commune, Giżycko district, grave 20.
4. Brzozówka, Bargłów Kościelny commune, Augustów district, Site 1, grave 36 (Iwanicki 2021, 237, pl. 4: 4).
5. Dłużec (ex-Langendorf), Piecki commune, Mrągowo district, Site I, grave 140.

6. Lake Legińskie, Reszel commune, Kętrzyn district, stray find.
7. Judziki, Bargłów Kościelny commune, Augustów district, grave 12a.
8. Koczek (ex-Kotzek), Świętajno commune, Szczytno district, Site II, grave 121.
9. Raczki, Raczki commune, Suwałki district, grave 6.
10. Skomack Wielki (ex-Skomatzko), Stare Juchy commune, Elk district, Site 1, grave 84.
11. Spychówko (ex-Klein Puppen), Świętajno commune, Szczytno district, stray find?
– it is not clear to which assemblage it belonged (Kontny 2018, 84-87, fig. 8, with further literature).

Sudovian culture

12. Szurpiły, Jeleniewo commune, Suwałki district, barrow XV, grave A3.
13. Suwałki region, site unknown (Kontny 2018, 88, 89, fig. 11: 1).

Dollkeim-Kovrovo culture

14. Hrustalnoe (ex-Wiekau), Zelenogradsk rayon, grave XIV (Kontny 2018, 79, with further literature). The affiliation of the mentioned artefact to Group II is certain, yet since only the view from the top is available at the illustration, it is not certain if it can be assigned to Group II.2.
15. Kotelnikovo (ex-Warengen), Zelenogradsk rayon, grave 31 (Kontny 2018, 79, with further literature). The artefact from Bartlikowo, quoted as an analogous one to the latter fint, however, allows tentatively to assign it to sub-Group II.2.

Przeworsk culture

16. Ciebłowice Duże, Tomaszów Mazowiecki commune, Tomaszów Mazowiecki district, grave 48 (Dzięgielewska and Kulczyńska 2008, 22, 37, 61, pl. 37: 7) and 122 (Dzięgielewska and Kulczyńska 2008, 37, 61, pl. 76: 8).
17. Janowiec, Janowiec commune, Puławy district.
18. Opoka, Końskowola commune, Puławy district, grave 77 (Szarek-Waszkowska 1971, 104, pl. 41: 4).
19. Radymno, Radymno commune, Jarosław district (Koperski 1980; collection of the National Museum of the Przemyśl Land, inv. no PM-A 1328; personal communication: Piotr Kotowicz, Ph.D. from the Museum in Sanok).
20. Spycimierz, Uniejów commune, Poddębice district, grave 42 (Kietlińska and Dąbrowska 1963, 151, pl. 7: 5).
21. Szczekarków, Wilków commune, Opole Lubelskie district; the find presented during the lecture M. Stasiak-Cyran ‘Wstępne wyniki ratowniczych badań przedinwestycyjnych na wielokulturowym stanowisku nr 2 w Szczekarkowie, pow. opolski’ on conference: ‘Badania archeologiczne w Polsce Środkowowschodniej, zachodniej Białorusi i Ukrainie w roku 2023, Zamek Królewski w Sandomierzu, 11-12 June 2024 r.’

Wielbark culture

22. Świerże, Dorohusk commune, Chełm district (Kontny in print).

23. Żuków, Miączyn commune, Zamość district (Kontny in print, fig. 2: 2). The authors would like to thank dr Piotr Kotowicz from the Museum of History in Sanok for the drawings of the axes from Żuków and Radymno.

Sântana de Mureş and Chernykhiv cultures

24. Sokolniki, Pustomyty rayon, settlement find (Raduš 2022, fig. 56: 6).

Scandinavia

25. Vimose Bog, Fünen, Denmark, Inv. no 15682 (Christensen 2005, 72, fig. 4; Kontny 2017, fig. 15: 3).

26. Illerup, near Skanderborg, Denmark, axe head PWU (Nørbach 2009, 278).

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