NOT ONLY THE TISA RIVER BASIN.
THE MARTIAL ACTIVITIES OF THE PRZEWORSK CULTURE PEOPLES AND THEIR ALLIES IN THE ROMAN PERIOD

Abstract: The author presents the movements of the Przeworsk culture warriors basing on written and archaeological sources but utilizes also the results of anthropological research. The warriors participated in military enterprises, viz. the raids but also more important ventures aimed at different areas (i.a. to the north – Vimose on Funen, and south-east – Čatyry Dag on Crimean Peninsula). Anthropological studies suggest that what was important for them was not the permanent direction, but tantalizing goals accomplishable in a military way. Possibly the warriors participated in retinues, also multi-ethnic ones, as described by Tacitus. It seems possible that the Przeworsk culture warriors occasionally collaborated with the Balts, but also the Wielbark culture warriors. Whether they occupied a privileged position among the Barbarians is still uncertain, but the Przeworsk culture forms of weapons imported and imitated in neighbouring cultures seem to suggest that for a long time they were treated as ‘role model’ warriors. The loss of their leading military impact in the Younger Roman Period should be linked with the increasing position of the Scandinavians with their well-equipped and stratified armies, probably fighting in the battle order. Written sources and weapons appearing as elements of grave furnishing, although not so frequent due to changes in the burial rite, suggest that it did not erase Przeworsk culture zealots from the military sphere. Detailed studies of sacrificial bog/watery sites, found in the territory of Poland, Scandinavia, and maybe also Lithuania and Latvia, have allowed finding further evidences of distant warlike expeditions.

Keywords: Przeworsk culture, warfare, Barbaricum, sacrificial sites, retinue

I. INTRODUCTION

The Przeworsk culture peoples are frequently defined by the military character manifested in their burial rites, i.e. equipping the dead with weapons, often ritually damaged (Kontny 2008; 2019a, 27-68, with further literature; Czarnecka, Kontny 2009). To study their warfare one may traditionally use a few lines of
enquiry; namely, analyse the settlement data (structured pattern of defensive character, strongholds, etc.), injuries in human skeletal remains, iconography, war weaponry, and burnt settlement structures (Lambert 2002, 209-210, with further literature); one should add to the list the study of battlefields.

However, this is not so easy to do, for some of the above-mentioned kinds of evidence may be missing. In Central European Barbaricum no fortified structures have been found so far, in contrast to northern Europe with its linear border structures dated to the Roman Period from Olgerdiget, Æ Vold, and Trældiget on the Jutland Peninsula (Neumann 1982; Nørgård Jørgensen 2003, 203-206; Ethelberg 2009, 175-178; Christensen 2006), the pre-Roman Period ringfort from Borremose (Martens 1988), or other defensive constructions similar to the barriers used by Julius Caesar during the siege of Alesia – lilies (conical pits left open, with central concealed pointed stakes) known from Grøntoft (Becker 1968; 1971; Schlosser-Mauritsen 2010, 271), Brændgaards Hede, and a few more from Western Jutland (Schlosser-Mauritsen 2010, 263-268, 271-278, Fig. 2-7, 12), or the spinae, i.e. double-pointed wooden spikes situated in the ditches known from Borremose or the settlement in Lyngsmose (Eriksen, Rindel 2003, 133-136, Fig. 11-13), and a few other sites from Jutland and Scania which served as caltrops (Martens 2018). So far no similar features have been discovered in the Przeworsk culture.

Forensic studies, which may suggest death in a battle, are also extremely difficult, because the ritual of cremation prevailing in the Przeworsk culture makes detailed analyses of military trauma virtually impossible. The scarce iconographic sources present the Germans in general (not specifically the Przeworsk culture warriors) and the reality here is distorted by the interpretatio romana (Krierer 1995, passim; 2004).

In contrast, the military equipment from burials is very well represented, and has been studied in detail (Konny 2008; 2019a, 27-68, with further literature). Additionally, there are the sacrificial bog/watery sites in which the weapons (most probably won from the defeated invading armies/war bands) were deposited. Whereas in northern Europe they have been studied for years, which has allowed reconstructing the structures of defeated armies, their homelands, fighting techniques, and occasionally even the names of the military leaders (see Konny 2019a, 7-26, with detailed literature), only single ones have been discovered in Poland (mostly Pomerania and north-eastern Poland, the latter settled by the Balt tribes). There are also some riverine finds from the territory of the Przeworsk culture, i.a. from the Noteć River (Makiewicz 1992; Nowakiewicz, Rzeszotarska-Nowakiewicz 2012; Konny 2006; 2015; 2016a). The interpretation of watery sites from the area of Poland is still in its initial stage.

The archaeological evidence of scorched settlements is difficult to interpret as one should also take into account the non-military causes of burning, such
as accidental fires or intentional clearing. Only single instances may have been caused by military events, e.g. those of the Marcomannic Wars (Fischer 1994; Jilek 1994), but at the moment this is not the case of the Przeworsk culture.

Demographic profiles may reveal population-level impacts of war, such as the loss of young males killed in the war or young women captured by the enemies (Lambert 2002, 210), but so far no such profiles have been compiled. Also, it is hard to expect that the impacts were large-scale whereas the small-scale ones may be difficult to trace because of the imprecision of the existing chronological system. Besides, possible under-representations may be interpreted in other ways as well (e.g. plagues, a bad season resulting in insufficient food supplies etc.).

As far as the battlefields are concerned, their archaeological researches are extremely rare and in reference to the proto-historic period: one may trace none from the Przeworsk culture area at the present time.

II. WARFARE IN PRE-STATE WORD

Some suppositions concerning the world of the Roman Period Barbarian warriors in central Europe may be drawn from the written sources and observations of pre-state tribal peoples, although one should remember that such data not necessarily needs to be universal. For example, even in combative societies there may also exist tribes with social structure efficient enough to survive, but not strong enough to wage a war (Turney-High 1949, 23). In the Germanic societies the military prowess seemed to have been the primary sign of male achievement, like in many pre-state structures (in fact, the border between the pre-state and early state societies in the Germanic milieu of the Roman Period is rather blurred): personal valour, energy, and boldness were highly appreciated, so it was combat which offered men a chance to gain recognition or demonstrate it in a spectacular way. Most probably, the phenomenon was connected with the ethos of warrior groups and proper training (apart from the raids one may list hunting, intelligence,

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1 From the Barbarian battles one may mention the possible place of the Celto-Roman skirmishes in the Alpine passes in 15 BC (Zanier 2009; 2010; Fischer, Moosbauer 2013, 53-54), the Varian disaster in Teutoburgian Forest in 9 AD at Kalkriese (i.a. von Carnap-Bornheim 1999; 2000 Jahre Varrusschlacht 2009), the Batavian siege of Xanten in 70 AD, and ancient Gelduba – Krefeld-Gellep in 69 AD (Fischer, Moosbauer 2013, 55; with further literature; here also another event from 259/260 AD), the engagement at Harzhorn ca. 235 AD (Pöppelmann et al. 2013), as well as the Migration Period massacre at Sandby Borg on Oland (Alfsdotter, Kjellström 2019). The suggested place of the Goths’ victory over the Romans at Abrittus in 251 AD (Radoslavova et al. 2011) seems to be doubtful, as in this case one deals with the material collected by amateurs, localized imprecisely, with a wide chronological range excluding the possibility to date the whole collection to 251 AD. Moreover, some items of high value are not normally spotted on battlefields (spoils of war!) and some (metal greaves) seem too archaic to be dated to the mid-3rd century (see Fischer, Moosbauer 2013, 55-56).

2 One may also consider comparative studies with the medieval world, see, e.g. Modzelewski 2004; Żmudzki 2004.
communication, scouting, mock attacks, or picket actions) organized by older kinsmen, retinues, but also military societies, i.e. Männerbünde (Kontny 2003).

Such attitude to warfare may be attributed to Type A Societies (Fraternal Interest Groups) after Keith F. Otterbein, i.e. the aggressive ones, involved in chronic, incessant struggle to achieve more. Fights and homicides, wife stealing, and rape may occur; men regularly carry specialized weapons. The wars are waged against culturally similar neighbours, so there is an internal war but strong leadership, which used to occur, diminishes violence inside and frequent wars are aimed at farther tribes (Otterbein 2009, 24-26). One has to mention the phenomenon of elite warriors, fighting in close combat and acquiring valuable commodities of the defeated enemies, which serve as trophies and loot. So both the capture and honour are goals in this form of warfare (Otterbein 2009, 29, with further literature).

Professionals, in contrast to non-professionals, devote a significant part of their early adulthood to intensive training. They may belong not only to standing armies but also to age-grades, military societies, or may serve as mercenaries (Otterbein 1994, 44). Such observations may be made for certain ethnic groups of the world, e.g. the Cheyenne from the north American Great Plains, where a choice of similar trophies can be found (weapons, stolen horses, scalps instead of headhunting3), prevalence of raiding, warrior societies constituting or supporting the tribal organization, and even social celebration of the individual deeds in the retelling of war stories (Bleed, Scott 2011, 54) resembling the Celtic bards or Germanic storytellers.

Besides the undeniable attractiveness of the Roman civilization, there was one more extremely important factor drawing the attention of the Germans: possibility of taking slaves from both Barbarian and Roman societies. It is more

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3 Tokens of enemy bodies were a widespread phenomenon, partly because of the cannibalistic attitude (for trophies see also Keeley 1996, 99-112) but they were also treated as insignia of honour, e.g. in South Africa or used magically like in Melanesia or South Africa; one should also recall head-taking in various cultures, i.a. the Jibaro from Amazonia (tsantsa), West Africa, Oceania, among the Maori of New Zealand. Nowhere in Eurasia head-hunting plays the part it did in the above-mentioned regions (Turney-High 1949, 194-199), but still: the custom existed. One may mention the Scythians drinking from cups made of crania of the killed enemies or taking scalps to sew them to a form of coat, make a quiver lid or dummies to show around (Herodotus IV, 64-66). For the Celts, there is a lot of evidence from the written and archaeological sources as well as iconography (see e.g. Aldhouse-Green 2006, 298-301; Gierek 2013, 315-343); decapitation existed also among the Germans, e.g. the detached head with the Suebian knot from Osterby or the beheaded body from Dätgen, both found in bogs in northern Germany (Asingh 2007, 307, 310, with further literature). In Scandinavia and the Elbe River basin there are also some inhumation graves with separated heads as well as certain images of heads in connection with military sphere, e.g. shield appliqués from the bog sites in Illerup and Vimose, or some baldric plaques from northern Europe (see Kontny 2019a, 11, with further literature), which may be interpreted as related to decapitation. The Nordic Eddas rarely present beheading, but even there one may find the story of Sigurd slaying and taking the head of Maelbrigte Tooth (Scottish earl), which later on hurt him in the leg with one of its prominent teeth, causing infection and death (Heimskringla Saga: Harald Harfager’s Saga 22). There is also further written and archaeological evidence for this custom among the Vikings (Gardela 2013).
productive to enslave a war captive than to kill or eat him, although nearly all military-oriented societies frequently kill captured enemy warriors\(^4\). For that reason war-slaving has been so popular, i.a. among the Indians of North America, tribes of Africa, or pastoral nomads in Asia (see Turney-High 1949, 178-181), but also among the Germans, e.g. the Roman slaves in Barbaricum (Tac., Germ. 25; Kolendo 1992; 2008, 135). This augmented the ‘inherent’ tendency for military prowess, characteristic for many pre-state communities. It is often claimed that states are less violent than small-scale societies, yet it may be a matter of taking a proper measure: if one scales the relationships: the one between the population and the war group size against the one between the war group size and the conflict casualties it occurs that the differences in conflict investment or lethality between a small-scale and state population are not significant (for the discussion see Oka \textit{et al.} 2017). Statistics acquired by Keeley suggest that the number of victims in the pre-state warfare is comparable to that in the modern wars, but specifically when the adversary has really been ‘foreign’ (outside) and the rules of war limiting the death toll have applied only to certain ‘related’ adversaries (Keeley 1996, 59-65, Fig. 4.1). However, this statement seems to be too outright. Also it is not necessarily connected with the complexity of military organization. Studies by Keith F. Otterbein strongly confirmed the hypothesis that “the higher the degree of military sophistication, the higher the casualty rates”, probably both on the offensive and defensive side (Otterbein 1994, 52-53; 2009, 20-21).

Certainly, there were also smaller scale military operations, i.e. raids and ambushes; what is more, they were the most frequent, which may be inferred from the general view of societies all over the world waging wars in a way typical of so-called pre-state societies. This is because such actions are highly effective while generating a minimal risk (Keeley 1996, 65-67). Characteristically, only a small number of people is killed in raids, with a higher proportion of women, than in actual battles (Keeley 1996, 65-66).

It seems that military sophistication is the agent which promotes external offensive wars, but not necessarily deters the retaliation (Otterbein 1994, 55-59). Lack of stable hierarchy in a society makes it very hard to participate in large battles unless arranged by very strong military leaders, which was rare; weakness in command is one of the typical traits in primitive war parties, which in many of them has resulted from the structure of the society: too small to subdivide war parties and too egalitarian to accept powerful leaders. However, following the plans and commands although the compulsory, not voluntary service, was not absent: trained units had appeared only occasionally (Keeley 1996, 42-47).

\footnote{\textsuperscript{4} According to Keith F. Otterbein’s research, in only approximately one-third of the societies the warriors were always or sometimes spared but the vast majority of non-centralized political systems spared women and children taking women as mates and adopting children (Otterbein 2009, 21-22).}
Logistic matters (e.g. food supplies for the warriors) were extremely important to gather and sustain an army; therefore, regular battles are extremely rare in primitive warfare (Turney-High 1949, *passim*; for the Barbarians of the Roman Period see, e.g. Goldsworthy 2017, 59). The weakness lies also in the lack of strategic planning beyond the first battle and tactical defects such as poor coordination of movement (see Keeley 1996, 42).5

The above does not concern raids and ambushes, which seem to be the most popular form of military activity (Keeley 1996, 65-66). Groups of several to several tens of men (the equivalent of today’s platoon or company) were very mobile and fast, e.g. those of the Cheyenne. Most of their combat has involved raids intent on stealing horses, taking trophies, or revenging a previous affront (Bleed, Scott 2011, 54). One may link it with the fact that endangered people do not think of themselves as subordinate members of a formal military organization but as equals within a very tiny group: perhaps no more than six or seven, as it was observed for the American soldiers during World War II (Keegan 1991, 36). Basing on such premises, General Samuel Lyman Atwood Marshall, a historian of the European war scene, argued for a new structure of small groups or ‘fire teams’ centred on a ‘natural fighter’; his ideas were even put into practice (Keegan 1991, 56).

This fits well the Roman Period Barbarians: one may conclude it from the reconstructed sizes of smaller units forming armies of the northern Europe6, but also from the relatively weak position of the military leader who was primus inter pares as shown by Tacitus (see Tac., *Germania* 13–14; cf. Kolendo 2008, 124-125); he has probably played an immense role in sharing the spoils (Kuhn 1956, 4; Wenskus 1961, 355), perhaps with the exception of duels – here generally the whole share was taken by the winner. Germanic warriors gained their income mostly from what they have looted, not from permanent payments which induced them to repeat such actions again and again (Kontny 2003, 254). The most desirable captures were horses, weapons, and jewellery, but also women (Kontny 2003, 254, 256, with further literature)7.

This is also similar to the Cheyenne people, who (i.e. their military societies) could rapidly coalesce into a group capable of undertaking large cooperative

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5 As it was shown by Keith F. Otterbein, even though the hypothesis that “the higher the level of political centralization, the more likely that the military organization/society/age-grade is composed of professionals” is generally valid, the military organizations composed of nuclei of professionals can be maintained without extensive economic support (Otterbein 1994, p. 46), as it was probably among the Germanic warriors gaining their income from plunder (Kontny 2003, p. 254, 256).

6 Reconstruction bases specifically on the analysis of weapons from the sacrificial bog sites, namely Ejsbøl Nord and Illerup A (Ørsnes 1988, 25; Ilkjær 1997, 56-61; von Carnap-Bornheim, Ilkjer 1996, 483). The other sources do not allow reconstruction of the unit sizes in a reliable way (Kontny 2003, 257-259).

7 ‘Raiding for wives’ was a frequent feature of patrilocal and polygynous societies (Otterbein 2009, 22).
actions, and the hierarchy within the societies was equivalent to the contemporary military structure with the ‘officers’ and discipline (see Bleed, Scott 2011, 55). Raids were executed by small groups of men, usually moving at night, therefore difficult to detect before they committed violence; hence the role of animals having more acute senses – watchdogs or the Capitoline geese (Keeley 1996, 46-47). The raids were aimed at diversified distances, although it is obvious that big distances from the homeland made the invaders more secure, as this limited the possibility of revenge. Vengeance was important in Germanic milieu, which is suggested by the phenomenon of blood money (Lat. poena capitis) in the Germanic law (Modzelewski 2004, 119-154). Probably this is what made the bonds between the retinue members so long-lasting, as it is described by Tacitus in Germania; as they made them stand for one another after a successful raid to oppose the possible retaliation of the victims or their kin.

Some of the military expeditions had multi-ethnical character, and their complexity may be equalled with the high military sophistication described by Keith F. Otterbein. This may be concluded from the opus of Tacitus, who noted that young warriors sought tribes which were waging a war to get an opportunity to fight for renowned military leaders from the outside (Germ. 14, 2; see Kristensen 1983, 31-32). Considering the development of a retinue institution, it is assumed that initially the war band was recruited from the local representatives, but at the certain stage they became open to foreign members thus achieving a multi-ethnic character; later on structural and material dependency from the commander has occurred (Steuer 1982, 52-54; Kontny 2003, 256). One may even imagine that on some occasions warbands of homogenous ethnic composition were hired and paid by foreign leaders for particular purposes, like in case of a Marcomannic noble Catualda, who ‘bought’ mercenaries among the Gothones to topple Marobodus (Tac., Annales II, 62); however, here one probably deals with the actions of which the Przeworsk culture elites had to know and accept; the more so that Vibilius, the leader of the Hermunduri, was involved in overthrowing Catualda, and – much later – also Vannius (cf. Tac., Annales II, 63; XII, 29). More permanent service to the leader was also proved – see the cavalry forces of the Sarmatian Iazyges who have assisted Vannius, the king of Quadi, in his struggle against the invading Hermunduri led by Vibilius, Lugii, and other peoples (Tac., Ann.  

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8 It resembles the description of the Harii – painting their bodies and shields in black and attacking during nights – written by Tacitus (Germ. 43). The tribe is attributed to the Lugii, who are generally identified with the Przeworsk culture peoples in the Early Roman Period. One of possible explanations is that the depiction refers to retinues or a warrior community (see Kristensen 1983, 14; Czarnecka 1990, 116; Kontny 2003, 257; Kolendo 2012). It seems probable that the night attack refers to raiding warrior parties. One should remark that re-enactment groups showed that black bodypainting is very effective in the matter of camouflage, also in daylight on the green (forest, meadows, grass) background (Kontny 2019a, 35, fig. 15).

9 See W. Schlesinger 1953; H. Kuhn 1956; A. Kristensen 1983; Kontny 2003.
One should note that both the Hermunduri and Lugii came from medium-distant lands (the Hermunduri lived on the middle Elbe and Saale). The above mentioned premises show the vast scale of barbarian military expeditions during that age.

III. THE PRZEWORSK CULTURE WARFARE – WRITTEN SOURCES

One has to consider the above possibilities also in case of Przeworsk culture. Its population was involved in a number of military actions directed to the south, i.a. the attack on the kingdom of Vannius in 50 AD\textsuperscript{11}, the clashes in Pannonia in the 90s\textsuperscript{12}, the Dacian Wars in the early 2\textsuperscript{nd} century (Lugian Buri – Kolendo 1999; see Kontny 2016c, 168-169), and then the Marcomannic Wars (167/8–180 AD)\textsuperscript{13}. Their migrations and changes of the cultural territory sometimes had military reasons, like the south-east movement in the 2\textsuperscript{nd} century AD, which is well documented both in written and archaeological sources. The territorial changes of cultural units in the B2b and C1a phases, the distribution of certain items (e.g. the imported Roman swords or ring-mails possibly looted during the Marcomannic Wars), as well as the features of the Przeworsk culture character found in the south, etc., have been thoroughly analysed (e.g. Friesinger et al. 1994; Kontny 2019a, 43-45 with further literature; see the other papers in this volume). In the 2\textsuperscript{nd} century the political stability in central European Barbaricum deteriorated and the tensions between the Barbarians increased considerably. That was due to, i.a., the population-stress (which growth is manifested by the increase of the number of burials and their wealth as well as by peopling of the earlier deserted areas) and militarization of the Barbarian societies, noticeable in Przeworsk culture mainly by the sudden growth of weapon-graves ratio (Kontny 2005). Critical population threshold was crossed in the B2b phase and the population growth culminated during C1a, which may be also responsible for the escalation in warfare. It is frequently observed in the so-called pre-state societies, like e.g. among the North American Indians; the technological innovations

\textsuperscript{10} The 3\textsuperscript{rd} stage of advancement in the structure of comitatus.

\textsuperscript{11} Tacitus, Annales XII, 30. It has been suggested that the expedition took a route blazed sometime earlier when the Przeworsk culture people made inroads into the region to the south, i.e. invasions of the Púchov culture territory (Godłowski 1994, 69); however, the evidence for the military activity of the Przeworsk culture war-bands is not utterly clear.

\textsuperscript{12} Cassius Dio, Historia romana LXVII, 5.2.

\textsuperscript{13} SHA, M. Ant. Phil. 17,1. One may consider also waging the war in the north, with close neighbours, i.e. the Goths. As Jordanes recorded (Getica 26), after their arrival to the southern Baltic coast, Gothiskandza, the Goths moved forward and defeated the coastal Ulmerugi, and next, none other but the Vandals living some distance away. See Kontny 2016c, 165-170, with further literature. The engagement in the north-east encounters against the Balts is possible as well.
explain (or rather display) an increasing intergroup aggression there (Lambert 2002, 210, 229) and in case of the Przeworsk culture one may point the growing popularity of high quality Roman swords in the C1 phase (Kaczanowski 1992, 32; Biborski 1994, 181-183; Kontny 2019a, 36-37).

It seems that generally the central European Barbarians’ spirit was not broken after their defeat in the Marcomannic Wars and soon afterwards they began to move towards the limes. However, starting from the C1b phase (see below), the Przeworsk culture warriors seem to have lost their position as military fashion leaders in favour of the northern European ‘military trendsetters’ and this may be inferred from a detailed analysis of weapon types and sets (Kontny 2019b). Certainly, they continued their way of life permanently seeking the opportunities to fight. They may have contributed significantly to the ‘Crisis of the Third Century’ in the Roman Empire (235–284 AD), weakening the Roman military forces on the limes; although, it is hard to find direct evidence for it basing only on archaeological grounds.

On the other hand, the participation of the Przeworsk culture peoples in the later Barbarian irruptions into the Roman Empire is well-documented in the written sources. Apart from the peoples living in the territory with the borders on the Rhine and Danube River, these events attracted the tribes residing in the more remote regions of central Europe. This is suggested by an account of Zosimus (Historia nova I, LXVII–LXVIII), about the wars waged by Probus (276–281 AD) with the Burgundians and Vandals in Raetia (the decisive battle was in AD 279 on the Ligus – now Lech – River), and on the Rhine, where the enemy were the Longiones, identified with the Lugii. The defeated Vandals were resettled to Britain, but the Longiones were allowed to return to their native parts. These two campaigns are the evidence for expeditions made by various peoples inhabiting the lands of present-day Poland, which definitely included some representatives of the Przeworsk culture.

During the second half of the 3rd century the Przeworsk culture tribes also ventured in other directions than the West (Godłowski 1992); some groups might have been involved in wars fought in the region of the Danube River (in Moesia and Thracia). The Asdingi were named next to the Goths, Taifali, Carpi, and Peucini as the people who attacked Moesia (Jordanes, Getica 91). Considering the distance from their respective homelands, this makes them quite a mobile war band. The Vandals and Goths invaded Pannonia in 270 AD. Here they have faced Emperor Aurelian (Zosimos, Historia nova I, XLVIII; Scriptores Historiae Augustae – further SHA, Vita Aureliani 33). On the strength of a peace treaty the Vandals had to surrender to Rome two thousand horsemen, with its possible echo: ala VIII Vandiliorum, documented some time later in Egypt. The southern direction of the Vandal activity is confirmed also by the wars that the Visigoths (Thervingi) were engaged with the Vandals (Hasdingi) in 290 and 344; the latter...
clash crowned by a victory on the Marisia River – present-day Mureș (Jordanes, *Getica* 115). This time the people involved were presumably the Vandals – Hasdingi – who had left their homeland earlier and settled on the Upper Tisa River\(^{14}\).

IV. THE PRZEWORSK CULTURE WARFARE – ARCHAEOLOGICAL SOURCES

Participation in military enterprises may be traced by the archaeological sources. To find evidence of such actions a model of the Przeworsk culture armament must be first established (Fig. 1-4). That is not an easy task as a lot of weapons, e.g. shield bosses and shield grips, were widespread in various cultures in the Roman Period. Fortunately, there are some local forms and preferences typical of certain cultural units. The differences in the military equipment of the cultural units in central European Barbaricum were manifested in the applications of the respective weapons, which occurred only in certain areas, e.g. the socketed axes in the West Balt Circle (Kontny 2016b), or axes prevailing in the Elbe River basin, the Luboszyce culture, and West Balt Circle (Kieferling 1994; Kontny 2018). Other distinctive features are sets of weapons, e.g. pairs of heads, one with barbs, typical of Scandinavia (Ilkjær 1990, *passim*). Unfortunately, it is not possible to make a full use of this comparative tool due to the unequal state of research and the differences in burial rites, which sometimes blur the picture of the actual military equipment. For the cultures which had similar models of combat accoutrement it is best to use shafted weapon heads and, to a lesser degree, spurs, as reliable determinants, because the forms of swords and elements of shields were quite homogeneous, but they may also be a useful cultural denominator in particular cases (see: shield bosses of the West Balt Circle or the north European ones). The heads may be even treated as a military equivalent of pottery, which is considered a good indicator of cultural affiliation (Kontny 2019a, *passim*; 2020)\(^{15}\).

\(^{14}\) Kontny 2016c, 165-170; 2019a, 43-46, with further literature.

\(^{15}\) The abundance of foreign artefacts may also suggest entanglement in wars. One should mention the numerous Roman militaria from Kuyavia, especially the Gąski-Wierzbięcany settlement cluster. They suggest that Roman military forces have been appearing there from the 1st until 4th century. The Roman presence in the Barbarian lands may be deduced from the remarks made in the ancient written sources (i.a. Augustus, *Res Gestae Divi Augusti* 26; Pliny the Elder, *Naturalis Historia* II, 167, XXXVII, 45; Tac., *Annales* II, 62; Cassius Dio, *Historia romana*, LXVII, 5,2), a few battlefields (see footnote 2) and certain precious finds (e.g. the Roman *pugio* from ex-Ilischken in the Dollkieim-Kovrovo culture – see Chilinska-Frůboes, Kontny 2018, 83, 86-88, 93-94, Fig. 4, 8) but in Kujawy one deals with a different phenomenon. Numerous new small finds of Roman military equipment were discovered there, i.e., belt and horse harness mounts and weapon elements, including, e.g. a gilded plaque in the shape of a ‘beneficiarius’ spearhead. Majority of them come from the 3rd century,
The results presented below are sometimes based on random, not fully representative data. This is due to the lack of comprehensive analyses of the military equipment in the respective cultural units. There are also considerable disproportions in the number of finds of weapons from the Early Roman Period and those from the later times. Despite this limitation, the impact of the Przeworsk culture military equipment model on the neighbouring areas from the Early Roman Period till the beginnings of the Younger Roman Period is quite evident. Starting from the C1 phase, especially its late part, the Przeworsk culture model began to lose its importance and was replaced by the Scandinavian one; yet, as it seems, the latter influence was not so strong as the former (Kontny 2019b). It is noticeable in the Wielbark culture (Kontry 2019a, 89-90), Luboszyce culture, or Lubusz group – see Przeworsk culture forms of the heads, but to a certain extent also in Bogaczewo culture or the Elbe River Circle (Kontny 2019b).

One of the possible explanations of the Przeworsk culture impact on the neighbouring regions is that it may have been caused by the joint military undertakings organised by the 'Przeworsk' leaders, especially the multi-ethnic retinues, as described by Tacitus in *Germania* 14, 2. Such relations seem to be confirmed by the Przeworsk culture artefacts found among the sacrificial deposits of captured weapons made most probably by the local population in the north European bog sites. The first identification was made by Jørgen Ilkjær, who noticed 'Polish' bar-shaped strike-a-lights in Illerup, differing from, as he imagined, the Scandinavian needle-shaped forms (Ilkjær 1993, 246-248, 250, 251). This led to the identification of possible homelands of the invading forces in particular phases. The Przeworsk culture area was not mentioned at that time and the closest to its pattern were the materials from Thorsberg, Deposit 1, from B2b–C1a period (possibly also some early-Roman finds from Vimose, see Ilkjær 1993, 375-376, Fig. 152), especially after a careful revision proposed by Ruth Blankenfeldt (Blankenfeldt 2015, 280-283, Fig. 167). However, even here the interpretation is not an easy and one-sided task. While Roman intervention seems not very possible, the sell-swords’ recruitment, on the other hand, appears much more likely. Similar interpretation was convincingly used for the finds from Erfurt-Prienstedt in Thuringia, i.e. the Germanic central place. It was particularly apt for the times of Imperium Galliarum, note SHA, *Vita Victorini* 6, 2 with the information that *ingentia germanorum auxilia* fought for Postumus and his successors; the Barbarian soldiers returning home after service in Roman army may be taken into account, in particular cases. Both in Thuringia and Kujawy, apart from the numerous small militaria extremely rare outside the Roman Empire, there were also frequent finds of coins struck by the rulers of the Gallic Empire, and in Kujawy – Roman seal boxes and lead seals. Naturally, one should consider other possible explanations of the concentration of Roman militaria here, i.e. the return of the Germanic mercenaries after their service in the Roman army, which is quite possible but specifically for the 4th century, or unknown official (hence guarded by Roman soldiers) delegations with commercial or political purposes. However it was, one deals with the materials showing a formidable position of the Przeworsk culture warriors in the 3rd century (see Kontny, Rudnicki 2020).
Fig. 1. Reconstruction of the outer appearance of the Przeworsk culture warrior (concept Bartosz Kontny, drawn by Stanisław Kontny)
Fig. 2. Chronological groups of weapon graves in the Przeworsk culture; phases B1–B2a
(after K. Godłowski 1994, supplemented by the author)
Fig. 3. Chronological groups of weapon graves in the Przeworsk culture; phases B2b–C1a (after K. Godłowski 1994, supplemented by the author)
Fig. 4. Chronological groups of weapon graves in the Przeworsk culture; phases C1a–D.
(after K. Godłowski 1994, supplemented by the author)
More promising materials come from the Vimose site, Deposit 1, from the early part of the B2 phase as well as Vimose 2a, from the late B2 phase (Fig. 5). Xenia Pauli Jensen proposed very wide limits of the potential invaders’ core-area, underlining, however, the undeniably ‘Polish’ items, such as the single-edged swords from Vimose 1 and shield grips, Ilkjaer 3b and 3c types, from Vimose 2a (Pauli Jensen 2008a, 108-117, 192-195, 223-228, 263-269, 283-285; 2008b, 119-125, 136-139, Fig. 31, 54, 81-84). She also took into consideration the fork-tongued belt buckles and Ginalski E2-type spurs (Ginalski 1991, 61-62); one may also add to the list the bar-shaped strike-a-lights (Pauli Jensen 2009, 59, Fig. 2, 7; 2011, 47, Fig. 6-7). Surprisingly, she had a problem with the identification of the vast part of spearheads assemblage, specifically the ones she described as types 3/6, 13, and Hunn (Pauli Jensen 2008a, 55-58, 68-70, 75-79; 2008b, 8-9, 19-20, Fig. 89), all having a good parallel among the Przeworsk culture types: respectively Kaczanowski VI and VIII, as well as the Type II (Kaczanowski 1995, 14-15, 17-20). As a lot of them may be attributed to the Przeworsk culture types from the Early Roman Period, it links them with the areas to the south of the Baltic Sea, not exclusively with the Przeworsk culture but also with the territories influenced by it, i.e. the Wielbark or Bogaczeowo culture (Kontny 2017, 37-38; 2019a). The difficulty concerned also the belt buckles with double forked tongues which were quite popular in the Wielbark culture and Baltic milieu as well, especially in the Bogaczewo and Dollkeim-Kovrovo culture (Andrzejowski, Madyda-Legutko 2013, 18-20, Fig. 1; 2018, 71, Fig. 1).

At the Vimose bog site the artefacts with Baltic features were found as well. These were e.g. the carpenters’ tools, but also typically Baltic weapons, such as socketed axes, axes, and shield bosses with a short blunt spike (including ones made entirely of wood). Assumed participation in raids aimed at distant areas sometimes demanded the use of boats and it was the case of Vimose on the Island of Funen, where pieces of weapons characteristic for other areas have been discovered. This seems reasonable as trade (at least sea trade) and war bands were strictly connected, because they were formed from the well-trained crews of oarsmen. Also it may explain why war-bands were well-informed as refers to potential aims of attack. Such supposition is valid not only for the Roman and Migration Periods (Kontny 2012, 69-71) but it may be true for the times as early as the Bronze Age, which may be concluded from the representations of warriors and boats in the Nordic rock art (Ling et al. 2018, 150-152, 160-161)\(^\text{16}\) and as late as the Viking Period, when war bands were organized into boat guilds (Jakobsson 1992, 81; after Ling et al. 2018, 160). Probably it was not an option

\(^\text{16}\) Here also the parallels from southern California (the Chumash Indians) and north-west coast (the Haida), who have developed sodalities/boat guilds organizing trading and raiding expeditions should be mentioned.
Fig. 5. Examples of the Przeworsk culture or the West Balt Circle elements from the bog site at Vimose (1–6, 8–12) and the possible pommel of a saddle (7) (after Kontny 2017, with further references)
for the Przeworsk culture people living far from the sea, maybe even not for the
Balts, in particular the ones living in the lakelands. For the Wielbark culture,
however, its partly littoral position seems quite a good area for preparing such
expeditions. Their weapons were similar to the Przeworsk culture ones, therefore
may not be traced easily among the Vmöglichkeiten; however, one may assume their
participation in the events. Theoretically, the researchers cannot exclude even
the Elbe Circle, although it seems less probable in that case. All in all, this seems
to prove that multi-ethnic military forces existed and were defeated somewhere
in Funen.

Some new perspectives for tracing the Przeworsk culture attacks emerged
together with the excavation of the newly found sacrificial bog site at Czaszkowo
(former Lake Nidajno) in north-eastern Poland (Nowakiewicz, Rzeszotarska-
Nowakiewicz 2012; Nowakiewicz 2016; unfortunately still not studied in detail
in regards to the weapons). A cursory analysis has allowed to distinguish the
Roman Period weapons (swords, particular spear- and javelin heads, ring-mails)
but also the Migration Period ones, e.g. the nomadic type spatha gold decorations
or Scandinavian javelin head, Vestly- or Ugulen-type, from the 5th century (Fig. 6;
Kontny 2019a, 123, 126-127, 136-137, Fig. 6, 11, 31).

Another sacrificial site is situated in Lake Lubanowo in north-western Poland
(a sacrificial site which is still a lake, not a bog), in the area of the so-called

![Fig. 6. Vestly- or Ugulen-type javelin head from Czaszkowo (after Kosiński et al. 2016)]
Lubusz Group, a kind of a liminal cultural unit, defined only in general terms. A lot of the weapons typical for the Przeworsk culture, especially spearheads, have been found there (Fig. 7: 1-4), so theoretically one may assume dealing with the weapons won from the Przeworsk culture invaders (Kontny, Nowakiewicz, Rzeszotarska-Nowakiewicz 2016, 236-256). Unfortunately, local spearheads were very similar, so it is not certain whether the rules of weapons’ deposition in northern Poland have been the same as in Scandinavia, i.e. whether they should be attributed to the foreigners or to the indigenous population (Kontny 2016a, 292-295). Theoretically, the finds of axes (Fig. 7: 7-8) may suggest that at least some of the materials may be ascribed to the Wielbark culture, where they were probably more frequent than in the Przeworsk culture (Kontny 2019a, 283-285). At the moment it is premature to solve this problem as the research is still at the initial stage.

Naturally, numerous examples of military finds may be reasonably linked with the Przeworsk culture warriors’ participation in military actions directed to the south. It happened probably in connection with the Marcomannic Wars, but started even before them, which is suggested by the militarization and standardization (indicating increased sophistication in combat and a tendency to use an ordered battle array) noticeable in the statistical analysis of the Przeworsk culture weapon graves’ equipment dated to the B2b phase, but also in some burials of the Przeworsk culture character from northern Slovakia, Trans-Carpathian Ukraine, etc. (Kontny 2005)\textsuperscript{17}. Some specialists considered the weapon graves from the Chernyakhov culture to be a proof of the Vandals’ participation in ‘the Goths’ migration’ (Magomedov, Levada 1996, 312-313). Naturally, it cannot be claimed without any doubt, as these graves frequently contained non-Przeworsk weapons, such as axes or shield mounts of Pontic types. Moreover, weapons appeared also in inhumation graves characteristic for the Sarmatians (see Kazanski 1994; Magomedov, Levada 1996). But theoretically one cannot neglect the possibility that the militant Przeworsk culture warriors also took part in the process. It seems very probable that they travelled along with the wayfaring Wielbark culture population from the beginning of the Younger Roman Period, which seems to be shown by the changes in the territories of the Przeworsk and Wielbark cultures which took place in the B2/C1 phase, i.e. the so-called ‘Goths’ migration’ (see Godłowski 1985, 68-84). Small groups of Scandinavian, Balt, or Przeworsk culture warriors may have taken part in those migrations, too. One may just imagine that this time the military leaders came rather from the Wielbark culture.

\textsuperscript{17} For further examples see the other papers in this volume.
Fig. 7. Selected finds from the sacrificial site at Lubanowo (after Kontny 2019a, with further reference)
V. THE BALT NEIGHBOURS: BROTHERS-IN-ARMS?

The possible participation of the Baltic military leaders in distant military expeditions may be inferred also from the analysis of the Sudovian culture inhumation grave from Szwajcaria, Barrow 2, Suwałki district dated to the C1b phase, where details suggesting intensive military contacts with northern Europe (horse headgear with imported Scandinavian fittings, including scavenger bird and human head motifs, an organic bucket-container, some decorations, a Vennolium-type spearhead) but also Przeworsk culture warriors (a sword, another spearhead) and the others, all the items combined in an eclectic way (Kontny 2013a; Kontny 2016d). It seems that the person buried in Szwajcaria, Barrow 2 was involved in international enterprises during the C1b subphase, documented by the Jutland bog deposits from that time. One could imagine a Sudovian warrior participating in those military events as a member of a retinue, presumably of a multi-ethnic character, and the successful enterprise being the key to the social elevation in his homeland.

Vimose is not the only Scandinavian bog site with Baltic weapons. In the bog deposit at Balsmyr on Bornholm (Fig. 8: 6) five out of 11 spearheads were of Baltic origin, i.e. two (inv. nos. 2587,1 and 2588,1) Kazakâvičûs Type IB/IB (Kazakâvičûs 1988) and three Type IG/IG (inv. nos. 2588, 2, 3, 6). They are from the deposit dated to the turn of the Younger Roman and Early Germanic Periods, while the other spearheads are attributed to the earlier deposit from the C1b/C2 phase (Nørgård Jørgensen 2008, 110, Fig. 67). Also sword-shaped spearheads of the Kazakâvičûs III type from the late-5th–7th century A.D (Kazakâvičûs 1988, 41, 42, Fig. 15, Map VII) which probably evolved in the Baltic milieu (specifically in the East Lithuanian Barrows culture) from the nomadic patterns (spearheads with blades made of broken swords – see Czarnecka 2010, 123-124) may be considered in terms of participation in raids (Fig. 8). They are known mostly from graves in the Baltic territories, so they were utilized by local warriors, whereas in northern Europe they appeared mostly in sacrificial sites; therefore, one may assume that they were won from the invading retinues embracing i.a. the Balts (Kontny 2017, 40-42, Fig. 17). Similarly to the Balts, the idea of such spearheads came to the Luboszyce and possibly Przeworsk culture, also treated only as a representation of a sword and not a sword’s blade as an element of a shafted weapon’s head (Kontny 2013b, 197, 199, Fig. 2). Similar forms are known from the Anglo-Saxon areas in England. Attributed to E3 and G types, they developed in the 6th and

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18 One may compare it with the tentative military character of the exploration of the half abandoned territories in northern Poland, but also in the Baltic Sea islands by the Baltic scouts at the turn of the Roman Period and in the Early Migration Period. It could be deduced from the distribution of typically Baltic items, e.g. Dollkeim/Kovrovo-type brooches and the ones with star-shaped foot, so-called Schlusskreuzfibeln, etc. (Kontny 2020).
continued in the 7th century (Swanton 1973, 83-87, 99-103, 179-181, 188-191, Fig. 27, 35; 1974, 14, 17, 18, Fig. 4:c, 5:d, 6:a), maybe as a result of the influence (migrations) from the Baltic zone (?).

The military activity of the Balts was also directed to the south, as the Balt traits were identified among the late 3rd–4th-century weapons from the Čatyr Dag cemetery on the Crimean Peninsula. Also in this case one may note the mixed ethnical character of the group burying their dead in the Crimean necropolis. Starting from the mid-3rd century (possibly in connection with the Goths’ raids,
marking the ‘Crisis of the Third Century’ in the Roman Empire), the deceased were deposited in cremation graves with weapons (which is unusual for the local inhabitants) with the features of a specific 'cocktail of cultures'. Apart from the possibly Balt ones (axe, sword-shaped spearhead) there are also Przeworsk culture traits (the sword of Nydam-Kragehul Subtype 2, certain types of spearheads with parallels in Kaczanowski’s classification [see Kaczanowski 1995], which may be treated also as the Bogaczewo culture forms), Sarmatian (sword, sickles), post-Roman/Pontic (dolabra-like axes) but also nomadic ones and interregional Barbarian forms which cannot be attributed precisely but one may even take into account northern Europe and the Chernyakhov culture as places of their origin (Kontny 2013b). The site may be considered to have been used by mixed warrior groups active here starting from the mid-3rd century, i.e. the Goths’ invasion at the Crimea19. As a picturesque literary parallel here may serve The Fellowship of the Ring, by a brilliant writer and linguist John Ronald Reuel Tolkien. A similar phenomenon may have taken place in a recently discovered grave from Kariv in Ukraine – equipped with typically Przeworsk culture weapons but with enamelled ornaments of the eastern European character (see Onyshchuk, Schuster in press). The phenomenon may illustrate the complex retinue but can be also linked with the process defined as the snowball effect, a migrating group increasing in size and faster rate during the expansion and changing its ethnical content in the process.

VI. CONCLUSIONS

As it has been indicated above, the Przeworsk culture warriors participated in military enterprises (certainly more numerous than the ones mentioned in this text) such as raids, but also larger-scale ventures directed at different areas. The anthropological studies suggest that not one permanent direction, but a multitude of tantalizing ways and goals accomplishable in a military way were important for them. The warriors may have participated in retinues, also multi-ethnical ones, as described by Tacitus. It is not certain if the Przeworsk culture warriors occupied a privileged position in these groups even if the Przeworsk culture forms of weapons imported and imitated in neighbouring cultures seem to suggest that for a long time they were treated as the ‘role model’ warriors. The loss of their leading military impact in the Younger Roman Period should be linked with the growing importance of the Scandinavians with their well-equipped and stratified

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19 Therefore the old idea of the Balts’ participation in the Gothic raids to the south, which was used to explain the depopulation of the Bogaczewo area during Phase D (Nowakowski 2000, 16-17, with further literature) seems to acquire a new foundation.
armies, probably fighting in battle order. Written sources and weapons found in the burials, not so numerous because of the different burial rite (Kontny 2002, 110-111, 127-128), suggest, however, that the new trend did not eliminate the Przeworsk culture zealots from the military sphere. Did they generally tend to go south, where their traces are not so well-identifiable? Probably detailed studies of sacrificial bog/watery sites discovered at the territory of Poland, Scandinavia, maybe also Lithuania and Latvia will allow finding further evidence of distant warlike expeditions.

ACKNOWLEDGEMENTS

This paper is a part of a research project led by Professor Adam Ziółkowski from the Institute of History, University of Warsaw, financed by the Polish National Science Centre, 2017/25/B/HS3/01299 (Crisis of the Roman Empire in the 3rd century: causes and reflection in ancient sources).

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