The elite horseman from the Przeworsk culture territory

Elitní jezdec z oblasti przeworské kultury

– *Renata Madyda-Legutko** –

KEYWORDS

Przeworsk culture – inlaid spurs – arrowheads – Roman Period

ABSTRACT

A new analysis of one of the graves (No. 177) at the burial ground of the Przeworsk culture in Drochlin, Częstochowa District, dated to the C1a phase of the Younger Roman Period, allows us to participate in a discussion about the position of horseman warriors in the milieu of the Przeworsk culture. The preserved grave goods from Drochlin suggest that the buried horseman can be considered a representative of the local elite. The iron spurs decorated with brass, bow arrowheads, and one glass vessel underline his social rank. The spurs have a stylistic association with spurs known from the sphere of Wielbark culture and also to those found on the territory of the Northern European Barbaricum. Similar associations were identified regarding the belt buckle. This paper also examines whether the bow was part of the equipment of the Przeworsk culture warriors or was a hunting weapon.

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1. Introduction

This study is a renewed analysis of one of the grave assemblages discovered during the excavations of a Przeworsk culture cemetery at Drochlin, Częstochowa District, situated on the banks of the Biała, a tributary of the upper river Pilica. The excavations took place between 1972 and 1974, and were led by Piotr Kaczanowski, MA (later a Professor), representing the then Chair of Archaeology of the Jagiellonian University (today the Institute of Archaeology, Jagiellonian University). The cemetery was established at the turn of the Early and Younger Roman Periods and remained in use for the entire Younger and Late Roman Periods until the early phase of the Migration Period (Kaczanowski 1987, 110).

Feature 177, a burial of a *maturus* male, is worthy of particular attention. The inventory of this unfortunately disturbed burial includes 2 spurs, 4 arrowheads, a buckle, a spearhead, a ribbon-like fitting (most likely of a sword scabbard mouth), a knife, a fragment of possibly a needle, a large lump of melted glass, and tiny fragments of hand-made vessels (Fig. 1: 1–15). The burial dates to phase C1 of the Younger Roman Period (Kaczanowski 1987, 33–35, 111, Pl. XVII: 1–15).

The results of the most recent analysis of the mentioned assemblage contribute to the discussion on the status of the mounted warrior in the Przeworsk culture.

2. Spurs

The renewed conservation treatment of the metal artefacts from the mentioned grave, performed in the Laboratory of Conservation and Archaeometry of the Institute of Archaeology, Jagiellonian University, revealed that the shanks of the iron bow spurs are decorated with copper alloy (more precisely, brass) inlay (the first spur: copper 86.10%, zinc 4.466%; the second spur: copper 85.11%, zinc 7.378%).[1] The result was obtained by a non-destructive analysis of chemical composition using a Spectro-MIDEX XRF spectrometer and scanning microscopy. The examination also revealed that three strips of brass were applied on the shanks, although not around them but only on their upper parts, which were visible when the spur was worn (Fig. 2: 1, 1a, 2). The shanks were separately forged and only later were they hammered onto the heel bands. It is worth emphasising that spurs decorated in this manner are unique to the entire Przeworsk culture area, except for the chair-shaped ones.

The spurs in question belong to type F3 variant a in Ginalski's classification of Przeworsk culture spurs (Ginalski 1991, 66–67). Such spurs have high, slightly asymmetrical heel bands, which are broadened in the middle and terminate in spherical catches. They are known from western Lesser Poland, Silesia, Central Poland, and Greater Poland (Ginalski 1991, 67, Fig. 14;

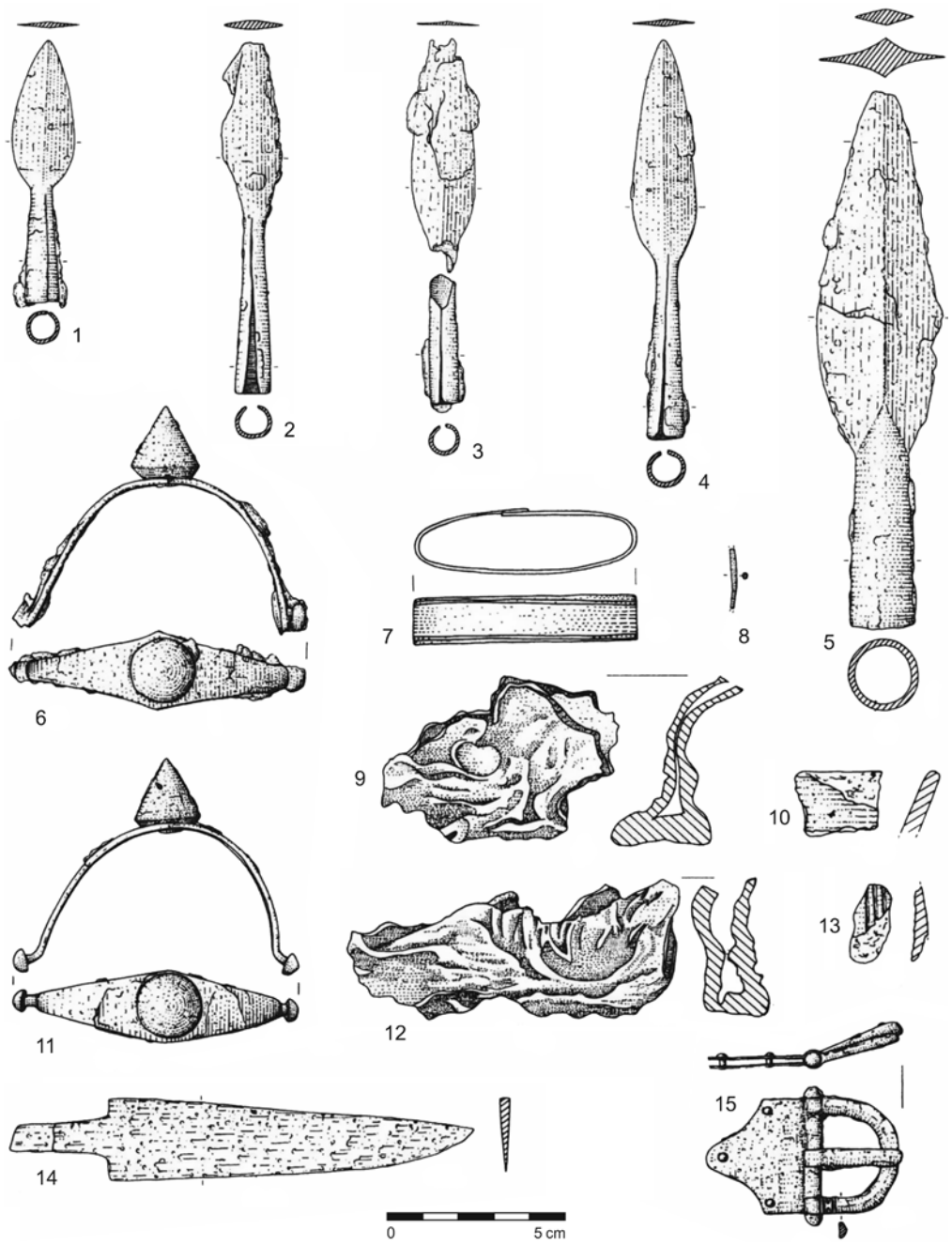

Fig. 1. Drochlin, Częstochowa District, feature 177 (acc. Kaczanowski 1987, No. 33–35, Pl. XVII: 1–15).

Obr. 1. *Drochlin, okr. Čenstochová, objekt 177 (podle Kaczanowski 1987, No. 33–35, Pl. XVII: 1–15).*

Dzięgielewska, Kulczyńska 2008, 60–61). They are also known from other territories where the presence of Przeworsk culture warriors has been confirmed, i.e. in Volhynia (Hromivka, Khmelnytskyi Region, Ukraine: Dąbrowska, Godłowski 1970, 78, 92, Pl. II: 5) and the upper Tisa basin (Kékcse, grave, Hungary: Istvánovits, Kulcsár 2017, 256, Fig. 202). Spurs of that type (F3) date to the phase C1 of the Younger Roman Period, being most common in sub-phase C1a. However, none of these spurs are decorated in a manner even remotely similar to the specimens from Drochlin.

It is assumed that the custom of decorating metal dress accessories and weapons with silver or copper alloy inlay has a Roman Provincial origin, and it caught on relatively quickly in barbarian Europe during the Roman Period (cf. Tejral 1999, 146–156; 2002, 151–159). One can mention here the example of chair-shaped spurs (*Stuhlsporn*), occurring over an extensive territory (from Scandinavia, the lower Elbe basin, to southern Moravia and Lower Austria, also known from the Przeworsk and Wielbark cultures), whose shanks are decorated with various patterns made from silver wire (Tejral 2002, Fig. 4). They are known primarily from the grave goods of the Early Roman burials of warriors of outstanding social position.

On the other hand, bow spurs occurring in the *Barbaricum* were very rarely adorned with inlay. Among the exceptions of note are two Ginalski type C1 iron spurs with traces of copper inlay on the heel bands. They were discovered in grave 8 in Goeva Gora cemetery (Lviv Oblast, Ukraine), a site representing the Early Roman Hryniv-Zvenyhorod horizon bearing traits of the Przeworsk culture (Kropotkin 1977, 188, Fig. 14: 3, 4; Ginalski 1991, 57). Single bow spurs with (mainly silver) inlaid decoration are known from territories to the north of the Przeworsk culture area. Of note is a pair of bronze bow spurs akin to Ginalski type E6, with shanks decorated with strips of silver and additionally a silver beaded wire at their bases, which were found in a Wielbark culture cemetery at Czarnówko in Lębork District,

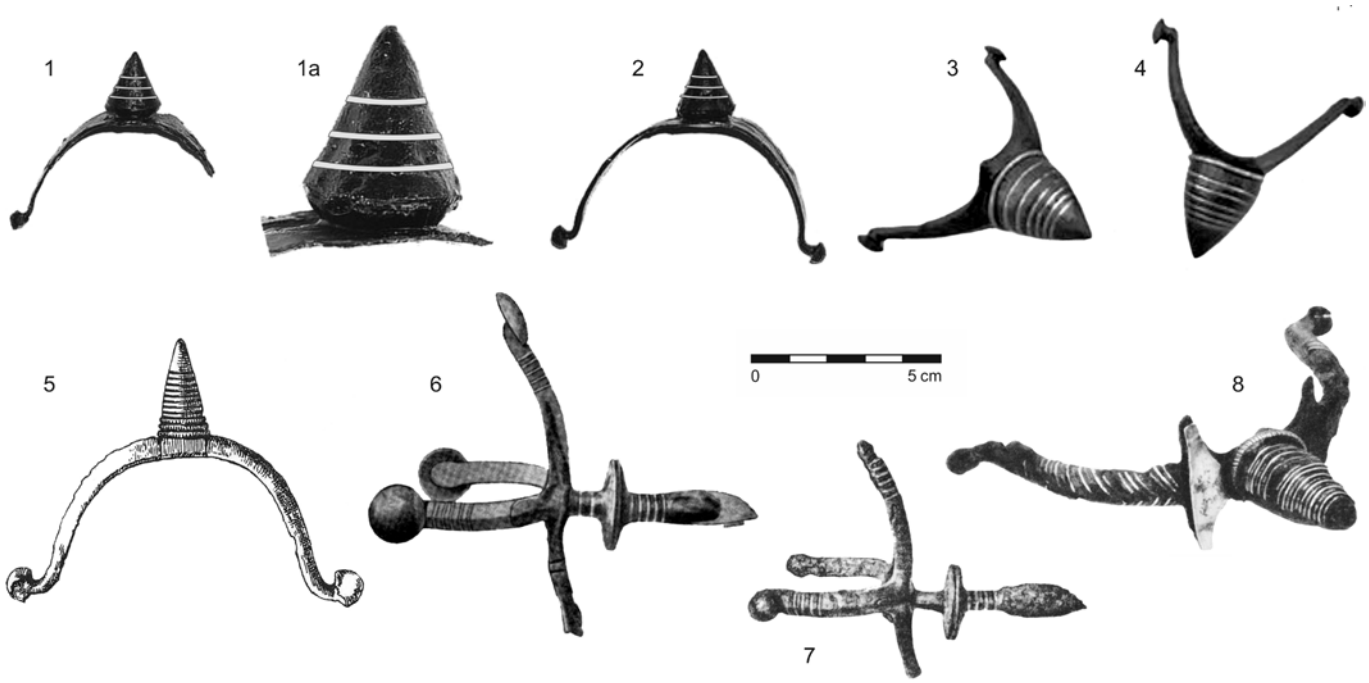

Fig. 2. Spurs with inlaid decoration. 1, 1a, 2 – Drochlin, feature 177 (photo by U. Socha); 3, 4 – Czarnówko, Lębork District, site 5, grave 1495/12 (acc. Pruska 2018, Fig. p. 37); 5 – Povarovka, Zelenogradsk Raion (former Kirpehnen, Fischhausen District), from cemetery (acc. Jahn 1921, No. 47, Fig. 49); 6 – Essunga, Västergötland (acc. Holmqvist 1951, No. 83, Fig 39: 1); 7 – Vogn, Mosbjerg (acc. Holmqvist 1951, No. 83, Fig. 39: 2); 8 – Endre, Gotland (acc. Holmqvist 1951, No. 82, Fig. 36).

Obr. 2. *Ostruhy zdobené inkrustací. 1, 1a, 2 – Drochlin, okr. Čenstochová, objekt 177 (foto U. Socha); 3, 4 – Czarnówko, okr. Lębork, poloha 5, hrob 1495/12 (podle Pruska 2018, Fig. p. 37); 5 - Povarovka, Zelenogradský rajón (dříve Kirpehnen, okr. Fischhausen), z pohřebiště (podle Jahn 1921, No. 47, Fig. 49); 6 – Essunga, Västergötland (podle Holmquist 1951, No. 83, Fig. 39: 1); 7 – Vogn, Mosbjerg (podle Holmquist 1951, No. 83, Fig. 39: 2); 8 – Endre, Gotland (podle Holmquist 1951, No. 82, Fig. 36).*

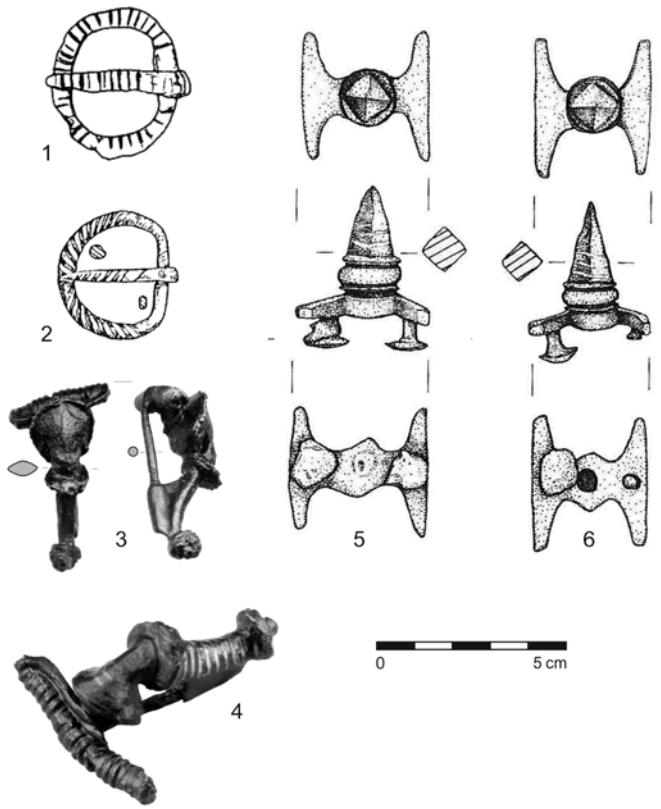

Fig. 3. Artefacts decorated with copper alloy. 1 – Łętowice, Tarnów District, grave 17 (acc. Szpunar 1990, No. 247, Fig. 4A: I); 2 – Goeva Gora, Lviv Oblast, Ukraine, grave 15 (acc. Svešnikov 1957, No. 65, Fig. 22: 6); 3 – Michałowice, Kazimierza Wielka District, grave 104 (acc. Zagórska-Telega et al. 2015, No. 169, Fig. 10: 3); 4 – Czarnówko, Lębork District, site 5, from cemetery (acc. Andrzejowski 2014, No. 80, Fig. 61); 5, 6 – Opalenie, Tczew District, site 1, grave 139 (acc. Tuszyńska 2005, No. 436, Pl. II: 6, 7).

Obr. 3. *Nálezy zdobené slitinou mědi. 1 – Łętowice, okr. Tarnów, hrob 17 (podle Szpunar 1990, No. 247, Fig. 4A: I); 2 – Goeva Gora, Lvovská oblast, hrob 15 (podle Svešnikov 1957, No. 65, Fig. 22: 6); 3 – Michałowice, okr. Kazimierza Wielka, hrob 104 (podle Zagórska-Telega et al. 2015, No. 169, Fig. 10: 3); 4 – Czarnówko, okr. Lębork, poloha 5, z pohřebiště (podle Andrzejowski 2014, No. 80, Fig. 61); 5, 6 – Opalenie, okr. Tczew, poloha 1, hrob 139 (podle Tuszyńska 2005, No. 436, Pl. II: 6,7).*

in grave 1495/12 (Fig. 2: 3, 4) dated to phase C1a (Kasprzak 2015, 263–265, Fig. 3: 1, 2; Pruska 2018, Fig. p. 37). A similar decoration (with silver strips around the shank) probably featured on the shanks of bronze spurs discovered in another Wielbark culture cemetery, at Gronowo in Drawsko Pomorskie District (barrow 1 grave 1, from Plato's research in 1881) (Kasprzak 2015, 265; Skóra 2011, 371). Iron bow spurs decorated with inlay are known from Scandinavia. An iron spur from Jämjö (in Blekinge, Sweden), dated to phase B2, is decorated with a white metal, possibly tin (Holmqvist 1951, 83, Fig. 37; Nicklasson 1997, 242–243, No. 7). Another iron spur of the same type, from Endre in Gotland (Fig. 2: 8), has a shank adorned with silver and bronze wire (Holmqvist 1951, 82, Fig. 36). Iron spurs of a later chronological position are also decorated with silver wire. One is known from Essunga in Västergötland (Fig. 2: 6), from a burial of a local elite member dated within phases C1b–C2 (Holmqvist 1951, 83, Fig. 39: 1; Giesler 1978, 41, Pl. 1: 2a, b; Nicklasson 1997, 216–217, No. 8), and another from Vogn, Mosbjerg, in Jutland (Fig. 2: 7), dated within phases C2–C3 (Holmqvist 1951, 83, Fig. 39: 2; Giesler 1978, 42, Fig. 8, Pl. 1: 10). In the Baltic Sea basin, an Early Roman iron spur with a shank decorated with grooves and with three beaded wires at its base (Fig. 2: 5) is known from a cemetery at Povarovka, Zelenogradsk Raion in Sambia (former Kirpehnen, Fischhausen District) (Jahn 1921, 47, 109, Fig. 49).

The question arises of when did Przeworsk culture artefacts start to be decorated with copper alloy inlay? It turns out that such inlay occurs as early as phase B1 of the Early Roman Period, featured on single metal dress accessories, worn by both women and men. A semi-circular buckle (group D type 1 acc. Madyda-Legutko 1986, found in a male burial (grave 17) at Łętowice in Tarnów District, is adorned with a copper wire (Fig. 3: 1) (Szpunar 1990, 247, Fig. 4A: l), and an analogical buckle inlaid with copper alloy comes from male burial (grave 15) from the mentioned cemetery at Goeva Gora near Zvenyhorod, Lviv Oblast, in Ukraine (Fig. 3: 2) (Svešnikov 1957, 65, Fig. 22: 6). Next, a female burial (grave 104) from Michałowice, in Kazimierza Wielka District, yielded an iron trumpet brooch adorned with bronze inlay (Fig. 3: 3) (Zagórska-Telega et al. 2015, 168–170, Fig. 10: 3). An Almgren type 78–79 brooch probably inlaid with bronze and silver comes from a disturbed grave in the Tarnów cemetery in Opole District, dated to phase B2 (Godłowski, Szadkowska 1972, 84, 86–88, Fig. 19a). Parallel with the Przeworsk culture, decoration with copper alloy inlay also appears in the Wielbark culture in phase B1. Particularly notable is an iron trumpet brooch from the mentioned cemetery at Czarnówko, decorated with copper strips (Fig. 3: 4) (Andrzejowski (ed.) 2014, 80, Fig. 61), as well as the shanks of iron chair-shaped spurs from grave 139 at Opalenie in Tczew District, site 1 (Fig. 3: 5, 6) (Tuszyńska 2005, 436, Pl. II: 6, 7).

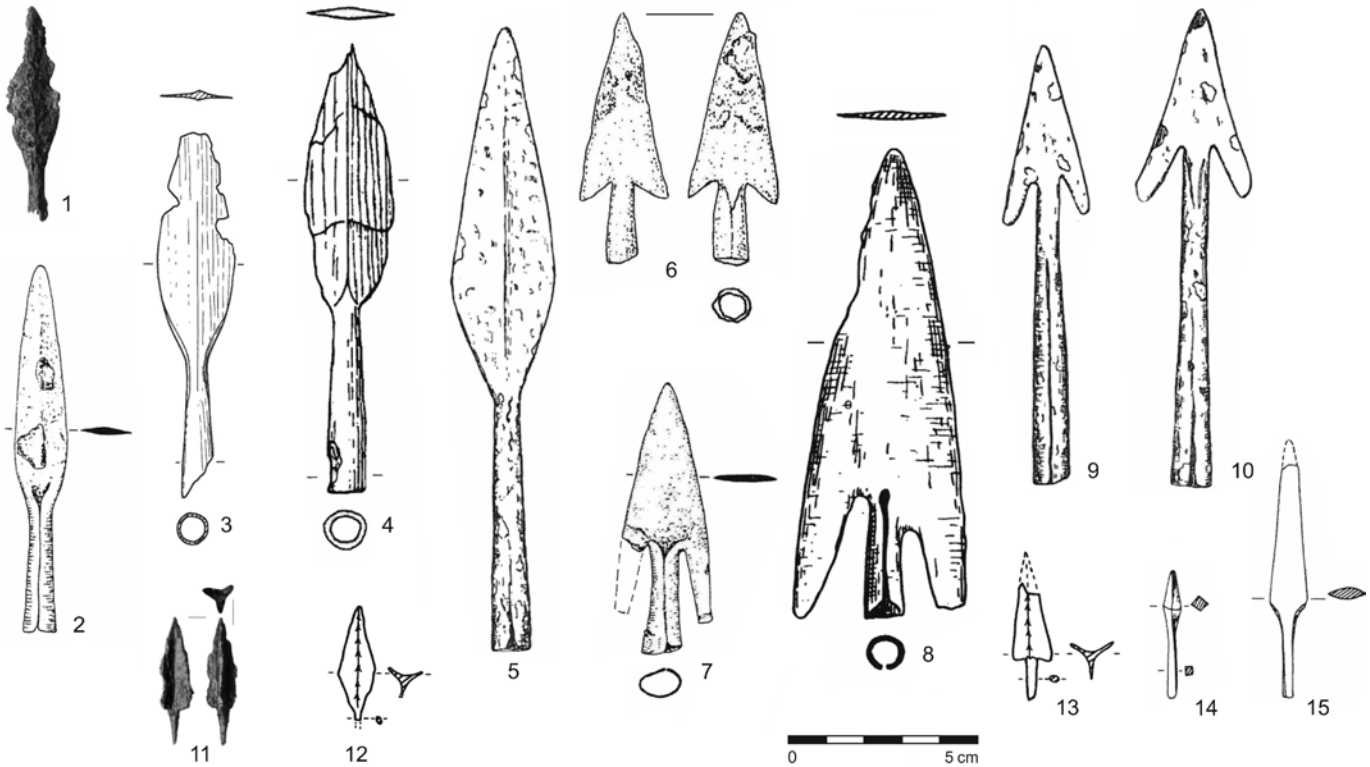

Fig. 4. Arrowheads from the Przeworsk culture area. 1 – Michałowice, Kazimierza Wielka District, site 1, from cemetery (acc. Zagórska-Telega et al. 2011, No. 207, Fig. 10: 3); 2 – Strobin, Sieradz District, site 4, grave 118 (acc. Abramek 1986, No. 77, Pl. XIV: 1); 3 – Opatów, Kłobuck District, site 1, feature 957 (acc. Madyda-Legutko et al. 2011b, Pl. CCCXXXII: 957/5); 4 – Mokra, Kłobuck District, site 8, grave 56 (acc. Biborski 1998, No. 64, Fig. 3: 3); 5 – Chorula, Krapkowice District, grave 90 (acc. Szydłowski 1964b, No. 80, Fig. 76: 4); 6, 7 – Siemiechów, Łask District, site 2, grave 67 (acc. Jażdżewska, Siciński 2017, No. 35, Fig. 60: 7, 8); 8 – Krapkowice, Krapkowice District, site 2, grave 1 (acc. Mączyńska 1971, No. 254, Fig. 4h); 9, 10 – Chorula, Krapkowice District, grave 90 (acc. Szydłowski 1964b, No. 79, Fig. 76: 1, 2); 11 – Michałowice, Kazimierza Wielka District, site 1, feature 31 (acc. Zagórska-Telega et al. 2011, No. 210, Fig. 12: 4); 12, 13 – Grzybów, Staszów District, from cemetery (acc. Garbacz 2000, No. 100, Pl. LXXI: 1, 2); 14 – Opoka, Puławy District, grave 28 (acc. Kokowski 1991, No. 98, Fig. 49b); 15 – Opoka, Puławy District, from cemetery (acc. Kokowski 1991, No. 112, Fig. 55f).

Obr. 4. *Hroty střel luku z oblasti przeworské kultury. 1 – Michałowice, okr. Kazimierza Wielka, poloha 1, z pohřebiště (podle Zagórska-Telega et al. 2011, No. 207, Fig. 10: 3); 2 – Strobin, okr. Sieradz, poloha 4, hrob 118 (podle Abramek 1986, No. 77, Pl. XIV: 1); 3 – Opatów, okr. Kłobuck, poloha 1, objekt 957 (podle Madyda-Legutko et al. 2011b, Pl. CCCXXXII: 957/5); 4 – Mokra, okr. Kłobuck, poloha 8, hrob 56 (podle Biborski 1998, No. 64, Fig. 3: 3); 5 – Chorula, okr. Krapowice, hrob 90 (podle Szydłowski 1964b, No. 80, Fig. 76: 4); 6, 7 – Siemiechów, okr. Łask, poloha 2, hrob 67 (podle Jażdżewska, Siciński 2017, No. 35. Fig. 60: 7, 8); 8 – Krapkowice, okr. Krapkowice, poloha 2, hrob 1 (podle Mączyńska 1971, No. 254, Fig. 4h); 9, 10 – Chorula, okr. Krapkowice, hrob 90 (podle Szydłowski 1964b, No. 79, Fig. 76: 1 ,2); 11 – Michałowice, okr. Kazimierza Wielka, poloha 1, objekt 31 (podle Zagórska-Telega et al. 2011, No. 210, Fig. 12: 4); 12, 13 – Grzybów, okr. Staszów, z pohřebiště (podle Garbacz 2000, No. 100, Pl. LXXI: 1,2); 14 – Opoka, okr. Puławy, hrob 28 (podle Kokowski 1991, No. 98, Fig. 49b); 15 – Opoka, okr. Puławy, z pohřebiště (podle Kokowski 1991, No. 112, Fig. 55f).*

The fact that copper alloy was used to adorn the shanks of the Drochlin spurs in a period when, in phases B2b and C1a, silver wire or very thin silver strips were predominantly used as inlays in the *Barbaricum* appears to have been connected with attempts at a specific visual effect rather than the availability of raw materials. The application of copper alloy gave the spurs' shanks an attractive golden colour, emphasising their parade nature. A similar effect was achieved using bronze rivets in plates of iron double-tongue buckles, characteristic of the broad belts used by warriors (Andrzejowski, Madyda-Legutko 2013, Fig. 5: 7–9). Copper alloy was also used in the Przeworsk culture area for inlaying the blades of pole weapons, with good examples at Prusiek in the Sanok District, site 25, grave 21 (Madyda-Legutko et al. 2007, 64, Fig. 5) and Ścinawa-Jeżów in Lubin District (Kaczanowski 1988, 57, Fig. 2: 4; Kontny 2001a, 82).

In this context, it is worth recalling that as signalled in the literature, the remains of non-ferrous metals have been recorded on many iron artefacts (representing different categories) in the Przeworsk culture, which suggests these objects were intentionally covered with such metals (Kieferling, Wichman 2004). Worthy of mention is a pair of iron bow spurs from phase C1b found at Chmielów Piaskowy in Ostrowiec Świętokrzyski District (grave 27E), with traces of coppering preserved on the shanks (Godłowski, Wichman 1998, 29, 63, Pl. XXXIX: 27E/3.4; Kieferling, Wichman 2004, 264, Pl. II: 2, 3), and iron bow spurs with coppering and silver-decorated attachments from Sandomierz-Krakówka in Sandomierz District, found in the grave of a local military elite from phase B2a (Kokowski, Ścibior 1990, Pl. 385 (6): 30–31). Analogical observations have been made concerning some Wielbark culture spurs on which the remains of non-ferrous metals have survived on the shanks, suggesting their original decoration (Cieśliński 2010, 96, 223, Pl. 56: A; Skóra 2011, 371, 372).

3. Leaf-shaped and barbed arrowheads

As mentioned, the grave goods of the Drochlin grave (feature 177) also contained four arrowheads. They represent a type most common in the *Barbaricum*: light, leaf-shaped arrowheads with only slightly marked ribs and having narrow, split sockets (of varying lengths) up to 1 cm in diameter. The sockets do not have holes for rivets, which means they were clenched on the shafts of the arrows. The preserved lengths of the Drochlin arrowheads vary from 7.5 cm to 11.5 cm. Leaf-shaped arrowheads from the Przeworsk culture area, including those from the Drochlin cemetery, correspond to type IA2 in the classification system developed for arrowheads from the bog site of Illerup Ådal in Jutland (Pauli Jensen, Nørbach 2009, 57–62, List 2, Fig. 43). Przeworsk culture arrowheads differ in size (Fig. 4: 1–5), with the smallest leaf-shaped examples, 4.5–5.4 cm long, known from cemeteries at Michałowice, Prusiek, site 25, and from a settlement at Nieszawa Kolonia, site 5. Some are significantly larger, reaching from 14–14.8 cm (Chorula, graves 53, 90 and 122; Krapkowice, site 2, grave 1), to 15.5–15.6 cm (Chorula, graves 23 and 113), or even to 16–16.3 cm (Chorula, grave 90; Tarnów, grave 33/1938). There are currently more than 40 sites known from the Przeworsk culture area where leaf-shaped arrowheads have been found (Fig. 5, List 1). These occur in both the grave goods and at settlement sites (Ludwinów, site 3; Nieszawa Kolonia, site 5; Strobin, sites 3 and 3a; Szczedrzyk, site 1).

Apart from leaf-shaped arrowheads, smaller numbers of other arrowhead types also occur in the Przeworsk culture area (Fig. 5, List 1). Notable among them are primarily iron barbed arrowheads, which also have split sockets (Fig. 4: 6–10) that sometimes co-occur with leaf-shaped forms in graves. As with the leaf-shaped arrowheads, their lengths vary. There are relatively small pieces with short sockets, as well as much larger arrowheads with long sockets. For example, the total lengths

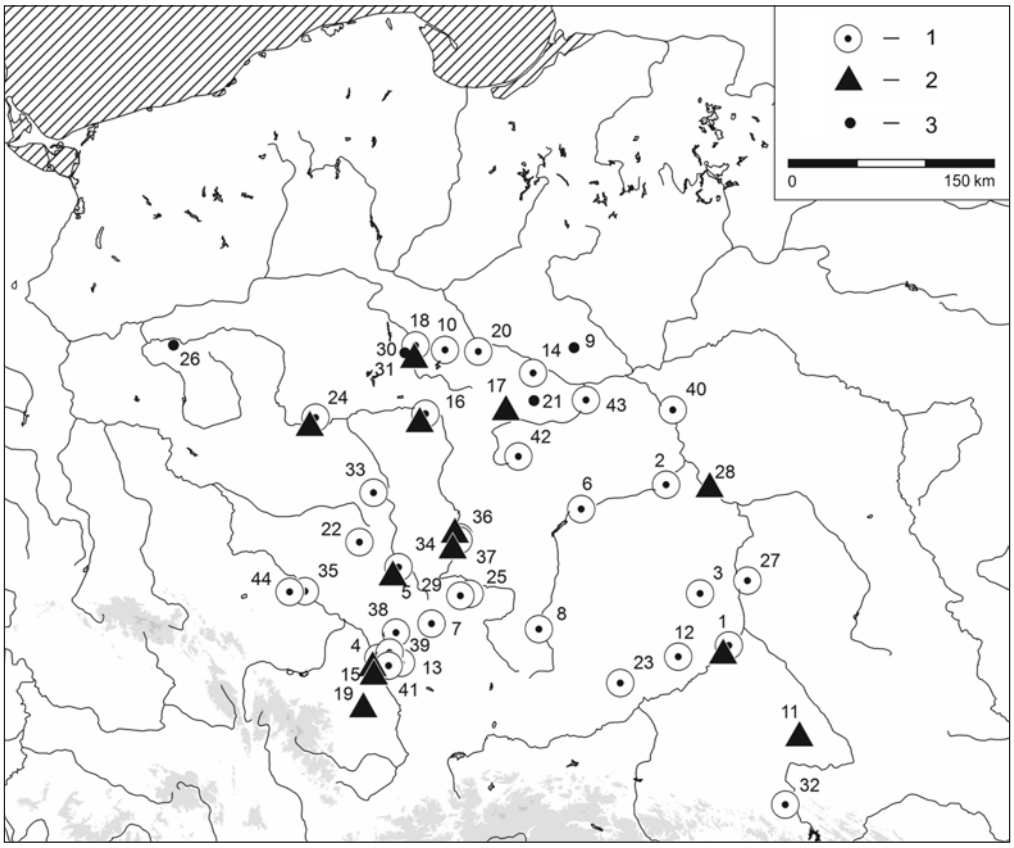

Fig. 5. The distribution of leaf-shaped and barbed arrowheads in the Przeworsk culture area (cf. List 1). 1 – leaf-shaped arrowheads; 2 – barbed arrowheads; 3 – unidentifiable arrowheads. Author R. Madyda-Legutko.

Obr. 5. *Rozšíření hrotů střel listovitých a s trnem v oblasti przeworské kultury (cf. List 1). 1 – listovité hroty; 2 – hroty s trnem; 3 – neurčené hroty. Autor R. Madyda-Legutko.*

of arrowheads from Oblin (grave 189) were 4.9 cm and 5.5 cm, and those from Siemiechów, site 2 (grave 67; Fig. 4: 6, 7) were 6.4 cm, 6.8 cm, and 7.4 cm long. Arrowheads from grave 90 at Chorula (Fig. 4: 9, 10) were from 10 to 12.7 cm long, and from Krapkowice, site 2 (grave 1; Fig 4: 8) from 7 cm to 7.4 cm long, although examples as long as 12.3 cm are also known.

Single tanged arrowheads are also known from the Przeworsk culture area. Among these are the so-called trilobate arrowheads, such as a 3.4-cm long piece (Fig. 4: 11) discovered in square-grooved feature 31 in the cemetery at Michałowice site 1, in Kazimierza Wieka District (Zagórska-Telega et al. 2011, 215, Fig. 12: 4). This feature also yielded three type-M brooches, one brooch of the Almgren 18 type, and one of the Almgren 67 type, which allows the feature to be dated to the end of the Pre-Roman Period and the beginnings of phase B1 of the Early Roman Period (Zagórska-Telega et al. 2011, 215, Fig. 12: 5–8). Another trilobate arrowhead is known from the nearby cemetery at Podlesie, Oleśnica District, where it was found in a warrior grave dated to

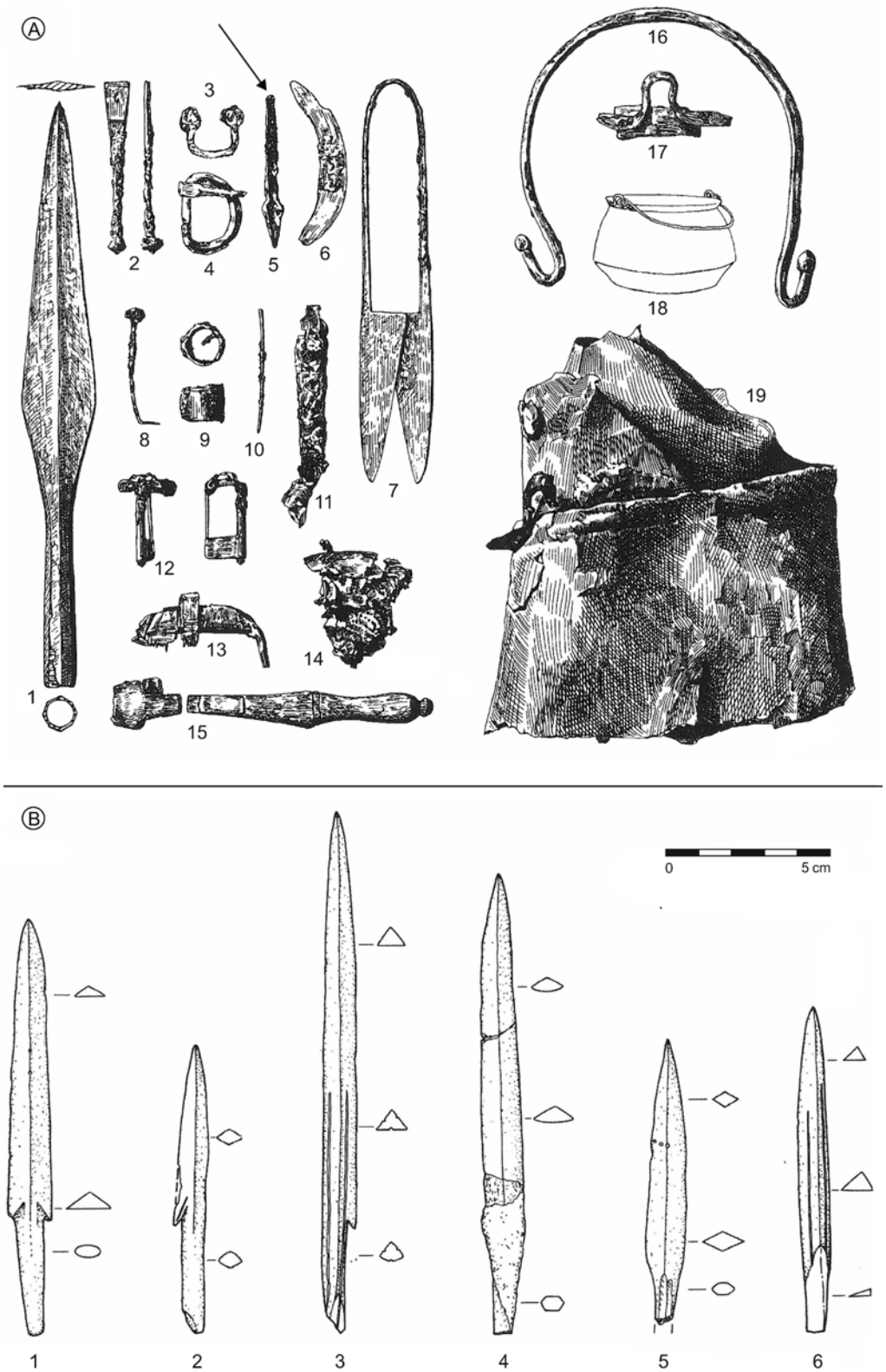

Fig. 6. A – Stara Wieś Wrocławska, Wrocław District. Grave goods containing arrowheads (acc. Pescheck 1939: No. 1–15: 345, Fig. 181; No. 16–19: 143, Fig. 122; without a scale); B – Karczyn/Witowy, Inowrocław District, site 21/22, burial 306, bone arrowheads (1–6) (acc. Bednarczyk, Romańska 2015, 129, Pl. 6–12).

Obr. 6. *A – Stara Wieś Wrocławska. Hrobový celek s hrotem střely z luku (podle Pescheck 1939: No. 1–15: 345, Fig. 181; No. 16–19: 143, Fig. 122; bez měřítka); B – Karczyn/Witowy, poloha 21/22, okr. Inowrocław, objekt 306, kostěné hroty střel z luku (1–6) (podle Bednarczyk, Romańska 2015, 129, Pl. 6–12).*

phase B1 (Kontny et al. 2019, 366, 373–376, Fig. 6: 6). A similar, equally early chronological position applies to tanged arrowheads from northern Slovakia, from the area of the Púchov culture settlement. These represent type 4 in K. Pieta's classification of arrowheads (Pieta 2008, 270, Fig. 125: 35, 36), and have also been found in the Danube area, in the so-called "late Augustan" layer at the Devín site (Pieta 2008, 270). On the other hand, in south-eastern Slovakia, in grave 106 (with strong connections to the Dacian milieu) in Zemplín cemetery, trilobate arrowheads co-occurred with a Demetz A67a brooch (Demetz 1999, 261) and barbed arrowheads with short sockets (Budinský-Krička, Lamiová-Schmiedlová 1990, 260, Pl. XV: 6, 7, 15–17; Pieta 2008, Fig. 127: 8–10).

In addition, outside the context of burials, at least 9 trilobate arrowheads (Fig. 4: 12, 13) have been discovered in the Przeworsk culture cemetery at Grzybów in Staszów District, which were in use from phase B1 of the Early Roman Period until the Younger Roman Period (Garbacz 2000, 100, 109, 121, 135–136, Pl. LXXI: 1–16). They have not survived in full, with the best-preserved arrowhead being 4.5 cm long. According to K. Garbacz, they represent a type used from the 1st century until the 4th century AD by archers from auxiliary units of the Roman army (Garbacz 2000, 121–122; cf. Erdmann 1976; Zanier 1988; Rajtár 1992, 155, 11). Such arrowheads occur along the Roman border from Britannia to the mouth of the River Danube and are also evidenced in Asia Minor (Zanier 1988, List 1, Fig. 2, 4). According to K. Garbacz, these arrowheads may have reached the southern range of the Przeworsk culture during the Marcomannic Wars (Garbacz 2000, 122). However, another possibility cannot be ruled out: that they originated from the Pontic nomadic milieu and were connected with the use of the reflex bow (cf. Dobrzańska 1999, 86; Simonenko 2001, 193–198, Fig. 2: 2–15, Fig. 4; Pieta 2008, 270). Recently, Younger Roman Period trilobate arrowheads have been identified during the re-analysis of Bogaczewo culture materials from old excavations (Kontny et al. 2019, 378–379, Fig. 11: 1, 5).

An artefact from grave 122 (dated to phase B2) at Stara Wieś Wrocławska in Lower Silesia, most likely a tanged arrowhead with a polygonal, probably quadrangular, cross-section (Fig. 6A: 5), is an isolated find in the Przeworsk culture area (Pescheck 1939, 63, 344–345, Fig. 181: 5). Arrowheads with a similar form are known from territories on the lower River Elbe and from the princely burial from Mušov in Moravia

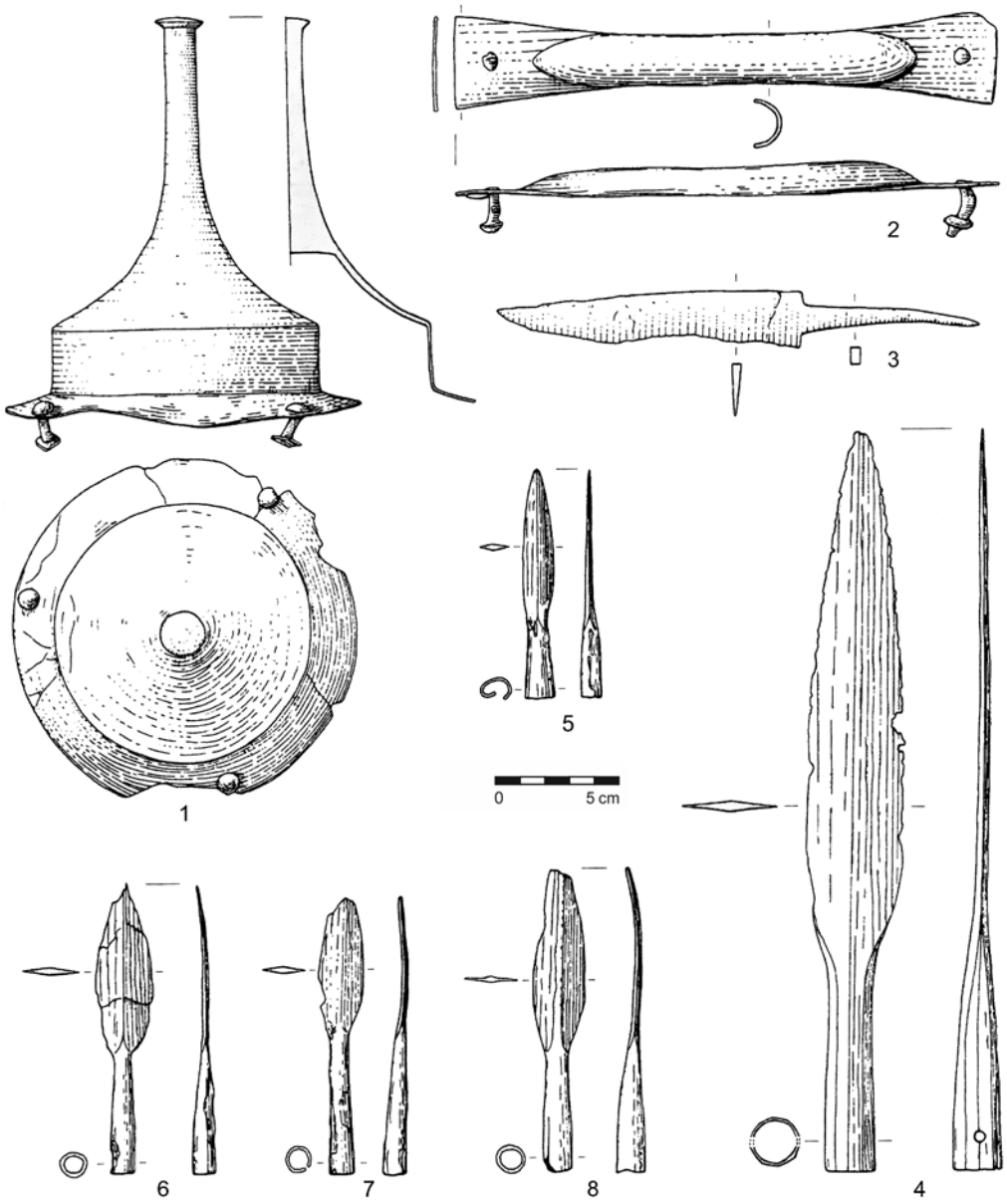

Fig. 7. Mokra, Kłobuck District, site 8, grave 56. Selected finds from from a grave with arrowheads (acc. Biborski 2010, No. 139, Fig. 2: 1–8).

Obr. 7. *Mokra, okr. Kłobuck, poloha 8, hrob 56. Hrobový celek s hroty střel z luku. Výběr inventáře (podle Biborski 2010, No. 139, Fig. 2: 1–8).*

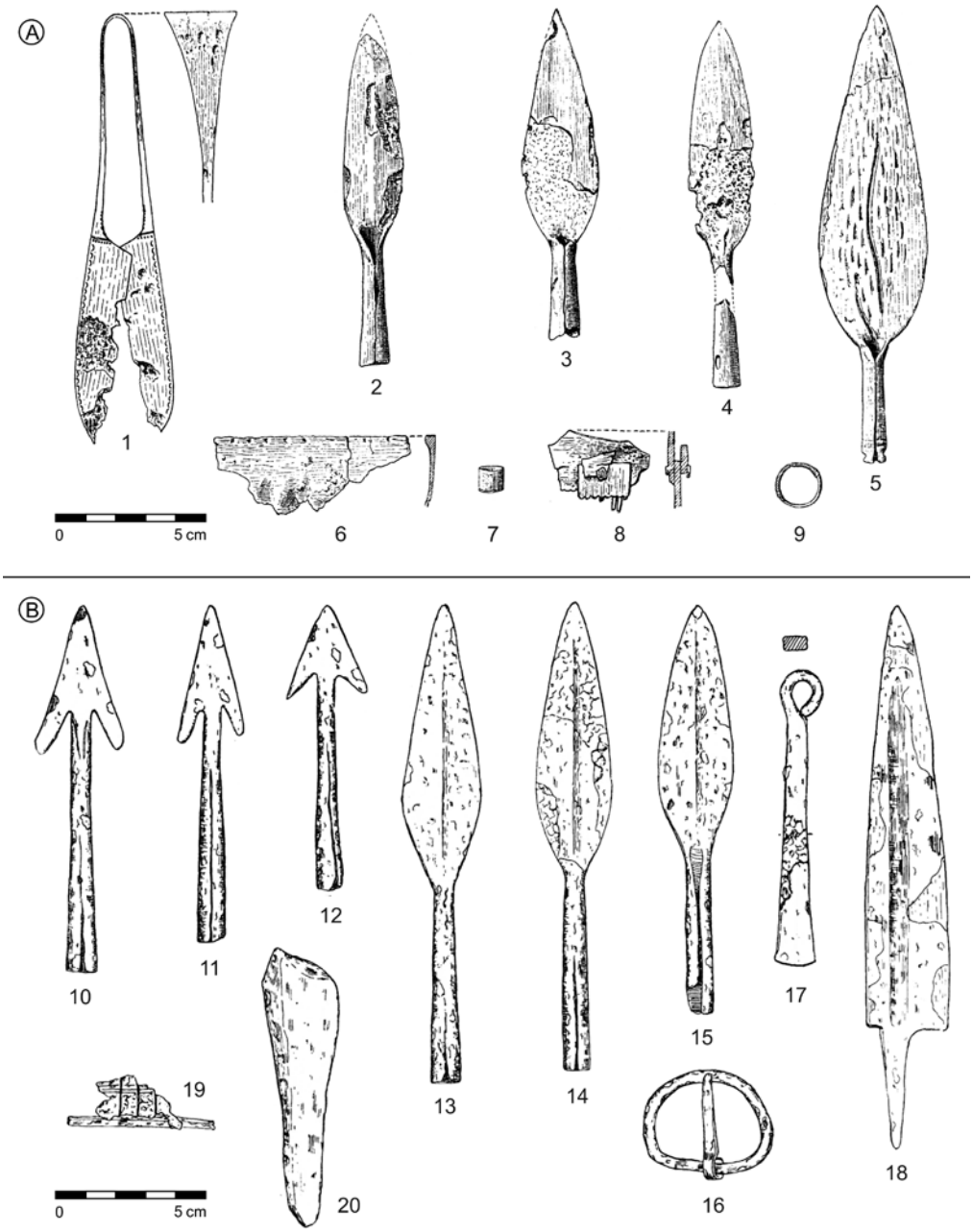

Fig. 8. A – Sadowie, Ostrów Mazowiecki District, grave 4. Selected finds from a grave with arrowheads (acc. Jasnosz 1955, No. 147, Fig. 13: 1–9); B – Chorula, Krapkowice District, grave 90. Grave goods with arrowheads (acc. Szydłowski 1964b, No. 79, Fig. 76: 1–11).

Obr. 8. *A – Sadowie, okr. Ostrów Wielkopolski, hrob 4. Hrobový celek s hroty střel z luku. Výběr inventáře (podle Jasnosz 1955, No. 147, Fig. 13: 1–9); B – Chorula, okr. Krapkowice, hrob 90. Hrobový celek s hroty střel z luku (podle Szydłowski 1964b, No. 79, Fig. 76: 1–11)*

(Droberjar, Peška 2002, 112, 113, Fig. 11). Moreover, two narrow tanged arrowheads come from a cemetery at Opoka in the Puławy District (from grave 28 and one is a stray find). One is 3.5 cm long with an angular cross-section, and the other is flat, approximately 8 cm long, with a triangular cross-section (Fig. 4: 14, 15) (Kokowski 1991, 98, 112, Fig. 49: b, Fig. 55f; Stasiak-Cyran 2004, 92, Fig. 4: 3, 4). However, such arrowheads are difficult to identify in the archaeological record.

Bone arrowheads from the cemetery at Karczyn/Witowy, site 21/22, in the Inowrocław District in Kujavia are exceptional finds in the Przeworsk culture area (Fig. 6B: 1–6). They were found in inhumation burial (grave 306), dated to the turn of phases B1b/B2a by an Almgren brooch type 77–78 (Bednarczyk, Romańska 2015, 29, 59, Pl. XLV: 6–12, Pl. CXV; Makowiecki et al. 2015, 199, Tab. 7, Fig. 4). There is a possibility that there are more such arrowheads in Przeworsk culture materials that are yet to be identified, especially given that bone points discovered in Przeworsk culture sites have sometimes been interpreted as spearheads (Kontny 1996; Żychliński 2002).

As mentioned, iron leaf-shaped and barbed arrowheads are the predominant arrowhead types in the Przeworsk culture area. Both these variants appeared as early as the Late Pre-Roman Period (Bochnak 2005, 93–96, List VI, Fig. 29: 1–4) and remained in use – with varying intensity – throughout the Roman Period. Arrowheads dated to the Late Pre-Roman Period are known from several necropolises.[2] In Ciecierzyn, their chronology can be narrowed down to phases A1/A2 (grave 12) and A3 (grave 19) of the Late Pre-Roman Period, while in Błonie (grave 186) an iron barbed arrowhead co-occurred with a damaged brooch of the Middle La Tène period construction. Examples of leaf-shaped and barbed arrowheads are also confirmed from phase A3/B1 and from phase B1 of the Early Roman Period.[3] Both these variants became more popular in the Early Roman and the beginning of the Younger Roman Period, and their number in the assemblages from phases B2[4] and C1a[5] is greater than previously assumed. After phase C1a, barbed arrowheads disappeared from grave goods, while leaf-shaped forms remained in use and are confirmed in assemblages from phase C2 (Korzeń Rządowy, grave 36; Sadowie,

grave 3). In the Opatów cemetery, they appear in the last phases of this necropolis, i.e. phases III–IV and IV, which in relative chronology correspond with phases C2–D (feature 987) and C3–D (feature 326 and 957), which means the end of the Roman Period and the beginning of the Migration Period. Within the same time span, they occur in the layer cemetery at Dobrodzień. Leaf-shaped arrowheads from inhumation burials in Żerniki Wielkie cemetery near Wrocław (graves 9 and 31) should also be linked with phase D.

In the European *Barbaricum* outside of the Przeworsk culture, Roman Period leaf-shaped arrowheads are particularly known from Jutland, the Elbe Germanic complex, the Bohemian Basin, and Moravia (Pauli Jensen, Nørbach 2009, List 2, Fig. 43; Jílek, Horník 2017, 73–76), with single specimens also known from the Wielbark (Kempisty, Okulicz 1965, Pl. 94(2): 8, 9; Kempisty 1969, 411, 419, Fig. 4g, 30b) and Cherniakhov (Gereta 2016, 82–83, Fig. 134: 1–5) cultures. It is also worth noting that arrowheads of various types occur in the Limes along the Roman border. They were part of the equipment of auxiliary units, known as *equites saggitariorum* (Zanier 1988; Droberjar, Peška 2002, 114, Fig. 12).

In Przeworsk culture cemeteries, both leaf-shaped and barbed arrowheads were most often placed into graves singly, but sometimes also in sets, for example of 2,[6] 3,[7] 4[8] (Fig. 7: 5–8, Fig. 8A: 2–5), or 5 pieces (Kalinów, grave 1). Sets of 6 (Chorula, grave 90; Fig. 8B: 10–15), and even 7 pieces (Krapkowice, site 2, grave 1; Fig. 9: 3–6, 9–11) are also known, comprised of both leaf-shaped and barbed arrowheads. Arrowheads occur in burials in larger numbers in phase B2, and especially in phases C1a and C2 (Kontny 2001b, 110, Diagram 14; 2008, 127, Diagram 14). Sets of 4 (grave 9) and 6 (grave 31) leaf-shaped arrowheads are also known from the Żerniki Wielkie cemetery, dated to phase D. The occurrence of single arrowheads in graves may point to their symbolic meaning, while the presence of larger sets possibly reflects the composition of arrows in a quiver.

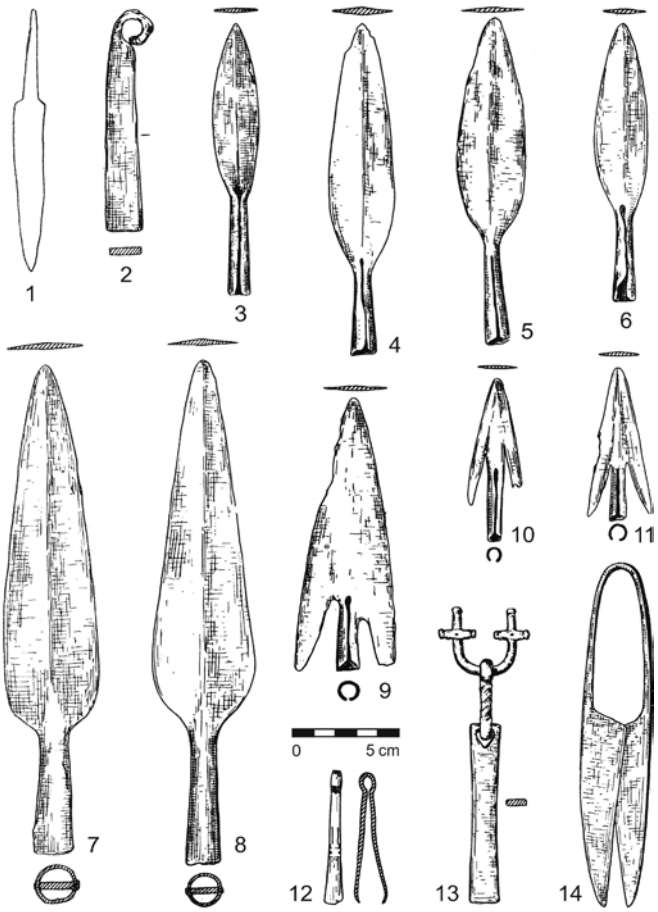

Fig. 9. Krapkowice, Krapkowice District, site 2, grave 1. Selected finds from grave goods containting arrowheads (acc. Godłowski 1977, No. 82, Pl. XX: 1–14).

Obr. 9. *Krapkowice, okr. Krapkowice, lokalita 2, hrob 1. Hrobový celek s hroty střel z luku. Výběr inventáře (podle Godłowski 1977, No. 82, Pl. XX: 1–14).*

In Przeworsk culture burials, arrowheads co-occur with such elements of weaponry as 1) spearheads alone;[9] 2) spearheads and elements of shields;[10] 3) swords, elements of shields, and spearheads, i.e. the full warrior equipment of that time.[11] The grave from Drochlin analysed here precisely represents such a set of weapons: apart from the arrowheads, it also contained a Kaczanowski type XVII spearhead (Kaczanowski 1995, 24) and what most likely is the mouth of a sword scabbard, made from iron ribbon. In the Younger Roman Period, scabbard mouth fittings only incidentally occur in the Przeworsk culture area (cf. Biborski 2000, 58). The position of a warrior from Sadowie (grave 3), buried with a sword and elements of a shield, was additionally emphasised by three rings made from gold wire, akin to type 15 acc. Ch. Beckmann (Beckmann 1969, 33–34) and four arrowheads.

Keeping in mind the diversity of factors possibly influencing the rules of furnishing male burials in the Przeworsk culture, it can nevertheless be assumed, to a certain extent, that the grave goods reflect the sets of weapons used by warriors in combat. From this perspective, the assemblages coupling the arrowheads with the above-mentioned categories of weapons would be sets whose particular elements were designed for different, mutually exclusive fighting techniques, since the bow is a distance weapon while the spear and the sword are used in close combat. Therefore, the question arises: is it legitimate to refer to archers in the Przeworsk culture? This is how burials from phases B2–C1a containing arrowheads as the only weapons (e.g. Zgierz-Rudunki, grave 3/1984; Chorula, grave 90 and grave 122) were interpreted in the literature (Godłowski 1977, 67; Skowron 2000). However, opposite views have been expressed more recently, claiming that the existence of archer units would require a developed and efficient command, to allow for the operations of archers to be coordinated with groups of warriors using other weapons, which was rather unlikely in the Przeworsk culture (Kontny 2001b, 110–111; 2008, 127).

In this context, it seems important to examine a correlation between the occurrence of arrowheads and equestrian equipment (i.e. spurs, which were a marker of mounted warriors) and to answer the question about the use of bows in horseback combat. Including the Drochlin burial, there are only a few assemblages where spurs co-occur with arrowheads.[12] These date to phases B1 and B2b of the Early Roman Period and phase C1a of the Younger Roman Period. The small number of such assemblages does not allow for any unambiguous conclusions. It is worth remembering that military objects are most common in Przeworsk culture graves in phases B2b–C1a and C1b, and it is precisely at that time that the frequency of spurs in grave assemblages reached its peak (Kontny 2001b, 101–103). Different possibilities of the military use of horses by Przeworsk culture warriors have already been discussed in the literature (Bochnak 2004, 32–39; Kontny 2001b, 104–106). In his *Germania*, which to a certain degree supplements our knowledge about the *Barbaricum*, Tacitus (2008) informs us that a Germanic mounted warrior was equipped with a shield and a *framea*, while there is no information about the use of bows (Tacitus 2008, Germania 6.1; Kontny 2001b, 98–99).

Archaeological records at our disposal do not allow for the reconstruction of bows used in the Przeworsk culture area during the Late Pre-Roman and Roman Periods. In the opinion of K. Godłowski, some of the tubular fittings interpreted as spear-butts could have been metal terminations of bow limbs (Godłowski 1977, 66; 1992, 81). However, it is worth noting that spear-butts known from the Przeworsk culture area differ widely in terms of shape and size. They were only recorded in four assemblages containing arrowheads, and only one piece per assemblage.[13] On a contrary note, B. Kontny presented arguments against interpreting the mentioned objects as bow limb fittings. First, adding weight to a bow limb would be functionally undesirable since it would significantly diminish the efficiency of the bow. Second, the fittings in question have no grooves for placing the bowstring (Kontny 1999, 134; Czarnecka 2003; Bochnak 2005, 93, footnote 39). Furthermore, there is no archaeological evidence from the Przeworsk culture area of placing quivers in graves, a custom confirmed for elite burials from Central Germany and Mecklenburg in phases C1b/C2 (Becker 2010b, 103; Voß 2014, 81).

This leads us to the question of whether the bow was indeed an element of equipment of the Przeworsk culture warrior or if it was mainly used for hunting?

Among the Przeworsk culture necropolises, the highest concentrations of burials containing arrowheads were recorded in a small cemetery at Sadowie in Greater Poland and a cemetery at Chorula in Lower Silesia. It is assumed that both these cemeteries were places of burial of warriors belonging to the retinue of a local chieftain. In Sadowie, there is a cluster of richly-furnished warrior burials, and in Chorula the graves of mounted warriors are concentrated around the central barrow, unfortunately looted, in which a local chieftain may have been buried (Godłowski 1960, 71, 81, Plan 3; Kontny 2003, 260). It is worth emphasising that a total of 20 arrowheads have been discovered in the Chorula cemetery in 8 graves and as non-contextual finds. However, graves with arrowheads do not form any clear concentration in this necropolis.

If assuming that hunting with bows and arrows was an exclusive occupation of high-ranking warriors and the alleged members of their retinues, such an interpretation can be supported by the osteological material from a settlement at Gosławice in the Opole region, which developed close to a princely burial of the Lubieszewo type. The share of game species among the animal remains from that settlement was exceptionally high compared to other settlements in the Central European *Barbaricum*, exceeding 27% of the total (Rodzińska-Nowak 2012, 121, with older literature). In the mentioned settlements, this proportion typically ranges from 1–2% to 10% of the osteological material (Rodzińska-Nowak 2012, 122; Stasiak-Cyran 2004, 90–96).

Irrespective of whether the bow was used for combat or hunting, arrowheads should be expected to be found primarily in burials of men. However, in the Przeworsk culture area, arrowheads (both leaf-shaped and barbed) also occur in the graves of children who died at the age of *infans* I (Chmielów Piaskowy, grave 6; Oblin, grave 189), *infans* II (Ciecierzyn, grave 233; Kuny, site 4, grave 47; Żdżarów, grave 99) and *infans* II – *juvenis* (Korzeń Rządowy, grave 36). These burials contain one or two arrowheads.

4. Other elements of grave goods

Some of the remaining elements of the grave goods in feature 177 from Drochlin also deserve attention. This applies to a buckle with a semi-circular frame and triangular plate, representing group D type 20 in R. Madyda-Legutko's classification (Madyda-Legutko 1986 31, Pl. 9: 20; Schuster 2018, 62–65). Such buckles have only been found in a few Przeworsk culture cemeteries (Fig. 10: 1–4; List 2), while they mainly occur in the Wielbark culture (Fig. 10: 5–8) and are also known from the West Baltic Circle (Fig. 10: 9). They can also be found in bog-sites in the North European *Barbaricum* (Fig. 10: 11) as well as in Altmark (Fig. 10: 10) and Brandenburg. The only example of a group D type 20 buckle in the South European *Barbaricum* is known from southwestern Slovakia. As mentioned, the grave goods of feature 177 from Drochlin also contained a large lump of bright-green melted glass, originating from a vessel, possibly a beaker. The high degree of melting of the vessel makes the reconstruction of its form impossible. In the Przeworsk culture, placing glass beakers into richly-furnished graves is confirmed, among others, by finds from several cemeteries (Czarnecka 1992, 121–128).

The surviving elements of the grave goods of the discussed grave from Drochlin (feature 177) indicate that the horseman buried there came from the local elites. His social position is

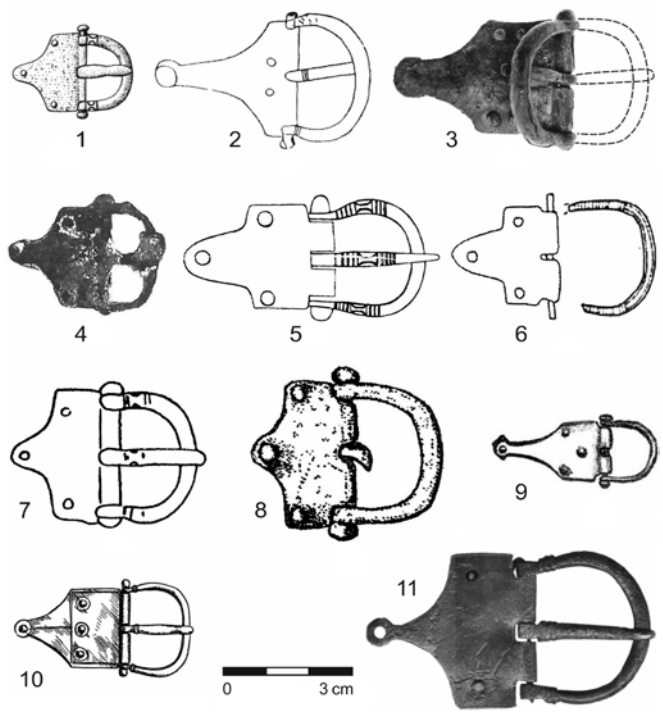

Fig. 10. Buckles with a semi-circular frame and triangular plate, representing group D type 20 (acc. Madydy-Legutko 1986). 1 – Drochlin, Częstochowa District, feature 177 (acc. Kaczanowski 1987, No. 34, Pl. 17: 15); 2 – Starachowice, Starachowice District, grave XVII (acc. Jamka 1959, No. 48, Fig. 30e); 3 – Drozdowo, Łomża District, grave 37 (acc. Andrzejowski, Madyda-Legutko 2018, No. 67, Fig. 9: 1); 4 – Novij Jiričiv, Lviv Oblast (acc. Bilas, Silaev 2012, No. 237, Fig. 4: 8); 5 – Skowarcz, Gdańsk District (acc. Blume 1912, No. 40, Pl. V: 49); 6 – Elbląg- Nowe Pole, Elbląg District (acc. Natuniewicz 2000, No. 157, Pl. XVI: 3a, b); 7 – Malbork-Wielbark, Malbork District, grave 1291 (acc. Kleemann 2017, No. 157, Pl. 80: 4); 8 – Odry, Chojnice District, grave 559 (acc. Grabarczyk 2007, No. 5, Fig. 2b); 9 – Bartlikowo, Giżycko District, grave 69 (acc. Kemke 1900, No. 119, Pl. III: 22); 10 – Stendal, Stendal District (acc. Kuchenbuch 1938, No. 44, Pl. XXX: 13); 11 – Thorsberg, Schleswig-Flensburg District (acc. Blankenfeldt 2015, No. 141, Pl. 13: PA87).

Obr. 10. *Přezky s polokruhovitým rámečkem skupiny D typu 20 (podle Madyda-Legutko 1987). 1 – Drochlin, okr. Čenstochová, objekt 177 (podle Kaczanowski 1987, No. 34, Pl. 17: 15); 2 – Starachowice, okr. Starachowice, hrob XVII (podle Jamka 1959, No. 48, Fig. 30e); 3 – Drozdowo, okr. Lomže, hrob 37 (podle Andrzejowski, Madyda-Legutko 2018, No. 67, Fig. 9: 1); 4 – Novij Jiričiv, Lvovská oblast (podle Bilas – Silaev 2012, No. 237, Fig. 4: 8); 5 – Skowarcz, okr. Gdańsk (podle Blume 1912 No. 40, Pl. V: 49); 6 – Elbląg-Nowe Pole (podle Natuniewicz 2000, No. 157, Pl. XVI: 3a, b); 7 – Malbork-Wielbark, okr. Malbork, hrob 1291 (podle Kleemann 2017, No. 157, Pl. 80: 4); 8 – Odry, okr. Chojnice, hrob 559 (podle Grabarczyk 2007, No. 5, Fig. 2b); 9 – Bartlikowo, okr. Giżycko, hrob 69 (podle Kemke 1900, No. 119, Pl. III: 22); 10 – Stendal, okr. Stendal (podle Kuchenbuch 1938, No. 44, Pl. XXX: 13); 11 – Thorsberg, okr. Schleswig-Flensburg (podle Blankenfeldt 2015, No. 141, Pl. 13: PA87).*

emphasised by the inlaid spurs, the set of weapons including arrowheads, and the glass vessel. As demonstrated above, the spurs from Drochlin reveal connections not only to the Wielbark culture but also to the North European *Barbaricum*, and the same applies to the belt buckle of group D type 20.

5. Conclusion

As per the remarks above, no bow spurs or arrowheads made of non-ferrous metals have been found in the Przeworsk culture area (see remarks in Dölle 1977; Giesler 1978; Becker 2010a, 95–98, 101–104). Nevertheless, it can be assumed that iron spurs and arrowheads known from that area belonged to horsemen enjoying higher social status. This phenomenon is particularly evident during phases B2b and C1a–C2. The discovery of arrowheads placed at the feet of the deceased in much later inhumation burials from Żerniki Wielkie is associated with the position of the arrows in the princely burial from Leuna in Thuringia (cf: Zotz 1935, 74–75, Fig. 40; Schulz 1953, 24–25, Fig. 39). Bows could be used in combat, but at the same time, also as hunting weapons. The diverse shapes of the arrowheads possibly reflect different purposes. For example, small, light arrowheads may have been used for hunting small game or birds. Barbed arrowheads from the Early Roman Period have short sockets and a relatively wide barb span, resembling harpoons in proportions and manufacture (Czarnecka 2007, 84, Pl. XLI: 38/4, XLVII: 45b/17, CXCI: 222/5; Stasiak-Cyran 2016, 77, Pl. CI: 10). Later arrowheads, both barbed and leaf-shaped, are typically slenderer and have long sockets. It cannot be ruled out that in the Late Roman Period the inhabitants of the *Barbaricum* modified their weapons to fight Roman troops (Kaczanowski 1992, 75). However, in the opinion of B. Kontny, arrows with leaf-shaped heads are unlikely to have been used in combat, as such arrowheads are not very efficient as weapons (Kontny 2008, 127, 130, Fig. 15a, b; 2019, 38).

List 1. Leaf-shaped and barbed arrowheads from the Przeworsk culture area (cf. Fig. 5)

1. Błonie, Sandomierz District, Świętokrzyskie Voivodeship, site 1, grave 186: 1 barbed arrowhead (Mycielska, Woźniak 1988, 94, Pl. CLXIV: 1); near grave 182: 1 leaf-shaped arrowhead (Mycielska, Woźniak 1988, 113, Pl. CXCVII: 4; Bochnak 2005, 94, 222, Fig. 29: 1).
2. Brzeźce, Białobrzegi District, Mazowieckie Voivodeship, site 2, grave 6: 2 leaf-shaped arrowheads (Balke 1976, 161, Pl. III: 3, 10).
3. Chmielów Piaskowy, Ostrowiec Świętokrzyski District, Świętokrzyskie Voivodeship, grave 6: 1 leaf-shaped arrowhead (Godłowski, Wichman 1998, 17, 62, Pl. VIII: 6/2); from cemetery: 1 leaf-shaped arrowhead (Godłowski, Wichman 1998, 46, Pl. II.5: 11).
4. Chorula, Krapkowice District, Opolskie Voivodeship, grave 4: 1 leaf-shaped arrowhead (Szydłowski 1964b, 18, Fig. 4: 3; Godłowski 1977, 66); grave 23: 1 leaf-shaped arrowhead (Szydłowski 1964b, 36, Fig. 22: 1; Godłowski 1977, 66); grave 49: 2 leaf-shaped arrowheads (Szydłowski 1964b, 55, Fig. 47: 4, 6; Godłowski 1977, 66; Pauli Jensen, Nørbach 2009, 182, List 2, No. 20); grave 55: 1 leaf-shaped arrowhead (Szydłowski 1964b, 59, Fig. 52; Godłowski 1977, 66); grave 90: 6 arrowheads, including 3 leaf-shaped arrowheads and 3 barbed arrowheads (Szydłowski 1964b, 79, 80, Fig. 76: 1–6; Godłowski 1977, 66); grave 100: 1 leaf-shaped arrowhead (Szydłowski 1964b, 89, Fig. 86: 8; Godłowski 1977, 66); grave 113: 4 arrowheads, including 3 leaf-shaped arrowheads and socket of fourth arrowhead (Szydłowski 1964b, 97, Fig. 96: 4–6, 8; Godłowski 1977, 66); grave 122: 3 leaf-shaped arrowheads (Szydłowski 1964b, 106, Fig. 105: 2–4; Godłowski 1977, 66); from cemetery: 1 leaf-shaped arrowhead (Szydłowski 1964b, 137, Fig. 149: 15; Godłowski 1977, 66).
5. Ciecierzyn, Kluczbork District, Opolskie Voivodeship, grave 12: 1 leaf-shaped arrowhead (Martyniak et al. 1997, 12, Pl. XV: 4; Bochnak 2005, 222); grave 19: 1 leaf-shaped arrowhead (Martyniak et al. 1997, 13, Pl. XXII: 12; Bochnak 2005, 222); grave 233: 2 arrowheads, including 1 leaf-shaped arrowhead (destroyed) and 1 barbed arrowhead Martyniak et al. 1997, 47, Pl. CCVIII: 6, 7).
6. Ciebłowice Duże, Tomaszów Mazowiecki District, Łódzkie Voivodeship, grave 61: 2 leaf-shaped arrowheads (Dzięgielewska, Kulczyńska 2008, 26, 60, Pl. XLVIII: 61/9.10); grave 70: 1 leaf-shaped arrowhead (Dzięgielewska, Kulczyńska 2008, 27, 60, Pl. LIV: 70/1); grave 122: 1 leaf-shaped arrowhead (Dzięgielewska, Kulczyńska 2008, 37, 60, Pl. LXXVII: 122/7).
7. Dobrodzień – Rędzina, Olesno District, Opolskie Voivodeship, the layer cemetery: 4 leaf-shaped arrowheads and socket of the next arrowhead (Szydłowski 1974, 76–77, Pl. XCII: d–h; Godłowski 1977, 66).
8. Drochlin, Częstochowa District, Śląskie Voivodeship, feature 177: 4 leaf-shaped arrowheads (Kaczanowski 1987, 34, Pl. XVII: 1–4).
9. Dzierzążnia Nowa, Płońsk District, Mazowieckie Voivodeship – 1 arrowhead (Bochnak 2005, 222).
10. Faliszewo, Radziejów District, Kujawsko-pomorskie Voivodeship, from cemetery: 1 leaf-shaped arrowhead (Zielonka 1970, 202–203, Pl. 7: 8).
11. Gać, Przeworsk District, Podkarpackie Voivodeship, from cemetery: 1 barbed arrowhead, acc. Hadaczek "in a few graves" (Hadaczek 1909, 10, Pl. VIII: D).
12. Grzybów, Staszów District, Świętokrzyskie Voivodeship, feature 3a/86: 2 arrowheads, including 1 leaf-shaped arrowhead and a piece of the other (Garbacz 2000, 100, 121, Pl. LXXII: 4, 6); from cemetery: 1 leaf-shaped arrowhead (Garbacz 2000, 100, 121, Pl. LXXII: 5).
13. Kalinów, Ostra Górka, Strzelce Opolskie District, Opolskie Voivodeship, grave 1: 5 leaf-shaped arrowheads (Szydłowski 1959, 160, Pl. I: d; Godłowski 1977, 66; Pauli Jensen, Nørbach 2009, 185, List 2, No. 70).
14. Korzeń Rządowy, Płock District, Mazowieckie Voivodeship, grave 36: 1 leaf-shaped arrowhead (Kempisty 1968, 346, Pl. XXV: 4; Wierciński 1968, 418).
15. Krapkowice, Krapkowice District, Opolskie Voivodeship, site 2, grave 1: 7 arrowheads, including 4 leaf-shaped arrowheads and 3 barbed arrowheads (Mączyńska 1971, 253–254, Fig. 4h–n; Godłowski 1977, 66, 67, Pl. XX: 3–6, 9–11; Pauli Jensen, Nørbach 2009, 186, List 2, No. 75).
16. Kuny, Turek District, Wielkopolskie Voivodeship, site 4, grave 25: 1 barbed arrowhead (Skowron 2008, 27, Pl. XII: 25/2); grave 47: 1 leaf-shaped arrowhead (Skowron 2008, 37, Pl. XIX: 47/10); grave 99: 1 leaf-shaped arrowhead (Skowron 2008, 58, Pl. XXIX: 99/2); grave 170 – 1 arrowhead (destroyed) (Skowron 2008, 88, Pl. XXXVIII: 170/2).
17. Kutno, Kutno District, Łódzkie Voivodeship, site 6, grave 48: 1 barbed arrowhead (Moszczyński 1996, 87, 88, Fig. 3: 10).
18. Lachmirowice, Inowrocław District, Kujawsko-pomorskie Voivodeship, grave XXXII: 2 leaf-shaped arrowheads (Zielonka 1953, 377, Fig. 29: 3, 4); from cemetery: 2 leaf-shaped arrowheads (Zielonka 1953, 383).
19. Lisięcice, Głubczyce District, Opolskie Voivodeship, grave 1: 1 barbed arrowhead (Godłowski 1973, 287, Pl. VI: 3; 1977, 66).

20. Ludwinowo, Włocławek District, Kujawsko-pomorskie Voivodeship, stan. 3, settlement: 1 leaf-shaped arrowhead (Marchelak et al. 2017, 280–281, Pl. 207: 1).
21. Luszyn, Gostynin District, Mazowieckie Voivodeship, from cemetery: 2 probably arrowheads (Bochnak 2005, 222, 238).
22. Maliszów-Syców, Oleśnica District, Dolnośląskie Voivodeship, stray find?: 1 leaf-shaped arrowhead (Kontny 2008, 131, Fig. 15c; 2019, 38, Fig. 21: 3).
23. Michałowice, Kazimierza Wielka District, Świętokrzyskie Voivodeship, from cemetery: 1 leaf-shaped arrowhead (Zagórska-Telega et al. 2011, 208, Fig. 10: 3)
24. Młodzikowo, Środa Wielkopolska District, Wielkopolskie Voivodeship, grave 94: 1 leaf-shaped arrowhead (Dymaczewski 1958, 260, Fig. 167: 12); grave 207a: 1 barbed arrowhead (destroyed) (Dymaczewski 1958, 355, Fig. 363: 8; Czarnecka 2007, 86); grave 251: 1 leaf-shaped arrowhead (Dymaczewski 1958, 386, Fig. 443: 7; Godłowski 1977, 66).
25. Mokra, Kłobuck District, Śląskie Voivodeship, grave 56: 4 leaf-shaped arrowheads (Biborski 1998, 64, Fig. 3: 2–5; 2010, 139, Fig. 2: 5–8).
26. Muchocin, Międzychód District, Wielkopolskie Voivodeship, site 12, from cemetery: 2–3 arrowheads? (Lewczuk 1997, 47, 106; Bochnak 2005, 222, 239).
27. Nieszawa Kolonia, Opole District, Lubelskie Voivodeship, site 5, settlement, feature 113: 1 leaf-shaped arrowhead (Stasiak-Cyran 2016, 40, 77, Pl. XCVII: 1), from cemetery: 1 leaf-shaped arrowhead (Stasiak-Cyran 2004, 92, Fig. 4: 2; 2016, 43, 77, Pl. CI: 9).
28. Oblin, Garwolin District, Mazowieckie Voivodeship, grave 189: 2 barbed arrowheads (Czarnecka 2007, 50, 84, Pl. CLXXVII: 189/1.2).
29. Opatów, Kłobuck District, Śląskie Voivodeship, site 1, feature 326: 1 leaf-shaped arrowhead (Madyda-Legutko et al. 2011a, 89; 2011b, Pl. CXV: 326/1; feature 957: 1 leaf-shaped arrowhead (Madyda-Legutko et al. 2011a, 217; 2011b, Pl. CCCXXXII: 957/5); feature 987: 1 leaf-shaped arrowhead (Madyda-Legutko et al. 2011a, 221; 2011b, Pl. CCCXXXIX: 987/1).
30. Ostrowo, Inowrocław District, Kujawsko-pomorskie Voivodeship, from destroyed cemetery: probably arrowhead (Zielonka 1970, 198–199; Bochnak 2005, 222, 240).
31. Popowo, Inowrocław District, Kujawsko-pomorskie Voivodeship, from destroyed cemetery: barbed arrowhead (Zielonka 1970, 199, Fig. 5: 9).
32. Prusiek, Sanok District, Podkarpackie Voivodeship, site 25, from cemetery: 1 leaf-shaped arrowhead (unpublished, collection of the Institute of Archaeology, Jagiellonian University).
33. Sadowie, Ostrów Mazowiecki District, Wielkopolskie Voivodeship, grave 3: 1 leaf-shaped arrowhead (Jasnosz 1955, 146, Fig. 11: 1; Ilkjær 1990, 369, No. 586; Pauli Jensen, Nørbach 2009, 189, List 2, No. 120); grave 4: 4 leaf-shaped arrowheads (Jasnosz 1955, 147, Fig. 13: 2–5); grave 7: 1 leaf-shaped arrowhead (Jasnosz 1955, 150, Fig. 17: 8; Ilkjær 1990, 370, No. 588; Pauli Jensen, Nørbach 2009, 189, List 2, No. 120).
34. Siemiechów, Łask District, Łódzkie Voivodeship, site 2, grave 67: 3 barbed arrowheads (Bochnak 2005, 222; Jażdżewska, Siciński 2017, 35–36, Fig. 60: 7–9).
35. Sobocisko, Oława District, Dolnośląskie Voivodeship, grave 9: 1 leaf-shaped arrowhead (Pescheck 1939, 63, 355–356, Fig. 185: 1); grave 15: 3 leaf-shaped arrowheads (Pescheck 1939, 63); grave 22: 1 leaf-shaped arrowhead (Pescheck 1939, 63, Fig. 60).
36. Strobin, Wieluń District, Łódzkie Voivodeship, site 3 and 3a, settlement: 1 leaf-shaped arrowhead (Abramek 1985, 43, Fig. 22: c; 1986, 61).
37. Strobin, Wieluń District, Łódzkie Voivodeship, site 4, grave 70: 1 barbed arrowhead (Abramek 1986, Pl. XIV: 2); grave 96: 1 leaf-shaped arrowhead (Abramek 1986, Pl. XIV: 3); grave 118: 1 leaf-shaped arrowhead (Abramek 1986, Pl. XIV: 1).
38. Szczedrzyk, Opole District, Opolskie Voivodeship, site 1, settlement: 1 leaf-shaped arrowhead (Godłowski 1973, 355–356, Pl. XXX: 8; 1977, 67).
39. Tarnów, Opole District, Opolskie Voivodeship, grave 8/1938: only socket of arrowhead (Godłowski, Szadkowska 1972, 37, 124, Pl. XXVI: 10); grave 33/1938: 1 leaf-shaped arrowhead (Godłowski, Szadkowska 1972, 44, 124, Pl. XXX: 1; Godłowski 1977, 66); grave 145/1938: 1 leaf-shaped arrowhead (Godłowski, Szadkowska 1972, 79, 124, Pl. XLVIII: 10; Godłowski 1977, 66).
40. Warszawa-Wilanów, Mazowieckie Voivodeship, grave 67: 1 leaf-shaped arrowhead (Marciniak 1957, 71, Pl. LIX: 12; Bochnak 2005, 222).
41. Zakrzów, Krapkowice District, Opolskie Voivodeship, grave 8: 1 leaf-shaped arrowhead (Szydłowski 1964a, 194, 214, Fig. 20b; Godłowski 1977, 66).
42. Zgierz-Rudunki, Zgierz District, Łódzkie Voivodeship, grave 3/1984: 3 leaf-shaped arrowheads (Skowron 2000, 80–81, Fig. 2: 1–3).
43. Żdżarów, Sochaczew District, Mazowieckie Voivodeship, grave 99: 1 leaf-shaped arrowhead (Nowakowski 2003, 295, 313, Pl. XXIV: 99/1).
44. Żerniki Wielkie, Wrocław District, Dolnośląskie Voivodeship, grave 9: 4 leaf-shaped arrowheads (Zotz 1935, 21, 65, Fig. 13: 8–10); grave 31: 6 leaf-shaped arrowheads (Zotz 1935, 75, Fig. 18: 2–6).

List 2. Buckles with a semi-circular frame and triangular plate representing group D type 20 (acc. Madydy-Legutko 1986 and J. Schuster 2018)

Przeworsk culture

1. Drozdowo, Łomża District, Podlaskie Voivodeship, grave 37 (Andrzejowski, Madyda-Legutko 2018, 67, Fig. 9: 1a; Schuster 2018, 62, Fig. 24: 16).
2. Novij Jiričiv, Lviv Oblast, West Ukraine, probably from the Przeworsk milieu (Bilas, Silaev 2012, 237, Fig. 4: 8; Schuster 2018, 62).
3. Pakoszówka, Sanok District, Podkarpackie Voivodeship, site 33, from cemetery (unpublished, materials of Jan Bulas – Institute of Archaeology, Jagiellonian University – and Piotr Kotowicz – Historical Museum in Sanok[14]).
4. Starachowice, Starachowice District, Świętokrzyskie Voivodeship, grave XVII (Jamka 1959, 48, Fig. 30e; Madyda-Legutko 1986, 167; 2017, 447, Fig. 1: 3, 4; Schuster 2018, 62, Fig. 24: 17).

Wielbark culture

5. Czarnówko, Lębork District, Pomorskie Voivodeship, features R 373 (similar to D20), 1562, 1798 (Schuster 2018, 61–65, Fig. 24: 1–18, Fig. 25).
6. Elbląg-Nowe Pole, Elbląg District, Warmińsko-mazurskie Voivodeship, from cemetery (Madyda-Legutko 1986, 141; Natuniewicz 2000, 157, No. 379; Schuster 2018, 62, Fig. 24: 8).
7. Malbork-Wielbark, Malbork District, Pomorskie Voivodeship, grave 1291 (Kleemann 2017, 157, Pl. 80: 4; Schuster 2018, 62, Fig. 24: 3).

8. Nowe Sadło, Rypin District, Kujawsko-pomorskie Voivodeship (only plate) (Kurpiewski, Lewandowski 2013, 183, Fig. 11: 26; Schuster 2018, Fig. 24: 5).
9. Odry, Chojnice District, Pomorskie Voivodeship, grave 559 (Grabarczyk 2007, 5, Fig. 2b; Schuster 2018, 62, Fig. 24: 4).
10. Skowarcz, Gdańsk District, Pomorskie Voivodeship, from cemetery (Blume 1912, Pl. V: 49; 1915, 40; Madyda-Legutko 1986, 166; Schuster 2018, 62, Fig. 24: 7).

West Baltic Circle

11. Bartlikowo, Giżycko District, Warmińsko-mazurskie Voivodeship, grave 69 (Kemke 1900, 119, Pl. III: 22; Madyda-Legutko 1986, 134, 2017, 447, Fig. 4: 1; Schuster 2018, 62, Fig. 24: 15).
12. Former Grebieten, Fischhausen District (Zelenogradsk Raion), grave 170 (only plate) (Bitner-Wróblewska et al. 2011, 192; Schuster 2018, 62).

The bog-sites

13. Illerup Ådal, Skanderborg Kommune (Ilkjær 1993a, 148; 1993b, 356, 359, Pl. 72, 87).
14. Thorsberg, Schleswig-Flensburg District (Lau 2014, 185–187, Fig. 133, 135, Pl. 52, 53, 55; Blankenfeldt 2015, 141–142, 366, Pl. 13: PA87; Schuster 2018, Fig. 24: 11–13).

Altmark, Brandenburg

15. Stendal, Stendal District, from cemetery (Kuchenbuch 1938, 44, Pl. XXXIII: 13; Madyda-Legutko 1986, 121; 2017, 447, Fig. 4: 2).
16. Wesendahl, Märkisch Oderland District, grave (Kirsch 2004, 39–40; Schuster 2018, 62).

South-western Slovakia

17. Abrahám, Galanta District, grave I (Kolník 1980, Pl. LXIV: Ic; Madyda-Legutko 1986, 125; Schuster 2018, 62).

Notes

1 I would like to express my gratitude to Dr hab. Marcin Biborski for performing the analysis.

2 Błonie, near grave 182; Ciecierzyn, grave 12 and grave 19; Dzierzążnia Nowa, grave; Kuny, site 4, grave 25 and grave 99; Luszyn, from the cemetery; Muchocin, grave?; Popowo, from the cemetery; Warszawa-Wilanów, grave 67.

3 Ciecierzyn, grave 233; Kuny, site 4, grave 47; Kutno, site 6, grave 48; Siemiechów, site 2, grave 67; Sobocisko, grave 9.

4 Brzeźce, site 2, grave 6; Chmielów Piaskowy, grave 6; Chorula, grave 55 and grave 113; Młodzikowo, grave 94; Oblin, grave 189; Tarnów, grave 33/1938 and grave 145/1938.

5 Ciebłowice Duże, grave 61; Kalinów, grave 1; Lachmirowice, grave XXXII; Mokra, grave 56.

6 Leaf-shaped arrowheads: Brzeźce, site 2, grave 6; Chorula, grave 49; Ciebłowice Duże, grave 61; Grzybów, feature 3a/86; Lachmirowice, grave XXXII; barbed arrowheads: Oblin, grave 189; leaf-shaped and barbed arrowheads: Ciecierzyn, grave 233.

7 Leaf-shaped arrowheads: Chorula, grave 122; Sobocisko, grave 15; Zgierz-Rudunki, grave 3/1984; barbed arrowheads: Siemiechów, site 2, grave 67.

8 Leaf-shaped arrowheads: Chorula, grave 113; Drochlin, feature 177; Mokra, grave 56; Sadowie, grave 4.

9 Chorula, grave 113; Ciebłowice Duże, grave 122; Ciecierzyn, grave 19; Młodzikowo, grave. 251; Krapkowice, site 2, grave 1; Sadowie, grave 4.

10 Kalinów, grave 1; Mokra, grave 56; Sadowie, grave 7; Siemiechów, site 2, grave 67.

11 Brzeźce, site 2, grave 6; Ciecierzyn, grave 233; Ciebłowice Duże, grave 61; Sadowie, grave 3.

12 Chorula, grave 100; Ciebłowice Duże, grave 61; Ciecierzyn, grave 233; Młodzikowo, grave 94.

13 Chorula, grave 23; Młodzikowo, grave 251; Sobocisko, grave 22; Zgierz-Rudunki, grave 3/1984.

14 I would like to express my gratitude to Jan Bulas and Piotr Kotowicz for sharing unpublished materials.

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Resumé

Nová analýza jednoho z hrobů (č. 177) na pohřebišti przeworské kultury v Drochlinu, okr. Čenstochová umožnila zapojit se do diskuse o postavení bojovníka na koni (jezdce) v prostředí této kultury a o používání jeho zbraní. Jde o žárový pohřeb muže ve věku *maturus*, datovaného do fáze C1a mladší doby římské. V pohřebním inventáři se zachovaly dvě obloukové ostruhy, čtyři hroty šípů z luku, přezka k opasku, hrot kopí, kování opasku, pravděpodobně horní část pochvy meče, nůž, fragment jehly, velký fragment roztavené skleněné nádoby světle zelené barvy a malé fragmenty ručně lepené keramiky (obr. 1).

Konzervace kovových artefaktů z téhož hrobu odhalila, že bodce železných ostruh (typ F3a podle Ginalski 1991) byly zdobeny mosaznou inkrustací. Mosazné proužky byly aplikovány pouze na horní části bodců, patrné po přiložení ostruhy na chodidlo (obr. 2: 1.1a, 2). V przeworské kultuře jsou takto zdobené ostruhy unikátní. Obloukové ostruhy nalezené na území barbarika byly velmi vzácně zdobeny inkrustací, a to hlavně ze stříbra. Jednotlivé nálezy jsou známy z oblastí severně od przeworské kultury, z kultury wielbarské (obr. 2: 3, 4), ze Sambijského poloostrova (obr. 2: 5) a ze severoevropského barbarika (obr. 2: 6–8).

Inkrustace slitiny mědi se v przeworské kultuře objevuje již ve stupni B1 starší doby římské, a to na jednotlivých kovových částech ženského a mužského oděvu (obr. 3: 1–3). Zdá se, že použití slitiny mědi k výzdobě bodců ostruh z Drochlinu v době, kdy se na území barbarika běžně prováděla stříbrná inkrustace ve fázích B2b a C1a, zřejmě nesouvisí ani tak s dostupností suroviny, ale s potřebou dosažení specifického vizuálního efektu. Tato inkrustace dodala bodcům ostruh atraktivní zlatavou barvu, zdůrazňující jejich reprezentativní charakter.

Čtyři hroty střel do luku z Drochlinu představují nejběžnější typ listových hrotů šípů s nedokovanými tulejkami (typ IA2 podle Pauli Jensen, Nørbach 2009). V oblasti przeworské kultury je kromě takových hrotů šípů také méně šipek s trny (obr. 4: 1–10, obr. 5, soupis 1). Objevují se i trojbřité (obr. 4: 11–15, obr. 6A) a kostěné (obr. 6B) hroty střel. Listovité šipky jsou známy nejen z hrobových inventářů, ale i ze sídlišť. Listovité hroty střel a šipky s trnem se objevují v przeworské kultuře již v předřímském období. Listové šipky se vyskytovaly po celou dobu římskou, především ve stupních B2, C1, a C2 a také v časném stupni doby stěhování národů. Naproti tomu hroty šípů s trnem mizí po fázi C1a mladší doby římské.

Listovité hroty šípů byly vkládány do hrobů bojovníků przeworské kultury nejčastěji po jednom, ale i více kusech (obr. 7, obr. 8A). Potvrzeny jsou i soubory s hroty šípů v počtu šesti až sedmi kusů, někdy listových hrotů nebo hrotů s trny (obr. 8B, obr. 9). Větší počet hrotů šípů se vyskytuje v hrobech stupně B2, zejména ve fázi C1a a stupni C2, které jsou obvykle vybaveny prvky výzbroje, jako jsou: 1) samotná dřevcová zbraň; 2) dřevcová zbraň a součásti štítu; 3) meč, dřevcová zbraň a součásti štítu. V případě souborů s hroty šípů a dalších kategorií zbraní máme co do činění se soupravami, jejichž komponenty sloužily k boji různými vzájemně se vylučujícími způsoby. Dosud nemáme důkazy pro vyčlenění lučištníků nebo jezdců s luky v przeworské kultuře. Archeologické prameny neposkytují údaje

pro rekonstrukci luku používaného v przeworské kultuře. Luk mohl být použit v boji, ale také mohl sloužit jako lovecká zbraň. Různé formy hrotů šípů luku mohou také odrážet jejich různé účely, například malé a lehké hroty šípů mohly být použity k lovu drobné zvěře nebo ptáků.

Ve srovnání se situací v labsko-germánském okruhu zaznamenáváme v hrobech przeworské kultury nedostatek obloukových ostruh a hrotů šipek z drahých kovů, přesto však lze předpokládat, že předměty z území przeworské kultury, o nichž zde bylo pojednáno, náležely elitě bojovníků, zejména ve stupních B2 a C1–C2. Souvislosti elit przeworské kultury s obyvatelstvem wielbarské kultury a severoevropským barbarikem naznačují nejen vykládané ostruhy z objektu 177 z Drochlinu, ale i přezka s polokruhovitým rámečkem a s trojúhelníkovou destičkou z téhož hrobu (skupina D typ 20 podle Madyda-Legutko 1986, soupis 2, obr. 10: 1–11).

Czech translation by Eduard Droberjar

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