PRUSSIAN GRAVES IN THE SAMBIAN PENINSULA, WITH IMPORTS, WEAPONS AND HORSE HARNESSSES, FROM THE TENTH TO THE 13TH CENTURY: THE QUESTION OF THE WARRIOR ELITE

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Abstract

The article presents the latest data on tenth to 13th-century imports, graves with weapons and horse harnesses in the north Prussian area. The study is made on the basis of five recently investigated Prussian cemeteries, and on vast prewar published and archival data. Questions of the Sambian Aschenplätze and social differentiation in Medieval Prussian society are also partly described. In addition, the 12th and 13th-century and Teutonic Period inhumation graves with weapons and horse harnesses are analysed briefly, in order to demonstrate both the continuity of tenth to 13th-century Prussian culture and its transformation brought about by 13th-century political changes.

Key words: imports, warrior-horsemen graves, burial rite, statistical data.

‘The Prussians many times invaded Polish lands with plenty of warriors, and they inflicted many losses: they burned down houses, pierced men with swords, and took away women and children for eternal slavery …’

Peter of Duisburg, 1326

Introduction

The political events of the 11th and 13th centuries in European history defined the formation of post-Viking Age Prussian society. Long-term historical processes, such as the formation of the early kingdoms of Denmark and Sweden in the early 11th century, the feudal division of Poland from the second third of the 11th to the beginning of the 13th century, and indirectly the feudal division of Ruthenia in the same period, step by step changed social, economic and political life from the outside, beyond Prussian society. And it might be logical that at the heart of these changes were members of the Prussian ruling classes, the warrior elite.

One of the possible consequences of the processes mentioned above was the decline in transit trade through the lands of the West Balts, determined by the sudden decrease in Scandinavian imports from the beginning of the 11th century. The assimilation of the main types of weapons and ornaments taken from Scandinavians in the ninth and tenth centuries occurred at this time.

If the influence of southern Scandinavian and Gotland Viking Age cultures is not so obvious on the Prussians as perhaps it was on the Curonians (Bliujienė 2008, p.169, Fig.1), political events in Poland at the beginning of the 11th century had a direct impact on Prussian society. The death of Boleslaw I around 1025 led to the weakening of Polish political and administrative centres. This resulted partially in the consolidation of Prussian warrior elites, and caused an increase in invasions into neighbouring Polish lands. At the same time, there was a great increase in imports from Poland (?) and Western Europe, and the early Russian principalities in Prussian lands (Antoniewicz 1955, p.243ff; Kulakov 1994b, pp.121-122).

In describing the main features of post-Viking Age Prussian warrior elites, let us look at the next issues in the article:

The main types of imports in 11th to 13th-century Prussian graves with weapons and horse harnesses.

Prussian double-layer cremation graves1 with weapons and horse harnesses from the tenth to the 13th century.

Prussian (Sambian) ‘collective’ cremations, or Aschenplätze.

Prussian warrior elites in the late 12th and 13th centuries.

1 A pit human cremation grave with a horse burial below, a kind of burial rite which appeared in the former area of Sambian-Natangian culture during the fifth and sixth centuries and existed in the north Prussian area at least into the first half of the 13th century.
This investigation is focused mainly on the north Prussian area, historic Sambia and the neighbouring lands, because of similarities in burial rites, categories of artefacts, and not in the last instance of the density of archaeological investigations, which are already different for the south Prussian area (Galindian, Pogesanian and other lands). The chronological frames of the article are mostly indicated by certain types of finds analysed here, and based on some features of the burial rite of the north Prussian area during the post-Viking era, which will be described below.

The main types of imports in 11th to 13th-century north Prussian graves with weapons and horse harnesses. Imports from the west

The period around 1000 AD in the southeast Baltic area is marked by the displacement of oriental silver coins by West European denars. This marks a reorientation in trade in the Baltic region (Potin 1968, p.44ff; Suchodolski 2011, p.201ff). However, Arabic dirhams still appear in some 11th-century Prussian cremation graves (Berga, Kulakovs 1993, p.12; Kulakov 1999, p.264, Fig. 58). European silver coins from the 11th and 12th centuries were found mainly in Prussian double-layer cremation graves with weapons and horse harnesses in the Klinovka-1, Kleine Kaup, Kholmy, Kleinheide, Kovrovo and Mitino cemeteries. Several denars are also known from the Kaup-Wiskiauten settlement, and as stray finds (Berga, Kulakovs 1993, p.12ff; Kulakov 2004, Fig. 78.1; Ibsen 2009, Fig. 97; Skvortsov 2010, p.114, 2012; Kulakov 2011, p.97, Fig. 9; Zubkov 2012). Thus, today in the north Prussian area, about 90 silver tenth to 12th-century denars from 16 indicated sites are known, including the recently discovered hoard of 47 denars at Sirenevo (Eiselbitten) (Skvortsov, Bogucki 2012/2013) (Fig. 1).²

² Also at least seven silver denars from the late tenth and 11th centuries, coming as far as we are able to guess from...
It is strange, but there are still no finds of Polish den- 
nars from the 11th to the 13th centuries in the area de- 
scribed. At the same time, the amounts of certain West 
European imports increased in Prussian lands. These 
are prototypes of weights and measures, made later by 
local craftsmen, bronze bowls (Hansaschüssel) and 
double-edged sword blades with Latin inscriptions. All 
the imported goods mentioned appear mainly in Prus- 
sian graves with weapons and horse harnesses.

Weights and balances

Weights and balances, as direct evidence of trading 
operations, are known in the West Balt area from the 
middle of the tenth century, where they appeared un- 
der the influence of Scandinavian trade with the east (Zulkus 2004, p.156; 2007, p.310). Balances found in 
West Balt lands belong to Types 6-10 after H. Steuer. 
They date from the 11th to the 13th centuries. Types 
9-10 were in use until the 14th century (Steuer 1997, 
p.28ff). According to their form and decoration, which 
have a vast group of European analogies, a fairly large 
amount of balances found in the West Balt area could 
have been imported from western and northwest Eu- 
rope in the tenth and 11th centuries. Or they were 
made by local craftsmen under the strong influence 
of European examples. Weights from the tenth to the 
13th centuries found in the West Balt area are also 
similar, corresponding mostly to H. Steuer B1-3/4 and 
B2 types, and to the ‘type with a cross’ (Steuer 1997, 
p.302ff). The largest number of weights and balances 
in Prussian territory known today is from the Klin- 
covka-1 cemetery. Weights and balances were found 
here in 28 cremation graves, that is, about 23.7% of 
118 more or less ‘complete’ objects (Kulakov 1999, 
p.213ff). Weights and balances in general were found 
in double-layer cremations with weapons and horse 
harnesses (16 graves, or 57.2%).

Bronze bowls from the 11th to 13th 
centuries

Bronze bowls, vessels also known as Hansaschüssel, 
are one of the typical mass grave goods in Prussian 11th to 13th-century cemeteries, which represent trade 
directions and a certain level of economic development in 
Prussian society. They have appeared mainly in piec- 
es in at least 21 Prussian cemeteries, exclusively on the 
Sambian Peninsula (Kulakov 1994a, p.115; 2004, Fig. 
71.9; Zubarev 2004; Pronin, Smirnova 2006, pp.150, 
189, 327; Skvortsov 2006; 2007a; Kulakov 
2010, p.194ff; 2011, p.97; Skvortsov 2010, p.135; 
Širouchovas 2011, p.292ff; Zubkov 2012; Skvortsov 
2012) (Fig. 3).

Bronze bowls distributed in Prussian territory have a 
European origin and belong to U. Müller A2, B2-4, 
C1-3, E3-4 and F types. Bowls of C type (with an image of an ‘angel’) seem to be most widespread in the 
Sambian peninsula. They are dated mainly to the late 
12th or early 13th centuries (Darkevich 1966, pp.55- 
56; Janowski 2003, p.331; Müller 2006, p.91ff, Fig. 
25, 38, Maps 3-8; Skvortsov 2010, p.135).

At Laptau cemetery, excavated by A. Bezzenberger, 
bronze bowls occurred in 16 cremations from the 11th 
and 12th centuries (50% of 32 graves) (Bezzenberger 
er 1914a, p.161ff). Bronze bowls were found in ten 
graves, together with weapons and horse harnesses 
(62% of graves with Hansaschüssel).
The largest amount of bronze bowls and pieces of bronze bowls found in Prussian territory occurred at the Klincovka-1 cemetery. Bronze bowls, mainly in pieces, were found in 37 cremation graves, which is about 31% of 118 "complete" graves. They were mainly found in double-layer cremations with weapons and horse harnesses (36 graves, 97%). In 30 graves they were found together with weapons, horse harnesses and other imported goods7 (Kulakov 1990, p.73ff; 1999, p.213ff).

Polish Pomerania and Mazovia are probably the closest regions to the Prussians with a distribution of bronze bowls. About 30 male inhumations with bronze bowls are known from 18 cemeteries from the 11th to the 13th-centuries in Poland (Janowski, Kurasiński 2002, p.653ff; Janowski 2003, pp.332, 344, Table 1). It is strange that there are still no other finds of 11th to 13th-century bronze bowls in Curonian or Skalvian lands.

Bronze bowls were used more by wealthy Prussians in daily life as tableware, and perhaps accompanied them in the afterlife (Širouchovas 2011, p.292ff). Most of them come from Prussian double-layer cremations with weapons, horse harnesses and other imports and goods connected with trade.

Double-edged swords with Latin inscriptions

The earliest examples of sword blades dating from the ninth to the 11th centuries and marked with inscriptions such as ‘+ULFBERCHT+’ or ‘+INTIVIN+’ are known in the present Kaliningrad region from four...
barrows at Kaup-Wiskiauten\(^9\) and several cremation graves at Linkuhnen (Rzhevskoe).\(^{10}\) One of the best-known examples of ‘Prussian’ swords with the ‘+ULFBERCHT+’ inscription is a T-type sword from former Awecken (Poland), and is also dated to the late tenth century (Engel 1931, Fig. 3; Kirpichnikov 1966, p.21; Mühlen 1975, p.33, Fig. 10.2, Table 32; Kazakevičius 1996, p.108, Table 2).

The widely known postwar sword with the ‘+ULFBERCHT+’ inscription comes from Klincovka-I cremation grave 15 from the first half (?) of the 11th century. This is a very luxurious double-layer cremation, consisting of a double warrior grave and a burial of three horses below, with numerous weapons, horse harnesses and fragments of bronze bowl (Kulakov 1999, p.221ff, Fig. 11). Recent finds of swords with Latin inscriptions in Sambia have been made in Kleinheide, Kovrovo (Dollkeim),\(^{11}\) Mitino (Stantau) and Shosejnoje (Kulakov 2007, p.227; Skvortsov 2007b; 2010, p.138; 2012). Thus, considering all accessible prewar and recently occurring examples of swords with Latin inscriptions in the Kaliningrad region, we may name for certain 18 examples from 11 locations (Kulakov 1990, p.29, Fig. 15; Kazakevičius 1996, Table 2) (Fig. 4).\(^{12}\) All tenth to 12th-century double-edged swords with

\(^9\) Graves 2, 3, 151A, and one without a number.
\(^{10}\) Graves 25(?), 53 and 106. Grave 106 is mentioned only in C. Engel Nachlass’ (R. Grenz Archiv).

\(^{11}\) Although this sword is published by V. Kulakov without detailed representation, Konstantin Skvortsov remarked that the blade of the sword had traces of a Latin inscription.

\(^{12}\) In addition, one sword with the inscription ‘AMEN’(?), kept in Königsberg before the Second World War, probably in the collection of the Prussia Museum, is mentioned in Peter Paulsen Kartotek (Schleswig). Yet another sword with a Latin inscription, found in the area of historic Sambia, is known from a private collection.
Latin inscriptions are found in rich Prussian double-layer cremations supported with numerous weapons, horse harnesses and imported goods.

Imports from the east

It may sound strange, but the decline in transit trade between the Scandinavians and the east, marked by the disappearance of Arabic dirhams, coincides with a significant rise in Ruthenian imports in Prussia. There could have been two main trade routes to Prussia for Ruthenian and other eastern imports: through the Nemunas (Niemen, Neman), Inster (Instruch) and Pregel (Pregolya) basins; or using the rivers Bug, Narev, Wisła and Nogata (Antoniewicz 1955, Fig. 26; Kulakov 1994b, p.121ff; Okulicz-Kozaryn 2000, pp.292, 294). Thus, together with silver European coins, at least three 11th to 13th-century Byzantine coins found in the Sambian Peninsula are known.\(^{13}\)

The main Ruthenian imports in 11th to 13th-century Prussia were weapons such as maces, helmets of ‘Ruthenian’ types, whip terminals, cylindrical locks and keys, slate spindle whorls, and other less numerous finds, such as pendants, clay eggs/rattles, and archaeologically unidentifiable goods.

Bronze and iron maceheads

Bronze and iron maceheads are typical of the Prussians in the 11th to 13th centuries. They began being produced by Ruthenian craftsmen in the 11th century, most likely under Central Asian influence. Maces spread from the Bulgarian Volga in the east to Sweden in the west. A total of 90%, or more than 100 examples, were found in former territories of the old Russian state, especially in the lands around Novgorod.

\(^{13}\) Bronze coin of Roman-IV (1067-1070) Laptau cremation grave 29, 11th century; silver coin of Aleksey-I (1081-1092), Kl. Kaup settlement; 12th/13th-century silver coin of Ivan Asen II (Kingdom of Bulgaria) found in the River Pregolia (Kaliningrad, information from K. Skvortsov) (Bezzenberger 1914a, p.177; Ibsen 2009, p.338, Fig. 261, Table 79.3).
and the middle reaches of the Dnieper (Antoniewicz 1955, p.272; Mugurevich 1965, p.54; Kirpichnikov 1966, p.50ff, Table XXV-XXIX; Kirpichnikov, Medvedev 1985, p.311; Artemjev 1990, p.11ff, Fig. 9.1, 4-5; Artemjev, Gaidukov 1995, p.204ff; Kirpichnikov, Gaidukov 1997, p.186ff). Several bronze maceheads are known from Latvia (four maces) and Estonia (also four), the last are connected with the Daugava (Western Dvina) trade route (Hausmann 1896, Tables 26.17-18; Mugurevich 1965, p.54; Mäesalu 2010, p.141ff).

The greatest concentration of bronze and iron maceheads in the east Baltic region corresponds to the area inhabited by Prussian tribes. Today in the former East Prussia, at least 16 maceheads from 13 sites, mainly cemeteries, are known. Eleven maceheads come from nine sites in the Sambian Peninsula (Bezenberger 1914a, p.162, Fig. 39; Gaerte 1929, p.383, Fig. 270b; Katalog Austellung Lüneburg 1992/1993; Kulakov 1999, p.213ff; 2004, Fig. 85.2; 2010, pp.194-195; Zubkov 2012; RGA T. 35) (Fig. 5). The maces described generally belong to III-IV types after A. Kirpichnikov, which correspond to the 12th to the early 13th century (Kirpichnikov 1966, pp.51-52).

Beyond the River Deima, maces occurred together with stone hammers from the Late Stone Age/Early Bronze Age (?), with traces of iron mounts. Like the one from inhumation grave 278 from the 13th to 15th-century necropolis at Alt-Wehlau (Valuev 2003, p.107, Fig. 7.3-5). A prehistoric ‘bronze hammer’, probably reused as a mace for power and status, is also known from Norkitten (Mezhdurech’e). It occurred here together with two ‘Totenkrone’ spiral neck-rings from the 13th or 14th century (Grüntert 1939, p.60, Fig. 90a).

All finds of maces in Prussian sites come from richly equipped double-layer cremation graves: Klincovka-1 (Nos 1, 10, 12), Kl. Kaup (24,26), Kholmy (51) (Kulakov 1999, p.213ff; 2004, p.194f; 2010, p.194ff, Fig. 5; Zubkov 2012). They were usually supported with double-triple horse burials.

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14 There are also several recently known ‘unofficial’ finds of bronze maceheads from Lithuania (Panevėžys region) and one in Latvia (Aluksne region) (online). Available from: http://kladoiskatel.5bb.ru/viewtopic.php (accessed 5 January 2012).
All the authors who have studied maceheads agree with their special social meaning. Maces are high-rank weapons, reflecting the high social status of their owners, like swords and inlaid spears. They might be a special additional symbol of power and control (Mugurevich 1965, p.54; Kirpichnikov 1966, p.56; Kulakov 1990, p.33; Valuev 2003, p.107; Mäesalu 2010, p.143). The level of concentration of power in the hands of Prussian warrior elites perhaps demanded appropriate symbols of rule, which are already known to have been in use in the old Russian area. The wide distribution of imported maceheads, together with European bronze bowls, demonstrates the uniqueness of Prussian 11th to 13th-century society compared with the other Balts.

Helmets of ‘Ruthenian’ type and other Ruthenian military imports

‘Ruthenian’ helmets are known from two examples, from the Groß Friedrichsberg cemetery (Lermontovo/Kalinigrad) and inhumation grave 12 at Ekritten (Vetrovo) (Gaerte 1929, Fig. 273; La Baume 1940, p.85ff, Fig. 4.a-b). The helmets mentioned are similar in form, and belong to Kirpichnikov II type, dating from the tenth to the 13th century (Kirpichnikov 1971, p.26ff, Fig. 8). It looks as if they came to Sambia as imports from old Russian territory, and belonged to a local nobleman, as is proven by Ekritten inhumation grave 12 (La Baume 1940, p.84ff; Antoniewicz 1955, p.256ff) (Fig. 6).

Other items associated with the Ruthenian military in Sambia are whip terminals in the form of the head of a bird of prey. One whip terminal, similar to Kiev or Novgorod examples, is known from the Klinovka-1 cemetery (Kulakov 1978, Fig. 140.9; 1990, Table XXXVIII) (Fig. 7). Another more schematic example was found at Kholmy cemetery in 2010 (Zubkov 2012). We could also refer to one decorated stirrup from Kleinheide, which is close in decoration to 12th-century analogies from Novgorod (Skvortsov 2012).

Cylindrical locks and keys

Cylindrical locks and keys are one of the main imported finds from the 11th to 14th centuries in the Prussian area (Gaerte 1929, p.338; Engel, La Baume 1937, p.192, Fig. 44.f-i; Kulakov 1990, p.34). The main centres for their manufacture and distribution are 11th to 13th-century Kiev, the lands of Novgorod, and Belarusian cities (Rybakov 1948, p.218ff, Kolchin et al.}

Fig. 6. Helmets of Kirpichnikov II type from cemeteries in the Sambian Peninsula: 1 Groß Friedrichsberg, stray find; 2 Ekritten, inhumation grave 12 (photographs from the Rudolf Grenz Archive, T. 24, 75).

Fig. 7. Whip terminal from the Klinovka-1 cemetery, stray find, KGOM 9772.295 (photograph by R. Shiroukhov).
Today, cylindrical locks and keys are known from at least 16 Prussian 11th to 14th-century cemeteries and settlements in the Kaliningrad region (Schiefferdecker 1871, Table V,22; Heydeck 1890, Table XIII; Bezzengerber 1909, p.62; Heydeck 1909, pp.244-245; Bezzengerber 1914a, p.161; 1914b, p.221; Gaerte 1929, Fig. 272a, b; Kalashnikov 2006, p.34, Fig. 11.4; Skvortsov 2007, Ibsen 2009, Figs. 143; 259; Biermann et al. 2011, p.274, Fig. 40.6; Skvortsov 2012) (Fig. 8).

As in other cases, the largest number of cylindrical locks is from the Klincovka-1 cemetery. Three cylindrical locks and nine keys were found here in nine double-layer cremations and as stray finds. That is, about 7.6% of the 118 ‘complete’ investigated graves (Kulakov 1999, p.215ff).

Cylindrical locks and keys as imported goods may reflect social differentiation in Prussian society. They occurred mainly in rich double-layer warrior-horseman cremations. Probably the role of this category of finds coincides partially with that of weights and balances. They probably represented the deceased as an owner of property. Locks and keys could also reflect some spiritual features, to symbolise the passage of (or part of?) a property and its owner to the ‘other side’.

**Slate spindle whorls**

Crimson and greyish-lilac slate spindle whorls with Kievan Russian origins appeared in the Prussian area, being manufactured mainly in Ovruch and Volyn’ during the 11th to 13th centuries. Slate spindle whorls spread to a vast area from the Volga down to the rivers Oder and Varta, and from the Dnieper to Volkov in the north. Outside their area of manufacture, they are common finds both in Polish and Belarusian cities, as in east Lithuania and Latvia’s Daugava region (Rybakov 1948, p.188ff; Mugurevich 1965, p.35ff; Kuncienė 1972, p.185; 1981, p.61; Zviaruga et al. 2000, p.410).

Today more than 50 slate spindle whorls were found in at least 16 Prussian 11th to 13th-century cemeteries and three settlements, mainly in Sambia (Bezzengerber 1914a, pp.163, 163; 1914b, pp.222, 226; Grünert 1943, p.8, Fig. 4; Antoniewicz 1955, p.244ff, Fig. 6; Gurevich 1960, p.375, Fig. 46.8-10; Kulakov 1994a, p.115; 1999, p.215ff; 2004, p.31, Figs. 79.3-4; 99.2; 2007, Fig. 98.2; Skvortsov 2007a; Kulakov 2010, p.194ff; Tiurin 2011, p.127, Fig. 4; Zubkov 2012) (Fig. 9).
The largest number of slate spindle whorls occurred at the Klincovka-1 cemetery. They were found here in at least 14 double-layer cremations, all of them with horse harnesses and burials, and 12 with various weapons, 12% of the 118 more or less 'complete' graves (Kulakov 1990, p.73ff; 1999, p.215ff). The slate spindle whorls found at Alejka-3 (grave 516), Kholmy (70, 77) and Kl. Kaup (24[26], 27, 31) also come from horseman cremations with weapons and imports.

The fact of the appearance of slate spindle whorls mainly in Prussian ‘warrior-horseman’ or ‘armed trader’ cremations stresses the ‘social’ meaning of this artefact. Slate spindle whorls were expensive imported goods, brought from abroad, and available first of all to the ruling classes of Prussian society. The custom of using spindle whorls in Prussian inhumations survived until the 13th or 14th century (Pronin, Smirnova 2006, p.85, Fig. 210.4; Kulakov 2011, p.92, Fig. 6).

Although slate spindle whorls were probably frequent goods on the trade routes of the Daugava, Wisła and Nežmūnas basins, they are still known in noticeably small numbers in the Skalvian-Curonian area (Mugurevich 1965, p.41, Fig. 6; Kuncienė 1972, p.184; 1981, Fig. 6; Budvydas 2006, p.102ff; 2007a, Fig. XI.23). At the same time that slate spindle whorls appeared in Prussian cremations with weapons and horse harnesses, sets of tablet-weaving tools emerged in Curonian and Skalvian ‘male’ cremations (Hoffmann 1941, p.56; Budvydas 2006, p.110ff; Asaris et al. 2008, p.100; Griciuvienė 2009, p.231). The probable links in the process of the emergence of spindle whorls and miniature weaving tools in Prussian, Curonian and Skalvian ‘male’ cremations require a separate study.

The presence of slate spindle whorls in Prussian cremations with weapons and horse harnesses may reflect the following features:

- slate spindle whorls mark the special social level of the buried warrior, as do other imports.
- spindle whorls represent female graves, dug next to the male
- spindle whorls found in Prussian ‘warrior-horseman’ graves may reflect certain burial customs. Weaving and spinning are widely reflected in European mythology and folk tales. Thus, Norns ‘wove the web of Fate’ to Helgi, foretelling him a glorious life (Starshaja Edda 2006, p.73).

At this level of research, the first suggestion seems to be more reasonable. Prussian double-layer cremations with weapons, horse harnesses and other imports represent the main social strata of consumption of slate spindle whorls.

**Fig. 10.** Prussian and Curonian sword scabbard chapes of V. Kazakevičius IV and Vb types: 1. Kaup-Wiskiauten, PM III. 164.941; 2. Schulstein, PM V. 285, 2388:XXI; 3. Ramučiai, grave 227b, PM Pl 1886; 4-5. Dollkeim-Kovrovos (4 grave 7/8 ? PM OPM 11489, 5 stray find, GIAMR 620); 6. Klinicovka-1, grave 33, KGOM 10709.86 (1-2, 4-6 Prussians, 3 Curonians) (1-4 photographs from the Herbert Jankuhn Archive, 5-6 photographs by R. Shiroukhov).

Besides the material evidence of contacts between the Prussians and Ruthenians, there are a number of artefacts which could reflect the importation or exchange of ideas and images. This applies to sword scabbard chapes of V. Kazakevičius IV and Vb types, known mainly in Prussian and Curonian areas (Kazakevičius 1998, p.304ff, Shiroukhov 2011, pp.186-188). Their decoration proves the existence of the influence of Ruthenian and Byzantine Medieval art motifs, as a blooming cross and a composition of two birds (Paulsen 1953, p.101ff; Darkevich 1975, pp.202-204). Perhaps these images, reinterpreted in the context of the...
Baltic pagan paradigm, were used by Prussian warriors as symbols of power, success and prosperity. On the contrary, the production of West Balt craftsmen as scabbard chapes of V. Kazakevičius Vb type, with eastern motifs reconsidered in the Baltic mode, found its way back to Ruthenian lands, occurring in Izborsk, Kniaz‘ia Gora, etc16 (Kirpichnikov 1966, Fig. 3.2; Sedov 2007, p.338; Figs. 338; 386.6) (Fig. 10).

Thus, according to the number of Ruthenian imports, the area of the lower Pregel is comparable with the Daugava region. That is probably why C. Engel and W. La Baume characterised Prussian ‘Spatheidnische’17 culture as ‘rich but not creative, with a strong predilection for imported foreign goods’ (Engel, La Baume 1937, pp.192-193). This could be illustrated by the example of Klincovka-1, today the most investigated tenth to 12th-century cemetery of the Sambians (Fig. 11). It is logical that the main consumers, and in some cases suppliers, of these expensive imported goods were the most influential sector of Prussian society, free warriors-horsemen.

Prussian graves with weapons and horse harnesses from the tenth to the 13th centuries

Graves with weapons and horse harnesses definitely prevail within the limits of Prussian burial customs at this time. Today in the Kaliningrad region about 60 cemeteries with graves of ‘warriors-horsemen’ are known. About 50 are concentrated in the western part of historic Sambia, the lower reaches of the Pregel and Deima, and in the surroundings of Kaliningrad, the main Prussian political and cultural areas (Fig. 12).

17 ‘Late Pagan Period.’

Prussian graves with weapons

The weapons situation of Prussian cemeteries is not very convenient for statistical analysis. This is mainly because of the disturbance of upper cremation layers by agricultural activity. According to recent opinions about the tenth to 13th-century Prussians, ‘There is a predominance of weapons and horse harnesses in (Viking Age) Prussian graves [...], weapons found in Prussian cremations are often broken or deformed’ (Šimėnas 2002, p.7). There is also still a strong V. Kulakov stereotype stressing the disappearance of weapons and horse harnesses from Prussian graves at the turn of the 11th and 12th centuries. According to that author, artefacts typical of the warrior elite are already unknown for Prussians in the 12th and 13th centuries (Kulakov 1994b, p.154).

Theories about the predominance of weapons in Prussian cremation graves and their sudden disappearance with members of the warrior elites at the turn of the 11th and 12th centuries are still popular in general works about the Prussians (Kulakov 2003; Kazakevičius 2007, p.399). What is the real statistical situation of weapons, according to the data available on Prussian cemeteries? In our attempt to answer this question, we use information from ten Prussian cemeteries of the tenth to the 13th centuries.18

At Seefeld cemetery, J. Heydeck in 1899 found 22 concentrations of artefacts, which seemed to be finds of cremations in the ‘Aschenplatz’ area. Grave goods were revealed in 21 such ‘graves’ from the 11th to the 13th centuries. Spearheads were found in 13 assumed double-layer cremations.19 That is, about 62% of the 21 graves with grave goods. Horse harnesses and remains of horses themselves occurred in 11 out of the 13 mentioned graves with weapons20 (Heydeck 1909, p.242ff). Schuditten (Orekhovo) cemetery has 35 objects: double-layer cremations, horse burials without upper cremation layers, and 11 inhumation graves from the 12th to the 14th centuries. Weapons were found here in only seven of the 11th to 14th-century graves: two double-layer cremations and five inhumations.21 That is only about 20% of the 35 graves mentioned, or about 32% of the 22 graves with more or less preserved upper layers. Some later inhumations were made above double-layer cremations, and in several cases overlaid early horse burials (Nos 26, 34, 36) (Bezzenberger 1909, pp.48-63;

18 Four of them were investigated in the first quarter of the 20th century, the other six between 1977 and 2010.
19 Graves 2, 4, 5, 6, 8, 12, 13, 14, 15, 16, 19, 20, 22.
20 Graves 2, 4, 5, 6, 8, 13, 15, 16, 19, 20, 22.
21 Cremation graves 20/21, 38; inhumation graves 17, 29, 31, 33, 34.
Kulakov 1990, p.84). Some double-layer cremations and horse burials occurred within the *Aschenplatz* area, represented by black earth mixed with coals and burnt bones in the upper layer (16 graves). It is strange, but weapons were not found here.

Bludau-II (Kostrovo) cemetery’s stratigraphic situation is not suitable for the study of weapons and other cremation goods. A. Bezzenberger mentioned that the cemetery is situated in a field disturbed by agricultural activities. Weapons, mainly spearheads, were found in only six of all 55 Bludau-II 11th to 13th-century graves: three double-layer cremations, one late inhumation, and in two uncertain graves (Bezzenberger 1914b, p.219ff). This is only 11% of all the 11th to 13th-century objects discovered here, or 37% without the horse burials with no upper cremation layers preserved (?)

The level of preservation, the structure and the grave goods situation of Laptau (Muromskoe) cemetery are better than in the cemeteries mentioned previously. However, in the case of Laptau, some graves (Nos 5, 6, 15, 16) look as if they were not investigated completely. Horse burials, which could have been in the above-mentioned cremations, were probably ‘missed’ by researchers. The same situation is known from O. Tischler’s Dollkeim excavations, where most of the horse remains in the graves’ lower levels were not discovered (Kulakov 2004, p.10). At Laptau, weapons are not present.

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22 Graves 40, 41, 43, 44, 45 (double layer cremation?), 46, 47, 48, 49, 50, 51 (d. 1.?), 52 (d. 1.?), 53, 54, 56 (double layer cremation?).
23 Graves 22, 56, 69.
24 Grave 3.
25 Graves 59, 71.
26 Schuditten, Bludau and Laptau cemeteries were investigated by A. Bezzenberger, the first in 1901, and the other two in 1906.
27 According to K. Skvortsov, this situation was probably caused by the lack of 19th-century methodology, when cemeteries were investigated in small areas, and not
were found in 22 graves out of the 32 investigated, which is about 70%. They are sword parts, M-type battle-axes and spearheads (including inlaid with bronze and silver). Due to the situation described, only in eight graves out of 22 with weapons did horse harnesses occur (36.4%)\(^{29}\) (Bezzenberger 1914a, p.161ff).

At Klincovka-1 cemetery, which was investigated between 1977 and 1986 by V. Kulakov, weapons were found in 56 tenth to 12th-century graves: 55 in double-layer cremations with horse burials (98%),\(^{30}\) and in one cremation, grave 29, without a horse harness. That is about 35% of all 161 graves investigated here, or about 47% of the 118 more or less ‘complete’ cremations. Swords and parts of them were detected in 13 double-layer cremations,\(^{31}\) that is, about 11% of 118 graves, and even 23.2% of all graves with weapons. Spears were found in 51 graves (up to four).\(^{32}\) That is, about 91% of all graves with weapons. In 11 graves, spears inlaid with non-ferrous metals were found (21% of graves with spears). Battle-axes were unearthed in three graves with horse harnesses, numbers 10, 16 and 69 (5% of graves with weapons). It was the same with maceheads, which were detected in three double-layer cremations, numbers 1, 10 and 12. Also, one battle-knife and several arrowheads were found (Kulakov 1990, p.73ff; 1999, p.213ff).

In talking about the Alejka-3 (Jaugehnen) 11th to 12th-century cemetery, investigated by K. Skvortsov in 2007, it should be mentioned that spearheads (often two or three) occurred here in 26 double-layer cremations.\(^{33}\) That is about 81% of all 32 investigated graves, or about 87% of double-layer cremations with horse burials (Skvortsov 2007a).

The upper layers of the Gerojskoje-5 (Eisliethen) cemetery were damaged by ploughing. Therefore, weapons (swords and pieces of them, spearheads) occurred here deeply, mainly ‘for artefacts’, which did not reveal the whole stratigraphic situation. Another reason could be that horse burials frequently lie 20 to 30 centimetres below cremations, and are often overlaid with clay. This means that horse burials are often indistinguishable at first sight.

In Povarovka (Grebieten/Powayen) cemetery, spears (up to three) were found in only five out of 22 double-layer cremations from the 11th to the 13th centuries,\(^{34}\) badly damaged by agricultural activities (23%). Spears were also found in three Povarovka inhumation graves from the 12th to the 14th centuries (?) (16.6% of 18 inhumation graves)\(^{35}\) (Pronin, Smirnova 2006, p.34ff). Thus, counting all 79 Povarovka graves from the 11th to the 14th centuries, spearheads were found here in eight graves, that is, only about 10%, or 20% of all 41 more or less ‘complete’ graves.

At Shosejnoje cemetery, which is almost destroyed by sand quarrying, plenty of different weapons from the period mentioned were found in 2007, in disturbed cremation graves: three M-type and other battle-axes, T1 sword parts, two Va-type sword scabbard chapes, and numerous spearheads (Skvortsov 2007b; Shiroukhov 2011, p.186ff; Širouchovas 2011, p.280ff).

The situation of Kholmy (Mülsen), which was investigated in 2010 by the Sambian Archaeological Expedition, is rather similar. Upper layers of cremations were also badly disturbed by ploughing and other agricultural activities. Therefore, weapons were found in only six out of 77 cremation graves from the 11th and 12th centuries (7.8%).\(^{40}\) Among the weapons are a bronze macehead from grave 51a, swords and parts of swords from graves 28, 36 and 88, and spearheads from graves 28, 35a, 36, 51a, 51b and 88. Graves with weapons make up about 22%, if we count 27 double-layer cremations with more or less preserved upper layers in the upper layers of 22 cremations:\(^{36}\) 18 double-layer cremations with horse harnesses, and in four cremation graves (?) without horse harnesses or traces of horse remains.\(^{37}\) That is about 27% of 81 more or less ‘complete’ 11th to 13th-century graves investigated here, or 66.7% of 27 double-layer cremations with more or less preserved upper layers.\(^{38}\) Spearheads (one to three) were found here in 20 cremations (91%).\(^{39}\) Swords and parts of them are known from graves 38, 71, 760, and as stray finds (13.6%) (Zubarev 2003; 2004; Nigmatullin et al., 2005, p.60, Fig. 7; Shiroukhov 2011, p.186, Fig. 13.6).

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The situation of Kl. Kaup cemetery, investigated between 2009 and 2011 by V. Kulakov, is quite unique, because its upper layers, covered by forest, were not disturbed by any urban or agricultural activities for at least 200 years. Weapons, mainly spearheads, occurred in ten out of 21 (20) tenth to 13th-century double-layer cremations investigated by V. Kulakov. That is, about 50% of all cremation graves investigated during 2009 and 2010. An M-type axe was found in double-layer cremation grave 33, together with spearheads. Several local and imported arrowheads, known in other Baltic territories, were found in cremations 24(26), 28, 29, 37 and 40 (Kazakevičius 2004, p.75). A spearhead and part of a sword shoulder belt (?) are known from Durbes Dīri, Griežė49 and other cemeteries from the 11th to 13th centuries. For example, there are no finds of bent battle-axes, unlike the Curonians, where bent axes are known from Durbes Dīri, Griežė and other cemeteries (Zemtíts 2004, p.79ff, Fig. 15.3; Žulkus 2004, p.176). However, bent or twisted swords are known much better in tenth to 13th-century Prussian cremations, being comparable in number to Curonian finds (Griciuvienė 2009, pp.230-231, 332). Thus, five out of 11 sword blades found at Klincovka-1 were bent or twisted (Kulakov 1999, pp.213, 222, 235, 240).48 Another six sword blades were found already broken or in pieces. Twisted and very bent S-shape swords are also known from recently investigated 11th to 13th-century double-layer cremations at Gerojskoje-5 (grave 76), Kholmy (36), Kleinheide and Mitino (408) (Zubarev 2004; Skvortsov 2010, p.139; Zubkov 2012; Skvortsov 2012).

While the Prussians began to use destructive burial rituals of cremation several centuries before the Curonians, there were much fewer bent, distorted or broken artefacts found in their cemeteries from the 11th to the 13th centuries. For example, there are no finds of bent battle-axes, unlike the Curonians, where bent axes are known from Durbes Dīri, Griežė and other cemeteries (Zemtíts 2004, p.79ff, Fig. 15.3; Žulkus 2004, p.176). However, bent or twisted swords are known much better in tenth to 13th-century Prussian cremations, being comparable in number to Curonian finds (Griciuvienė 2009, pp.230-231, 332). Thus, five out of 11 sword blades found at Klincovka-1 were bent or twisted (Kulakov 1999, pp.213, 222, 235, 240). Another six sword blades were found already broken or in pieces. Twisted and very bent S-shaped swords are also known from recently investigated 11th to 13th-century double-layer cremations at Gerojskoje-5 (grave 76), Kholmy (36), Kleinheide and Mitino (408) (Zubarev 2004; Skvortsov 2010, p.139; Zubkov 2012; Skvortsov 2012).

It is also worth mentioning that scythes and sickles, so familiar both from Curonian male inhumation graves of the tenth and 11th centuries, and cremations up to the beginning of the 13th century (Žulkus 1979, 1994a, p.109). There is also one untypical Prussian grave with several severely bent spears mentioned by B v. zur Mühlen as Bledau-1 grave 1 (Mühlen 1975, p.145. Fig. 55.1). The grave goods of this grave are very similar to tenth-century Prussian male cremations, and probably belonged to the Linkuhnen cemetery, mistakenly attributed in this table to a place in Bledau (?). If not, this complex is unique to Sambian tenth-century culture, and might have belonged to incomers from the south bank of the Nemunas (Kulakov 1999a, p.109).

41 Excluding a plot disturbed by a sandpit and investigated by C. Engel before the building of the Cranz-Wosegau-Mülsen road.  
42 The upper layer of cremation grave 39 is overlaid and disturbed by a later inhumation. Therefore, grave 39 is not included in the statistical analysis.  
43 Graves 24(26), 27, 29, 33, 34, 37, 40, 44.  
44 The same goes for Prussian ornaments.  
45 Bent spearheads, as a relic of an old tradition, probably spread during the 11th century in West Baltic sites, such as Curonian Laistai46 or Puodkaliai.47 Thus at the Klincovka-1 cemetery, slightly bent (clearly by fire) spearheads were found in only seven 11th and 12th-century graves out of all 51 with spears (14%) (Kulakov 1999, p.213ff, Figs. 17, 20, 32, 55).48 No Klincovka-1 inlaid spearheads were bent or crooked. Bent spearheads were also not found in any of the recently investigated Sambian cemeteries. The custom of deforming spearheads was not very popular in Prussian post-Viking Age society. Probably the latest Prussian bent spearheads are known from Alt-Wellau and Stangenwalde male inhumation graves (Valuev 1997, p.45, Figs. 105; 107; 127; 2003, Fig. 3; Biermann et al. 2011, Figs. 23.1; 24.2).

While the Prussians began to use destructive burial rituals of cremation several centuries before the Curonians, there were much fewer bent, distorted or broken artefacts found in their cemeteries from the 11th to the 13th centuries. For example, there are no finds of bent battle-axes, unlike the Curonians, where bent axes are known from Durbes Dīri, Griežė and other cemeteries (Zemtíts 2004, p.79ff, Fig. 15.3; Žulkus 2004, p.176). However, bent or twisted swords are known much better in tenth to 13th-century Prussian cremations, being comparable in number to Curonian finds (Griciuvienė 2009, pp.230-231, 332). Thus, five out of 11 sword blades found at Klincovka-1 were bent or twisted (Kulakov 1999, pp.213, 222, 235, 240). Another six sword blades were found already broken or in pieces. Twisted and very bent S-shaped swords are also known from recently investigated 11th to 13th-century double-layer cremations at Gerojskoje-5 (grave 76), Kholmy (36), Kleinheide and Mitino (408) (Zubarev 2004; Skvortsov 2010, p.139; Zubkov 2012; Skvortsov 2012).
pp.51-63; Stankus 1995, p.75ff; Butėnas, Butėnienė 2002, pp.20-21, 114-116; Asaris et al. 2008, p.74ff; Griciuvienė 2009, p.231ff), are almost unknown for Prussian warrior cremations. Perhaps there was no need to show Prussian men as peasants or ploughmen on their way to the underworld. Is it just because those buried with weapons and horse harnesses were not? There is one exception, the late 12th-century (?) inhumation grave 12 at Ekritten, where a sickle occurred together with a Ruthenian helmet, several inlaid spears, a bronze plate and a horse harness (La Baume 1940, p.84ff, Fig. 2.c). This grave probably appeared under the strong influence of the 11th to 12th-century ‘chamber graves’ of West Slavic types, like Cedynia or Kaldus (Janowski, Kurasiński 2003, p.655ff; Janowski 2011, p.257ff).

Thus, we may conclude that the weapons situation of ten Prussian cemeteries described above is unequal. The number of weapons per cemetery varies from 8% at Kholmy to 81% at Alejka-3, or from 22% to 87% if we count more or less ‘complete’ and ‘preserved’ graves from the same cemeteries. On average, about 40% to 50% are buried with weapons in Prussian cemeteries from the late tenth to the 13th century. Every cemetery’s situation depends on the stage of both investigation and preservation. Thus, statistical data from Bludau, Gerojskoje-5, Kholmy, Povarovka and Schuditten is not objective, because of the strong disturbance of the graves’ upper layers by agricultural activities. So if we count from the other five cemeteries left, we will have about 60% graves with weapons from the total number of graves. Thus, a 40% to 60% average of Prussian graves with weapons corresponds to a situation which could be close to the reality.

It is the same with ‘armed’ Prussian graves with horse harnesses. They vary from about 30% at Schuditten, to 100% at Alejka-3, Kholmy, Klincovka-1 and Kl. Kaup cemeteries, being on average 75.5%. If we deduct all the data from prewar investigated cemeteries, where some horse burials might not have been detected due to the poor methodology, we will have on average about 90% of graves with weapons supported by horse burials. At this point in the research, we may conclude that armed horsemen represent on average 50% of the population of tenth to 13th-century Prussian cemeteries, varying at different sites. Thus, Prussian society in this period was rather egalitarian, with a large group of warriors.

A number of these graves definitely correspond to the social level of the warrior elite. The ruling stratum of Prussian society in this case is represented by graves supported with symbols of power and wealth, such as swords, maces, bronze and silver-inlaid weapons, and horse harnesses, and other imported weapons and goods described above. For example, in the Klincovka-1 cemetery, about 21% to 26% of those buried with weapons were supported with swords, maces, weapons and riding equipment inlaid with non-ferrous metals (or about 10% to 12% of all the ‘complete’ graves). This situation is close to other more or less preserved and investigated Sambian cemeteries from that period: such distinguished graves form about 8% at Kholmy cemetery, 13% at Gerojskoje-5, and about 15% of graves with weapons and horse harnesses at Alejka-3. This preliminary data probably means that approximately 10% of the armed and mounted Sambian...

<table>
<thead>
<tr>
<th>No.</th>
<th>Cemetery</th>
<th>Graves: Cremations (C) Inhumation (I)</th>
<th>Total graves number</th>
<th>Gravest with weapons</th>
<th>Gravest with weapons and horse harness</th>
<th>Gravest with weapons from ‘complete’ graves number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bludau-II</td>
<td>C+I. 55</td>
<td>6 11</td>
<td>4 66.7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Laptau</td>
<td>C. 32</td>
<td>22 68.8</td>
<td>8 36.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Schuditten</td>
<td>C.+I. 35</td>
<td>7 20</td>
<td>2 28.6</td>
<td>22 32</td>
<td></td>
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<tr>
<td>4</td>
<td>Seefeld</td>
<td>C. 22</td>
<td>13 59.1</td>
<td>11 84.6</td>
<td>21 62</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Alejka-3</td>
<td>C. 32</td>
<td>26 81.2</td>
<td>25 96.2</td>
<td>30 86.7</td>
<td></td>
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<tr>
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<td>Gerojskoje-5</td>
<td>C. 81</td>
<td>22 27.2</td>
<td>18 81.8</td>
<td>27 66.7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Kholmy</td>
<td>C. 32</td>
<td>6 7.8</td>
<td>6 100</td>
<td>27 22.2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Klein Kaup</td>
<td>C. 21</td>
<td>10 47.6</td>
<td>10 100</td>
<td>20 50</td>
<td></td>
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<tr>
<td>9</td>
<td>Klincovka-1</td>
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<td>56 34.5</td>
<td>55 98.2</td>
<td>118 47</td>
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<tr>
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<td>Povarovka</td>
<td>C+I 79</td>
<td>8 10.1</td>
<td>5 62.5</td>
<td>41 19.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td>36.7</td>
<td>75.5</td>
<td>48.3</td>
<td></td>
</tr>
</tbody>
</table>
Prussian graves from the tenth to the 13th centuries with horse harnesses

The first graves accompanied by horse burials appeared in the future Prussian area in phase B1 (graves 44, 45 at Muntowo/Alt Muntowen) (Nowakowski 2003, p.52ff). Today, in Sambia-Natangia, there are at least 110 cemeteries known with horse burials dating from the Roman Iron Age to the early Medieval period (Skvortsov 2010, p.25). At the turn of the fifth and sixth centuries, human cremations with horse burials below them (double-layer cremation graves) appeared. From that time, the culture of the population that inhabited the Sambian-Natangian area is described as ‘Prussian’ (Kulakov 1994b, p.159; Skvortsov 2010, p.28). A ‘double-layer’ cremation with a horse burial at the bottom of the grave pit became one of the distinctive indicators of sixth to 13th-century Prussian culture. By the sixth to eighth centuries, horse burials formed 25% to 30% of all the graves in Prussian cemeteries (Skvortsov 2010, p.26ff; Kontny et al. 2011, p.116ff).

Known Prussian double-layer cremations with horse burials dating from the early ninth century to the mid-10th century are still rather rare. They could include Zophen (Suvorovo) graves 50, 99, 152a, 335-337, 365, 415, 433, 467 and 472; Klincovka-1 graves 90, 98, 100 and 158; and Kl. Kaup graves 41 and 45 (Heym 1938, Tables 4, 8, 12, 15, 17; Kulakov 1999, pp.247-250, 270-271, Figs. 41-44; 62; 2010b, p.21ff, Figs. 113; 155). There is a much larger number of cremations supported with horses dating from the late tenth to the late 12th century in Prussian cemeteries. For the Late Viking Age and Early Medieval period, today we know about more than 60 tenth to 13th-century Prussian cemeteries of double-layer cremations with more than 750 horse burials in the Kaliningrad region (Table 2). (Fig.12)

It is clear that double-layer cremations (with horse burials) prevailed in tenth to 13th-century Prussian burial rites. The main Prussian tenth to 13-century grave goods accompanying horses and horsemen are iron bridle bits with ring terminals and cheek-pieces, horse bells on the collar (bells), bridles with rivets, and pendants in different forms, stirrups, spurs, saddles and parts of saddles. Horse burial data from five recently investigated tenth to 13th-century Sambian cemeteries, at Alejka-3, Gerojskoje-5, Kholmy, Klinkovka-1 and Povarovka, is presented below. At the Alejka-3 cemetery, 30 double-layer cremations with horse burials were revealed. That is, about 91% of all 33 graves investigated there. Twenty-six horse burials may be called ‘complete’ (with three to six pieces of horse harnesses) (87%). In quite richly equipped graves, such as graves 501, 503, 509, 523 and 523A, five to ten pieces of horse harnesses were found (not including bridle bells and rivets). Horse harnesses suitable for more than one horse, like two bridle bits, or three or four stirrups, were found in graves 503, 523 and 531 (9%). No bridle bit at all was found in 22 graves, which is about 73% of the 30 graves with horse harnesses. A bridle bit with cheek-pieces was found in four graves: 508, 520, 525A and 537 (18% of graves with a bridle bit). Stirrups were found in 23 horse burials (76%). Bells were found in 14 horse burials (47%). As for other Prussian ‘horse cemeteries’, spurs are less common finds, they occurred in only seven Alejka-3 graves (23%).

Wooden saddles and parts of wooden saddles were found in horse burials 502, 520 and 521 (Skvortsov 2007). The saddle bows from grave 520 are decorated with mythological scenes: horse and solar images (Shiourohov, Skvortsov 2009, p.26ff; Skvortsov, Khokhlov 2010, p.343ff).

If we compare the Alejka-3 graves with horse harnesses to the same with weapons, it turns out that in 25 double-layer cremations, spearheads were also found (83%). The figure for the Gerojskoje-5 cemetery is 77 graves with horse harnesses. That is, about 95% of 81 of the tenth to 13th-century cremations investigated. Four to six horse harness pieces (up to 12 items) were found in 30 graves. That is, about 40% of all horse


54 A total of 36 graves were investigated in the general number. Graves 538, 541 and 542, supposed double-layer cremations, were preserved (Skvortsov 2007).


57 Graves 500, 502, 503, 505, 506, 509, 516, 517, 522, 523, 523A, 527, 528, 534, 539.

58 500, 503, 504, 523, 524B, 527, 540.

59 Graves 1, 2, 3, 10, 11, 12, 16, 20, 21, 22, 23, 24, 25, 26, 36, 37a, 40, 41/42, 43, 44a, 45, 45/95, 46, 47, 48, 48a, 49, 53, 54, 55, 56, 57, 57a, 59, 59a, 59d, 60, 61, 62, 63, 64, 64a, 65, 66, 67, 68, 69, 70, 73, 74, 74a, 75, 77, 78, 80, 81a, 816, 88, 90, 95, 96, 97, 98, 99, 100, 101, 102, 102a, 103, 104, 105, 107, 119, 120, 121, 122 (Zubarev 2004).

60 Grave 95: two bridle bits with ring terminals, six stirrups, two bells on collar, two horse buckles, and a bridle decorated with rivets and pendants.
burials investigated there. In six graves, double or even triple sets of horse harnesses were found, which possibly indicates double or triple horse burials (8%).

Riding equipment found at Gerojskoje-5 is represented by bridle bits, different types of stirrups and spurs, bells, bridle rivets, pendants and bells. Bridle bits with ring terminals were found in 35 graves (60%), and with cheek-pieces in 23 (40%).

Horse bridle bells were found here in 32 graves (41.6%).

Stirrups of different types, often a pair, were found in 58 double-layer cremations (75.3%). In four horse burials, odd stirrups were found. The custom of putting different stirrups perhaps demonstrates a kind of symbolism in the Prussian burial rite, when damaged or unused items in everyday life were used as grave goods. Spurs were found less frequently, in 12 graves.

At Kholmy cemetery, 65 tenth to 13th-century double-layer cremations and horse burials were found. That is, about 84% of the 77 graves investigated. Ten graves from the general number are horse burials, without distinct upper cremation layers. That is, 13% of all 77 graves, or 15.4% of the 65 double-layer cremations with horse burials. In addition, five graves with double-layer cremation stratigraphy, but with no horse harness in the lower layers, are known here: graves 43, 51d, 58, 72 and 87 (8% of the 65 horse burials).

There are also known horse burials from the tenth to the 13th centuries at Cojehnen (1 grave), Logvinovo/Medena (2), Mitino/Stantau (2), Platupönennen/Iskrovo (4), Possritten/Davydovka (2), Powayen/Cherepanovo (4), Pr. Arnau (1) and Widitten/Izhevskoje (8) (Kulakov 1990; Skvortsov 2010).

Table 2. Prussian tenth to 13th-century cemeteries with horse burials in the Sambian-Natangian area (from 10 to 150)

<table>
<thead>
<tr>
<th>No.</th>
<th>Number of site on map</th>
<th>Cemetery</th>
<th>Number of horse graves</th>
<th>Years of investigations</th>
<th>Dating centuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48</td>
<td>Klinckovka-1 (Irzekapinis)</td>
<td>1411</td>
<td>1977-1986</td>
<td>10-12</td>
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<tr>
<td>2</td>
<td>41</td>
<td>Zophen/Suvorovo</td>
<td>116</td>
<td>1928</td>
<td>10-12/13</td>
</tr>
<tr>
<td>5</td>
<td>46</td>
<td>Kholmny/Mulsen</td>
<td>65</td>
<td>2010</td>
<td>10-12/13</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>Blöcken/Osokino</td>
<td>About 40-50</td>
<td>1897</td>
<td>10-12</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Bludau-II/Kostrovo</td>
<td>40</td>
<td>1906</td>
<td>10-12/13</td>
</tr>
<tr>
<td>8</td>
<td>49</td>
<td>Klein Kaup (Malyj Kaup)</td>
<td>36?</td>
<td>2009-2010/1930-1934(?)</td>
<td>10-12/13</td>
</tr>
<tr>
<td>10</td>
<td>42</td>
<td>Alejka-3 (Jaugehnen)</td>
<td>30</td>
<td>2006-2007</td>
<td>11-12</td>
</tr>
<tr>
<td>11</td>
<td>33</td>
<td>Schulstein/Vol'noje</td>
<td>29 (Aschenplatz)</td>
<td>1906</td>
<td>11-12/13</td>
</tr>
<tr>
<td>12</td>
<td>34</td>
<td>Seefeld/Prostorno</td>
<td>20 (Aschenplatz)</td>
<td>1874-1899</td>
<td>10-13</td>
</tr>
<tr>
<td>13</td>
<td>43</td>
<td>Berezovka/Groß Ottenhagen</td>
<td>12</td>
<td>2003-2004</td>
<td>11-12</td>
</tr>
<tr>
<td>14</td>
<td>17</td>
<td>Laptau/Muromskoje</td>
<td>10</td>
<td>1906</td>
<td>10-11-12</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>Ekritten-I,II/Vetrovo</td>
<td>About 106*</td>
<td>1890-1895</td>
<td>10-11-12</td>
</tr>
</tbody>
</table>

1 There are also known horse burials from the tenth to the 13th centuries at Cojehnen (1 grave), Logvinovo/Medena (2), Mitino/Stantau (2), Platupönennen/Iskrovo (4), Possritten/Davydovka (2), Powayen/Cherepanovo (4), Pr. Arnau (1) and Widitten/Izhevskoje (8) (Kulakov 1990; Skvortsov 2010).

double-layer cremations (16% of graves with horse harnesses) (Zubarev 2004).

Weapons (spearheads) occurred only in the context of 17 Gerojskoje-5 graves, which is about 22% of the 77 double-layer cremations (Zubarev 2004). Some graves probably did not have any weapons before being damaged by ploughing, and could have belonged to a less prosperous or a less powerful member of society. Horses seem to be not only a warrior-horseman grave good, but probably a guide to the underworld for other members of Prussian society too.

At Kholmy cemetery, 65 tenth to 13th-century double-layer cremations and horse burials were found. That is, about 84% of the 77 graves investigated. Ten graves from the general number are horse burials, without distinct upper cremation layers. That is, 13% of all 77 graves, or 15.4% of the 65 double-layer cremations with horse burials. In addition, five graves with double-layer cremation stratigraphy, but with no horse harness in the lower layers, are known here: graves 43, 51d, 58, 72 and 87 (8% of the 65 horse burials).

Gravels 22, 46, 65, 95, 100, 102.
Gravels 10, 12, 21, 22, 23, 24, 36, 37a, 45-95, 47, 48, 48a, 49, 55, 59, 60, 61, 62, 63, 64, 64a, 65, 66, 77, 80, 81b, 85, 95, 98, 99, 100, 103, 104, 120.
Graves 1, 3, 11, 22, 40, 43, 45, 46, 53, 57, 70, 73, 74, 74a, 75, 78, 816, 96, 101, 102, 102a, 121, 122.
Graves 1, 3, 10, 11, 16, 20, 21, 43, 45, 45/95, 46, 48, 49, 53, 54, 55, 57a, 60, 61, 62, 65, 67, 73, 74, 77, 78, 81a, 95, 97, 100, 102a, 119.
Graves 1, 2, 3, 10, 11, 16, 20, 21, 22, 25, 40, 43, 44a, 45, 45/95, 46, 48, 48a, 49, 53, 55, 57a, 59, 596, 60, 61, 62, 64a, 65, 66, 67, 70, 73, 74a, 75, 77, 78, 80, 81, 81a, 81b, 90, 95, 96, 98, 99, 100, 101, 102, 102a, 103, 105, 119, 120, 121, 122.
Graves 62, 78, 103, 119.

Gravels 2, 10, 16, 40, 45, 45/95, 46, 53, 57, 66, 78, 81.
Gravels 2, 3, 4, 5, 8, 11, 14, 15, 21, 24a, 26, 28, 32, 35a, 36, 39, 40, 46, 48, 50, 51a, 51b, 51c, 51d, 53, 54, 55, 56, 57, 59, 60, 61, 616, 62, 63, 65, 67, 68, 69, 69a1, 69b1, 69b8, 70, 70a, 72, 74, 76, 77, 78, 79, 80, 81, 82, 83, 85, 86, 87, 88, 88b, 91, 93, 95, 96, 97, 100.

Graves 2, 3, 14, 15, 24a, 26, 55, 57, 61, 80.
Riding gear was found in 58 Klholmy double-layer cremations. That is, about 90% of all horse burials. Due to the continuous agricultural and urban activities, complete horse harness sets (from three to five titles) were indicated in only 13 graves, that is, 20% of all 65 horse burials, or 22.4% of the 58 graves with horse harnesses. At Klholmy, seven hypothetical double horse burials, marked mainly by double sets of horse harnesses, were found (11% of horse burials).

Bridle bits were found in 49 double-layer cremations of the 65 investigated at Klholmy; that is, 84.5% of 58 graves with horse harnesses. In 40 graves, bridle bits with ring terminals occurred (81.6%), and in eight with cheek-pieces (16.3%). All bridle bits with cheek-pieces were found in eight quite rich graves with weapons and horse harnesses.87 Bridle bits with ring terminals occurred in 11 double-layer cremations (19% of 58 graves with horse harnesses). Stirrups are known from 23 Klholmy horse burials (40%). They are frequently found in pairs, 11 graves (47.8%),84 or just singles, eight graves (35%).75 In four double men’s graves, accompanied by two horses, two pairs of stirrups were found (17.4%).88 Spurs are quite rare at Klholmy. They are known only from six double-layer cremations (10%).77

Weapons were found in only seven Klholmy graves with horse harnesses (11%).89 Macheads, pieces of bronze bowls and other imports were found here in five graves (7.7%) (Zubkov 2012). The Klholmy-1 cemetery gives us our most complete data both in the study of weapons and horse harnesses. A total of 135 double-layer cremations with horse harnesses,80 and six horse harnesses without clear traces of upper cremations,81 are known from all 161 tenth to 12th-century graves investigated here. Altogether, 141 graves with horse harnesses or horse burials have been uncovered at Klholmy-1, or 87.6% of the total number of investigated graves. It is important to stress that weapons were found in only 56 double-layer cremations with horse harnesses.82 This makes only 41.5% of 135 double-layer cremations accompanied by horse burials (Kulakov 1980; 1999).83 It might prove that the horse was not just warrior-horseman property or a guide to the world of the ancestors in Prussian burial rites.

Cremations uncovered at Klholmy-1 were accompanied by one, two and even three horses (or suitable harness sets). Most double-triple horse burials were found below rich cremations with weapons and imported goods: a total of ten graves.84 However, two or three horse burials were also found under five graves without weapons in the upper layers.85 Thus, double-triple horse burials were identified in 15 double-layer cremations from 141 horse burials investigated, which is about 11%. It is also important to stress the four graves with double-triple horse burials which have two or three separate groups of burnt bones in the upper cremation layers, a kind of ‘group’ or ‘collective’ grave: graves 15, 64, 69 and 110. Graves 15, 64 and 69 are richly equipped with weapons and imports, probably belonging to collective warrior-horseman graves, or to the same with women’s (?) remains.

Horse harnesses were found in 140 ‘horse burials’ from the 141 mentioned (99%).86 Horse harness sets of three to eight titles occurred in 100 graves, which is about 71% of the 140 graves with horse harnesses.87 Bridle bits with ring terminals and cheek-pieces were found in altogether 126 Klholmy-1 horse buri-
Bridle bits with cheek-pieces were found in 42 graves (33.3%), mainly in ‘complete’ graves with weapons and imported goods: 33 graves (78.5%).

Bridle bits with ring terminals were found in 77 Klincovka-1 horse burials, that is, 61.1%. Bridle bits with ring terminals occurred in only 24 cremations with weapons and/or imports (31% of graves with bridle bits).

Most bridle bits with ring terminals were not found in rich graves: 53 (69%). Thus, bridle bits with cheek-pieces were found at Klincovka-1 and in other Prussian cemeteries mentioned mainly in rich warrior-horseman cremations, or less frequently in other richly equipped graves. Bridle bits with ring terminals were usually found in graves that were not rich. This is similar to some south Curonian cemetery data (Butćnas, Butćniene 2002, p.55).

Bells occurred in 66 Klincovka-1 horse burials, that is, about 47% of 140 graves with horse harnesses. Stirrups, often inlaid with non-ferrous metals, were found in 112 graves (80%) of 140 graves with horse harnesses. Stirrups occurred mainly in pairs: 97 graves (87%). Stirrups of different types were also used here as grave goods in one or several pairs. Thus, in Klincovka-1 grave 48, two out of the three stirrups belonged to one type, the third to another. Graves with only one stirrup probably had the same symbolic meaning: graves 16 (?), 38, 87 and 106 (3.6%). In nine double horse burials, two pairs of stirrups were found (8%).

Grave 64, one of the richest Klincovka-1 double-layer cremations, where three men were buried with weapons, imports and at least three horses, had eight stirrups (four pairs).

Parts of saddles found at Klincovka-1 have not survived. The same goes for photographs or other documents. According to V. Kulakov’s publications and excavation reports, parts of wooden saddles (with bronze rivets) were found in three Klincovka-1 graves: 6, 52 and 84 (2.1%). No Klincovka-1 graves with saddles are rich, they are without any weapons or imports (Kulakov 1980, pp.221; 1999, pp.235, 245).

Spurs are known from 50 Klincovka-1 graves (36% of 140 graves with horse harnesses). It is logical that spurs were found mainly in cremations containing weapons, 32 graves, or 64% of all graves with spurs. As in other Prussian cemeteries from this period, spurs have been found mostly singly, in 40 graves (80%), and in pairs, in five graves. In ten graves, there are 2.3 (32) or even four (69) spurs (20%) known.

Spurs were found both in lower (41 or 82%) and upper (nine or 18%) Klincovka-1 grave layers. In addition, spurs occurred in 16 armless graves (Kulakov 1980; 1999). This probably demonstrates that not all the individuals who were buried with horses were warriors. They could probably have been people of other ‘professions’, such as traders, who were not involved in warrior activities, or people with no right to carry weapons. At Povarovka cemetery, only 38 horse burials were found.

Due to the high number of single-layer cremations, this is about 62% of the 61 cremation graves investigated here. Twenty-two graves are double-layer cremations, and 16 are horse burials, with no distinct traces of cremation layers (?). Horse harnesses were uncovered in 36 graves, that is, about 60% of all cremation graves, or about 95% of 38 horse burials (Pronin, Smirnova 2006, p.34ff).

Weapons (spearheads) were found in only five graves with horse harnesses, making about 23% of 22 double-layer cremations. Imported goods were found in only six double-layer cremations (27%). About 50% of double-layer cremation upper layers are supported only with ‘poor’ artefacts, such as potsherds, case combs and fragments of bronze artefacts.

Bridle bits were found in all 36 Povarovka graves with horse harnesses (100%). Bridle bits with ring terminals occurred in 26 graves (72%).

Graves 1, 4, 5a, 6, 10, 12, 15, 16, 28, 28a, 30, 31, 33, 34, 35, 36, 37, 37a, 38, 39, 41, 43 (?), 44, 45, 48, 49, 61, 64, 68, 71, 130, 136, 141.

95 Graves 1, 2, 7, 8, 9, 11, 22, 27, 32, 40, 47, 50, 53, 73, 85, 93, 108, 117, 119, 121, 122, 124, 125, 148.


97 Graves 1, 2, 4, 5a, 5b, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 20, 21, 22, 23, 24, 25, 26, 28, 30, 31, 32, 34, 35, 37, 37a, 40, 41, 42, 43, 44, 47, 48, 49, 53, 56, 58, 59, 64, 65, 66, 68, 69, 73, 76, 77, 79, 81, 85, 86, 87, 94, 104, 107, 118, 119, 121, 125, 136, 140.

98 Graves 1, 2, 3a, 5b, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 28a, 30, 31, 32, 33, 34, 35, 36, 37, 37a, 38, 39, 40, 41, 42, 43, 44, 45, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 64, 66, 67, 68, 69, 71, 73, 74, 77, 78, 81, 82, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 96, 97, 98, 99, 102, 104, 105, 106, 107, 108, 109, 110, 111, 117, 118, 119, 121, 122, 124, 125, 130, 132, 136, 137, 138, 140, 141, 142, 149, 153, 157.

99 Graves 1, 8, 14, 15, 32, 37, 69, 91, 110.
Prussian Graves in the Sambian Peninsula, with Imports, Weapons and Horse Harnesses, from the Tenth to the Thirteenth Century: The Question of the Warrior Elite

SHIROUKHOV

arovka horse burials. There are approximately 106 stirrup terminals are known from 15 graves (42%). Also, in four graves both types of bridle bit were found (Pronin, Smirnova 2006, p.347ff). Although the upper cremation layers of Povarovka graves are often disturbed and not rich in grave goods, in the lower layers of nine graves, from two to seven bridle bits were found. Horse bells were found in ten Povarovka graves (28%). Stirrups are the most numerous find in Povarovka horse burials. There are approximately 106 stirrups known from 33 graves (92%). As in other Prussian tenth to 13th-century cemeteries, stirrups are often found in pairs (13 graves, or 40% of graves with stirrups). Two pairs of stirrups occurred in six graves (18.2%). In five graves three stirrups were found (15.5%). Also, in three graves only one stirrup was found (9.1%). Spurs were found only in the context of one disturbed double-layer cremation (?), grave II, which is approximately 3% of 33 graves with horse harnesses (Novikov 2006, p.347ff).

The number of horse harnesses is often much higher than that of horse remains in Povarovka graves. Thus, one set of horse harnesses was found in 19 single horse burials out of all 36 (53%). From one to eight horse harness sets were found in 15 graves with one to three horse burials. For example, horse harness sets suitable for six to eight (!) horses were uncovered in grave I, with one visible horse skeleton. However, some graves were notably poor, such as grave XIV, with only a stirrup, or grave XXVI, with only two horse buckles. Thus, we may count here approximately 14 double or even triple horse burials, or those with one skeleton and several riding gear sets (42%). Ten Povarovka graves were ‘overloaded’ with riding gear (26% of all 38 horse burials). This might have had both an economic and a symbolic meaning, being both a manifestation of plentiful goods and symbolising an additional horse without the horse itself. Horse harnesses are also known from two Povarovka inhumation graves, preliminarily dated to the late 12th or early 13th century: grave 5 and 17 (11% of all 18 inhumation graves) (Pronin, Smirnova 2006, pp.80, 87-88).

In spite of the diverse statistical data from Prussian tenth to 13th-century cremation cemeteries, at least one common tendency needs to be stressed: human graves with horses or horse burials themselves make up on average 85% to 90% of all the number of tenth to 13th-century graves (Table 3).

It is clear that the proportions of graves of armed horsemen and armless members of society buried with horses are not permanently connected. There is no doubt that people buried with weapons, imports and richly adorned horses played an important role in Prussian society. It is also obvious that the majority of those buried with horses have no weapons or other status goods in their graves. This fact demonstrates again the importance of the horse, both in the everyday life and in the burial rituals of the Prussians. It could also prove the theory that not only armed horsemen, professional warriors, were buried with horses. There were probably other, more or less influential people, like merchants or wealthy women (?), or even people who did not have much property or the right to bear arms. Hypothetically, they could be male adolescent Prussians who had already passed through a rite of initiation, who in the event of their early death already had the right to be buried with their horse. This could be partially proved by the Klinckovka-1 double-layer cremations without weapons, imports or other prosperous goods.

This is typical of all cultures with an active role of the horse in everyday life. Giovanni da Pian del Carpine wrote about the Polovtsians around 1250: ‘They used to sit two or three-year-old children in the saddle and teach them to ride ...’ (Pletneva 2010, p.146). This situation is typical of all nomadic societies that put a strong importance on the horse (Kradin 2007, p.22), and could also apply to male adolescent Prussians (Okulicz-Kozaryn 2000, p.217).

Were Prussian women buried with horses in individual graves? Perhaps they used to ride horses in everyday life, and were also buried with horses, as is known in other cultures where the horse played a significant role. However, without proper anthropological studies, it is still very doubtful. In the middle of the 13th century, Carpine wrote about Polovtsian women: ‘Girls and women ride on horseback and dare to gallop like men ...’ (Pletneva 2010, p.137). In some cases, Polovtsian women had the right to bear arms and act as warriors, too (Tolochko 2003, p.103). There are also several 19th-century ethnographic accounts by Otto Glogau and other authors about girls and women from Prussian Lithuania who often used to ride on horseback ‘like men’ (Korzonaite 2009, p.787). Although we cannot apply these 19th-century accounts and ethnographic notions about 13th-century nomadic societies to Prus-
In favour of Prussian women, individual graves accompanied by horses could testify to the distribution of ‘horsewoman’ graves in the tenth and 11th centuries in the Carpathian region, today Hungary and Slovakia (Revesz 1995, p.307ff). A Samogitian girl’s grave 61 from the ninth or tenth century accompanied by a horse scull is known from Paragaudis cemetery (Valatka 2004, p.235). Moreover, the anthropological study of several cremations with horses from Mitino Migration Period cemetery proves that some individuals buried together with horses were not male (Dobrovolskaja 2010, p.210ff). Horses also accompanied burials of women in the sixth or seventh-century Nowinka cemetery (Kontny et al. 2011, p.128). Talking about the probability of the existence of women’s graves supported with horse burials, B. Werbart stated: ‘Horse graves should be regarded more as an element of the ritual symbolism of the grave tradition, a symbolism with economic overtones’ (Werbart 1995, p.125).

The significance of horses in Prussian society was stressed many times by the authors of ninth to 14th-century chronicles. Peter of Duisburg mentioned the several thousand horsemen Sambia could raise (Duisburg III.3). Horse ‘phenomena’ of the Early Medieval Prussians have only one close parallel in the Baltic world, the region of central Lithuania. Probable Sambian-Natangian and central Lithuanian cultural links have been studied briefly by V. Kulakov, M. Bertašius and V. Žulkus (Kulakov 1994b, p.154; Bertašius 2002, pp.67-68, 178-179, 210-211, Fig. 73; 2009, pp.107-109; Žulkus 2004, pp.170-171, 175).

Concluding this review of Prussian tenth to 13th-century horse burials on the basis of five recently investigated cemeteries, we may state the following facts (Table 4).

Double-layer cremations accompanied by horse burials or ‘single’ horse burials comprise from 62% to 95% of all graves (84% on average). This was the main burial rite of the Prussians from the tenth to the early 13th century.

Horse harnesses are found in 90% to 100% of horse burials (an average of 97%). Horses equipped with riding gear and buried under a cremated individual could first of all be a kind of transport facility on the way to the underworld, and only after that could manifest the prosperity of the deceased, or could be a sacrifice.

Horse harness sets, composed mainly of three to six pieces, comprise from 20% to 94% (on average 62%) in different cemeteries. This probably demonstrates that two or three, or even three or four, horse burials could belong to quite rich owners. It is likely that richly equipped horses or double-triple horse burials reflected the prosperity of their owners. However, several harness sets found in a single horse burial could symbolise the burial of several horses.

105 Let us also not forget other customs of the Prussians related to Medieval nomadic cultures, such as drinking koumiss, ritual horse races, and building stone sculptures.

106 Human bones that were found in this grave were not investigated anthropologically (editorial note).

Table 3. Prussian armed horseman graves from the tenth to the 13th century

<table>
<thead>
<tr>
<th>No.</th>
<th>Cemetery</th>
<th>Double layer cremations and horse graves (from the number of all graves) %</th>
<th>Double layer cremations (with horse grave) and weapons %</th>
<th>Double layer cremations without weapons %</th>
<th>Single layer cremations (from all graves number) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alejka-3</td>
<td>91</td>
<td>83,3</td>
<td>16, 6</td>
<td>6,1</td>
</tr>
<tr>
<td>2</td>
<td>Gerojskoje-5</td>
<td>95,1</td>
<td>22,1</td>
<td>77,9</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Kholmy</td>
<td>84,4</td>
<td>9,2</td>
<td>90,8</td>
<td>11,7</td>
</tr>
<tr>
<td>4</td>
<td>Klinovka-1</td>
<td>87,6</td>
<td>41,5</td>
<td>58,5</td>
<td>12,4</td>
</tr>
<tr>
<td>5</td>
<td>Povarovka</td>
<td>62,3</td>
<td>22,7</td>
<td>77,3</td>
<td>37,7</td>
</tr>
<tr>
<td>Average</td>
<td>84</td>
<td>36</td>
<td></td>
<td>64</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 4. Prussian tenth to 13th-century horse burial data

<table>
<thead>
<tr>
<th>No.</th>
<th>Cemeteries</th>
<th>No. of horse burials %</th>
<th>Hb. with horse harnesses %</th>
<th>Hb. with complete harness sets %</th>
<th>Hb. with 2-4 horses or harness sets %</th>
<th>Bridle bit %</th>
<th>Bells %</th>
<th>Stirrups %</th>
<th>Spurs %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Terminals</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All</td>
<td>Ring</td>
<td>Cheek</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Alejka-3</td>
<td>91</td>
<td>100</td>
<td>87</td>
<td>9</td>
<td>73</td>
<td>82</td>
<td>18</td>
<td>47</td>
</tr>
<tr>
<td>2</td>
<td>Gerojskoje-5</td>
<td>95</td>
<td>100</td>
<td>40</td>
<td>8</td>
<td>60</td>
<td>60</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>Kholmy</td>
<td>84</td>
<td>90</td>
<td>20</td>
<td>11</td>
<td>75</td>
<td>82</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Klinovka-1</td>
<td>88</td>
<td>99</td>
<td>71</td>
<td>11</td>
<td>90</td>
<td>61</td>
<td>33</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>Povarovka</td>
<td>62</td>
<td>95</td>
<td>94</td>
<td>42</td>
<td>100</td>
<td>72</td>
<td>42</td>
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<tr>
<td>Average</td>
<td>84</td>
<td>97</td>
<td>62</td>
<td>16</td>
<td></td>
<td>80</td>
<td>71</td>
<td>30</td>
<td>37</td>
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</table>
Double-triple horse burials or burials with two to four horse harness sets are known from 8% to 42% of all horse burials (an average of 16%). There are about 10% double-triple horse burials in Prussian cemeteries (excluding data from Povarovka). Burials of several horses were uncovered mainly under cremation graves that were richly equipped with weapons and imports (Kholmy, Klincovka-1). Perhaps this number of approximately 10% of human cremation graves supported by several horses or harness sets, the same as about 10% of graves with rich weapons described above, corresponds to the size of the warrior elite. However, each case of such a grave should be investigated separately.

Weapons were found in 9% to 83% of cremations accompanied by horse burials (an average of 36%). Thus, approximately only a half or a third (or even less) of double-layer cremations could certainly belong to warrior-horseman strata. Other horse burials, as described above, probably belonged to less influential or less prosperous members of Prussian society, to people of other occupations, and perhaps to adolescents or women (?).

The most common horse harness objects from Prussian horse burials are bridle bits and stirrups. Their share in the general amount of riding gear is about 80% on average, varying from cemetery to cemetery. Bells are known from 19% to 47% of horse burials (an average of 37%), being quite a common Prussian horse attribute. Spurs are less numerous, known from 3% to 36% of Prussian horse and horseman burials (on average 18%).

Therefore, a horse in the Prussian burial rite could have several meanings:

A transport facility, carrier and guide to the underworld, which was required for any free member of society of a certain age, being both necessary during the burial ritual and afterwards.

A grave good-property indicator post-mortem, particularly in the case of double-triple horse burials or the burial of a richly equipped horse.

A sacrifice to the deceased, the ancestors or the gods, perhaps in the case of burials with scattered horse remains.107

At the turn of the 11th and 12th centuries, Prussian double-layer cremations with weapons and horse harnesses began to accumulate in certain areas of cemeteries, forming the phenomenon known as ‘Aschenplätze’.

‘Collective’ cremation graves of the Prussians. A brief survey of Sambian Aschenplätze

The increase in the number of burials with weapons and horse harnesses, and parts of them, in other Prussian graves from the tenth to the 12th centuries possibly indicates the process of the consolidation of warrior elites. Archaeologically, this is recorded by the appearance of a special group of cremations known as Aschenplätze108 in Sambia at the turn of the 11th and 12th centuries.

The question of Aschenplätze as Prussian (and Curonian) ‘collective’ cremations has interested scientists since the 1930s (Engel 1935, p.120ff; Engel, La Baume 1937, p.190ff). It is discussed most in the works of Wojciech Wróblewski, Vladimir I. Kulakov and Vladas Žulkus. Wróblewski describes Aschenplätze as a specific kind of Prussian warrior cemetery from the 11th and 13th centuries, close to central Lithuanian or Curonian collective cremation graves such as Marvelė or Griežė (Wróblewski 2006, p.227ff). Kulakov divides Aschenplätze cemeteries into two types of burial rite: A-1 multiple cremation pyre areas, such as Ko-strovo (Bludau-II) and probably Dobroe (Hünenberg/Gora Velikanov); and A-2 areas of collective cremation graves, which combine the main features of both Prussian double-layer cremations and Curonian collective cremation graves (Kulakov 2010, p.203ff).

The general tendency in the works mentioned is the comparison and sometimes identification of Prussian Aschenplätze with Curonian ‘collective’ cremations. However, the last one was probably of a slightly different origin and meaning. Archival and published data about the Curonian cemeteries at Griežė and Slengiai with collective or group burials describes them as the graves of several people (more than two or three) marked by certain family/clan or ‘professional’ relations, and made in one vast pit probably at the same time (Žulkus 1979; Varnas 1982, p.75ff; Žulkus 2004, pp.170-171; Griciuvienė 2009, pp.366ff, 428-429).

Thus, for today there are about 15 such cemeteries with the Aschenplätze burial rite known in the Sambian peninsula. Also in the mentioned works by W. Wróblewski and V.I. Kulakov, at least four Prussian sites with similar burial rites in northern Poland are covered. There are about nine cemeteries with the mentioned collective or ‘group’ cremation graves in the Curonian area, and probably two sites with supposed ‘collective’ cremation graves in the lands of the Skalvians. In addition,

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107Anthropological interpretations of Prussian horse burial rites are presented in one of A. Zinoviev’s latest publications (Zinoviev 2011, pp.79-85).

108The German for ‘an area covered with ashes’.
Fig. 13. The distribution of *Aschenplätze* in Sambian and Balt cemeteries with ‘collective’ or cremation graves from the 11th to the 13th centuries.

Prussian *Aschenplätze* and supposed *Aschenplätze*: 1 Alejka-3; 2 Bludau (Kostrovo); 3 Dollkeim; 4 Groß Friedrichsberg; 5 Hünenberg (Dobre); 6 Kholmy; 7 Klein Kaup; 8 Klinovka-1; 9 Laptau; 10 Linkau; 11 Polwitten; 12 Schulstein; 13 Seefeld; 14 Sorthenen; 15 Zophen.

Galindian, Pomesanian and Varmian *Aschenplätze*, and supposed *Aschenplätze*: 16 Czarny Las; 17 Elbing-Benkenstein (Elbląd-Żytno); 18 Kröcken (Kreki); 19 Staatsen (Stacze).

Curonian cemeteries with collective graves and late Curonian cremation graves: 20 Aukštkiemiai-Oberhof; 21 Anduliai-Egliškiai; 22 Gintališkė; 23 Gričė; 24 Laiviai; 25 Siaičiai; 26 Slengiai; 27 Alsungas Kalnini; 28 Durbes Diri.

Skalvian cemeteries: 29 Linkuhnen; 30 Viešvilė.

Upland Lithuanian (Aukštaičiai): 31 Marvelė; 32 Purvyniai (after Wróblewski 2006, Fig. 1, with additions by the author).
two similar (?) cemeteries with horse burials in central Lithuania are mentioned by W. Wróblewski (Fig.13). Famous examples of Prussian (Sambian) Aschenplätze are the cemeteries at Kl. Kaup and Schulstein. Judging by prewar archival data and later publications, they represent certain areas of cemeteries with vast mixed cremation layers and individual (?) horse burials below (Wróblewski 2006, p.222ff; 2009, p.596ff). The Kl. Kaup Aschenplätze data investigated in the 1930s by C. Engel, and in 2009-2011 by V. I. Kulakov, is more informative. We can describe it as a vast area of coal and ashes blackened by a layer of earth (Brandschicht), which covers the remains of individual (?) cremations situated over horse burials (Fig.14.1, 2). That is very close to the description of ‘classic’ Prussian double-layer cremation graves. During C. Engel’s and V. I. Kulakov’s investigations of an area of 100 square metres, up to 45 cremations with horse burials below them were uncovered. So the rich concentration of double-layer cremations here is obvious. As has been mentioned, the graves with weapons investigated by V. I. Kulakov do not exceed 50%.

Alejka-3 cemetery’s 100-square-metre area with at least 30116 11th and 12th-century double-layer cre-
mations is very similar to the KL. Kaup situation. The Alejka-3 cremations’ upper layers are also situated in a common burnt earth layer, with only the slight contours of cremation graves. The graves’ upper layers lay 0.1 to 0.3 metres from ground level. Most cremation graves’ upper layers were mixed by ploughing. Thus, individual graves were determined mainly by the horse burials of the lower layers and the concentrations of finds. It is clear that the Alejka-3 double-layer cremations were put very close to each other for a certain purpose, and obviously not at the same time (Skvortsov 2007; Širouchovas 2011, p.279ff). A total of 83% of Alejka-3 graves are warrior-horseman double-layer cremations (Fig.14.3).

The Klein Kaup and Alejka-3 cemeteries were investigated by rather small areas of concentrations of regular graves. Kholmy cemetery, on the contrary, shows that the concentration of graves at this site is irregular. Investigated in 2010 by the Sambian Archaeological Expedition, this cemetery shows at least three zones with noticeable accumulations of cremations with weapons and horse burials. The most remarkable are trenches 14B and 14V, where in an area of approximately 40 square metres, under a thin disturbed cremation, an interlayer of about 20 horse skeletons, scattered bone concentrations and horse harnesses in pits with organic remains (in the case of sandy soil) were uncovered.110 In most cases, the cremation layers of the graves were mixed and partially disturbed by agricultural and urban activities. Area 14V, of 12 square metres and with ten horse skeletons and scattered bone concentrations, is notable (Fig.14.4).

It is obvious that such a concentration of cremations of horsemen must have appeared against a social background. Members of warrior elites, or the most influential clans, which performed administrative functions in a certain area, could have been buried here. This is proven by finds of swords, bronze maces, imports, and double and triple horse burials below the cremations in Kholmy cemetery. Although weapons occurred only in 9% of Kholmy double-layer cremations, it is obvious that many more graves with weapons would be found if the cemetery was better preserved. This is proven by the Kholmy stray finds.

The Sambian cemeteries Alejka-3, Kholmy and KL. Kaup represent Aschenplätze, as certain areas of individual double-layer cremations dug very close to each other and not at the same time. Their stratigraphy is very different from Curonian or Galindian ‘collective’ cremation graves. Each grave literally has its own pit, being dug next to an already existing grave. Although cremation layers are often mixed, grave goods are mostly found within certain grave areas. The same is true for horse burials, whose pits are mainly linked to upper cremations. At the same time, Prussian Aschenplätze and Curonian ‘collective’ cremation graves from the 11th to 13th centuries possibly have a common social background. They probably indicate the emergence of new, not family based, ‘professional’ relationships as a warrior elite (Žulkus 2004, p.170).

Despite this brief review of recent investigations, the question of Sambian Aschenplätze still particularly needs to be investigated in comparison with other Prussian and West Balt burial customs from the tenth to the early 13th centuries.

The Prussian warrior elite in the late 12th and 13th centuries. Postscript

Political and economic changes in Europe in the late 12th and early 13th centuries, such as the dominance of merchants from German cities in the trade on the Baltic, the attempts of Danish and Polish feudalists to establish political influence in different Prussian lands from the 11th to the early 13th century, and the appearance of the Teutonic Order on the border of the Prussian lands in the first half of the 13th century, must have influenced Prussian society.

Under these conditions, at the turn of the 12th and 13th centuries, or at the beginning of the 13th century, several inhumations with weapons and horse harnesses appear in old Prussian cremation cemeteries (Fig. 15). In the Kaliningrad region, at least eight such cemeteries are known (Bezzenberger 1909; 1914b; Heym 1938; Kulakov 1990, p.71ff; Shiroukhov 2011, p.192; Širouchovas 2011, p.285ff). Horse burials uncovered under such inhumations are mostly parts of the lower levels of disturbed double-layer cremations, overlaid by later inhumations. This is seen at Bludau cemetery, and perhaps at Zophen (Bezzenberger 1914b, p.219ff; Heym 1938). Prussian burial rituals slowly began to change due to external influences, as Prussian warriors participated in the clashes with Christian Polish feudalists, as well as the spread of Christian influence in the region itself (Širouchovas 2011, p.290).

At the end of the 13th century, Prussian cremations with horse burials disappeared, with inhumations taking their place. Some of the old Prussian warrior elite, the nobles, went into the service of the Teutonic Order, in this way preserving their old privileges and gaining new ones. Weapons and parts of horse harnesses have survived in the graves of the Prussian military elite of

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110 Objects (graves) 59, 60, 24a, 62, 63, 68, 69, 69a1, 69a2, 69b1, 69b2, 70, 70a, 81, 83, 91, 91a, 92 and 100. The graphic material on Kholmy cemetery is not available yet for publication, due to the preparation of an archaeological report.
the period of the Order. Some rites concerning horse burial relics, such as putting horse harnesses in graves, survived until the early 14th century. Bridle bits probably disappeared from Prussian graves together with horse burials at the turn of the 13th and 14th centuries. Today, only two definitely Teutonic Order-period inhumations with bridle bits are known in the Kaliningrad region: the Prussian Alt Wehlau grave 143 (Valuev 1997, pp.153-154), and Skalvian Splitter grave 24 (Peiser, Luckmann 1914, p.372). Spurs are a more common find for the 13th to 15th-century Prussians. As relics, they have acquired another meaning: now they symbolise the belonging of their owner to a new elite, the knighthood (Henning 1879, p.319). Prussian inhumations with spurs from the 13th to the 15th centuries are known from the necropolis of Alt-Wehlau (graves 127, 162, 199), Gerdauen-Kinderhof (27) and Równina Dolna (Unterplehnen) (64, 72) (Henning 1879, p.310; Odoj 1958, Tables XVI, XXIII-XXV; Valuev 1999, Figs. 27; 55; 199).

Today, in the territory of historic Prussia, at least five cemeteries from the late 13th to the early 15th centuries with male inhumations equipped with weapons and horse harnesses are known (Fig. 15). Therefore, Prussian pre-feudal warrior elites played a part in the formation of the political and administrative elite of a new European state.

Conclusions

- The period from the late tenth to the late 12th centuries is marked by a great number of graves with weapons, horses and imported goods. This corresponds to the formation of a pre-feudal warrior elite in Prussian society.

- At the turn of the 11th and 12th centuries, cemeteries with areas of large concentrations of double-layer cremations with weapons and horse harnesses, also known as Aschenplätze, appeared on Sambian territo-
This relates to the consolidation of members of the Prussian warrior and ruling classes, or powerful clans.

- As a result, the period from the 11th to the early 13th century is distinguished by the militarisation and unification of Prussian material culture.

- The Prussian warrior elite led an aggressive policy against neighbouring Polish lands and the Danish invasions in the 11th to 13th centuries, and later against the Teutonic Order. Archaeologically, this is proven by the large number of double-layer cremations with weapons and horse harnesses, and also by later inhumations with weapons and horse harnesses. This correlates with Polish and German written sources from the 11th to the 14th centuries.

- In the second half of the 13th century, some of the old Prussian warrior elite went into the service of the Teutonic Order, this way becoming part of a new ruling class.

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References

Manuscripts


Abbreviations

Arch. Baltica – Archaeologia Baltica (Vilnius since 1995, Klaipėda since 2006)
Arch. Lituana – Archaeologia Lituana (Vilnius since 1999)
ATL – Archeologiniais tyrinėjimais Lietuvoje ... metais (Vilnius since 1967)
Lietuvos arch. – Lietuvos Archeologija (Vilnius since 1979)

Museums

GIAMR – Rantava City Museum of History and Archaeology, Pionerskii-Kurort (Kaliningrad region)

KGOM (KOIKHM) – Kaliningrad Museum of History and Art, Kaliningrad
LNM – Lithuanian National Museum, Vilnius
LNVM – Latvian National Museum, Riga
MVF – Museum of Prehistory and Early History, Berlin
MVZ – Valdau Castle Museum, Nizov’e (Kaliningrad region)
PM – Prussia Museum, Königsberg

Archives

Arkhiv IA RAN – Archive of the Institute of Archaeology of the Russian Academy of Sciences, Moscow
CEN – Carl Engel Nachlass (Heritage) (in RGA), Schleswig
HJA – Archive of Herbert Jankuhn, Schleswig
LII A – Archive of the Lithuanian Institute of History, Vilnius
PPA – Archive of Peter Paulsen, Schleswig
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Literature


PRŪSŲ X–XIII A. KAPAI SU IMPORTINIAIS DIRBINIAIS, GINKLAIS IR ŽIRGO APRANGA. KARINIO ELITO KLAUSIMAS

ROMAN SHIROUKHOV

Santrauka


Sprendžiant iš kapų konteksto, pagrindiniai importo vartotojai prūsų visuomenė yra profesionalus karinė elita, palaidoti su ginklais ir žirga, karių-raitetiių sluoksnius. Tarp jų yra tokie kapai, kurie yra apie 90% kapų, kurie buvo palaidoti su ginklais ir žirga, kartais net duvėjų trijų, palaikės. Tai yra patyręs karininkų kapai, kuriuos rasta II–III a. šalyje. Nykstamųjų kapų daugėja, kurie yra apie 85% visų kapų.