

# A horse warrior's armament based on studies of the Przeworsk culture cemeteries from the Roman Period

Výzbroj bojovníků na koních na základě výzkumů przeworských pohřebišť z doby římské

– Emilia Smółka-Antkowiak\* –

## KEYWORDS

Spurs – horse warriors – weapons set – military structure – social differentiation – Przeworsk culture – Roman Period

## ABSTRACT

*The known burials of the deceased equipped with spurs from the heavily militarised Przeworsk culture are interpreted as burials of horse warriors. This theory is partially contradicted by the fact that there are no weapons in the inventory of some of them and the frequently performed anthropological analyses often prove that they are burials of women or children. Nonetheless, most graves with spurs contain more or less complex sets of weapons, which allows us to assume that they are indeed burials of deceased warriors. The subject of this article is the variety of weapon sets in graves containing spurs. The author inquires how the equipment of a horse warrior differs from that of a foot soldier, and how diverse is the armament within the layer of the horse warriors. The research was carried out taking into account several variables, such as time, the size and the number of “riders’ burials” discovered in the cemetery and space, which is understood here as the distinctiveness of each community depending on the site investigated.*

## 1. Introduction

The community known today as the Przeworsk culture (Mączyńska 2003, 553–567) was one of the more militarised cultures of barbarian Europe. The abundance of weapons found in their burials gave rise to research on the characteristics and diversity of the warrior class; their position in the military and social hierarchy. The research on their military legacy focused on observing the variability of equipment and forms of weaponry. It also enables to reconstruct the warriors’ kit and to attempt to reconstruct their combat methods. The extensive analysis of the weapon sets found in the Przeworsk culture graves was of particular importance for the above considerations.<sup>1</sup>

The extensive analysis of the weapon sets found in the Przeworsk culture graves was of particular importance for the above considerations. Even though some archaeological literature on the Przeworsk people, including analyses, has already been published several times (Elantowska 1961; Kaczanowski 1976; Weski 1982; Gojda 1984), it is Bartosz Kontny’s works that can be considered as the most current and, at the same time, the most exhaustive. Published in three separate articles (2002; 2003a; 2003b), they form a comprehensive approach to the issue of the diversity of the weapon sets, which comprised the equipment in graves discovered in connection with the Przeworsk culture. An extensive source database and a detailed chronological division of the analysed groups are only a few of the many advantages of these publications. The results obtained by B. Kontny are an invaluable contribution to understanding archaeology as a scientific discipline, while at the same time an excellent comparative base for similar analyses, such as this one, which aims to reconstruct the changing gear of the Przeworsk culture warriors.

Graves with spurs in the Przeworsk culture and throughout the Central European *Barbaricum* area are considered to be burials of people with a high social status (i.a. Kietlińska 1963, 104; Godłowski 1969, 156; Hedeager, Kristiansen 1981; Tejral 2002; Mączyńska, Rudnicka 2004). The archaeological context of these finds is that they are often equipped with numerous valuables,<sup>2</sup> as well as the presence of spurs, which most often, although not always, allowed to connect the deceased with the upper horse-riding ranks of the military. Although it is necessary to agree with this thesis about a form of a “high status” of the deceased who was equipped with spurs, the author acknowledges that it is too vague a label and does not exhaust the potential of these finds. As part of the research conducted based on spurs and their context of occurrence in the *Barbaricum* area, the author observed a huge diversity of these objects, which allows to claim the diversified role of the particular deceased in their local societies. First, it should be noted that the presence of spurs should not be unambiguously associated with a man or, indeed, a warrior, because they were often found in the burials of women and children

\* Corresponding author – E-mail address: emilia\_smolka@wp.pl

<https://doi.org/10.47382/pv0621-09>

Received 19 February 2021; received in revised form 14 May 2021.  
Available online 30 June 2021.

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Competing interests: The authors have declared that no competing interests exist.

or burials lacking weapons. On the other hand, the graves with spurs that were equipped with weapons, and which can probably be labelled as those of warriors, show a strong differentiation. Therefore, this analysis intends to explain the nature of such differentiation. Can they be considered as a sign of a specific hierarchy within the military structures of the Przeworsk culture? Or is it conditioned by the changing methods of fighting and the weapons in use? Another possibility may include other conditions affecting the diversity of the weapon set, such as local traditions, fashion or the richness of a particular community.

To answer the aforementioned questions, the author analysed 226 burial sites of the Przeworsk culture that were equipped with spurs (see Tab. 1 at the end of this article). Only compact sites with precise chronology were taken into account in the analysis, which means that the material base does not constitute all spur finds in the area of the Przeworsk culture, such as random finds or heavily damaged or looted burials. The author realizes that with the resignation of including imprecisely dated burials, she has omitted a significant amount of data, which distorts the image of the reality of that time. However, the author believes that with the inclusion of these, that in many cases it would be wrong to distort rather than improve the reliability of the results obtained.

The first part of the article focuses on the differences between the kit of the horse warriors and the foot warriors. The knowledge regarding the variability of weaponry equipment for the infantry (i.e. graves not equipped with spurs) was obtained from the above-mentioned works of B. Kontny. The source data provided there has been configured to extract and characterise groups of graves devoid of spurs. On the other hand, based on the source database obtained by the author, groups of gravesites with spurs were isolated. Both the analysed groups are compatible in terms of chronology, which enables a proper comparison of the results obtained. The second analysis concerns the diversification of the weapon sets within the burials containing spurs. The author then posed the question of whether the armour of the deceased rider was affected by the size of the community in which they lived and were buried. Are there any differences in the equipment of the deceased in the cemeteries with single burials of this type and those where more of them were discovered? Do the cemeteries with an increased number of spurs feature a hierarchy among a group of the buried horse warriors? The final chapter will deal with the variability of the weapons of the warriors depending on the particular community – the cemetery. By analysing the sets of weapons in the framework of cemeteries where there was a greater number of graves with spurs, the author will verify the existence, or lack of, of any local traditions and customs associated with equipping the deceased with spurs.

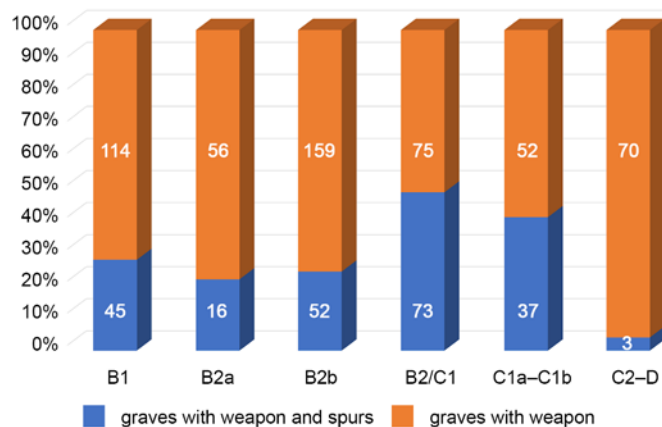
An obvious but important aspect is that the subject of the analyses are “weapon sets” and not the individual elements they are comprised of. The aim of the work is not to present the diversity of weapons and the diversification of the warrior's equipment. This is because only the entire set allows us to characterise or hierarchise the find. For similar reasons, the quantity or quality of the weapons will be less important from the point of view of these considerations than the element of the category of weaponry present in the grave. There are three main weapon categories found in the Przeworsk burials with spurs: swords, pole weapons and shields. The author assumes, after the works of B. Kontny, that the “sword” category is represented by the presence of either a sword itself and/or scabbard fittings. The “pole weapon” category is represented by the presence of a spear and/or a javelin head. Third, the presence of a shield boss, and/or a grip, and/or shield fittings represents the “shield” category. The Przeworsk burials also commonly comprise arrowheads, which prove the use of bows.<sup>3</sup>

The author is aware of the presence of a whole series of distortions of the actual historical image, resulting from the specifics of the archaeological sources studied, as previously indicated by other researchers (see Kontny 2003a, 113). These distortions result from the destruction of the historic material (the post-accession process or simply the rite of destroying weapons before burial) and the adoption of inappropriate research methods, etc. It should also be noted that all research related to *sacrum* is rife with a number of interpretational errors. Even at the level of the excavation and the description of the source material, one can have doubts about the relationship with the contemporary reality that is currently being discovered in the burial. Does this equipment testify to the deceased or rather to the community that buried them? It is commonly accepted that the type, quantity and quality of burial gifts are indicative of the role of the deceased during their life (Kontny 2003a, 113), hence the categorisation of “prince”, “blacksmith” or “warrior” graves. The burial can be considered as a testimony to the relationship connecting the deceased with the rest of the community; it may also indicate respect for the deceased, and their social and property status. It is also impossible to deny such reasoning, which is also shared by the author of this article. However, it should be noted that the grave is a product of the community that buried the deceased and, indeed, also a form of testimony. It was the actual rite, adopted by the mourners, that determined what would be placed in the grave, as there may have been a selection procedure (for example, a ban on laying weapons and iron in graves in the Wielbark culture). It may have depended on the wealth of the people as to whether certain items could be excluded from use, or perhaps the property of the deceased was more useful to someone else, etc. The structure and economy of the society also depended on whether the deceased was equipped with their “personal” items. We do not know what the question of ownership looked like, or whether there was something that today we would call “private property”. As B. Kontny wrote, for example, the weaponry could be distributed by the war chief and not be included in the grave to be used in the afterlife (Kontny 2003a, 113). Consciously, and sometimes unconsciously, we are exposed to mistakes made at each stage of research, which in effect distort or even falsify the results obtained. Nevertheless, according to the author, the broadest possible database, a reliable source selection and a detailed analysis should positively influence the resulting interpretations and minimise the margin of error.

## 2. Diversification of weapon sets in burials with and without spurs

At this point, the author focuses on the differences between the kit of the horse warriors and the foot soldiers. The knowledge about the variability of weaponry equipment for the infantry (i.e. graves not equipped with spurs) was obtained from the above-mentioned works of B. Kontny. The source data provided by them has been configured to extract and characterise groups of graves devoid of spurs. On the other hand, based on the source database obtained by the author, groups of gravesites with spurs were isolated. Both of the analysed groups are compatible in terms of chronology, which will enable a full comparison of the results obtained.

The following decision is the result of categorising the 226 burial sites containing spurs into the above-mentioned phases: 45 graves from phase B1,<sup>4</sup> 16 graves from phase B2a, 52 graves from phase B2b, 73 graves from phase B2/C1, 37 graves from late C1a–C1b phase and only 3 graves from the C2–D phases. Graph 1 shows the percentage of graves with spurs analysed in this work in the group of graves with weapons analysed by Kontny.



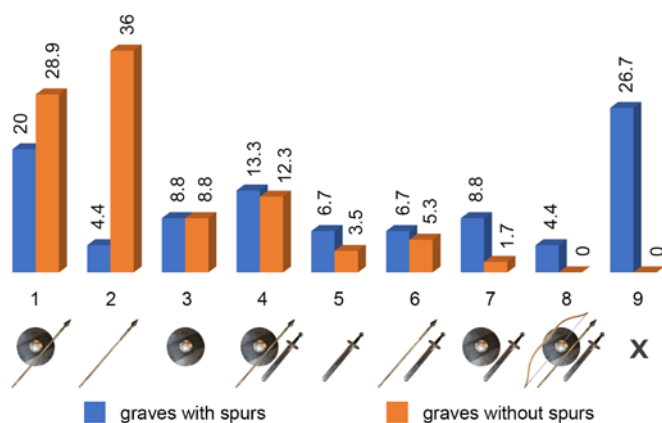
**Graph 1.** Percentage share of the analysed graves with spurs in the group of graves with weapons analysed by B. Kontny (Kontny 2001; 2003a).

**Graf 1.** Procentní podíl analyzovaných hrobů s ostruhami v hrobech bojovníků podle B. Kontny (2002b; 2003a).

The presented data confirms the known dependence on the gradual increase in the occurrence of spurs in graves with weapons from the beginning of the Early Roman Period to the B2/C1 phase, and then their decrease, leading to them almost disappearing in the C2-D phases of the Late Roman Period (Kontny 2001; 2003a).

## 2.1 B1 phase

The analysis of 45 burial sites from the B1 phase enabled to distinguish nine sets of weapons that accompanied the spurs in the graves: 1. Pole weapon + shield, 2. Pole weapon, 3. Shield, 4. Sword + pole weapon + shield, 5. Sword, 6. Sword + pole weapon, 7. Sword + shield, 8. Sword + pole weapon + shield + bow, 9. No weapon.<sup>5</sup> The results presented in the table indicate a clear differentiation in the percentage of weapon sets in graves with and without spurs (Graph 2). The biggest discrepancy is noticeable in the category of “pole weapons”. While the weapon model dominates graves with weapons but lacking spurs, a combination with spurs is relatively rare (4.4%). A warrior equipped with only a weapon that corresponds to arming standard infantry – the foot soldier (Kontny 2003a, 121) – is one of the most frequently found (Kontny 2002; 2003a). However, the position of the warrior changes drastically when spurs are added to their equipment, consequently indicating the existence of a mount. However, as the



**Graph 2.** Diversification of weapon sets in burials of the Przeworsk culture dated to the B1 phase.

**Graf 2.** Diversifikace výzbroje v hrobech przeworské kultury datovaných do stupně B1.

analysis shows, such a set was not particularly prevalent at the beginning of the Common Era.

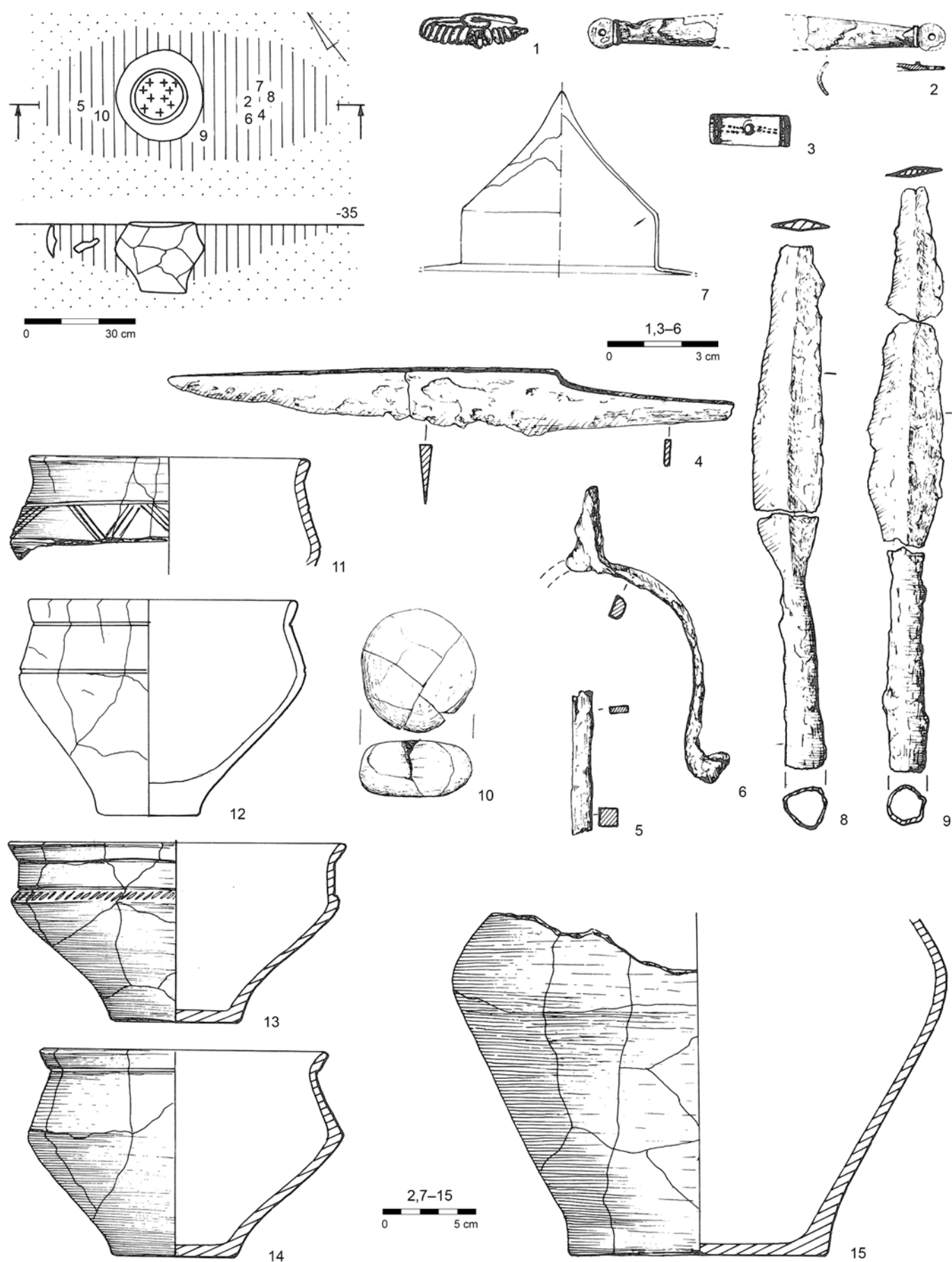
One of the most common sets of weaponry in graves with and without spurs during the entire of the Roman Period is the combination of “a pole weapon + shield” (see Fig. 1, Kamięńczyk grave 292). Every fifth grave (20%) among the graves with spurs comprises such a set, and it does not differ significantly from the popularity of such gear among common infantry (28.9%).

Shield elements are found in both categories of burials at an identical rate: 8.8%. A set consisting solely of a shield, which is only a defensive weapon, does not appear to correspond to the actual weaponry of the contemporary warrior. Such a warrior would be deprived of an offensive weapon to attack their opponent with. Therefore, several interpretations can explain the occurrence of a sole shield in a grave. These refer to the symbolic meaning of the shield representing the entirety of their weaponry (Peschel 1991, 137; Schultze 1991, 177), or an element of apotropaic importance – protecting the deceased (Kontny 2003a, 121). There is also the possibility that the burials equipped with shields as the only element of weaponry were those of the lowest-class warriors as far as the military hierarchy was concerned (Peschel 1991, 131–141) although this interpretation should be excluded in the case of burials equipped with shields and spurs.

In the graves with both weapons and spurs, and those that do not contain elements of equestrian gear, the wealthiest of sets consisting of a sword, a pole weapon and a shield, are present on a similar level. In graves with spurs, the set occurred at a rate of 13.3% (see Fig. 2, Domaradzice grave 1), while it was 12.3% in those without spurs. However, in general, “richer” weapon sets (No. 4–7), i.e. those containing swords, clearly appear more often accompanied by spurs than without them: with spurs, they constitute 39.9% of the graves and, in burials not equipped with spurs, then only 22.8%. The sword, according to Godłowski's assumptions, belonged to the most valuable elements of weaponry, while the spurs were only found in, above all, the graves of rich, and even the wealthiest (Godłowski 1960, 40–41, 50–53, 82). Considering the practical aspect of the use of a sword in horse fighting, it does not appear to have had a decisive impact on the combination of these weapons. The analysis conducted by Kontny shows that in the graves containing equestrian gear, the frequently found long and short swords, would not be useful in horse fighting. It is also worth mentioning that according to Bartosz Kontny, during the Roman Period, people fought on foot and used the horse as a form of transport to reach and possibly retreat from the battlefield (cf. Kontny 2001, 102–106; Kontny 2003a, 119; Kontny 2003b, 254–255). Therefore, the relationship of the swords and elements of equestrian gear should be explained by prestige/wealth considerations because both these elements of arms can be considered as determinants of the high social position of the deceased in question (Godłowski 1960).

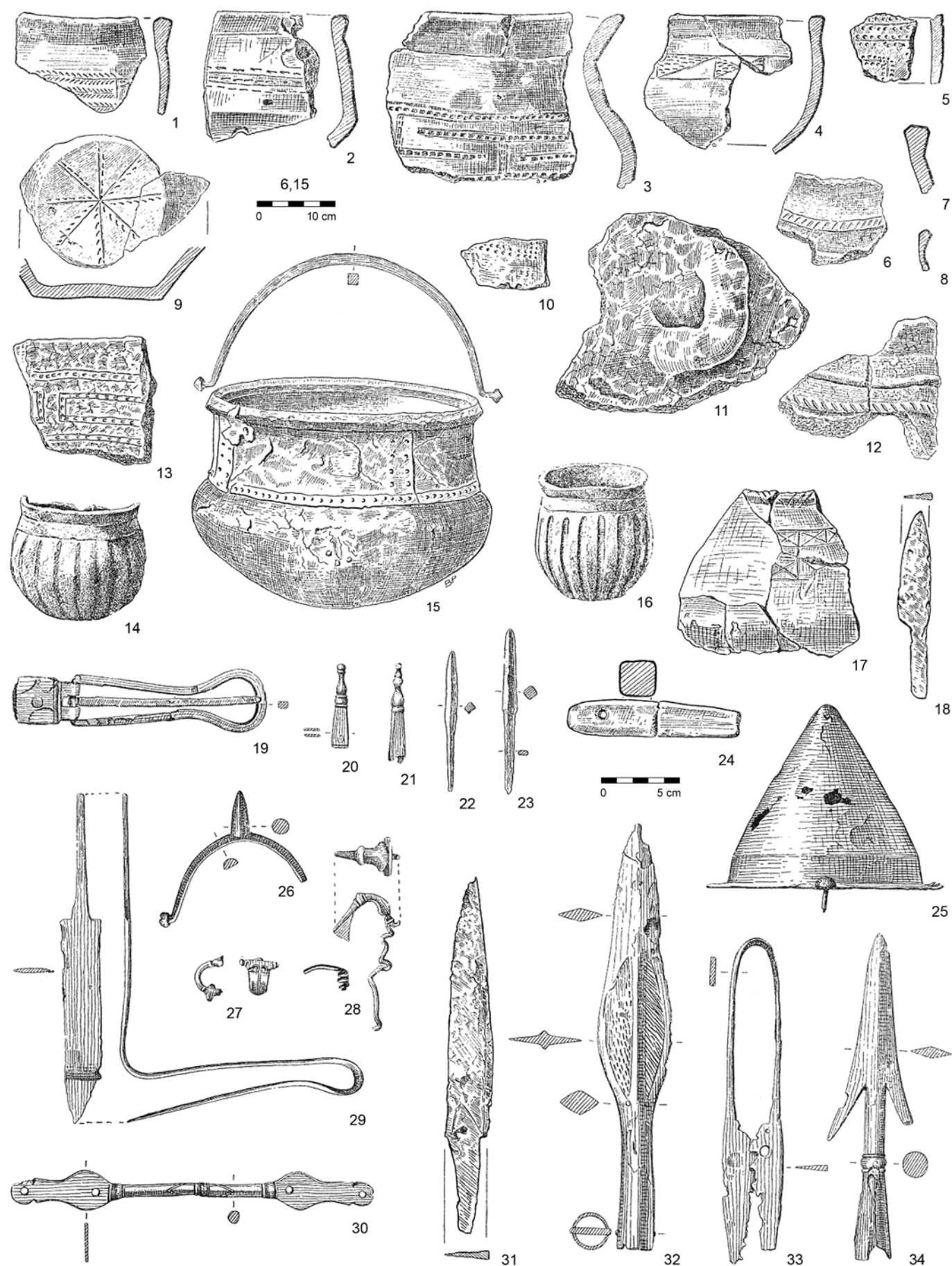
Every fourth grave with spurs from phase B1 was devoid of weapons (26.7%). However, a high percentage of these graves were largely influenced by predominately analysing the burials in cemeteries in the Nidzica group area (Gródki – 3 graves, Niedanowo – 2 graves (Ziemlińska-Odojowa 1999), Modła – 2 graves), which was characterised by a different funeral rite that prohibited placing weapons in graves (Okulicz 1983). Among the graves with spurs from the beginning of the Roman Period, there is also a noticeable greater variation in weapon sets than in the burials without spurs. B. Kontny explained this by the influence of the new cultural trends flowing from the Roman Empire, which first reached the elite, and presumably, is why among the “wealthy” burials we can observe an individualised approach to equipping the deceased with arms (Kontny 2003a, 122).





**Fig. 1.** Kamieńczyk, grave 292. Pottery and bronze (1, 3), iron (2, 4–9) and stone (10) items from the grave (after Dąbrowska 1997, 265, Tabl. CXXXV).

**Obr. 1.** Kamieńczyk, hrob 292. Keramika, bronzové (1, 3), železné (2, 4–9) a kamenné (10) předměty z hrobu (podle Dąbrowska 1997, 265, Tabl. CXXXV).



**Fig. 2.** Domaradzice, grave 1. Brown cauldron (15), pottery and bronze, iron and stone items from grave No. 1 (after Kostrzewski 1939, 156, Fig. 3, 158, Fig. 4).

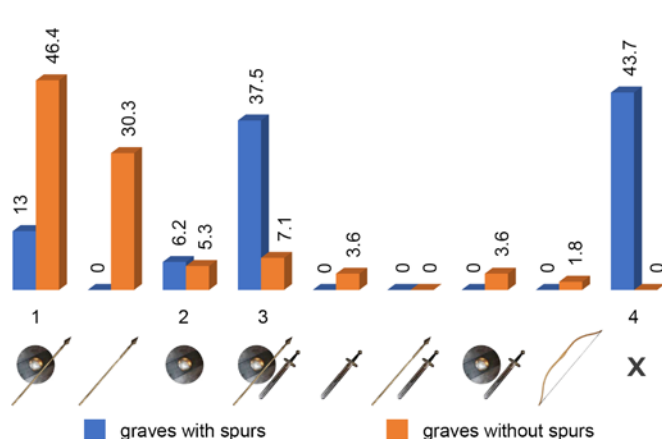
**Obr. 2.** Domaradzice, hrob 1. Bronzový kotel (15), keramika a bronzové, železné a kamenné předměty z hrobu (podle Kostrzewski 1939, 156, Fig. 3, 158, Fig. 4).

## 2.2 B2a phase

The analysis of 16 burial sites from the B2a phase enabled to distinguish between five sets of weapons that accompanied spurs in the graves: 1. Pole weapon + shield (13%), 2. Shield (6.2%), 3. Sword + pole weapon + shield (31.3%), 4. Sword (6.2%) and 5. No weapon (43.7%). The results obtained based on the analysis indicate a specific weapon standardisation. However, these standards are different for the group of graves containing spurs in relation to burials deprived of this category of burial gift (Graph 3). When reading the results of this analysis, it should be taken into account that a narrow source base (16 graves) may not be sufficiently representative for obtaining reliable results. The reason for the separation of such a small number of graves with spurs for this chronological section is due to the decline in the role of equestrian gear as part of a burial gift in phase B2 (Kontny 2001, Graph 10–11; 2003a, 124).

The “rich” set of weapons (see Fig. 3, Kamińczyk grave 320); consisting of a sword, a pole weapon and a shield (31.3%) dominates the inventory of graves containing spurs. This result is in direct contrast with the data obtained based on a group of graves that do not contain spurs, where the combination was only found in 7.1% of burials, while the combined ratio of “wealthy” graves – i.e. equipped with swords – dropped significantly compared to the previous phase and amounted to only 14.3%.<sup>6</sup> A completely different situation can be seen in the example of graves without spurs: 46.4% feature the set of a pole weapon + a shield (No. 1), which constitutes only 13% in the graves with spurs. The results of the above analysis may indicate a specific division, highlighting the borders between the foot soldiers and the horse warriors of the Przeworsk culture. Perhaps a standard was created during this period – only equipping a strictly defined group of high-ranking warriors with “rich” sets of weapons (including spurs and a sword). Similarly, the appearance of a certain standardization can be seen as the uniform equipment of a lower-ranking foot soldier consisting of a weapon and/or shield.

During this period, a significant increase in the number of graves with spurs but not equipped with weapons can be observed, which accounts for almost half of these burials (43.7%). However, this image, as in the previously analysed phase, is strongly distorted by the burials from the so-called Nidzica group (Niedanowo, Modła), which account for 37.5% of the burials included in the analysis.



**Graph 3.** Diversification of weapon sets in burials of the Przeworsk culture dated to the B2a phase.

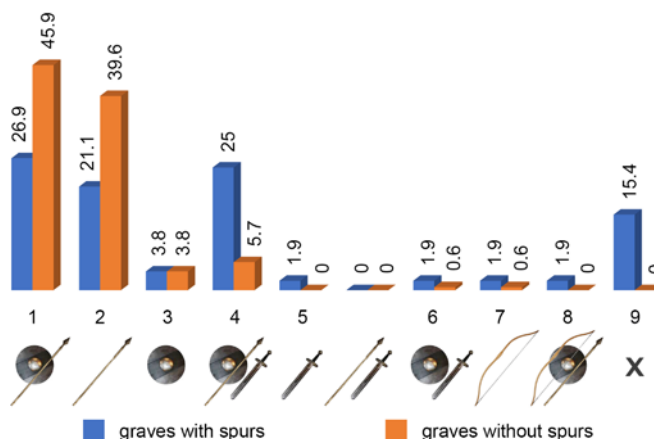
**Graf 3.** Diversifikace výzbroje v hrobech przeworské kultury datovaných do fáze B2a.

## 2.3 B2b phase

For the later phase of B2, we managed to obtain a more representative group of graves with spurs consisting of 52 graves, which is much more representative in relation to the previous phase (B2a). On this basis, nine sets of weapons accompanying spurs were distinguished (Graph 4): 1. Pole weapon + shield (26.9%), 2. Pole weapon (21.1%), 3. Shield (3.8%), 4. Sword + pole weapon + shield (25%), 5. Sword (1.9%), 6. Sword + shield (1.9%), 7. Bow (1.9%), 8. Polearm + shield + bow (1.9%), 9. No weapon (15.4%). In the graves with spurs, as in the previous phase, then to a lesser extent, the “rich” weapon sets – containing the sword – dominate: a total of 28.8% of the burials. The graves not equipped with elements of equestrian gear featured the “rich” set only 6.3% of the time.

Based on the analysis, it can also be noted that the standards for the equipment of graves with weapons that do not contain spurs from phases B1a and B2b appear to be remarkably similar. However, the real differences are mainly noticeable in the burials with spurs. In the later section of the B2 phase, the percentage of the sets containing pole weapons and shields (26.9%) is increased together with the reappearance of pole weapons in the company of spurs (21.1%). The emergence of a fairly strong class of horse warriors equipped with a weapon and/or a shield (see Fig. 4, Cieblowice Duże, grave 58) next to the still-dominant group of warriors equipped with “rich” sets of weapons, can be considered as a sign of a hierarchy in the ranks of horse warriors. The author thus concludes, with a degree of uncertainty, a possible division of horse warrior classes found in the B2b period on at least two levels: 1. The so-called “commander” – graves with “wealthy” equipment, 2. lower-ranking horse warrior – graves with pole weapons and/or shield. It should be noted, however, that this is only one of the possible interpretations because some other options should still be considered, including those taking into account the “symbolic” meaning of the weapon placed in the grave.

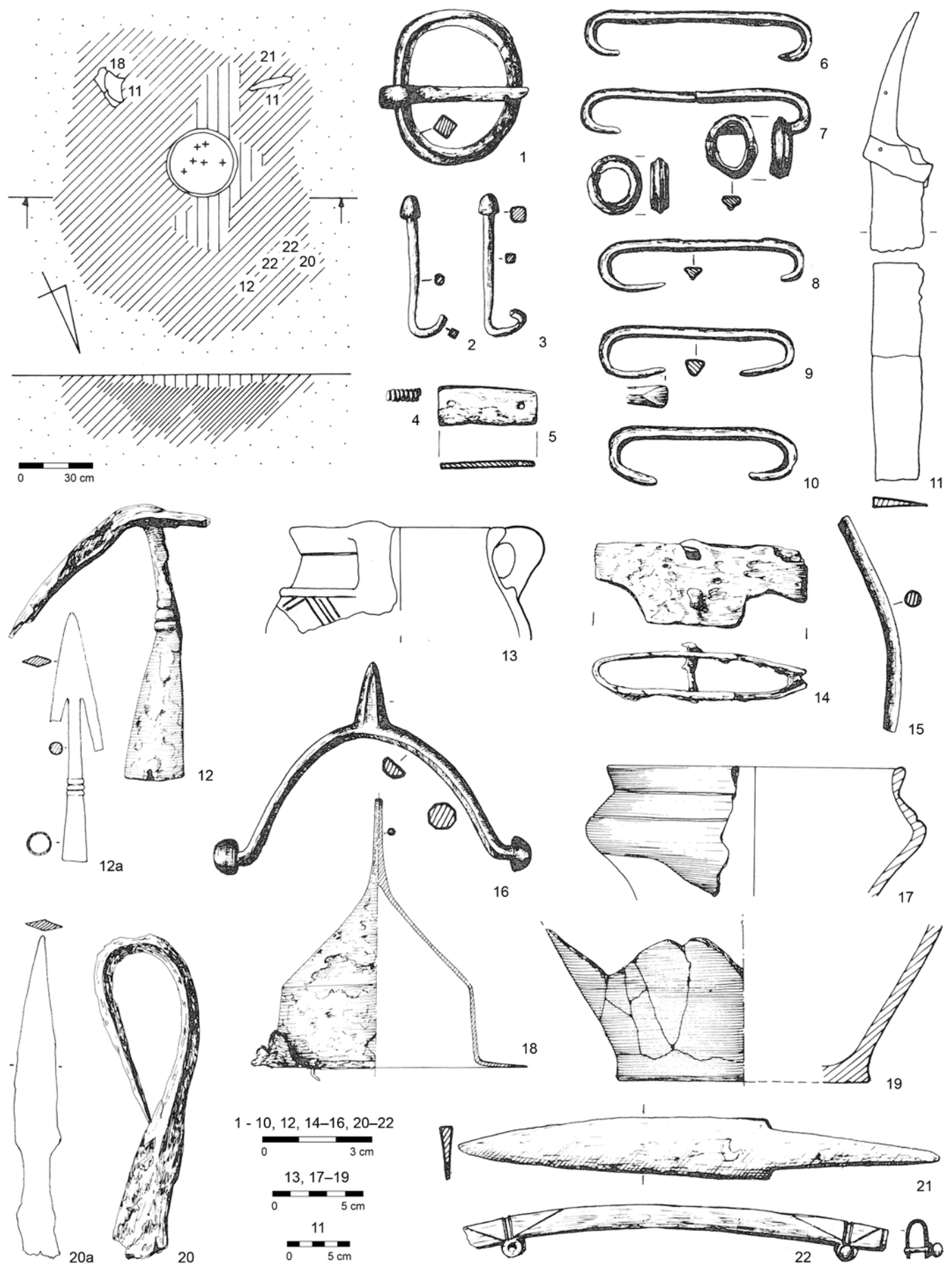
In the B2b phase, the share of graves with spurs not equipped with weapons dropped significantly, although it remained at a relatively high level (15.4%). In contrast to the previous chronological sections, a high percentage of graves with weapons cannot be explained this time by disturbances resulting from the inclusion of graves from the area of the so-called Nidzica group (where it was prohibited to place weapons in the graves), as burials with no weapons come from the whole area of the Przeworsk culture.



**Graph 4.** Diversification of weapon sets in burials of the Przeworsk culture dated to the B2b phase.

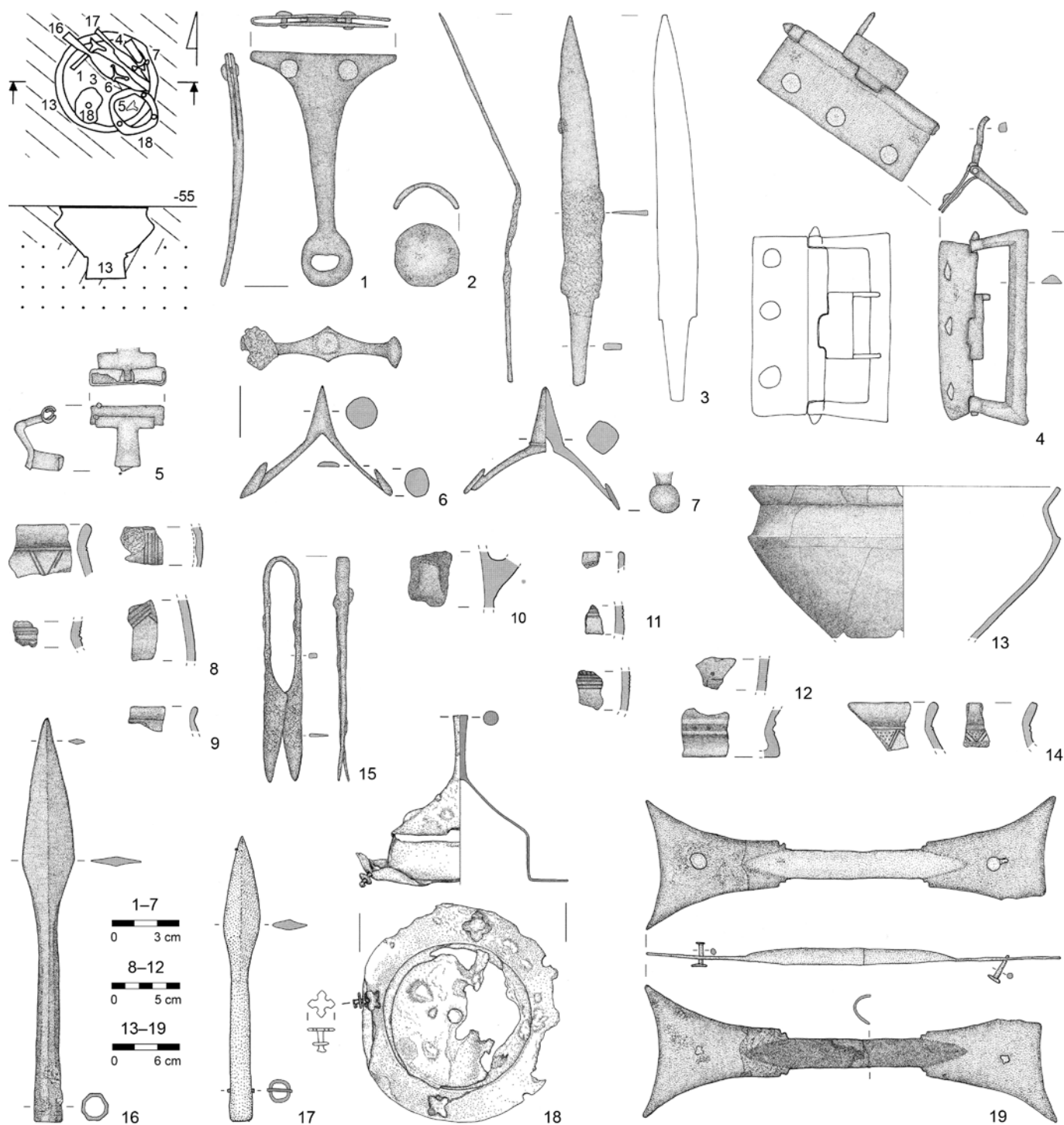
**Graf 4.** Diversifikace výzbroje v hrobech przeworské kultury datovaných do fáze B2b.





**Fig. 3.** Kamieńczyk, grave 320. Pottery, bronze (4, 22,) and iron items from the grave (after Dąbrowska 1997, 275, Tabl. CXLV).

**Obr. 3.** Kamieńczyk, hrob 320. Keramika, bronzové (4, 22) a železné předměty z hrobu (podle Dąbrowska 1997, 275, Tabl. CXLV).



**Fig. 4.** Cieblowice Duże, grave 58. Pottery and iron items from the grave (after Dziegielewska, Kulczyńska 2008, 154–156, Tabl. XLVI).

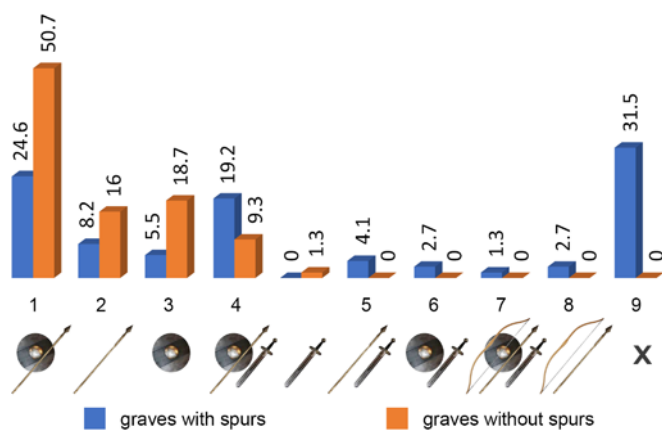
**Obr. 4.** Cieblowice Duże, hrob 58. Keramika a železné předměty z hrobu (podle Dziegielewska, Kulczyńska 2008, 154–156, Tabl. XLVI).

It appears that this time, placing a spur in the grave, in which none of the other items of equipment can be found, could have a symbolic character. A spur placed into a grave could symbolise the high social status of the deceased, belonging to a specific social group or a specific family. The presence of spurs could also be the result of inheritance, etc. There are many interpretive possibilities although they will not be discussed in detail in this work.

## 2.4 B2/C1 phase

The largest group, 73 graves with spurs, are burials dated to the B2/C1 phase and the beginning of the C1a phase. From their analysis, the author distinguished nine sets of weapons that accompanied spurs (Graph 5): 1. Pole weapon + shield (24.6%), 2. Pole weapon (8.2%), 3. Shield (5.5%), 4. Sword + pole weapon + shield (19.2%), 5. Sword + pole weapon (4.1%), 6. Sword +





**Graph 5.** Diversification of weapon sets in burials of the Przeworsk culture dated to the B2/C1 phase.

**Graf 5.** Diverzifikace výzbroje v hrobech przeworské kultury datovaných do fáze B2/C1.

shield, (2.7%), 7. Sword + pole weapon + shield + bow (1.3%), 8. Pole weapon + bow (2.7%), 9. No weapon (31.5%).

The biggest change in the equipment in the graves with spurs in relation to the previous period is an almost twofold increase in the frequency of the graves not equipped with any weapons at the expense of graves that are equipped with them (from 15.4% in phase B2b to 31.5% in B2/C1). The proportions of the weapon combinations remain similar as in the B2b phase. The “rich” weaponry sets still dominate, i.e. those containing swords (27.3% in total). A clear drop is noticeable in the range of graves containing weapons with the first combination (Pole weapon + shield – 24.6%), and above all, in set No. 2 (Pole weapon – 8.2%). Graves with spurs but with no weapons (see Fig. 5, Opatów grave 879), which account for 31.5% of all of the analysed burials in this phase, come from various areas of the Przeworsk culture. However, a few cemeteries comprise concentrations of this type of grave: Opatów (11 graves), Wymysłowo (3 graves; Jasnosz 1952), Młodzikowo (2 graves; Dymaczewski 1958). On this basis, it can be concluded that an increase in the “symbolic” meaning of the spurs in the funeral rite (the most probable interpretation of their presence in burials without weapons) concerned only selected local communities, not the general population of the Przeworsk culture.

The number of graves with spurs equipped with shields oscillates around 5.5%, at the same level as in the previous phases. However, among the graves without any elements of equestrian gear, a marked increase in the prominence of burials equipped with shields as the only weapon is visible (from 3.8% in the B2b phase to 18.7% in B2/C1). B. Kontny explains the increased prevalence of graves with metal shield fittings observed in the discussed period, as a probable reaction to the development of longer and better chopping swords. This was to counteract the emerging cutting focus of the more effective new sword designs (Kontny 2003a, 136).

## 2.5 C1a–C1b phase

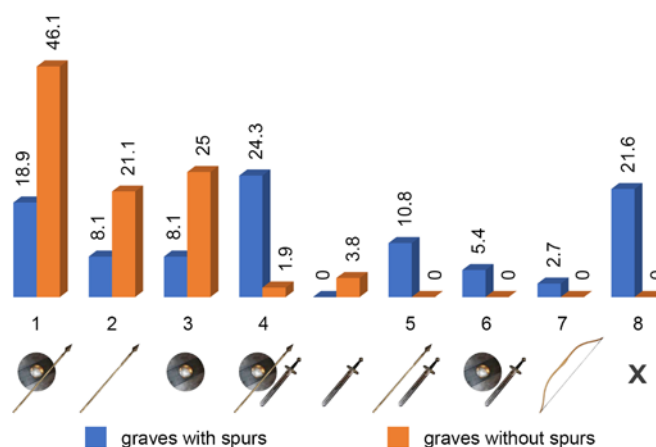
The analysis included 37 burial complexes from the late C1a phase and the C1b phase, which enabled to distinguish between eight sets of weapons discovered in the burials of the Przeworsk culture containing spurs. These sets are presented as follows: 1. Pole weapon + shield (18.9%), 2. Pole weapon (8.1%), 3. Shield (8.1%), 4. Sword + pole weapon + shield (24.3%), 5. Sword + pole weapon (10.8%), 6. Sword + shield (5.4%), 7. Pole weapon + bow (2.7%),

8. No weapon (21.6%). The data presented in the Graph 6 shows that the beginning of the Late Roman Period brought noticeable changes in the equipment found in graves containing spurs. The proportions of the first three weapon combinations did not change significantly and remained at a similar level: 1, 2 and 3. However, a significant change is observed in the “rich” graves (containing swords, among other items), which in the current phase constitute as much as 40.5% of the burials containing spurs. This increase was at the expense of a decrease in the proportion of graves not equipped with any weapons, which constitute 21.6%.

Among the “rich” sets of weapons, the number of graves equipped with spurs, a sword and a pole weapon (an increase from 4.1% to 10.8%), as well as graves with spurs, a sword and a shield (an increase from 2.7% to 5.4%), grew in numbers in relation to the previous phase. An increase (from 19.2% to 24.3%) in the prevalence of graves with full equipment was also observed, which consisted of a sword, a pole weapon and a shield. In the current chronological phase, as in the previous ones, no graves with spurs and a sword were registered. It appears that the weapons found in the above burials could correspond to the actual equipment of a horse warrior, as demonstrated by the fact that this phase featured double-edged swords of significant lengths (Biborski 1978, 104–105). The analysis by B. Kontny shows that the finds coinciding with elements of equestrian gear were usually of the longer variety while shorter forms were significantly rarer (Kontny 2002, 105). The above conclusions suggest the possibility of using swords in horse-fighting while still stressing the main role of horses as a form of transport to and from the battlefield.

To conclude, the analysis showed an increase in the complexity of weapon sets found in the graves of riders in the period corresponding to the late section of the C1a and C1b phases. It is worth noting that such changes were not observed based on the burials of infantry, where sets of weapons and their proportions remained almost unchanged compared to the previous period – B1/C1.

In his works, B. Kontny points out the diversity of the warriors' kit at the beginning of the Late Roman Period, indicated by, among other elements, the changes in the funeral rites<sup>7</sup> and the ways of fighting, as a consequence of direct contact with the Roman army and weaponry (Kontny 2003a, 116). However, these theories apply to all the warriors, as this was how the analysis was conducted. From the observations made in this work, it appears that these assumptions mainly apply to horse warriors/

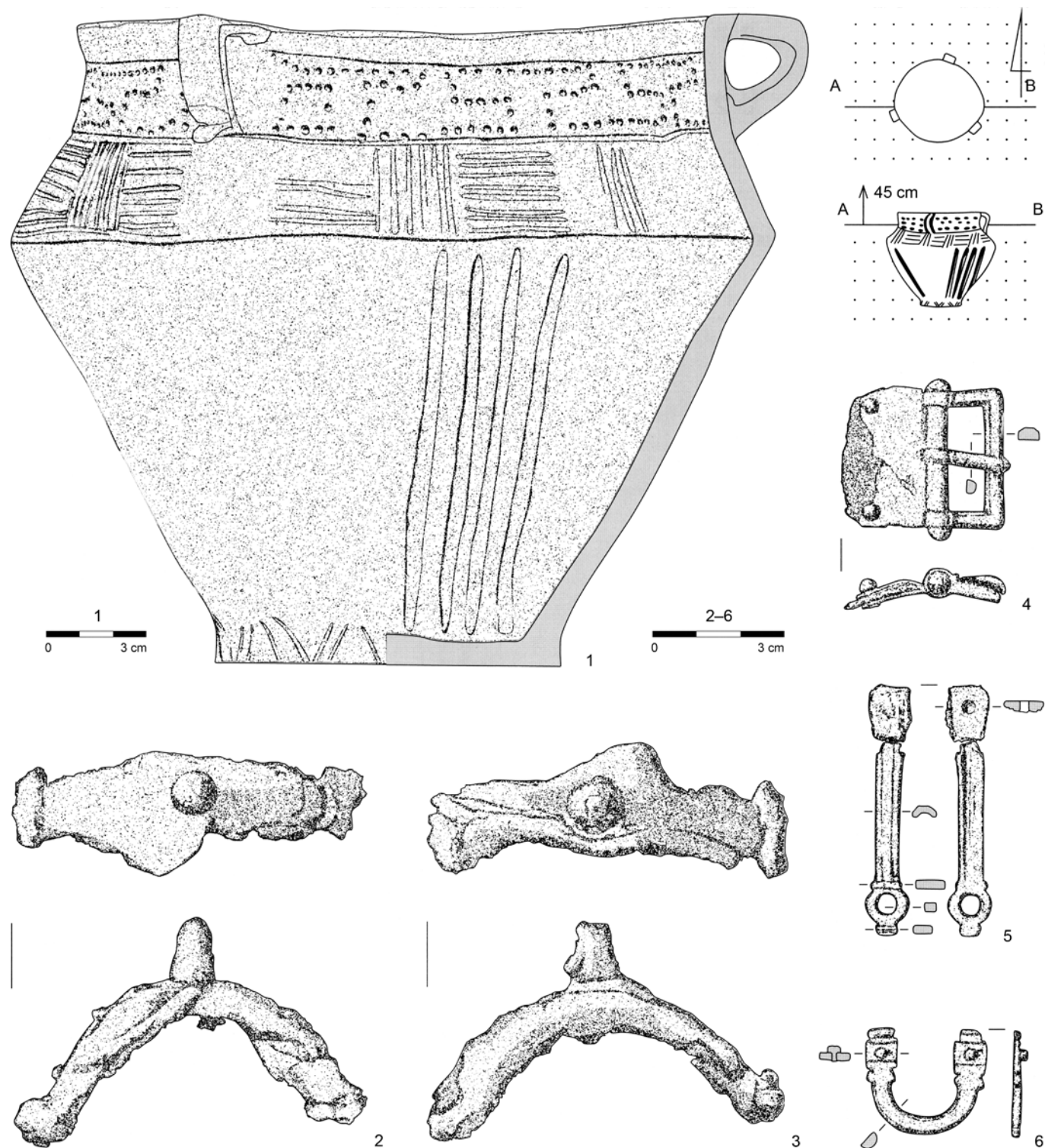


**Graph 6.** Diversification of weapon sets in burials of the Przeworsk culture dated to the C1a–C1b phase.

**Graf 6.** Diverzifikace výzbroje v hrobech przeworské kultury datovaných do fází C1a–C1b.

those buried with spurs. Is it possible that the contacts with the Roman army and weaponry during the Marcomannic Wars would primarily influence only the class of the horse warriors? This possibility seems to have a logical justification in the huge distances that the Przeworsk fighters were forced to travel to fights on the borders. It would have been impossible without the

help of a mount. In addition, issues remain, such as the prestige associated with participation in similar expeditions; perhaps only the most outstanding or highest-ranking warriors were selected, as well as pragmatic problems, such as the costs of arming or equipping a warrior, supporting their family during their absence, etc.



**Fig. 5.** Opatów, grave 879. Pottery, iron (2–3) and bronze (4–6) items from the grave (after Małyda-Legutko et al. 2011, Tafeln 315, Tabl. CCCXIII).

**Obr. 5.** Opatów, hrob 879. Keramika, železné (2, 3) a bronzové (4–6) předměty z hrobu (podle Małyda-Legutko et al. 2011, Tafeln 315, Tabl. CCCXIII).

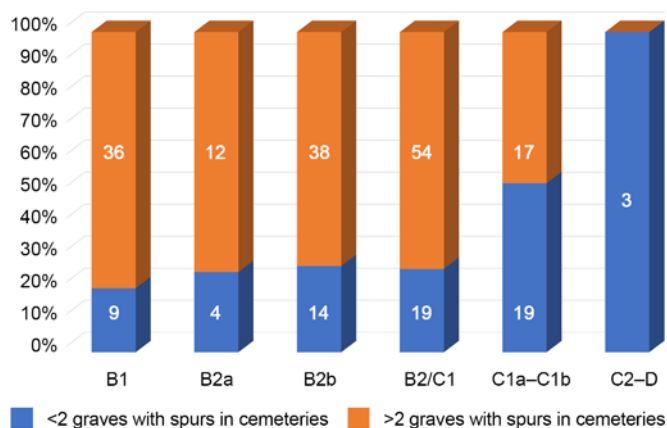
## 2.6 C2–D phase

As part of the last of the analysed chronological periods, there were only three burials with spurs. The number of graves with weapons (70 in total) also significantly fell. These changes were caused by the developments in the funeral rites that had already started in the C1b phase, which were expressed in the almost complete disappearance of urn graves, which were replaced by the spread of graves without urns. During this period, the deceased began to be placed in layered cemeteries, the so-called Dobrodzień type, which featured layers of burials without separate burial complexes (Szydłowski 1974, 15–16, 38–42, 99–100; Szydłowski 1977, 74–83; Kontny 2002, 113). The changes in the form of burials were accompanied by a significant reduction in the quantity of burial equipment (Godłowski 1985, 91; Szydłowski 1977, 76; Kontny 2002, 111–113). A smaller number of graves with weapons may have been caused not only by the changes in the funeral rites but also the migration of warriors from their native areas and their expansion to the western borders of the Roman Empire. The migrations of barbarians dating from the middle of the third century CE constituted not only the peoples of the borderland areas of the Rhine and the Danube but also the tribes inhabiting distant regions of Central Europe, and even Scandinavia (Kolendo 1997, 15; Kontny 2002, 113). The low number of horse warrior burials recorded in the period in question makes it impossible to obtain a comprehensive picture of the rider in the latter part of the Late Roman Period.

## 3. Diversification of weapon sets within the group of the buried equipped with spurs

The above analyses showed, on the one hand, the significant differences in the equipment of the deceased foot soldiers and horse warriors, and on the other hand, the disparities in the weapon sets within the horse rider class.<sup>8</sup> In the course of her research on the subject of spurs, the author noticed that the diversity of weapon sets and grave equipment accompanying spurs changed not only chronologically but also geographically. The latter can be understood as parts of the Przeworsk cultural area influence, e.g. Nidzica group, *the eastern zone of the Przeworsk Culture* (Andrzejowski 2001) or the *Greater Poland and Kuyavia cultural border* (Machajewski 1980), as well as “territory” in a more local context – strictly related to a given cemetery. Individual barbarian communities, which testify to the Przeworsk burial grounds recently discovered by archaeologists, were significantly different from each other. These differences are visible in the occurrence of local traditions, in the degree of wealth (e.g. cemeteries located on trade routes are usually richer than those located in their periphery) or the characteristics of a given community (e.g. the cemetery in Wesółki, due to the disproportionately large amount of weaponry found therein, is often called the cemetery of a “warrior pack”), etc. The author posed the question: To what effect did the community in which the deceased rider lived influence how they lived, and thus, how they were buried? Is it possible to refer to a social class of “horse warriors” in a given community, or only about the symbolic aspect of the spurs that were found in the graves, etc.?

To refine the knowledge of the context of the presence of spurs in the Przeworsk community, the author carried out an analysis on two subsequent levels. First, she investigated the possible differences in the equipment of warriors buried in cemeteries, where there were single graves with spurs (<2) in relation to those where more of these were recorded (>2). A larger number of graves with spurs is usually recorded in large, longer-used cemeteries. The development of communities associated with these necropolises was conditioned mostly by nearby trade



**Graph 7.** Proportion of cemeteries with single graves of horse riders and cemeteries with multiple graves.

**Graf 7.** Zastoupení ostruh na pohřebištích s jednotlivými hroby bojovníků na koních a na pohřebištích s více hroby.

routes and a thriving economy, which became the cause of maintaining intra and intercultural contacts, including the provinces of the Roman Empire. Among such communities, one can usually register a strongly represented class of warriors including horse riders. It is obvious that the degree of militarisation was different for each of the social groups; for example, relatively few weapons were discovered in the Przeworsk site in Karczyn-Witowy (Bednarczyk, Romańska 2015, 58–60), whereas, disproportionately, many burials with elements of weapons were recorded in the cemeteries of Lachmirowice (Zielonka 1951) and Wesółki (Dąbrowska, Dąbrowski 1967). Nevertheless, each case provides the opportunity to observe the relationships within the group of the deceased buried with spurs, which is the purpose of this analysis. The findings of spurs from large cemeteries and individual finds of burials equipped with spurs were contrasted in direct opposition. The latter were mostly graves from small peripheral cemeteries connected with communities of lesser economic importance.

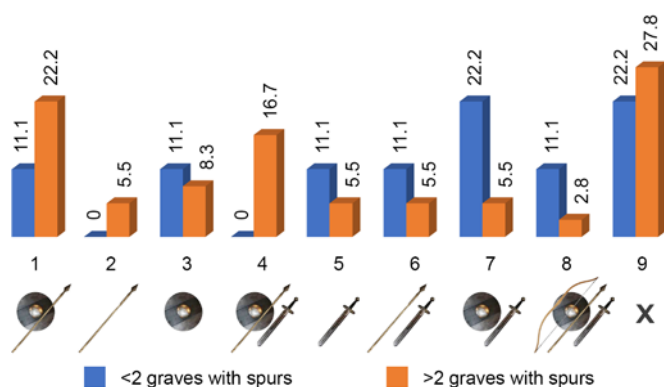
## 3.1 Diversification of weapon sets in cemeteries with single and multiple graves of horse riders

Most of the burials with spurs (69%) dated to the Roman Period, were discovered in cemeteries with other spurs finds. Only 30% of spur finds come from cemeteries where one, possibly two, burials equipped with this element of equestrian gear has been discovered. The proportion of each group of burials is shown in the Graph 7 and subsequently reveals that at the beginning of the Common Era as many as 80% of the dead buried with spurs had graves among larger communities, as evidenced by such large cemeteries as Ciecierzyn (Martyniak et al. 1997), Domaradzice (Kostrzewski 1954), Kamieńczyk, Modła (Grzymkowski 1986; 1996) and Oblin (Czarnecka 2007). In subsequent phases, the number of cemeteries containing single burials with spurs gradually increased. However, in the Early Roman Period, spurs were most common as individual finds in cemeteries, which was probably caused by the aforementioned changes in the funeral rites and the decrease in the number of graves with weapons in general.

### 3.1.1 B1 phase

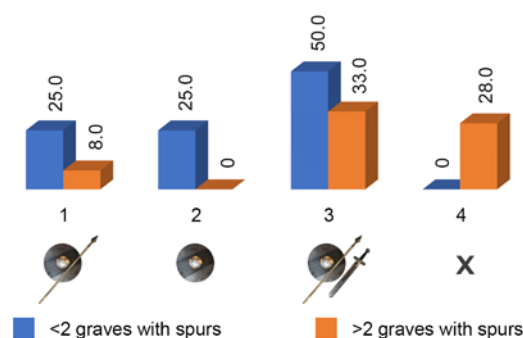
Burials with spurs dated to the very beginning of the Roman Period mostly originate from large cemeteries, where more were discovered (>2), i.e. in 36 out of the 45 graves dated to phase B1.





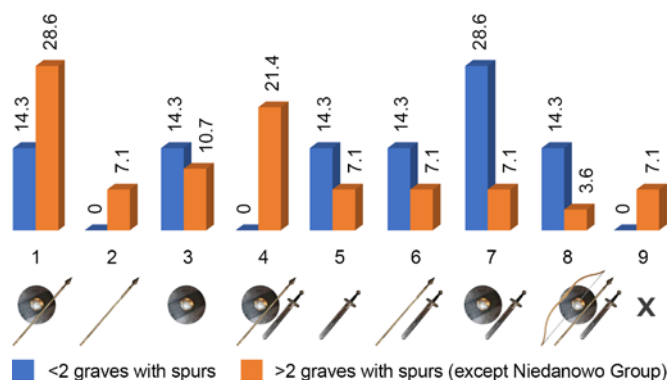
**Graph 8a.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B1.

**Graf 8a.** Zbraně s ostruhami na pohřebištích s jednotlivými hroby bojovníků na koních a na pohřebištích s několika hroby ze stupně B1.



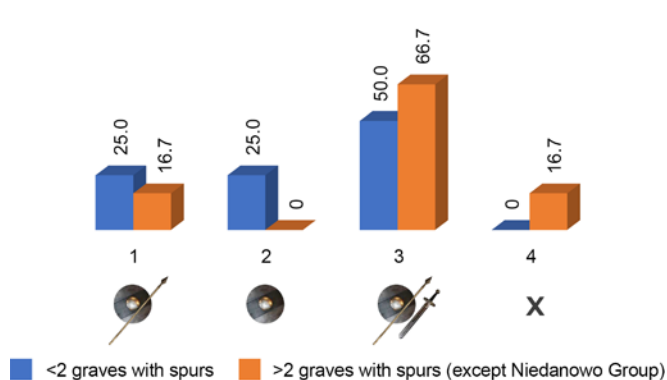
**Graph 9a.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B2a.

**Graf 9a.** Zbraně s ostruhami na pohřebištích s jednotlivými hroby bojovníků na koních a na pohřebištích s několika hroby z fáze B2a.



**Graph 8b.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B1 (except Niedanowo Group).

**Graf 8b.** Zbraně s ostruhami na pohřebištích s jednotlivými hroby bojovníků na koních a na pohřebištích s několika hroby ze stupně B1 (kromě skupiny Niedanowo).



**Graph 9b.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B2a (except Niedanowo Group).

**Graf 9b.** Zbraně s ostruhami na pohřebištích s jednotlivými hroby bojovníků na koních a na pohřebištích s několika hroby z fáze B2a (kromě skupiny Niedanowo).

These burials were dominated by three types of weapon sets: 1. Pole weapon + shield, 4. Sword + pole weapon + shield and 9. No weapon (see Graph 8a, 8b). A large percentage of graves not equipped with weapons was caused by the significant portion of a group of burials from the north-eastern area of the Przeworsk culture, where the custom of placing weapons in the grave was uncommon, as the author mentioned earlier. To overcome the distortion resulting from the cultural distinctness of these cemeteries, analyses were also carried out with their omission, which are presented in separate graphs (Graph 8b, 9b, 10b) generated for phases B1–B2/C1. After this correction, it is possible to point to a stronger differentiation of weapons discovered in graves with spurs from cemeteries in their greater numbers, indicating the dominance of sets 1 (28.6%) and 4 (21.4%).

In burials with spurs, which are classified as single finds at the cemetery (<2), the deceased were equipped with swords much more often (71.5% for <2, 46.3% for >2), but there were no burials containing full sets of weapons consisting of a sword, a pole weapon and a shield. A large percentage of swords in individual graves with spurs may indicate that among the smaller communities, the deceased equipped with spurs and a sword had a definite high social or military standing. Taking into account the insignificant percentage of graves equipped with sets that do

not contain swords, one can claim that there was an extensive military structure. The situation is different for cemeteries with more spurs, where among the burials of riders one can observe a fairly significant diversity of sets of weapons, which could suggest the existence of a form of military hierarchy among the horse warrior class.

### 3.1.2 B2a

The results of the analysis conducted for groups from phase B2a (Graph 9a, 9b) can be debatable due to their small database, which only includes 12 burials from cemeteries with multiple spurs and only 4 graves from the necropolis where they occurred individually. Nevertheless, one can observe the dominance of a rich set of weapons (set 4. Sword + pole weapon + shield) in contrast to burials from cemeteries with single spur finds (<2). It appears that the model of equipping the deceased riders with a full set of weapons replaced all other combinations containing swords that were completely missing in the current phase. Graves equipped with set No. 1 (Pole weapon + shield) set No. 3 (shield) remain on the same level.

Weaponry of horse warriors from those burial grounds, where at least a few of them were buried (>2), still mostly consists of the rich full set (No. 4 – a sword, a pole weapon and

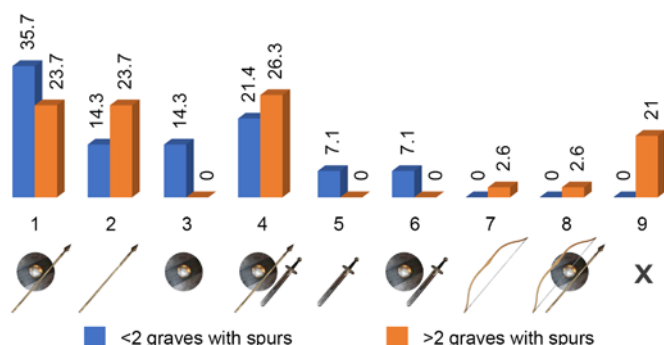
a shield). The sole exception is represented by grave No. 60 found in Kamieńczyk, equipped with set No. 1 (Pole weapon + shield) and grave No. 30 from Opoka – not equipped with a weapon (Szarek-Waszkowska 1971; Kokowski 1991). It should be noted that there are as many as five graves without any weapons from Niedanów, for which the analysis results have been corrected.

### 3.1.3 B2b phase

In the B2b phase, one can observe an increase in the number of graves with spurs. The total number is 52, of which 14 of which are single finds in cemeteries and 38 burials come from cemeteries with multiple spurs.

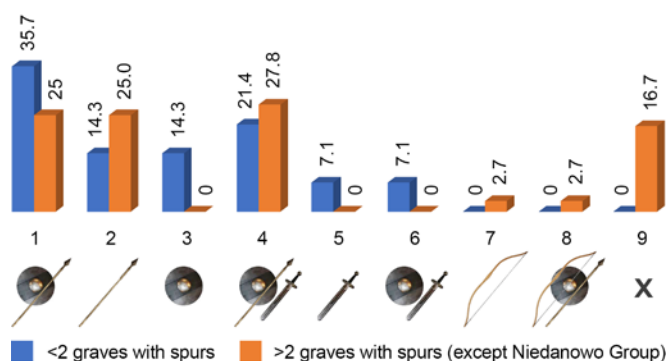
Sets of weapons discovered in burials from cemeteries where spur finds are considered individual (<2) are subject to significant transformations (Graph 10a, 10b). Noticeably, there is a decrease in graves equipped with swords (from 71.5% in phase B1, 75% in phase B2a to 35.6% currently), while a number of burials were equipped with the following set: 1. Pole weapon + shield (35.7%), 2. Pole weapon (14.3%) and 3. Shield (14.3%), i.e. sets corresponding to the so-called lower rank warriors.

The weaponry of riders buried in a large cemetery, where more spurs were found (>2), such as Chorula (Szydłowski 1964), Kamieńczyk (Dąbrowska 1997), Młodzikowo, Oblin or Opoka,



**Graph 10a.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B2b (except Niedanowo Group).

**Graf 10a.** Zbraně s ostruhami na pohřebišťích s jednotlivými hroby bojovníků na koních a na pohřebišťích s několika hroby z fáze B2b.



**Graph 10b.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B2b (except Niedanowo Group).

**Graf 10b.** Zbraně s ostruhami na pohřebišťích s jednotlivými hroby bojovníků na koních a na pohřebišťích s několika hroby z fáze B2b (kromě skupiny Niedanowo).

indicate a specific standardisation, as three sets of weaponry prevail: 1. Pole weapon + shield (25%), 2. Pole weapon (25%) and 4. Sword + pole weapon + shield (27.8%). At the same time, one can conclude there was a certain hierarchy in the ranks, where set No. 4 corresponds to the horse warrior of the highest rank, perhaps the commander, while the next two sets, No. 1 and 2, could be considered the attributes of warriors of a lower military rank.

One cannot ignore the presence of graves with spurs not equipped with any weapons, which this time cannot be explained by the specificity of the funeral rite concerning the cemeteries from the north-eastern area of Przeworsk culture. It appears that from that period, one can conclude the emergence of a symbolic custom of putting spurs into the graves of the Przeworsk culture.

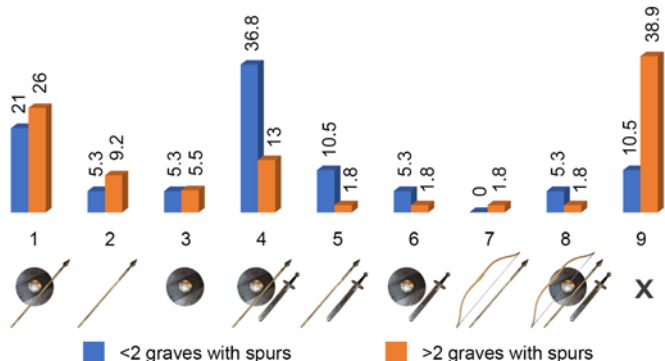
### 3.1.4 B2/C1

The largest number of graves with spurs comes from the B2/C1 phase, which also includes the initial stage of the C1a phase (Graph 11). Their smaller constituent is the single finds, 19 finds of this type in the cemeteries while the larger one is the multiple finds – 54 graves with spurs discovered in cemeteries of this category.

The weaponry of the buried riders from cemeteries, from which single finds of spurs originate (<2) again largely fit the set containing swords (52.6%). Considering the relatively large statistical sample, the predominance of graves equipped with a full set of weapons (as many as 36.8% of graves are equipped with a set of 4. Sword + pole weapon + shield) appears to be deliberate. On this basis, one can conclude the stabilisation of the high position of horse warriors within the ranks of the military in smaller communities. The deceased buried with spurs with full weaponry could be considered as commanders of a local group of warriors, which included infantry.

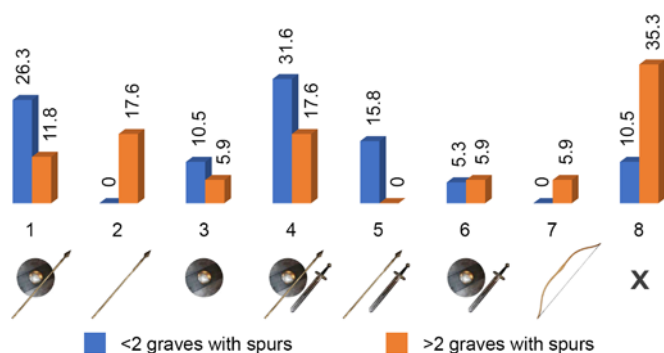
The increase of graves equipped with swords occurred at the expense of a decrease in the share of other sets of weaponry, attributes of lower rank warriors, i.e. sets No. 1. Pole weapon + shield (21%), 2. Pole weapon (5.3%) and 3. Shield (5.3%), which may additionally confirm the above assumptions regarding the increase in the importance of horse riders in smaller communities.

At the turn of the Early and Late Roman Period, there were also changes in the grave equipment of the deceased with spurs from the cemeteries that featured increased numbers (>2). The number of graves not equipped with any weaponry increased more than twice (from 16.7% to 38.9%). Most came from cemeteries in Opatów (10 graves), Wymysłowo (3), Młodzikowo (2) and Chorula (2), i.e. a large necropolis where a relatively high



**Graph 11.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from B2/C1.

**Graf 11.** Zbraně s ostruhami na pohřebišťích s jednotlivými hroby bojovníků na koních a na pohřebišťích s několika hroby z fáze B2/C1.



**Graph 12.** Weapon sets accompanying the spurs in the cemeteries with single graves of horse riders and cemeteries with multiple graves from C1a–C1b.

**Graf 12.** Zbraně s ostruhami na pohřebištích s jednotlivými hroby bojovníků na koních a na pohřebištích s několika hroby z fází C1a–C1b.

percentage of graves equipped with weapons were registered. Therefore, in these cases, it is impossible to explain the absence of weapons together with spurs as a generally prevailing custom of avoiding placing weapons in graves, but rather by the symbolic meaning of spurs. As previously mentioned, the problem of the symbolic meaning of spurs will not be discussed in detail. However, the author would like to refer to the progressive custom of symbolically equipping the deceased with spurs, which started in phase B1b, intensified in the B2/C1 period and at the beginning of the Late Roman Period appeared to be quite deeply rooted in the Przeworsk community culture.

The persistent diversification of weapon sets among the rest of the graves equipped with weapons may indicate a continuous hierarchy in the ranks of horsemen in a given community. However, the ratio of individual sets of weaponry appears to be much more reflective of reality. It is no longer the case that a grave equipped with the richest set of weapons was the most prevalent one (No. 4. Sword + pole weapon + shield), as its share dropped to 16.5%. Graves equipped with a set with attributes of a lower rank warrior dominate: 1. Pole weapon + shield (26%), while much less frequent are the sets consisting of single weapon elements: 2. Pole weapon (9.2%) and 3. Shield (5.5%).

### 3.1.5 C1a–C1b

Among the groups of graves with spurs dated to the end of the C1a phase and the beginning of the C1b phase, it can be noted for the first time that a similar number of finds are considered as single finds (17 graves) compared to those from cemeteries with multiple finds (19 graves). However, the range and proportions of weapon sets in both analysed groups of graves with spurs do not change (cf. Graph 12). Possible changes manifest themselves in only a +/- 5% share of the sets of individual weapons. This indicates that the position of a horse warrior in the military structures defined in the previous chronological section has been firmly established.

### 3.1.6 Conclusion

The analysis of the weapons accompanying spurs in burials from cemeteries with individual finds, contrasted with those with a larger number, showed significant differences that may indicate a different significance and the role of the rider depending on the size of the social group in which they lived and were buried. In general, the vast majority of the equipment of graves that contain individual finds indicate high prestige and a high military position of the deceased. Almost throughout the entirety of the

Roman Period, these graves were equipped with swords, the percentage of which in B1 was 71.5% with 52.6% in the B2/C1 phase and similarly 52.7% in the C1a–C1b phase. A lower, but still high, number of graves with swords was recorded in the B2b phase. At that time, they constituted 35.6% of graves equipped with spurs. During this period, the armaments of riders, as well as foot soldiers, underwent standardisation and consisted mostly of a set of a pole weapon + shield or only a pole weapon.

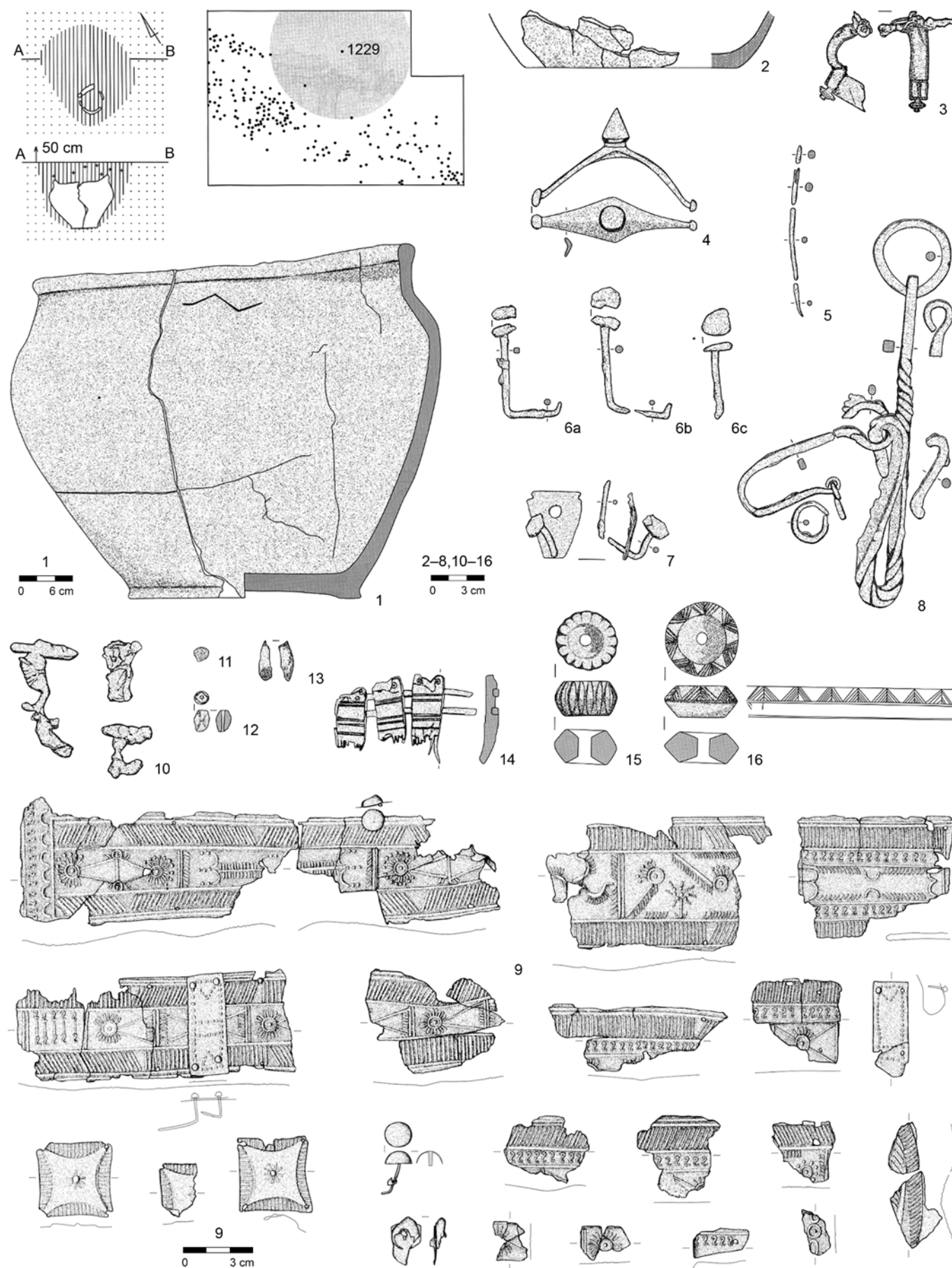
The military character of the spurs in the discussed burials (from the cemeteries where <2 graves with spurs were discovered) is also worth emphasising. In the Early Roman Period they were almost exclusively (discounting the area of the Nidzica group) found in warrior burials. It was only at the turn of the Early and Late Roman Period that spurs began to appear in isolated burials without weapons. According to the author, this was the point when the spurs clearly took on a symbolic meaning (e.g. Fig. 6, Opatów grave 1229). Among smaller communities, this is noticeable in the form of the appearance of burials of non-warriors with spurs (in the B2/C1 and the C1a–C1b phases at around 10% of burials with spurs), whereas in larger cemeteries where this phenomenon was recorded from the beginning of the Common Era, there is a noticeable increase in the frequency of graves with spurs but without any weapons, which in the B2/C1 phase is as high as 38.9% and slightly less at 35.3% in the C1a–C1b phase.

A large percentage of graves with spurs but no weapons may indicate a much more complex meaning of spurs among larger communities. Additionally, one can observe a noticeable group of graves equipped with swords and burials containing sets consisting of a combination of a pole, a weapon and a shield in large cemeteries, where more spurs were discovered. On the one hand, a spur is an attribute of a rider where one can see the division into the higher and lower rank. On the other hand, spurs have a distinct symbolic overtone, which manifests itself by their presence in the graves of non-warriors. This diversity can be conditioned by a complex social structure, an extensive spectrum of beliefs and traditions, but also by the degree of wealth of the society. It can be assumed that in a rich society, spurs could be afforded not only by the commanders who were the richest and the highest on the social ladder. The second aspect is that putting spurs into a grave was associated with their exclusion from use, a sacrifice for the burial gift, which the mourners could afford.

### 3.2 Sets of weapons accompanying spurs in individual cemeteries

The context of the occurrence of spurs varies between small and large cemeteries, which does not mean that within these two groups it remains unchanged. The results of the analysis presented below indicate the nature of the occurrence of these elements of equestrian gear among particular communities, which are testified by the cemeteries studied. This analysis includes cemeteries where at least three or more spur burials were discovered. The analysis was carried out separately for a group of graves dated to the beginning of the Common Era (B1–B2a phase) and burials from the developed section of the Roman Period, i.e. B2b–B2/C1 – and the beginning of C1a phases. The first of these included cemeteries in Domaradzice (5 graves), Ciecierzyn (4 graves), Kamieńczyk (6 graves), Karczyn-Witowy (4 graves) and Młodzikowo (2 graves). Later periods included graves found in Cieblów Duży (6 graves; Dziągiewska, Kulczyńska 2008), Chorula (14 graves), Kamieńczyk (3 graves), Krupice (5 graves; Jaskanis 2005), Lachmirowice (9 graves), Młodzikowo (8 graves), Oblin (9 graves), Opatów (8 graves), Opoka (6 graves) and Wymysłowo (4 graves).





**Fig. 6.** Opatów, grave 1229. Pottery, silver (3), bronze (9–10), glass (11–13), bone (14), clay (15–16) and iron (4–8) items from the grave (after Madyda-Legutko et al. 2011, Tafeln 387–391, Tabl. CCCLXXXVII–CCCXCI).

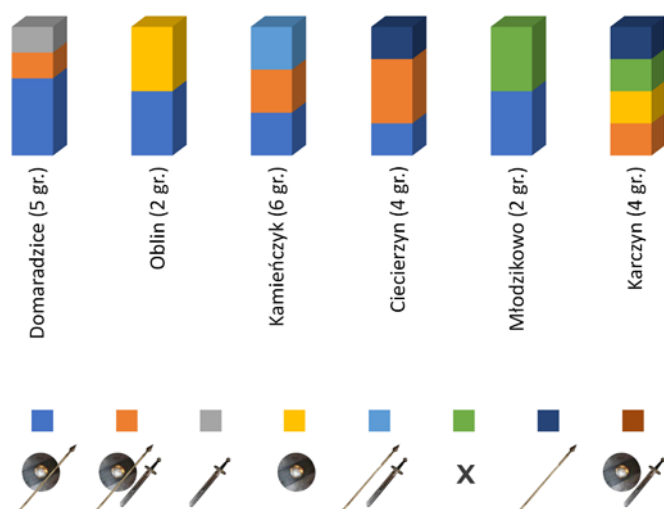
**Obr. 6.** Opatów, hrob 1229. Keramika, stříbrné (3), bronzové (9, 10), skleněné (11–13), kostěné (14), hliněné (15, 16) a železné (4–8) předměty z hrobu (podle Madyda-Legutko et al. 2011, Tafeln 387–391, Tabl. CCCLXXXVII–CCCXCI).

### 3.2.1 B1–B2a phase

Data presented in the Graph 13 indicates that in cemeteries such as Domaradzice, Oblin, Kamieńczyk and Ciecierzyn with spurs from burials dated to the beginning of the Roman Period have a functional and definite military significance, as shown by the accompanying sets of weapons. In Domaradzice, three of the five burials with spurs were equipped with the set of a lower rank warrior: a pole weapon and a shield. Two other graves contained swords. The deceased buried in the first grave was armed with a sword, a pole weapon and a shield while grave No. 71 contained a single spur and a sword. In the case of this second burial, it can be assumed that the principle *pars pro toto*<sup>9</sup> was applied, where a spur and a sword could symbolise the entirety of the equipment of a deceased warrior.

It appears that the deceased riders buried in the cemeteries in Kamieńczyk and Ciecierzyn were of a high military rank. In Kamieńczyk, four of the six graves with spurs contained swords and the other two were equipped with a set of a pole weapon and a shield. In Ciecierzyn, in turn, the inventory of two of the four burials consisted of swords; the other two were more modestly equipped with weapons (grave No. 141 – a pole weapon and a shield, grave No. 194 – a pole weapon). All the burials with spurs discussed above can be regarded as burials of warriors holding different positions in the military hierarchy. Thus, one can observe a strong military connotation of spurs among the communities that built these necropolises.

In the case of cemeteries in Młodzikowo and Karczyn-Witowy, dig site No. 21/22, the symbolic meaning of the spurs is clearly noticeable. In Młodzikowo, one of the two burials with spurs, grave No. 188, was equipped with a set consisting of a shield and a pole weapon, which enables to classify the deceased as a warrior. Meanwhile, at the second site, grave No. 73, did not contain any weapons. An even more complex situation can be observed at the cemetery in Karczyn-Witowy, where three of the four burials with spurs were equipped with only individual weapon elements, while one does not contain any weapons at all. However, the results of the anthropological analysis are particularly intriguing. They indicate that grave No. 13 was that of a child – buried in the age of *infans II* – and contained, among other finds, spurs and two spears. An adult woman (20+ years old) was placed in grave No. 629, equipped with spurs and the only sword scabbard



Graph 13. Weapon sets accompanying spurs in individual cemeteries in the B1–B2a phase.

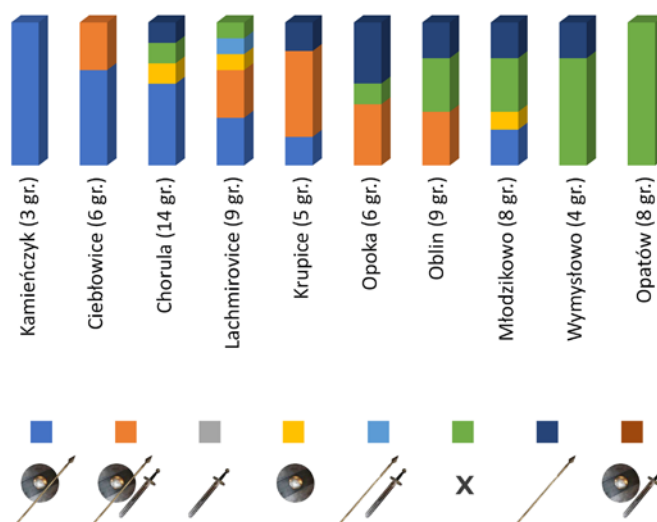
Graf 13. Zbraně s ostruhami na jednotlivých pohřebištích v B1–B2a.

in the cemetery. In grave No. 130, which contained spurs but was devoid of weapon elements, a child was buried (age *infans I/II*). The grave also contained fittings of a drinking horn, rarely found in the area of *Barbaricum*, as well as dice and a toy stone.

### 3.2.2 B2b–B2/C1

The B2b and B2/C1 phases feature the widest group of funerals with spurs from large cemeteries. Graph 14 presents the diversity of the characteristics of the presence of spurs in ten Przeworsk culture cemeteries. It was designed in a way that makes it easier to compare results. Reading the graph from left to right, one can notice that the military value of the weapon sets gradually decreases in favour of the symbolic value.

In Kamieńczyk, all graves with spurs were equipped with a weapon + shield set, the most common weapon sets in the Roman Period. Thus, it can be concluded that the spurs were definitely of a practical and military character. Similarly, in the



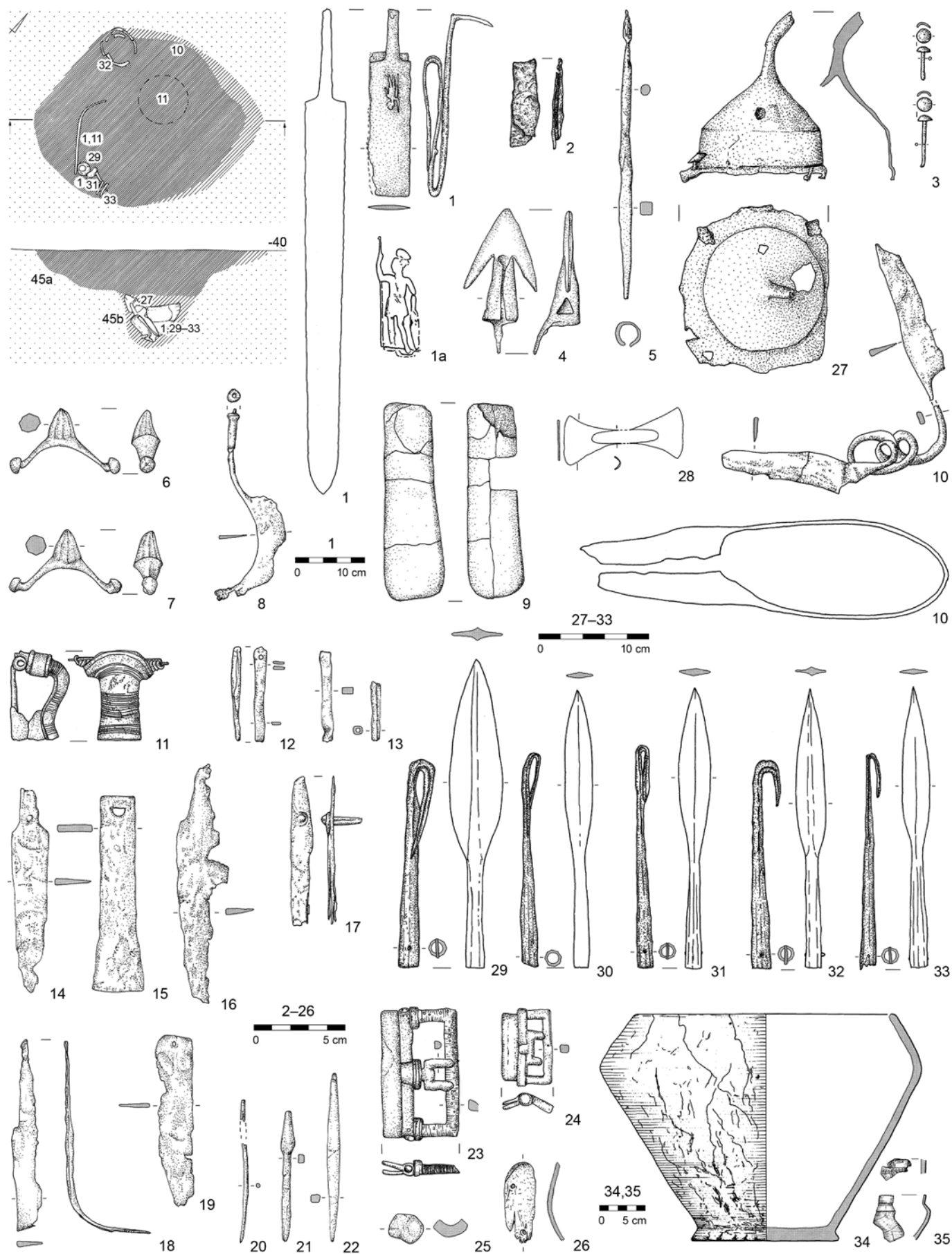
Graph 14. Weapon sets accompanying spurs in individual cemeteries in the B2b–B2/C1 phase.

Graf 14. Zbraně s ostruhami na jednotlivých pohřebištích ve fázích B2b–B2/C1.

case of the deceased in the cemeteries in Cieblowice Duże and Chorula, based on clearly militarised burial equipment, it can be presumed that they were part of the warrior caste. In the case of these two communities, it is also worth noting that there was a noticeable standardisation and unification of the horse riders' armaments. In subsequent cemeteries, weapon sets began to differentiate further and gradually the basic weapon set consisting of a pole weapon and a spear began to replace other combinations, including large rich sets containing swords. Therefore, it can be assumed that at successive cemeteries the utilitarian value of spurs decreased while the symbolic value increased. Thus, the prestige and wealth of the people buried in the company of spurs grew.

The largest number of graves with spurs containing swords were discovered in the cemeteries in Lachmirowice, Krupice and Opoka. In Lachmirowice, three burials (graves No. 17, 24 and 30) contained a full set of weapons, which consisted of a sword, a pole weapon and a shield. Grave No. 1 was equipped with a sword and a pole weapon. The sets of weapons discovered in subsequent burials with spurs were slightly more modest,





**Fig. 7.** Oblin, grave 45b. Pottery, silver (25, 26), stone (9) and iron items from the grave (after Czarnecka 1999, 211–215, Tabl. XLVII–L).

**Obr. 7.** Oblin, hrob 45b. Keramika, stříbrné (25, 26), kamenné (9) a železné předměty z hrobu (podle Czarnecka 1999, 211–215, Tabl. XLVII–L).



including one of the graves not equipped with weapons at all. It is worth mentioning that grave No. 13 is referred to and considered by the literature as a “feminine” burial because its contents feature, apart from a single spur, a key, a casket and a clasp (Jasnosz 1952; Zielonka 1953b, 367–368). At the necropolis in Krupice, all the five horsemen were equipped with sets of weaponry; three of them, the richest, contained a sword, a pole weapon and a shield (graves No. 106, 134 and 332/1). Burials of three deceased with weapons also come from the cemetery in Opoka (graves No. 18, 75 and 95). However, the wealth of these finds contrasts with the inventory of the remaining analysed graves from this site because three of them contained only elements of pole weapons (graves No. 11, 24 and 98) while the fourth, grave No. 88, did not contain any weapons.

The results presented here clearly indicate an increase in the symbolic value of the spurs in the community that was responsible for the cemeteries in Oblin, Młodzikowo, Wymysłowo and Opatów. At the necropolis in Oblin, the prestige of the deceased equipped with spurs is clearly visible in the equipping of as many as one-third of them (graves No. 45b, 52 and 62) with a full set of weapons (a sword, a pole weapon and a shield). Grave No. 45b is particularly noteworthy – not only because of the extraordinarily rich equipment present, including weapons, tools and elements of the outfit but also because of the interesting non-standard spatial layout, described by Katarzyna Czarnecka (Fig. 7, Oblin grave 45b). According to the interpretation of the cited researcher, the richly equipped grave No. 45b was placed under the foot of an older one (from the A3 phase of the Late Pre-Roman Period) – also a well-equipped grave with the designation of 45a (Czarnecka 1999, 165–168). It should be added that abundant equipment was not, it appears, the only way to emphasise the importance of these graves and the people buried in them. These burials were located inside a fairly regular circle created by clearly less intensively equipped graves (Smółka-Antkowiak, Ciesielski 2019). Given the above, it can be presumed that the deceased belonged to the social elite, potentially the military elite. Three more burials from Oblin, indicating the symbolic role of the spurs, are graves numbered 33, 51 and 72 and not equipped with any weapons. The first grave contained the body of a child in the age of *infans I/II*, buried with two spurs, rarely found in the area of the Przeworsk culture, but more often within the domain of the Wielbark culture. In addition to the spurs, the grave also included an imported glass vessel (Czarnecka 2007). The remaining burials with spears from Oblina were equipped with individual weapon elements.

A large percentage of graves with spurs not equipped with weapons were also recorded at the Młodzikowo Cemetery. These are graves numbered 15, 106 and 169. Grave No. 15 is of particular interest as together with several others it formed a grouping of urnfield graves, clearly spatially distinctive and equipped differently in the context of the cemetery in Młodzikowo (Smółka-Antkowiak, Ciesielski 2019). In Wymysłowo, as many as three of the four graves with spurs dated to this period were devoid of any weapons. The uniqueness of the deceased buried in these graves is highlighted by the set of gifts placed in the grave. Grave No. 176, features a bronze spur, bronze vessel fragments and a *terra sigillata* (Jasnosz 1952). Grave No. 177, like the above-mentioned grave No. 13 of Lachmirowice, contained the remains equipped with a typically “feminine” set, which consisted of chest-lock fittings and a needle, and among others, a fragment of a bronze vessel (Jasnosz 1952). In addition, it should be emphasised that the spur discovered in this grave, like the specimen from grave No. 176, was made of bronze.

The unusually symbolic character of the spurs is visible in the example of a large necropolis in Opatów where none of the eight graves dated to the extended section of the Roman Period (B2/C2–C1a) contained weapons and their equipment can be described as modest. The one exception is grave No. 1229, which contained the body of a mature woman. The grave is equipped with a single spur, probably two bronze and one silver clasp, a unique, richly decorated bronze casket, a needle, a comb, two spindles and glass, presumably from a molten vessel. It is also worth noting that this burial was most probably a burial mound because it was located at a considerable distance, about 15 m, from other objects dated to the earlier stage of the Late Roman Period and formed a compact cluster in this part of the cemetery (Zagórska-Telega 2000, 314). The sex of the deceased, although not typical for burials with spurs, in the case of the necropolis of Opatów is not surprising because most of these types of graves dating back to the beginning of the late Roman Period contained the remains of women and children in the age of *infans I* (Madyda-Legutko et al. 2011).

#### 4. Conclusion

To conclude, spurs found in graves in the context of the area of the Przeworsk culture appear to have many meanings. The current level of research excludes the possibility of the unequivocal determination of graves with spurs as only the graves of men or warriors. Nevertheless, a large share of burials containing military items indicates that it is possible to interpret the majority of graves containing this category of equestrian gear as those of warriors. This analysis showed significant differences, particularly regarding the wealth of the weapon sets of horse warriors in relation to foot soldiers, thus confirming the thesis about the high wealth and social status of the dead buried with spurs. Deceased riders also occupied a high position in the military structure and it can be assumed that the military commanders came from the ranks of horse warriors. This is indicated by the analysis of the armaments of the individual riders buried among smaller communities, which showed that they were most often equipped with the richest sets of weapons including swords. Among the riders buried in larger groups in the cemetery, one can still find wealthy sets, but this time more diversified. This may suggest a division between a commander and the lower-ranking warriors in the cavalry.

The analysis carried out also shows that the changes the occurred in the equestrian warrior's gear were somewhat independent of changes in the weaponry sets of the foot soldiers. The “enrichment” of weapon sets following the wars on the Roman limes was mainly related to horse riders.

The existing differences in the degree of the militarisation of burials with spurs were conditioned by time and space. Spurs are mainly a utilitarian object – an attribute of a warrior at the beginning of the Common Era – that over time acquired a symbolic meaning, which is manifested by their presence in burials not equipped with any weapons and often belonging to women and children. It should be emphasised that the share of graves equipped and not equipped with weapons is different for individual communities. The last analysis showed that a spur was only of military significance for some human groups while for others it was more often a gift or a symbol, with only a presumed meaning.

#### Notes

- 1 Regardless of the fact that some archaeological literature on the Przeworsk culture, including analyses, have already been published several times (Elantkowska 1961; Kaczanowski 1976; Weski 1982; Gojda 1984), it is B. Kontny's works that can be considered as the most current and, at the same time,

- the most exhaustive (Kontny 2002; 2003a; 2003b). They form a comprehensive approach to the issue of diversity of weapon sets, which comprised the equipment in graves discovered in connection with the Przeworsk culture.
- The research conducted by the author shows that graves with spurs usually belonged to the richest burials found in the cemeteries. However, the term “rich burial” is a very relative, locally conditioned concept, contextualised by the wealth of a given community. For example, a burial equipped with spurs, arrowheads, a shield boss, a brooch and a comb could be common in one cemetery, while elsewhere it may belong to some of the richest burials. Thus, “the wealth of the grave” is not always associated with imported goods, for example, but with richer-than-average equipment of the deceased within a given cemetery.
  - However, these are such rare finds that they do not enable to recognise the bow as a category of weapon commonly used by this community. In addition, it is not certain whether the bow in general was ever regarded and considered as a military weapon in the Przeworsk culture. Rather, it indicates the possibility that the bow was used during hunting, not necessarily fighting (Kontny 2006, 72). Despite the above ambiguities, for the purposes of this analysis, the bow was identified as a separate category of weapon, which enables to verify the marginality of its possible use in arming the horse warriors of that community.
  - The chronological division adopted in the work is based on the division used by B. Kontny (2003a, 113), which, in turn, takes into account the dating of graves with weapons by K. Godłowski (1992; 1994). The adoption of an analogous division allows for an unrestricted comparison of the results obtained to those of Kontny. In total, six chronological phases were ascribed for the Roman Period: B1 phase (between 10 CE and 75/80 CE), B2a (between 75/80 CE and the 2nd century), B2b (around 160 CE), B2/C1 (up to 200 CE), late C1a phase and C1b phase (up to 260 CE), C2–D (up to the 5th century). Based on the dating classification of T. Dąbrowska (1988) and K. Godłowski (1985; 1992; 1994; cf. Kaczanowski, Kozłowski 1998, 265–278).
  - The author considers it justified to separate the category of graves with spurs without weapons as spurs can be treated as part of the weaponry. Spurs are seen as a weapon element by many researchers, including B. Kontny.
  - B. Kontny already mentioned this relationship (Kontny 2003a, 124) with no real justification for the reduction in the number of swords (and spurs) in B2a phase graves.
  - These changes concerned burial forms, i.e. the deceased were buried in shallower, trough graves or more often than before in urn-less graves. General impoverishment of the grave equipment occurred and new forms of graves appeared later, among others, cremation layered graves (Godłowski 1985, 91; Godłowski 1992, 83; Błażejowski 1998, 89–93; Kontny 2002, 110).
  - The author wishes to emphasise once again that such terms as “horse riders”, “horse warriors” and others used herein refer only to some of the dead buried in graves containing spurs. Therefore, these terms are used here with the awareness of their generalisation.
  - This possibility was indicated by B. Kontny in the case of graves equipped with individual elements of armament that do not reflect the actual armament of a warrior (Kontny 2002; 2003a).

Site	Commune (administrative district, municipality)	County	Voivodeship	References
Adolfin	Dobre	Radziejów	Kujawsko-pomorskie	Zielonka 1953a, 1961a
Biała, site 1	Zgierz	Zgierz	Łódzkie	Makiewicz 1970
Bodzanowo	Zakrzewo	Aleksandrów	Kujawsko-pomorskie	Zielonka 1958, 1961b
Bogomice	Kotla	Głogów	Dolnośląskie	Petersen 1934
Bolesław	Bolesław	Dąbrowa	Małopolskie	Jamka 1967
Brodno	Środa Śląska	Środa	Dolnośląskie	Anonym 1926
Budy Łańcuckie	Białobrzegi	Łańcut	Podkarpackie	Osiński 1923
Chłopice	Chłopice	Jarosław	Podkarpackie	Franz 1932
Chmielów Piaskowy	Bodzechów	Ostrowiec	Świętokrzyskie	Godłowski, Wichman 1998
Chorula	Gogolin	Krapkowie	Opolskie	Szydlowski 1964
Cieblowice Duże	Tomaszów Mazowiecki	Tomaszów Mazowiecki	Łódzkie	Dzięgielewska, Kulczyńska 2008
Ciecierzyn	Byczyna	Kluczbork	Opolskie	Martyniak et al. 1997
Dębica	Prusice	Trzebnica	Dolnośląskie	Kaletyn 1963
Domanowice	Trzebnica	Trzebnica	Dolnośląskie	Błażejowski 1998
Domaradzice	Jutrosin	Rawicz	Wielkopolskie	Kostrzewski 1954
Domaradzyn	Głowno	Zgierz	Łódzkie	Piętka-Dąbrowska 1960
Drochlin	Lelów	Częstochowa	Śląskie	Kaczanowski 1972
Drohiczyn	Drohiczyn	Siemiatyce	Podlaskie	Szmit 1921
Głogów	Głogów	Głogów	Dolnośląskie	Tackenberg 1925
Głogów-Nosocice	Głogów	Głogów	Dolnośląskie	Tackenberg 1925; Pescheck 1936
Gojewa Góra	Warta	Sieradz	Łódzkie	Svešnikov 1957
Grodzisk Mazowiecki	Grodzisk	Grodzisk	Mazowieckie	Barankiewicz 1959
Gródki	Płońnica	Działdowo	Warmińsko-mazurskie	Okulicz 1983
Grudynia Mała	Pawłowiczki	Kędzierzyn-Koźle	Opolskie	Jahn 1921
Inowrocław site. 55	Inowrocław	Inowrocław	Kujawsko-pomorskie	Zielonka 1970
Inowrocław „na Batkówku”	Inowrocław	Inowrocław	Kujawsko-pomorskie	Bednarczyk 1994
Kamieńczyk	Wyszków	Wyszków	Mazowieckie	Dąbrowska 1997
Karczyn/Witowy	Kruszwica	Inowrocław	Kujawsko-pomorskie	Bednarczyk, Romańska 2015
Komorówko	Trzebnica	Trzebnica	Dolnośląskie	Pescheck 1939
Konin	Konin	Konin	Wielkopolskie	Kostrzewski 1947; Pieczyński 1967

Site	Commune (administrative district, municipality)	County	Voivodeship	References
Kopki	Rudnik	Nisko	Podkarpackie	Jamka 1935
Korytnica	Korytnica	Jędrzejowski	Świętokrzyskie	Skurczyński 1947
Kotla	Kotla	Głogów	Dolnośląskie	Kaczmarek 1962
Krajanka	Czastary	Wieruszów	Łódzkie	Abramek, Kaszewski 1973
Krapkowice	Krapkowice	Krapkowice	Opolskie	Mączyńska 1971
Krupice	Siemiatycze	Siemiatycze	Podlaskie	Jaskanis 2005
Kryspinów	Liszki	Kraków	Małopolskie	Godłowski 1972; 1976a; 1976b; Godłowski, Mączyńska 1972
Kurza, site 2	Blizanów	Kalisz	Wielkopolskie	Olędzki, Teske 1987
Kutno- Józefów	Kutno	Kutno	Łódzkie	Moszczyński 1994, 1996
Lachmirowice	Kruszwica	Inowrocław	Kujawsko-pomorskie	Zielonka 1951, 1953b
Lisów	Grójec	Grójec	Mazowieckie	Karpińska 1926; Kietlińska 1974
Lęgonice Małe	Odrzywół	Przysucha	Mazowieckie	Liana 1976; Kordowska, Kowalska 2018
Miksztal	Nowe Ostrowy	Kutno	Łódzkie	Lepówna 1956
Młodzikowo	Krzykosy	Środa Wielkopolska	Wielkopolskie	Dymaczewski 1958
Modła	Wiśniewo	Mława	Mazowieckie	Grzymkowski 1986
Mokra	Miedźno	Kłobuck	Śląskie	Biborski 1998
Nadkole	Łochów	Węgrów	Mazowieckie	Andrzejowski 1998
Niedanowo	Kozłowo	Nidzica	Mazowieckie	Ziemlińska-Odojowa 1999
Oblin	Maciejowice	Garwolin	Mazowieckie	Czarnecka 2007
Ochędzyn Nowy	Sokolniki	Wieruszów	Łódzkie	Ząbkiewicz-Koszańska 1973
Opatów, site 1	Opatów	Kłobuck	Śląskie	Madyda-Legutko et al. 2011
Opoka	Końskowola	Puławy	Lubelskie	Szarek-Waszkowska 1971; Kokowski 1991
Opoki	Aleksandrów Kujawski	Aleksandrów	Kujawsko-pomorskie	Bednarczyk 1994
Piaski	Kleszczów	Bełchatów	Łódzkie	Skowron 1997
Piastowo-Pajki	Krzynowłoga Mała	Przasnysz	Mazowieckie	Peiser 1916
Podlodów	Łaszczów	Tomaszów	Lubelskie	Gruba, Ślusarski 1966
Rzeszów-Zalesie, site 93	Rzeszów	Rzeszów	Podkarpackie	Czopek 1998
Sandomierz-Krakówka	Sandomierz	Sandomierz	Świętokrzyskie	Wilkoński 1938; Kokowski, Ścibior 1990
Siedlemin	Jarocin	Jarocin	Wielkopolskie	Karpińska 1926; Janiczak 1990
Siemianice	Lęka Opatowska	Kępno	Wielkopolskie	Szembekówna 1902; 1905; 1909a; 1909b; Kostrzewski 1923
(Stara) Sobótka	Grabów	Łęczyca	Łódzkie	Rydel 1983
Spycimierz	Uniejów	Poddębice	Dolnośląskie	Kietlińska, Dąbrowska 1963
Stara Wieś	Węgrów	Węgrów	Mazowieckie	Radig 1942
Strupina	Prusice	Trzebnica	Dolnośląskie	Pfutzenreiter 1929
Stupsk	Stupsk	Mława	Mazowieckie	Grzymkowski 1996
Ścinawa	Ścinawa	Lubin	Dolnośląskie	Anonym 1934
Tarnów Opolski	Tarnów Opolski	Opole	Opolskie	Godłowski, Szadkowska 1972
Walichnowy	Sokolniki	Wieruszów	Łódzkie	Ząbkiewicz-Koszańska 1966–1967
Wesółki, site 5	Blizanów	Kalisz	Wielkopolskie	Kozłowska 1972
Witaszewice	Góra Świętej Małgorzaty	Łęczyca	Łódzkie	Kaszewska 1973; Kaszewska et al. 1974
Wola Błędowa	Stryków	Zgierz	Łódzkie	Blomborgowa 1972
Wólka Domanowska	Przytyk	Radom	Mazowieckie	Olędzki 1994
Wrocław-Pracze Odrzańskie	Wrocław	Wrocław	Dolnośląskie	Pescheck 1939
Wrzask-Zagłoba	Stryków	Zgierz	Łódzkie	Siciński 1988
Wymysłowo	Krobia	Gostyń	Wielkopolskie	Jasnosz 1952
Zadowice, site 1	Godziesze Wielkie	Kalisz	Wielkopolskie	Abramowicz 1956; Abramowicz, Lepówna 1957; Kaszewska 1975
Zaspy	Warta	Sieradz	Łódzkie	Kostrzewski B. 1939
Żerków	Żerków	Jarocin	Wielkopolskie	Kočka 1939
Site	District	Region	Country	References
Bratovo (Batyu)	Vinogradov	Zakarpattia	Ukraine	Kobał' 1997
Hromówka	Chmiel'nic'kij	Chmiel'nic'kij	Ukraine	Dąbrowska, Godłowski 1970
Griniv	Pustomyty	Lviv	Ukraine	Kozak 1985
Iwane-Zolote	Zalischczyky	Ternopil'ska	Ukraine	Śmiszko 1932
Kamianka Velykaja	Kolomyia	Ivano-Frankivsk	Ukraine	Śmiszko 1932; Kozak 1984
Petryłów	Tlumach	Ivano-Frankivsk	Ukraine	Śmiszko 1932
Welikaja Ternewa	no data	Chmiel'nic'kij	Ukraine	Kropotkin 1977

**Tab. 1.** List of sites comprising the material base for the analysis of graves with spurs.

**Tab. 1.** Seznam lokalit představujících materiální základnu pro analýzu hrobů s ostruhami.



## Acknowledgement

This article was created as part of the project funded by the Polish National Science Center (NCN) UMO-2017/27/N/HS3/00181, titled *Horsemen in social structures of the Central European Barbaricum. Spatial analysis of the dispersion of spurs in cemeteries*.

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## Resumé

Hroby s ostruhami z oblasti silně militarizované przeworské kultury bývají interpretovány jako pohřby bojovníků na koních (jezdci). Tomu však odporuje jednak skutečnost, že v inventáři některých z nich nejsou žádné zbraně, jednak stále častější antropologické analýzy, dokazující že se často jedná o pohřby žen nebo dětí. Většina hrobů však soubory zbraní obsahuje, což wskutku naznačuje, že se jedná o bojovnické pohřby. Předmětem této studie je poukázat na rozmanitost výzbroje v hrobech s ostruhami. Autorka se zabývá tím, do jaké míry se výzbroj bojovníka na koni liší od výzbroje pěšího bojovníka a jak různorodá je výzbroj uvnitř skupiny bojovníků na koních. Výzkum byl prováděn s přihlédnutím k několika faktorům – doba, velikost pohřebiště a na něm doložený počet „pohřbů jezdců“ a odlišnost každé komunity, což dosvědčují zkoumané nekropole.

Analýza provedená v tomto článku poukázala na významné rozdíly týkající se především bohatství výzbroje jezdců ve vztahu k pěším bojovníkům, čímž potvrdila tezi o vysokém majetkovém a sociálním postavení pohřbených jedinců s ostruhami. Zemřelí jezdci měli také význačné postavení ve vojenské struktuře, a dá se tudíž předpokládat, že vojenští velitelé (náčelníci) figurovali právě mezi jezdci na koních. Na to mimo jiné ukazuje analýza zbraní ojedinelých bojovníků na koních pohřbených mezi menšími komunitami. V takových případech byly hroby nejčastěji vybaveny nejbohatšími soubory zbraní, včetně mečů. Mezi jezdci pohřbenými ve větší skupině na pohřebišti je vidět stále bohaté, ale rozmanitější soubory zbraní, které mohou u jízdy naznačovat rozdělení na velitele a válečníky nižšího postavení.

Zde provedená analýza rovněž ukazuje, že ke změnám, které se odehrály ve výbavě jezdců, došlo určitým způsobem, a to bez ohledu na změny ve výzbroji pěších bojovníků. V důsledku válek vedených na římské hranici (limitu) došlo k obohacování výzbroje hlavně jízdních bojovníků.

Stávající rozdíly ve stupni militarizace pohřbů s ostruhami byly podmíněny časem a prostorem. Na počátku letopočtu představovaly ostruhy především funkční artefakt – atribut bojovníka. Postupem doby získaly symbolický význam, který se projevuje výskytem ostruh v hrobech beze zbraní, často patřících ženám a dětem. Je třeba zdůraznit, že podíl hrobů se zbraněmi a bez nich se v jednotlivých komunitách lišil. Poslední část analýzy potvrdila, že pro některé skupiny lidí měla ostruha čistě vojenský charakter, zatímco pro jiné to byl častěji dar nebo symbol, jehož význam můžeme jen předpokládat.

## Contact

### Emilia Smółka-Antkowiak

Uniwersytet im. Adama Mickiewicza w Poznaniu  
Wydział Archeologii  
ul. Uniwersytetu Poznańskiego 7  
PL-61 614 Poznań  
&  
Muzeum Archeologiczne w Poznaniu  
ul. Wodna 27  
PL-61 781 Poznań  
emilia\_smolka@wp.pl