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LIEGT DA DER HUND BEGRABEN? AN ASPECT OF POST-FUNERARY INTRUSIONS FROM THE WIELBARK CULTURE CEMETERY IN CZARNÓWKO IN POMERANIA

ABSTRACT

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In comparison with other Wielbark culture necropoles, the cemetery in Czarnówko is remarkable not only due to its size, but also because of a very high percentage of disturbed graves. It is estimated that nearly 90% of inhumation grave pits were disturbed in antiquity. This paper deals with the practice of deposition of a dog's body into a grave in the course of post-funerary intrusion. This habit is unknown in other cemeteries of the Wielbark culture. Bones of the animal underwent examinations using absolute dating methods. Possible reasons behind the deposition of the animal in the trench are discussed with reference to similar discoveries from the Central European Barbaricum in the Roman Period. The role of the dog in funerary rites in antiquity is stressed.

Keywords: Czarnówko, Wielbark culture, Roman Period, dog, grave opening, funeral rites, post-funerary intrusion

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INTRODUCTION

The Wielbark culture cemetery in Czarnówko is located in northern Poland, about 25 km from the shoreline of the Baltic Sea. It is the largest necropolis of this culture (research is ongoing) and was in use until phase C1b of the Roman Period (Schuster 2014;

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Krzysiak and Andrzejowski 2015, 10). People arriving from Scandinavia during the Migration Period also selected this site as the place of rest for their deceased (Schuster 2015). The cemetery stands out in terms of the richness of grave furnishings in the burials of local elites. With regard to their lavishness, these graves are comparable with elite graves from the Early Roman Period (Lubieszewo grave horizon) and the Late Roman Period (Hassleben-Leuna-Zakrzów grave horizon). Some of these are also comparable to the so-called royal grave in Mušov in Moravia, which is dated to the second half of the 2^{nd} c. (phase B2/ C1 – see, e.g., Mączyńska and Rudnicka 2004; Tejral 2004; Schuster 2014). However, this parallel is not completely apt as in the past the graves from Czarnówko were disturbed with trenches, which are usually referred to as robbery trenches in the literature. Traces of such post-funerary intrusions were revealed in 90% of the inhumation graves. In spite of the fact that in the course of such intrusions the dead were actually deprived of part of their grave furnishings, it does not seem proper to use the term plundering or robbing in order to explain all actions that took place within grave pits after burial (Schuster 2018, 27-33; Skóra 2018).

RUDIMENTS OF CHRONOLOGY OF GRAVE OPENINGS IN THE CEMETERY AT CZARNÓWKO

One of the keys to determining the possible motives of persons who disturbed graves is to identify the time of the intrusion. In view of the lack of exact temporal indicators of such actions, one makes use of less precise premises, which nevertheless allow for the proposition of a general chronology. If skeletal remains are well-preserved, their arrangement in the grave enables us to ascertain whether the intrusion took place before bodily decomposition, during decomposition, or after skeletonisation. Regrettably, human bones at Czarnówko are either poorly preserved or completely decomposed (cf. Rożnowski and Cymek 2015). It is therefore generally difficult to identify the period of time between burial and the reopening of a grave on the basis of a skeleton's arrangement. Most often recorded in the pits of inhumation graves are the remains of skulls, teeth and small fragments of long bones that owe their preservation to the preservational properties of metal artefacts near them. Although entirely preserved skeletons are absent, observed arrangements of skeletal material unequivocally demonstrate that bones were moved in the course of reopening graves, which therefore most often took place after the decomposition of the body. No finds that could be related to those originally involved in the burial have been found in the trenches. Such artefacts would enable us to identify the cultural identity of such persons and the time of intrusion (on such a possibility cf., e.g. Kümmel 2009, 147-149; Lau and Pieta 2017). On the other hand, abandoned parts of grave furnishings are sometimes found in the trenches. Discoveries of organic remains are exceptional and their presence in a trench is clearly of secondary nature. An example of this comes from feature 1271, in

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Fig. 1. Czarnówko, Grave 1271. Feature disturbed by a trench: from the top to the bottom part. Photo by A. Krzysiak

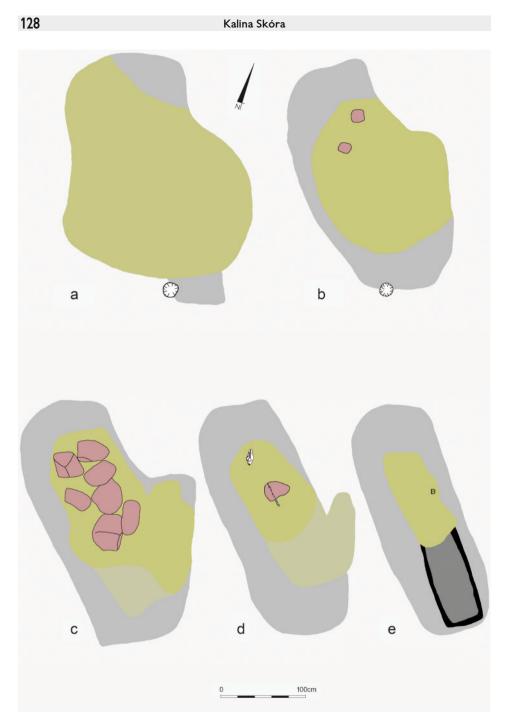


Fig. 2. Czarnówko, Grave 1271. a – outline of the grave at the level of discovery; b – 30 cm; c – 55 cm; d – 95 cm; e – 105 cm. Drawn by K. Skóra

which a the skeleton of a dog was found (Fig. 1). It should be added here that the remains of a European pond tortoise were found in another grave at Czarnówko. They were located in the trench at the level above the skeleton (Makowiecki 2015, 140). It is assumed that its presence in this location is a result of its having been shifted from the bottom of the grave pit rather than finding its way there in the course of the reopening of the grave (information provided by A. Krzysiak). Thus, the cemeteries in Czarnówko and in Gródek nad Bugiem, site 1C, seem to be similar with regard to the share of animal species in funeral rites (cf. Szyndlar 1989; Rogatko 1991, 166; Kokowski 1993).

GRAVE 1271

Inhumation grave 1271 was discovered in the northern part of the necropolis. Its ceiling was disturbed by the trench along nearly its entire surface (Fig. 2). Traces of post-funerary intrusion can be seen to the same degree in subsequent levels of the burial. About 30 cm below the top, the oval trench narrowed. It encompassed the central part of the eastern zone of the grave, where it continued down to the level of a log coffin (Fig. 2). At a depth of 30 cm isolated stones were found. These were part of a fill of boulders (d=30-50 cm) that were thrown into the trench. A vertebra of a dog was recorded on a stone located next to the bottom of the trench, which destroyed the northern part of the coffin. The skull and other parts of the skeleton were deposited in anatomical order beyond the stone. The dead animal and the stones were in all probability thrown into the grave at the same time. Under the boulders and the below dog skeleton, at a depth of c. 100 cm from the top, the trench narrowed further. Its extent encompassed solely the section of the log in which the upper part of the deceased person's body should be located. However, skeletal remains were not found, which is quite typical in this cemetery. On the other hand, a semicircular iron buckle was found in the centre of the trench near its eastern wall. This was the only remaining item of the original grave furnishings, about which it is difficult to say more. The discovered fragment of the belt may suggest that the buried person was male, but this is not sufficient evidence to say anything conclusively.

A basic chronological indicator which allows us to date the feature is the iron buckle, of Type D1 according to R. Madyda-Legutko (1987). Its frame is semicircular and it is rectangular in cross-section. The prong of the buckle is straight (Fig. 3). Belt parts of this kind are generally not very sensitive chronologically; they are quite common in the Roman Period, especially in the first two centuries AD, i.e., in phases B1-B2/C1 (Madyda-Legutko 1987, 24-26). In the Wielbark culture, individual artefacts occur in assemblages dated to phase B1, and they are more common in the developed stage of phase B2. In the Late Roman Period they become rare again (Madyda-Legutko 1987, 25). Graves neighbouring feature 1271 can increase the precision of this dating to a small extent only. Some of these were also disturbed with trenches, while others are burials of children with no furnishings

(which was either an original state or a result of "robbery"). Artefacts revealed in the neighbouring features, that is, a Type B S-shaped clasp and Type A V 128 and A V 148 fibulae suggest that burials in this part of the cemetery took place in the late stage of phase B2. It is therefore probable that grave 1271 can also be dated to this period.

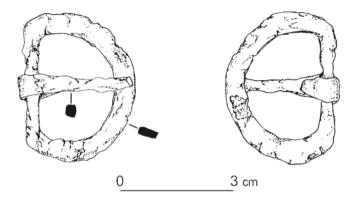


Fig. 3. Czarnówko, Grave 1271. Iron buckle. Drawn by A. Krzysiak



Fig. 4. Czarnówko, Grave 1271 – arrangement of the dog's skeleton in the trench. Photo by A. Krzysiak

ARCHAEOZOOLOGICAL ASSESSMENT

The dog skeleton discovered in the grave was in poor condition, and some bones had completely decomposed (Fig. 4). It can be supposed that the bones that were preserved were covered by the stones in the trench and thus protected from humic acids, which are responsible for the decomposition of organic materials. Among the identified bones were the skull, both mandibles, cervical vertebrae (I and II), lumbar vertebrae and bones of the pelvic girdle (Fig. 5). On the basis of tooth wear and an *ante mortem* loss of one tooth, Daniel Makowiecki (2015, 139-140) proposed that the dog may have been 8-10 years old at the time of death. Its advanced age is also demonstrated by the fact that the lumbar vertebrae are ankylosed. No traces suggesting that the dog was killed were identified on the skeleton. Of course, their absence does not exclude such a possibility. The advanced age of the dog can indirectly imply its natural death. It is worth mentioning that analyses of the age of dogs from early medieval Germanic cemeteries, for example, demonstrate that most of them were less than 5 years old. This could suggest that their death was not a result of natural factors (Prummel 1992, 151-152).

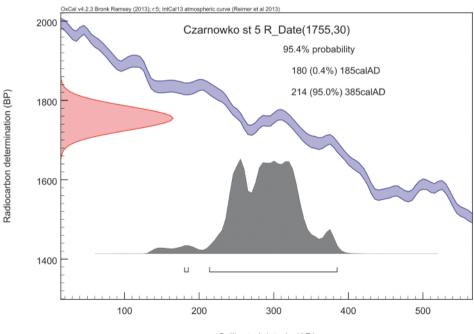
CHRONOLOGY OF THE TIME OF INTRUSION

In view of the absence of surviving human bones, the only archaeological indicator which allows for a general estimation of the time of intrusion is the state of preservation of the log coffin and the degree to which it was damaged when the grave was reopened. The northern part of the coffin was damaged by the trench while the southern part remained untouched. Such a state of preservation of the log suggests that the period of time that passed since the burial was long enough to weaken the hardness and integrity of wood in the coffin walls. Thus, it disintegrated when the grave was dug up. On the basis of contemporary observations, this time can only be approximately estimated to be about 20-35 years. In fact, the rate of decomposition of the body and the wood depends on a number of different factors, both case-specific and external (cf. Skóra 2017, with further reading, cf., e.g., Ferreira and Cunha 2013). Regrettably, it proved impossible to identify the species of wood that was used for the coffin.

It should also be stated that the time interval between the burial and the opening of the grave was in all probability not very long. Trenches were located very precisely within grave pits, which means that no more than a couple of decades passed, and above-ground markers, such as earthworks and stone and wood constructions, must have been in a good condition. We also know that the opening of numerous graves at Czarnówko probably occurred before the decomposition of log coffins, as in numerous cases the degree of their integrity was very high. In spite of the fact that the graves were dug up, the coffins remained undamaged. In grave R300, for example, post-funerary manipulations took place



Fig. 5. Grave 1271 - fragment of the dog's skull. Photo by J. Słomska



Calibrated date (calAD)

Fig. 6. Results of ¹⁴C dating of the dog's skeletal remains (Poznań Radiocarbon Laboratory – lab. no. Poz-103003)

when the log was in such good condition that a stone stela which was thrown into the pit during the opening of the grave caused the coffin to break and the separated part to move. However, the log was not completely destroyed (Schuster 2018, table II).

In order to go beyond these general attempts at identifying the chronology of the grave opening, radiocarbon analyses were carried out on the remains of the dog that was thrown into the trench. Analyses of one of the animal's vertebrae was carried out in the Poznań Radiocarbon Laboratory. The analysed sample (lab. no. Poz-103003) yielded a date of 1755±30 BP. After calibration, it provided a date between 214-385 AD with a probability of 95% (Fig. 6).

This means that the opening of the grave and the deposition of the dog's body took place between the final stage of phase C1a of the Roman Period and the Migration Period – that is, phase D. The end of use of the necropolis at Czarnówko falls within phase C1b, prior to 260/270 AD. Therefore, two hypotheses can be proposed: 1) grave 1271 was disturbed while burials were still taking place at Czarnówko, 2) the opening took place after the necropolis had been abandoned.

Assuming that the grave came into being in the late stage of phase B2, the time elapsed between burial and the reopening of the grave (214, as indicated by the first date from the range provided by the radiocarbon dating) would be at most 60 years, but it is also possible that the grave may have been opened soon after the burial. Longer intervals between burial and reopening are possible, however, taking into account the earlier possible dates for the grave and the younger end of the radiocarbon range for the dog vertebra.

Bearing in mind the fact that in the cemetery at Czarnówko there are examples of graves with traces of intrusions which took place relatively soon after the burial, the first of the discussed options, i.e., the short time interval, is certainly possible. As stated above, however, the state of preservation of the coffin suggests an interval of a couple of decades (two or three?).

DOG REMAINS IN OTHER NECROPOLES OF THE CIRCLE OF GOTHIC CULTURES

A case which would be analogous to that identified at Czarnówko in grave 1271 was not found in any other cemetery of the Wielbark culture. Dog remains are not recorded in socalled secondary or "robbery" trenches, which disturb pits of inhumation graves. On the other hand, a couple of cases in which bones of other animals were recorded are known. Regrettably, only in one case is species identification possible. At Waplewo, Olsztyn district, a cattle tooth was found between stones at the top of a trench that disturbed an inhumation grave of a child (7-8 years) (Mazur 2012, 159; Skóra and Troszczyńska 2012, 149, fig. 5). At Pruszcz Gdański, site 7, stones and animal bones were thrown into the trench in grave 96. The grave is dated to phase B2, and it was disturbed after decomposition of the

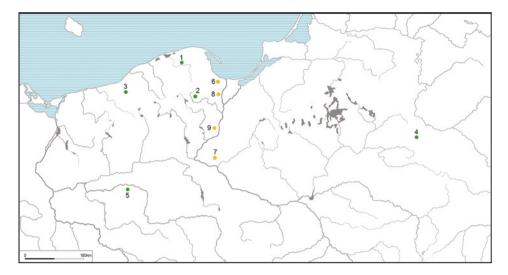


Fig. 7. Dog remains discovered in cemeteries (green) and settlements (yellow) of the Wielbark culture: 1 - Czarnówko; 2 - Chwarzno; 3 - Grzybnica; 4 - Jasionowa Dolina; 5 - Słopanowo; 6 - Pruszcz Gdański; 7 - Rogowo; 8 - Stanisławie; 9 - Warlubie. Drawn by K. Skóra

body (the skeleton was not in anatomical order; the skull was located 70 cm above the limbs and was placed vertically and turned to the east; the mandible was located separately at some distance). The deceased was a woman aged 25-35 (Gładykowska-Rzeczycka *et al.* 2003, table 2). According to M. Tuszyńska (1995, 217), these actions were related to robbery or were some sort of magical rites. Thus, the deposition of stones and animal bones in the trench is a characteristic this case has in common with the burial at Czarnówko. Animal bones were also discovered in another two graves at Pruszcz Gdański, site 7, but in a different context (information from M. Tuszyńska from the Archaeological Museum in Gdańsk, 9 November 2018). In addition, it is worth mentioning that several animal bones (cattle, pig, goose) were discovered in the "robbery" trench dug into inhumation grave 177 from the cemetery of the Przeworsk culture at Karczyn/Witowy, site 22/22 (Bednarczyk and Romańska 2015, 18; Makowiecki *et al.* 2015, table 1, 207; Pospieszny and Bełka 2015, 181).

Generally, the share of animals in burial rites of the Wielbark culture is nonetheless minimal as compared, e.g., to the Masłomęcz Group (Nadachowski and Wolsan 1989; Kokowski 2007, 146), the Chernyakhov-Sântana de Mureş culture (Rogatko 1991, 153-155; Hopkalo and Rudych 2017), or the neighbouring Przeworsk culture (among others, Węgrzynowicz 1982, 224-227; Andrałojć 1986; Makiewicz 1987; Dąbrowska 1997, 112-113, table 3; Kuziak 2009, 78, 79, fig. 2). This holds true for dog bones as well, which are only sporadically found in cemeteries (Fig. 7): between the stones of a mound covering (Mound 12 – Jasionowa Dolina – Jaskanis 2012, 76, 212-213, table 1), in a channel-like feature

(mandible of a 2-4 year old dog in Pit 534 in Słopanowo), from stone wreath I (bones of the skull, the mandible, a metacarpus and a phalanx of a dog greater than 2 years of age – Chwarzno, Kaszuby Lake district, Gałezowska 2007, 184, table 4). Additionally, a fragment of a talus of a dog, together with remains of a goat/sheep and of a bird were found together with bones of an adult individual in a pit burial (Knochenhäufchen) located near stone 1, which formed part of circle IV at Grzybnica (Hahuła and Wołągiewicz 2001, 53, plate VIII). All this demonstrates that the dog played a certain role in the funeral rites of the Wielbark culture A few burials of this species were identified in settlements of the Wielbark culture (Rogowo, site 23, Lubicz commune, Kujawsko-Pomorskie province – Bokiniec et al. 2012, 164; Makowiecki 2006, 71; Bokiniec 2016, 17, 49, fig. C159; Pruszcz Gdański – Sobociński 1975, 517-525; Andrałojć 1986, catalogue, no. 71; Rogatko 1991, 179; Warlubie - https://archeowiesci.pl/2011/01/29/wielbarska-osada-w-warlubiu, access on 12 October 2018 and Stanisławie, site 37, Tczew commune, Pomorskie province - Makowiecki 2006, 71). Dog bones from Lipianki come from the Oksywie culture (Ostasz 2015, 58) and not the Wielbark culture part of the settlement (cf. Sielicka 2015, 165-166). Such discoveries are rare in comparison with the situation in the Przeworsk culture, and this fact is sometimes explained by unfavourable soil conditions in Pomerania (Makiewicz 2000, 222-223, fig. 35).

On the other hand, in the Masłomęcz Group, whose funeral ceremonies are remarkable for a great variety of rituals (Kokowski 2007, 134-140), one also records disturbances of inhumation graves with so-called secondary trenches. Sometimes, animal remains are found in them. However, it is often very difficult to identify relationships between such remains and the original human burial. This is due to the fact that bone remains are translocated from their original position as a result of the reopening of graves. Furthermore, human-animal burials, animal additions or admixtures, and even independent animal burials or partial graves are recorded. One of the more unconventional practices is the replacement of removed human bones with animal ones (cf. Rogatko 1991, 153, 162). It also occurs that skeletons of animals (but not of dogs) are discovered in the secondary trenches themselves. As noted by J. Rogatko, "complete or headless skeletons of animals were located on the bottom of the trench which disturbed the top (Masłomecz, site 15, grave 132), the fill (Gródek nad Bugiem, site 1c, grave 50), or the bottom (Masłomecz, site 15, grave 134) of human inhumation burials." Trenches were usually located in the central parts of grave pits. Animal species found there included the European pond tortoise, sheep and pig (Rogatko 1991, 155, table 2). The earliest animal grave (the post-cranial skeleton of a sheep dug into grave 132 from Masłomecz, site 15) could be dated to phase C2 of the Roman Period. The remaining animal burials, as well as the human-animal burials from Gródek nad Bugiem, site 1C, Masłomęcz, site 15, Moroczyn, site 25 and Werbkowice-Kotorów, are most probably related to phases C3-D (Rogatko 1991, 182).

It should be noted that in spite of the fact that numerous animal species were identified in cemeteries of the Masłomęcz Group, the remains of a dog were found only once. At

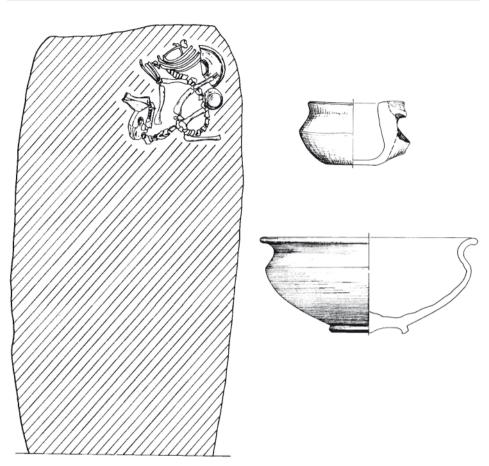


Fig. 8. Gródek nad Bugiem, Grave 103. After Kokowski 1993

Gródek nad Bugiem, site 1C, the canine skeleton was situated in feature 103 in the NE part of the pit. Next to it, there were two vessels (Fig. 8) (Kokowski 1993, 77-78, fig. 94, photos 158-160). The pit was similar to those of human graves with regard to its size.

The deposition of the dog's body in the trench of grave 1271 at Czarnówko is very loosely related to the aforementioned discoveries, which were in all probability a manifestation of cultural ideas of south-eastern provenance. Although chronologically the burial itself is too early in relation to these traditions, the so-called robbery trench itself could possibly be closer to them temporally.

The presence of the dog in burial rites is much more strongly pronounced in communities of the Chernyakhov-Sântana de Mureş Culture. Dogs accompany humans in burials, or are found in features located above human graves. Cases of independent animal burials within necropoles are known as well (Petrauskas 2014; Hopkalo and Rudych 2017, 81-83). Such a tradition was also found among the Sarmatians and in Geto-Dacian cultures. Apart from the presence of dog remains in cemeteries, they are also recorded in settlements (Rogatko 1991, 177-178; Grumeza 2013; Istvánovits and Kulcsár 2015, 61-63). In no case does the evidence suggest that these animals were eaten. A narrative of Ammianus Marcellinus about the Goths (Thervingi) exchanging slaves for dogs in the time of famine (Amm. Marcell. XXXI, 4, 11) must be considered a peculiar case. There may be some truth to this assertion, but it calls for caution in its interpretation. Traces revealed on bones of these animals in Europe demonstrate the possibility of cynophagia in certain situations of crisis,

e.g., during sieges of towns (cf., e.g., Makiewicz 2000, 219; Kajkowski 2015, 231; Sielicka 2015, 156-157), at the turn of winter and spring when food resources were running out, or for medicinal purposes (Zwolska 2014, 127-129).

An assessment of whether the animal was buried together with the dead person or was interred after the burial is important in determining whether it was intentionally killed. The disturbance of the grave by the trench and the resulting translocation of the contents of the grave pit renders an understanding of the chronology – and therefore interpretations of the deposition – difficult.

An interesting discovery was made at Velikaya Bugayevka (Kiyevskaya oblast', Ukraine): a cremation burial (burial 73) was deposited at the top of inhumation burial 74 (Fig. 9), above the chest of the dead. The inhumation burial was disturbed by a trench, and a dog's body was placed about 40 cm above the pelvis and femora (Petrauskas and Shishkin 2013, 36, figs. 28 and 113, tab. 9:73; Petrauskas 2014, 143). It is difficult to ascertain whether the deposition of the dog's body is causally related to the reopening of the grave or is an independent event. In my opinion, these actions took place after the

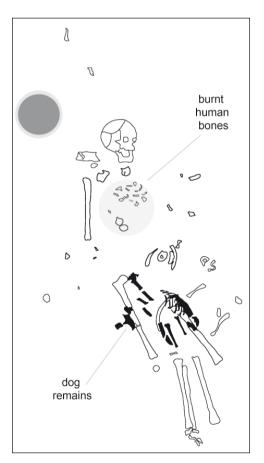


Fig. 9. Velikaya Bugayevka (Kiyevskaya oblasť, Ukraine) – dog remains in the trench-disturbed inhumation, Grave 73. They are situated c. 40 cm above the pelvis and femora of the deceased. After Petrauskas and Shishkin 2013. Drawn by K. Skóra

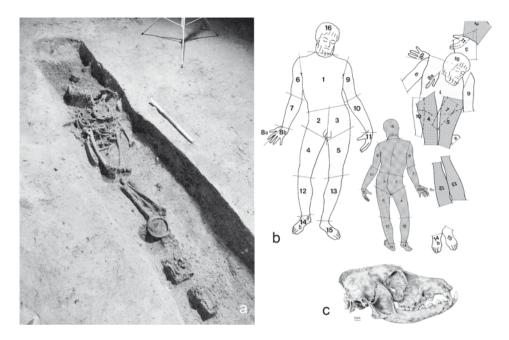


Fig. 10. Himlingøje (Zealand), Grave 1978-35. Dog skeleton on the coffin of the deceased, whose body was quartered (?) before burial. After Lund Hansen et al. 1995

skeletonisation of the body, which is implied by the arrangement of the skeleton. In some respect, this case is similar to the discovery from Czarnówko.

What is more, the incomplete skeleton of a dog was found in inhumation grave 30 at Chervone-2 (Ukraine), near mixed human bones. This burial was also disturbed by a trench, and the fact that the human bones were mixed indicates that the intrusion took place after the decomposition of the body. The dog's skeleton was deposited in the NW part of the pit, at its mid-depth (Shishkin and Petrauskas 2010; Petrauskas 2014, 143; as well as unpublished information provided by O. V. Petrauskas, 30 July 2018). It seems that the incompleteness of the animal's skeleton indicates that the dog's body found its way to the fill of the grave pit in connection with activities related to the first burial. The absence of some bones could therefore be caused by their disturbance when the feature was opened.

Apart from these two discoveries, which are somewhat analogous to the case of Czarnówko, other types of examples of the presence of dogs in funeral rites come only from the Chernyakhov-Sântana de Mureş Culture. At Lavrykivka (Poltavs'ka obl., Ukraine), the complete skeleton of a small dog was located near a pottery cluster close to the leg of a deceased woman (Suprunenko and Hopkalo 2014, 208, fig. 1). In grave 13 in the cemetery at Pereyaslav-Khmel'nytskyy (Ukraine), a dog's skull was found. Furthermore, dog remains were found in feature 287 in the necropolis at Dănceni (Moldova). This feature is interpreted as a cenotaph. Remains of dogs are not always discovered directly in the grave pit. Sometimes they are located above the grave or in the barrow, as it is the case among the Sarmatians from the Carpathian Basin (Hopkalo and Rudych 2017, 81).

In the cemetery at Nejzac (Crimea), dogs accompanied the dead who were buried in cylindrical pits located in the peripheries of the cemetery (Khrapunov 2013, 192). In the cemetery at Olbia (Ukraine), a feature with the remains of three young dogs found in a layer of ash was interpreted as a sacrificial burial. Potsherds and burnt bones were also recorded in the pit (Hopalko and Rudych 2017, 81). Moreover, the skeletons of six dogs in anatomical position were found in grave 165 in Velikaya Bugayevka (Petrauskas and Shishkin 2013, 61). Traces of knife incisions were found on some bones (Zhuravlev 2013, 383). This discovery is considered as some kind of sacrifice or cult feature (Hopkalo and Rudych 2017, 83).

I do not know any instances of discoveries of dog remains in trenches disturbing Roman Period graves in Scandinavia, although a habit of common burials with humans was in use there (Gräslund 2014, 36-37). In Hammarby (Öland), inhumation grave 1/1954 (phase C1) in a stone chamber contained the skeleton of a dog (?) in its southern part. This area of the burial pit was intact, whereas the rest was plundered – human bones and burial equipment were mixed (Rasch 2001, 198, 222). The incomplete skeleton of a mediumsize dog was discovered in a chamber grave in Ellekilde (Zealand), where a man who died as a result of combat trauma was buried. The fact that the animal's remains are not complete is the result of a *pars pro toto* rule in the opinion of R. Iversen (2011, 82, 109; 2014, 136-137). Additionally, only dentition from dogs was included in graves 30 and 100 from (Iversen 2011, 82).

The skeleton of a dog was found at the bottom of the coffin in grave 1978-35 in the cemetery from the Younger Roman Period in Himlingøje (Zealand) – Fig. 10. No archaeological traces demonstrating post-funerary intrusion were discovered in this grave. On the other hand, an anthropological assessment suggests that the partially decomposed body of a man (aged 18-25) was first quartered and then deposited into the grave. This is implied both by the non-anatomical arrangement of the skeleton and by cutmarks on pelvic and limb bones and perhaps on the shoulder blade (Lund Hansen *et al.* 1995, 125-127, 254-255, fig. 3:89-93).

DOG REMAINS IN SO-CALLED ROBBERY TRENCHES IN NECROPOLES OF OTHER CULTURES

The habit of depositing dead dogs in trenches that are classified as robbery trenches seems to be well established in European cemeteries from the first centuries of the second half of the first millennium AD. This is related to the growing role of the dog in funeral rites of societies of that time. Dog burials were practiced by the Thuringians, the Longobards,

the Franks, the Alamanni, and the Anglo-Saxons (c. 400-700 AD), as well as by the Saxons, the Frisians (c. 600-800 AC) and the Scandinavians (c. 600-1050 AD).

I also know of some graves with so-called robbery trenches in which dog remains were revealed. These discoveries are from Merovingian Period cemeteries located in the territory of present-day Germany, but chiefly from Longobard necropoles from the period preceding their migration to Italy, which is believed to have commenced on Easter in 568 (Mączyńska 2013, 242-243). Of significance for proposed interpretations are the presence of dogs as companions of the dead, and the occurrence of a "Grabraub" (grave robbery) plague (Klevnäs 2013, 7), which involved necropoles of western and central Europe at this time. Due to this, remains of dogs in robbery trenches are very often a result of the fact that graves were dug through by "plunderers". In cases in which the reopening took place shortly after burial, any disturbance concerned the non-decomposed body of the animal, whereas if the intrusion took place after skeletonisation, we can observe a disturbed arrangement of animal bones and a translocation of parts of the skeleton within the pit and the trench. Sometimes the absence of some parts of the skeleton is noted. These parts were perhaps removed in the course of the intrusion.

Ménfőcsanak (Győr, Hungary) is believed to be an example of a cemetery where dog remains were recorded in the trench of an inhumation grave (Tomka 2005, 248). In grave 262 (6th c.), skeletons of two adult dogs buried with a deceased female were identified (Vaday 2015, 214). L. Bartosiewicz (2015, 255) assumes that these dogs were killed for the needs of the funeral ceremony, be it in order to manifest the status of the dead person or to be her companions in the voyage to the other world. An archaeozoological assessment did not show any traces of *perimortem* trauma. On the other hand, a number of pathological changes were found in the case of Individual B, which demonstrated its poor living conditions (Bartosiewicz 2015, 251, 255, fig. 3). One of the animals (Dog B) was placed in a niche in the course of the burial and thus remained *in situ* at the time of the intrusion. The arrangement of the other individual (Dog A) implies that its body was thrown again into the pit after the grave had been emptied. However, it is not clear where this dog was originally deposited. The arrangement of the body and the position of the dog demonstrate that the opening took place shortly after the burial (Bartosiewicz 2009, 161; Vaday 2015, 186-187, fig. 10.1-9, grave 262).

In the necropolis of Lužice (Moravia), dog remains were found in grave 96. They were originally located on the coffin lid of an older adult (*senilis*) male. As a result of the collapse of the coffin or its destruction, the dog's remains moved downward in the pit (Klanica and Klanicová 2011, 289-290, fig. 41). An analogous situation was found in the "plundered" grave 111 with a double burial of a man and a child. The caudal portion of the skeleton of a dog with its hind limbs directed upward was found in the central part of the trench above the coffin. The cranial portion of the skeleton was destroyed in the course of the robbery (Klanica and Klanicová 2011, 300, fig. 47). The aforementioned examples demonstrate that the animals were not deposited into the graves secondarily, but rather that their pre-

sence in the trenches resulted from the translocation of the original contents of the grave pit by the robbers. An analogous situation was found in Plotiště nad Labem in chamber grave I. In this case, the skeletons of five dogs and a child were translocated as a result of the collapse of the grave's structure when it was disturbed by a robbery trench (Rybová 1979, 467-472, fig. 84).

It seems that the situation discovered in the Baiovarian cemetery of Viecht-Unterfeld (Gde. Eching, Lkr. Landshut) is somewhat related to the case of Czarnówko (Dannhorn 1994, 295). Among nearly 300 features, grave 121 stands out with regard to its spatial arrangement. It was surrounded with a ditch and was originally covered with earthen mound. Next to a large grave pit, post-holes were discovered. These were remains of a wooden structure. Inside the pit, a "robbery" trench in the shape of a shaft leading directly to the coffin was revealed. The skeleton of a dog was discovered in the middle of the trench's depth, and below that lay the corpse of a fox. The animals had been decapitated before they were thrown into the pit. On the basis of grave furnishings, the burial can be dated to the second third of the 7th c. (Dannhorn 1992; 1994, 298). The deposition of the animals in the trench is interpreted as a manifestation of magical rituals undertaken by the robbers or as an attempt at placating the robbed dead by means of sacrificial rites (Dannhorn 1992, 133; 1994, 299-300). Decapitated bodies of dogs found in human burials are known from Viking Age cemeteries, often in so-called atypical burials (Gardela 2012, 19-22). This, however, fits within another sphere of meanings.

Other species of animals can also be found in trenches dug into graves in inhumation necropoles. Apart from the aforementioned fox, red deer antlers have been discovered in 6th c. Germanic cemeteries in the Czech Republic and Slovakia. For example, red deer antler was found in the trench of grave 45/1904 in the cemetery at Krainburg, in grave 5 at Prague-Kobylisy, and in grave 38 in the Avar cemetery at Kiskörös-Vágóhíd (Werner 1962, 88; Svoboda 1965, 259-260). J. Werner (1962, 88) classified these actions as "Geweihzauber", or sorcery with the use of antler. Such magic was supposedly used by early medieval grave-robbers. Antler may have also been among the original content of the grave pit, ending up in the trench as a result of translocation. This is certainly possible, as cases of covering the dead with Cervidae antler are known from necropoles of that time (e.g., a moose antler on the bodies of a pair of children – grave 45 from Holubice in Moravia, see Čižmář 2011, 182, plate 101:45).

THE ROLE OF DOGS IN FUNERAL RITES AND THE DISCOVERY FROM CZARNÓWKO

Dogs whose remains are discovered in human graves are generally perceived as gifts, guides to the otherworld, guardians of the dead or status symbols of the deceased person. This does not exclude an emotional relationship between the dead person and the animal

(Makiewicz 1987, 248; Prummel 1992, 151-152; Scheibner 2013, 80-81) or the existence of more profound symbolic meanings (cf. Gräslund 2004). One crucial step in ascertaining the meaning behind such customs is the identification of the manner of death of the dog, while its breed or size can help to define its function during its life (e.g., companion animal, protection against predators, participation in hunts).

There is no doubt with regard to the strong bonds between humans and dogs. These have consolidated steadily since domestication, when an ability to identify human emotions and behaviours developed as part of the behavioural traits of the animal (Lasota-Moskalewska 2005, 202). Perhaps as a result of this profound symbiosis and a high regard for certain traits of this species, dogs were considered to have healing properties belonging to the repertoire of homeopathic magic (Morawiecki 1996, 58-63, 77). A belief in the healing or protective power of medicines or apotropaics prepared from dogs (from specific parts of the body, internal organs or body fluids) was popular in antiquity and has survived in folk medicine until the present. Pups were believed to possess particularly strong healing properties (Scheibner 2013, 63-64). Images of dogs (e.g., depicted in mosaics) or vessels containing canine blood were sometimes buried under the threshold in order to protect a household against malicious spirits (Zwolska 2014, 57, 73, 99-100). Dogs were also "protagonists" of a drastic ritual known as kynomartyrion or "dog tortures". It became widespread in the Greek world in antiquity. Its aim was to protect the community against the malicious spirits of people who died a violent or premature death, and its method was to strangle, stone or drown the animal (Zwolska 2014, 101-104). Generally, the role of the dog in ancient rituals, not only those of Mediterranean cultures, places it between a remedy for poor health via agrarian sacrifice and a means of repelling evil forces (Scheibner 2013, 75-76).

Although in the course of time, the dog became a symbol of fidelity and friendship and its position was sometimes even quasi-human, the attitude of humans toward dogs was not only positive. There was room for contemptuous treatment and extreme neglect (e.g., keeping dogs in miserable living conditions). This ambivalence was perhaps also rooted in cases of aggressive behaviour against humans.

Based on the presence of dog burials in particular locations within settlements of the Central European Barbaricum (e.g., household pits, pottery kilns or bloomery furnaces, households and post-holes), one first of all assumes their role as sacrifices, including foundation sacrifices, or guardians, e.g., of precious contents (among others, Beilke-Voigt 2007; Beneš and Nývltová Fišáková 2009, 532; Grünewald 2009, 253; Gralak 2012; Sielicka 2015, 154; Nohálová *et al.* 2016, 83-84).

Some discoveries from within settlements may be the results of actions belonging to the profanum sphere: an accident, individual relationships with the animal or removal of corpses of animals that died of sickness or old age. Obviously, it is not always possible to archaeologically assess the context of a discovery in a way that would unequivocally fit within the sacrum or profanum sphere (Šedo 2004, 473). It is emphasized that dog burials

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should not be considered the aim of rituals, but rather a result of a series of cult and magical actions. Their presence among some sacrificial offerings discovered in bogs is a testimony to their sacral role (Jankuhn 1967, 124-125; Maringer 1981, 38, 39; Ørsnes 1988, 121-129; Makiewicz 2000, 226; Beilke-Voigt 2007, 241, 243; Gräslund 2014, 36). Dog bones or their complete skeletons are also recorded in wells, e.g., of the Przeworsk culture (Gralak 2012; Sielicka 2015, 156-157). What is more, they are not uncommon in similar contexts in other cultures or epochs (cf., e.g., Beilke-Voigt 2007, 201-203; Kajkowski 2015, 234). It is assumed that taking a well out of service meant that it should be filled up, and animal sacrifices were made in the course of such actions (Gralak 2012, 119). Such an activity is sometimes understood as a compensation sacrifice during the ritual of taking a feature out of service (cf. De Grossi Mazzorin and Minniti 2006, 64). Therefore, the dog was perhaps not only supposed to play a role in initiation or opening rites, but also in those of closing: taking buildings out of service, an abandonment of their previous function (e.g., as a dwelling, a workshop, or an agricultural structure). Of course, this role does not exclude a belief in the dog's ability to protect against evil spirits or misfortune. A sacrifice of the dog's life held the evil in its former place and guaranteed prosperity in the new one (cf. Šedo 2004, 475; Beneš and Nývltová Fišáková 2009, 523). It is also assumed that such actions may have been a kind of "taboo" for the deceased's property (Nohálová et al. 2016, 84). The dog was also a guardian of its dead owner or of their post-mortem property (Nohálová et al. 2016, 84).

Wells, fissures and openings in the ground were related to the *axis mundi* at the level of mythical imagination. These were perceived as mediation places, which were spaces of contact between various spheres: the terrestrial and the cosmic, the real world and the otherworld. According to T. Gralak (2012, 122, 123), a sacrifice of a dog made in such a place closed this axis of contact. Making a sacrifice could also mean a termination of the original function of a feature and its desacralisation. It is also assumed that the dog may have been a proxy sacrifice, made in the place of another animal that was more valuable from an economic point of view. It may have also been a substitute for a human sacrifice (Jankuhn 1967, 146; Beilke-Voigt 2007, 240, 243). "Evil" that was re-directed against the dog would have otherwise inflicted the community of the living. The animal sacrifice guaranteed purification (Beneš and Nývltová Fišáková 2009, 532).

A belief in the relationship between dogs and forces of chthonic nature, as exemplified in mythologies of both European societies (e.g., Greek, Roman, or Nordic) and non-European ones became a foundation for their magical properties. On the one hand, their chthonic association, and their use as sacrificial offerings to gods, and on the other hand, the daily role of dogs in human life and their advanced ability to socialize must have led to the interaction and intermingling of their roles (Morawiecki 1996, 69-77; Peters 1997, 511; Gräslund 2004, 170; Beilke-Voigt 2007, 240; De Grosi Mazzorin and Minniti 2006, 62; Zwolska 2014, 52-56; 87-94; Kajkowski 2015). Manfred Lurke (1983) stressed the double role of the dog in the religious dimension. As a representative of both culture and nature, good

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and evil, this animal became not only a guardian of access to the otherworld (or a guide for passage between this world and the other); it also became a creature gifted with the prophetic ability of foretelling impending death, and a psychopomp, which led souls of the dead to the reality of the otherworld. Being a creature from a liminal zone, it guarded the established order and prevented opposite worlds from intermingling. Thus, this property of dogs is manifested in the act of placing the corpses of these animals within border zones (e.g., peripheries of settlements and necropolis) (Kajkowski 2015, 233).

In antiquity, dog sacrifices were perceived as purification rituals that averted crises of various nature (De Grosi Mazzorin and Minniti 2006, 63-64). Dogs were sacrificed to secure prosperity, but also to remove unfavourable consequences of events. By means of killing a dog, a "daemon" was being killed. Sacrifices offered to the goddess *Genita Mana* protected household members, especially children, against death (Morawiecki 1996, 68-70; Zwolska 2014, 96). An offering of a dog was also thought to secure prosperity in military activities (Zwolska 2014, 97). The Greek goddess Hekate was depicted with the head of a dog and in the company of dog-like daemons named Lamio, Gello and Empus. This goddess accompanied the souls of people who died a premature death and did not receive a proper burial (Mainoldi 1981).

The significant place of the dog in the religious practices of the North is testified to by Adam of Bremen and Thietmar of Merseburg, among others, who report on sacrifices of horses and cocks, as well (Gräslund 2004, 171-172). Gods who set out on a journey, mainly to the otherworld, meet dogs on their way, which guard access to the realm of the dead (Gardela 2012, 12-13). We also know of Odin's wolves, devouring warriors who fell on the battlefield (Słupecki 2003, 49; Gräslund 2004, 172). Garm is a dog howling near the cave of Gnipahålan, which one must pass through in order to access Hel. Garm still has a role to fulfil during the Ragnarök, which is to fight against the god Tyr (poetic Edda: *Völuspá*, Strophes 44, 49, 58; Gardela 2012, 13). A barking dog, covered with blood, also appears near the gates of Hel (poetic Edda: *Baldrs draumar*, Strophes 2-3). A.-S. Gräslund (2004, 173) believes that dog remains in funerary contexts should be discussed at the level of symbolic-mythological meanings and as being connected to the transition from life to death, rather than simply as companions of their owners or signs of their high social status. In general terms, a dog's burial or the sacrifice of a dog is related to the idea of transitioning from one stage to another in many European cultures.

It is usually problematic to determine whether the deposition of a dog in a feature was actually synchronised with the cessation of use of this feature, or whether the dog's corpse was simply disposed of opportunistically – that is, it was thrown into a feature that had long since been abandoned. This was certainly easier than digging a new pit. In order to answer this question, it is necessary each time to carefully examine the context of the discovery and to consider whether we are dealing with the removal of the corpse due to hygienic reasons or a burial-sacrifice should rather be taken into account (although these functions are not mutually exclusive).

CONCLUSIONS

Determining the significance of the actions that took place in the trench leading to the inhumation grave in Czarnówko is not easy, particularly given that the skeleton of the deceased person did not survive. It seems that considering the presence of the dog to be incidental would be the easiest explanation. However, on account of the context of this discovery and due to the peculiar ritual role of the dog in general, other interpretations can be supposed. The originators may have intended to place the dog's body and the stones in the trench in order to block the way back to the deceased person. Therefore, this act may have been some sort of self-protection against the reaction of the dead person, or protection for the community against a "Wiedergänger". Some Iron Age burials of dogs whose bodies are covered with stones are interpreted in such a manner (Scheibner 2013, 77, plate 7, chart 16). Looters, for example, protected themselves against the revenge of persons whose post-mortem rest they disturbed. In such an interpretation, trenches disturbing inhumation graves are not only a testimony to past looting (which is the simplest way of seeing this issue); they are also places in which ritual actions took place, or spaces of communication with the dead.

Remains of dogs in Wielbark culture cemeteries are few, and they are typically represented by fragments of the skeleton only. Sometimes, excavation reports do not provide data on whether bones were in contact with fire or on which skeletal elements were identified in a given feature (e.g., at Chwarzno these were the skull and limb bones – Gałęzowska 2007, table 4). Furthermore, we are offered no explanation of whether or how the animals were killed. On the other hand, in many cases the context of discoveries of dog remains in cemeteries – inside a wreath, in the stone covering of a mound, in a channel-like feature – demonstrates their ritual nature.

The presence of the dog in the trench, that is, in the pit which connected the world of the dead and the world of the living can be seen as the remnants of a chthonic ritual, or making a *do ut des* type sacrifice. In some societies, the very act of opening the ground often means gaining access to "chthonic forces which are indispensable in the ritual." These forces offer support in carrying out various sacrificial rituals and in communications between various realities. This, in itself, could be of use – for example, in soothsaying (cf., e.g., Słupecki 2017, 197).

Grave 1271 does not stand out against the background of other burials in the cemetery in Czarnówko with regard to its furnishings (although we know only of the artefacts which were left). The construction of the grave does not place the dead person in the group of representatives of local elites, either. It can be assumed that the person (or the memory of this person) was known to the group of people who disturbed the grave. The place of the deceased person in the community – which was a result of various factors, such as social role, function (e.g., in holding rituals), personality or physical traits, etc. – may have been related to this peculiar ritual. As the bones of the dead underwent a complete decomposition, rendering it impossible to assess his or her biological condition, there is no reason to go any further in these considerations.

On the other hand, it cannot be excluded that this grave was randomly selected for the deposition of this kind of sacrifice. Thus, the sacrifice may have been related not only to this grave, but to the entire series of post-funerary practices that took place at Czarnówko. The degree of disturbance of this necropolis is very high and there are firm grounds to suppose that the intrusions that we call grave reopening (without any binding interpretations at this stage of research) took place throughout the entire duration of its use. In the case of this particular grave, the intrusion may well have taken place at the very end of use of the cemetery.

Certain questions in archaeology are doomed to remain without any unequivocal answer. Placing a sequence of past actions within a broad religious, social and customary system yields a result which may be very general and thus not always seen as satisfactory.

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References

Primary Sources

Ammianus Marcellinus. *Dzieje rzymskie*, vol. 2: 26-31. Trans. Ignacy Lewandowski. Warszawa 2002: Biblioteka Antyczna.

Edda (Edda poetycka). Trans. Anna Załuska-Strömberg. Wrocław 1986: Biblioteka Narodowa, seria 2.

Andrałojć M. 1986. Pochówki psów u pradziejowych społeczeństw Europy Środkowej. Inowrocław.

Bartosiewicz L. 2009. A comparison between Roman Period and Langobard dogs from western Hungary. In Sz. Bíró (ed.), *Ex officina. Studia in honorem Dénes Gabler*. Győr: Mursella Reìgeìszeti Egyesület, 159-171.

Bartosiewicz L. 2015. Animal remains from the Langobard cemetery of Ménfőcsanak (NW Hungary). Antaeus. Communicationes ex Instituto Archaeologico Academiae Scientiarum Hungaricae 33, 249-263.

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- Bednarczyk J. and Romańska A. 2015. Karczyn/Witowy stan. 21/22. Birytualne cmentarzysko kultury przeworskiej z Kujaw (= Studia i materiały do dziejów Kujaw 12). Poznań, Inowrocław: Instytut Prahistorii Uniwersytetu im. Adama Mickiewicza, Fundacja Ochrony Dziedzictwa Kulturowego Społeczeństw Kujaw "Cuiavia".
- Beilke-Voigt I. 2007. Das "Opfer" im archäologischen Befund. Studien zu den sog. Bauopfern, kultischen Niederlegungen und Bestattungen in ur- und frühgeschichtlichen Siedlungen Norddeutschlands und Dänemarks (= Berliner Archäologische Forschungen 4). Rahden/Westf.: Verlag Marie Leidorf.
- Beneš Z. and Nývltová Fišáková M. 2009. "Pohřby psů" na sidlištich doby řimske v Čechach: současny stav poznani. In M. Karwowski and E. Droberjar (eds), Archeologia Barbarzyńców 2008: powiązania i kontakty w świecie barbarzyńskim/Archäologie der Barbaren 2008. Beziehungen und Kontakte in der barbarischen Welt (= Collectio Archaeologica Resoviensis 13). Rzeszów: Fundacja Rzeszowskiego Ośrodka Archeologicznego, Instytut Archeologii Uniwersytetu Rzeszowskiego, 531-542.
- Bokiniec E., Gużyński P., Hoffmann M. and Kucharski L. 2012. Rogowo, stan. 23, gmina Lubicz, woj. kujawsko-pomorskie. *Informator Archeologiczny. Badania 2000*, 161-164.
- Bokiniec E. 2016. Rogowo, gmina Lubicz, województwo kujawsko-pomorskie, stanowisko 23, osada kultury wielbarskiej, tom 2: Katalog: odcinki C i D. Pozostałości osadnictwa z okresów przedrzymskiego i rzymskiego w strefie przebiegu autostrady A-1 w województwie kujawskopomorskim. Toruń: Uniwersytet Mikołaja Kopernika w Toruniu, Muzeum Okręgowe w Toruniu.
- Čižmář M. 2011. Das Gräberfeld von Holubice. In J. Tejral, S. Stuchlík, M. Čižmář, Z. Klanica, S. Klanicová (eds), Langobardische Gräberfelder in Mähren I (= Schriften des Archäologischen Instituts der AW CR in Brno 39). Brno: Archäologisches Institut Akademie der Wissenschaften der Tschechische Republik Brno, 129-224.
- Dannhorn T. 1992. Ein alt beraubtes Adelsgrab aus dem frühmittelalterlichen Friedhof von Viecht, "Unterfeld". *Das archäologische Jahr in Bayern* 1992, 130-133.
- Dannhorn T. 1994. Beobachtungen zu den antiken Beraubungsmethoden im frühmittelalterlichen Reihengräberfeld von Viecht, "Unterfeld," Gde. Eching, Lkr. Landshut. In K. Schmotz (ed.), Vorträge des 12. Niederbayerischer Archäologentag (= Vorträge des Niederbayerischer Archäologentag 12). Deggendorf: Verlag Marie Leidorf GmbH, 295-306.
- Dąbrowska T. 1997. Kamieńczyk. Ein Gräberfeld der Przeworsk-Kultur in Ostmasowien (= Monumenta Archaeologica Barbarica 3). Kraków: Instytut Archeologii i Etnologii Polskiej Akademii Nauk, Państwowe Muzeum Archeologiczne w Warszawie.
- De Grossi Mazzorin J. and Minniti C. 2006. Dog Sacrifice in the Ancient World: A Ritual Passage? In L. M. Snyder and E. A. Moore (eds), Dogs and People in Social, Working, Economic or Symbolic Interaction. 9th ICAZ Conference, Durham 2002. Oxford: Oxbow Books, 62-66.
- Ferreira M. T. and Cunha E. 2013. Can we infer post mortem interval on the basis of decomposition rate? A case from a Portuguese cemetery. *Forensic Science International* 226, 298.e1-298e6.
- Gałęzowska A. 2007. Obrządek pogrzebowy kultury wielbarskiej w Wielkopolsce. Acta Universitatis Lodziensis. Fola Archaeologica 25, 155-234.

- Gardeła L. 2012. Pies w świecie wikingów. In T. Borkowski (ed.), *Człowiek spotyka psa. Katalog wy*stawy. Wrocław: Muzeum Miejskie Wrocławia, 11-22.
- Gładykowska-Rzeczycka J. J., Sokół A., Pudło A. and Zientek A. 2003. Stan zdrowotny mieszkańców Pruszcza Gdańskiego z okresu rzymskiego, pochowanych na cmentarzysku, stanowisko 7. In M. Fudziński and H. Paner (eds), XIII Sesja Pomorzoznawcza, vol. 1: Od epoki kamienia do okresu rzymskiego. Gdańsk: Muzeum Archeologiczne w Gdańsku, 335-347.
- Gralak T. 2012. "Użył jak pies w studni", czyli o pochówkach zwierzęcych z osady w Polwicy-Skrzypniku, pow. Oława, z późnego okresu wpływów rzymskich i początku okresu wędrówek ludów. *Przegląd Archeologiczny* 60, 107-132.
- Gräslund A.-S. 2004. Dogs in graves a question of symbolism? In B. Santillo Fitzell (ed.), *Pecus. Man* and Animal in Antiquity. Proceedings of the conference at the Swedish Institute in Rome, September 9-12, 2002. Rome: The Swedish Institute, 167-176.
- Gräslund A.-S. 2014. En hund begraven Hunden från stenålder till medeltid. In A.-S. Gräslund and I. Svanberg (eds), Från renhållningshjon tillmodeaccessoar. 10 000 år av relationer människahund i Sverige. Föredrag vid ett symposium i Uppsala 15 februari 2013 (= Acta Academiae Regiae Gustavi Adolphi 133). Uppsala: Kungl. Gustav Adolfs Akademien för svensk folkkultur, 31-47.
- Grumeza L. 2013. Animal inhumations within settlements during the Sarmatian period on the western plain (end of the 2nd century first half of the 5th century AD). In A. Stavila, D. Micle, A. Cîntar, C. Floca and S. Forțiu (eds), Arheovest 1: In memoriam Liviu Măruia, Interdisciplinaritate în Arheologie și Istorie, Timișoara, 7 decembrie 2013. Szeged: JATEPress Kiadó, 413-435.
- Grünewald M. 2009. Eine römische Hundebestattung mit zugehörigem Fressnapf aus Mayen. Archäologisches Korrespondenzblatt 39(2), 251-261.
- Hahuła K. and Wołągiewicz R. 2001. *Grzybnica. Ein Gräberfeld mit Steinkreisen der Wielbark-Kultur in Pommern* (= *Monumenta Archaeologica Barbarica* 8). Warszawa, Koszalin: Muzeum w Koszalinie, Fundacja Przyjaciół Instytutu Archeologii Uniwersytetu Warszawskiego, Państwowe Muzeum Archeologiczne w Warszawie.
- Hopkalo O. V. and Rudych T. O. 2017. Tv aryny na mohyl'nykakh kul'tury Chernyakhiv Syntanade-Muresh. In: A. V. Skyba and S. A. Horbanenko (eds), Yevropeys'ka Arkheolohiya I tysyacholittya n. e. Zbirnyk naukovykh prats' na chest' Liany Vasylivny Vakulenko. Kyyiv: Instytut Arkheolohiyi NAN Ukrayiny, 75-86.
- Istvánovits E. and Kulcsár V. 2015. Animals of the Sarmatians in the Carpathian Basin (Archaeozoology through the eyes of archaeologists). *Materialy po Arkheologii, Istorii i Etnografii Tavrii (Materials in Archaeology, History and Ethnography of Tauria)* 20, 49-78.
- Iversen R. 2011. Ellekilde en gravplads fra yngre romersk jernalder med fyrstegrav og cirkusbægre. *Aarbøger for Nordisk old kyndighed og historie* 2009, 69-102.
- Iversen R. 2014. The chamber grave at Ellekilde A late Roman Iron Age princely burial and cemetery from Torslunde, East Zealand, Denmark. In A. Abegg-Wigg and N. Lau (eds), Kammergräber im Barbaricum. Zu Einflüssen und Übergangsphänomenen von der vorrömischen Eisenzeit bis in die Völkerwanderungszeit, Internationale Tagung, Schleswig 25.–27. November 2010. Neumünster, Hamburg: Wachholtz Verlag, 133-144.

- Jankuhn H. 1967. Archäologische Beobachtungen zu Tier- und Menschenopfern bei den Germanen in der Römischen Kaiserzeit. Nachrichten der Akademie der Wissenschaften in Göttingen, Philologisch-Historische Klasse 6, 117-147.
- Jaskanis J. 2012. *Wodzowskie kurhany kultury wielbarskiej na Podlasiu*. Białystok: Muzeum Podlaskie w Białymstoku, Instytucja Kultury Samorządu Województwa Podlaskiego.
- Kajkowski K. 2015. The Dog in Pagan beliefs of Early Medieval north-western Slavs. Pies w wierzeniach pogańskich wczesnośredniowiecznych Słowian północno-zachodnich. In L. Gardeła and A. Pulpánová-Reszczyńska (eds), *Rituals in the Past (= Analecta Archaeologica Ressoviensia* 10). Rzeszów: Instytut Archeologii Uniwersytetu Rzeszowskiego, 199-240.
- Khrapunov I. N. 2013. Osobennosti mogil'nika Neyzats. In I. N. Khrapunov (ed.), Krym v sarmatskuyu epokhu (II v. do n.e. - IV v. n.e.)/The Crimea in the Age of the Sarmatians (200 BC - AD 400) (= Sbornik nauchnykh statey 1). Simferopol', Bakhchisaray: Izdatel'stvo "Dolva", 188-207.
- Klanica Z. and Klanicová S. 2011. Das langobardische Gr\u00e4berfeld von Lu\u00e5ice (Bez. Hodon\u00e1n). In J. Tejral, S. Stuchl\u00efk, M. \u00e5i\u00e5m\u00e5r, Z. Klanica and S. Klanicov\u00e5 (eds), Langobardische Gr\u00e4berfelder in M\u00e4hren I (= Schriften des Arch\u00e4ologischen Instituts der AW CR in Brno 39). Brno: Arch\u00e4ologisches Institut Akademie der Wissenschaften der Tschechische Republik Brno, 225-312.
- Klevnäs A. M. 2013. Whodunnit? Grave robbery in Anglo-Saxon England and the Merovingian Kingdoms (= British Archaeological Reports International Series 2582). Oxford: Archaeopress.
- Kokowski A. 1993. Gródek nad Bugiem. Cmentarzysko grupy masłomęckiej, 1-3 (= Lubelskie Materiały Archeologiczne 7(1-3)). Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Kokowski A. 2007. Goci. Od Skandzy do Campi Gothorum (od Skandynawii do Półwyspu Iberyjskiego). Warszawa: Wydawnictwo Trio.
- Krzysiak A. and Andrzejowski J. 2015. Czarnówko największe cmentarzysko z późnej starożytności na ziemiach polskich. In J. Andrzejowski (ed.), *Czarnówko, stan. 5. Cmentarzyska z późnej* starożytności na Pomorzu 1 (= Monumenta Archaeologica Barbarica, Series Gemina 5). Lębork, Warszawa: Muzeum w Lęborku, Fundacja Monumenta Archaeologica Barbarica, 7-13.
- Kümmel Ch. 2009. Ur- und frühgeschichtlicher Grabraub. Archäologische Interpretation und kulturanthropologische Erklärung (= Tübinger Schriften zur Ur- und Frühgeschichtlichen Archäologie 9). Münster: Waxmann.
- Kuziak B. 2009. Szczątki zwierzęce z wybranych cmentarzysk strefy wschodniej kultury przeworskiej. Studia i Materiały Archeologiczne 14, 75-92.
- Lau N. and Pieta K. 2017. Die antike Öffnung des Kammergrabes von Poprad-Matejovce. In Ústav archeologie a muzeologie FF MU (ed.), *Na hranicích impéria. Extra fines imperii. Jaroslavu Tejralovi k 80. narozeninám*. Brno: Masarykova Univerzita, Archeologický Ústav Akademie Věd, 255-265.
- Lasota-Moskalewska A. 2005. Zwierzęta udomowione w dziejach ludzkości. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- Lund Hansen U. (ed.) 1995. Himlingøje Seeland Europa. Ein Gräberfeld der jüngeren römischen Kaiserzeit auf Seeland, seine Bedeutung und internationalen Beziehungen (= Nordiske Fortidsminder Serie B, 13). København: Det Kongelige Nordiske oldskriftselskab.

- Lurke M. 1983. Der Hund als Symboltier für den Übergang vom Diesseits in das Jenseits. Zeitschrift für Religions- und Geistesgeschichte 35 (2), 132-144.
- Madyda-Legutko R. 1987. Die Gürtelschnallen der Römischen Kaiserzeit und der frühen Völkerwanderungszeit im mitteleuropäischen Barbaricum (= British Archaeological Reports International Series 360). Oxford: Archaeopress.
- Mainoldi C. 1981. Cani mitici e rituali tra il regno dei morti e il mondo dei viventi. *Quaderni Urbinati di Cultura Classica, New Series* 8, 7-41.
- Makiewicz T. 1987. Znaczenie sakralne tak zwanych "pochówków psów" na terenie środkowoeuropejskiego Barbaricum. *Folia Praehistorica Posnaniensia* 2, 239-276.
- Makiewicz T. 2000. Hund und Hundegräber. 4. Archäologisches. In R. Müller (ed.), (= *Reallexikon der Germanischen Altertumskunde* 15). Berlin, New York: Walter de Gruyter, 219-232.
- Makowiecki D. 2006. Remarks on the 'breeds' of dog (*Canis lupus f. familiaris*) in the Polish Lowland in the Roman Period, the Middle Ages and Post-Medieval Times in the light of archeolozoological research. *Fasciculi Archaeologiae Historicae* 18, 63-73.
- Makowiecki D. 2015. Wyniki badań archeozoologicznych z Czarnówka, pow. lęborski, stan. 5 (materiały z lat 2008-2015). In J. Andrzejowski (ed.), *Czarnówko, stan. 5. Cmentarzyska z późnej starożytności na Pomorzu* 1 (*= Monumenta Archaeologica Barbarica. Series Gemina* 5). Lębork, Warszawa: Muzeum w Lęborku, Fundacja Monumenta Archaeologica Barbarica, 139-144.
- Makowiecki D., Makowiecka M. and Wiejacka M. 2015. Analiza archeozoologiczna kości zwierzęcych i zabytków z cmentarzyska z okresu wpływów rzymskich w Karczynie/Witowach, stan. 21/22. In J. Bednarczyk and A. Romańska (eds), *Karczyn/Witowy stan. 21/22. Birytualne cmentarzysko kultury przeworskiej z Kujaw (= Studia i materiały do dziejów Kujaw 12)*. Poznań, Inowrocław: Instytut Prahistorii Uniwersytetu im. Adama Mickiewicza, Fundacja Ochrony Dziedzictwa Kulturowego Społeczeństw Kujaw "Cuiavia", 197-217.
- Maringer J. 1981. Der Hund in der Mythologie der vorgeschichtlichen Menschen. *Acta Praehistorica et Archaeologica* 11/12, 37-42.
- Mazur G. 2012. Ekspertyza antropologiczna szczątków kostnych z Waplewa, stan. 1. *Wiadomości Archeologiczne* 63, 158-159.
- Mączyńska M. 2013. Światło z popiołu. Wędrówki ludów w Europie w IV i V wieku. Warszawa: Wydawnictwo Trio.
- Mączyńska M. and Rudnicka D. 2004. Ein Grab mit römischen Importen aus Czarnówko, Kr. Lębork (Pommern). *Germania* 82 (2), 397-429.
- Morawiecki L. 1996. "Święte psy". Pies w życiu człowieka i kulcie religijnym w starożytności. In M. Salamon and Z. J. Kapera (eds), *Studia classica et byzantina Alexandro Krawczuk oblata*. Kraków: Uniwersytet Jagielloński, Instytut Historii, Enigma Press, 57-78,
- Nadachowski A. and Wolsan M. 1989. Ocena archeozoologiczna szczątków zwierzęcych ze stanowisk grupy masłomęckiej (młodszy okres wpływów rzymskich, południowo-wschodnia Polska). In J. Gurba and A. Kokowski (eds), *Kultura wielbarska w młodszym okresie rzymskim (materiały z konferencji)*, 2. Lublin: UMCS, 63-72.

- Nohálová H., Vávra J. and Kuchařík M. 2016. Dog burial and animal bone remains from the human graves in Prague-Zličín. *Interdisciplinaria Archaeologica. Natural Sciences in Archaeology* 7(1), 71-86.
- Ørsnes M. 1988. Ejsbøj I. Waffenopferfunde des 4.-5 (= *Jahrh. nach Chr. Nordiske Fortidsminder*. Serie B 11). København: Det Kongelige Nordiske Oldskriftselskab.
- Ostasz A. 2015. Osada kultury oksywskiej i wielbarskiej w Lipiankach, gm. Kwidzyn, stan. 3 (część I źródła nieruchome). In M. Fudziński and H. Paner (eds), *Kontakty ponadregionalne kultury* wielbarskiej. Przemiany kulturowe w okresie wpływów rzymskich na Pomorzu. Gdańsk: Muzeum Archeologiczne w Gdańsku, 51-124.
- Peters J. 1997. Der Hund in der Antike aus archäozoologischer Sicht. *Anthropozoologica* 25-26, 511-523.
- Petrauskas O. V. 2014. Razrushennye pohrebenyya na mohyl'nykakh chernyakhovskoy kul'tury Podneprov'ya: analyz arkheolohycheskoy struktury. In H. Yu. Ivakin (ed.), Vid Venediv do Rusi. Zbirnyk naukovykh prats' na poshanu doktora istorychnykh nauk, profesora Denysa Nykodymovycha Kozaka z nahody yoho 70-littya. Kyyiv: Instytut Arkheolohiyi NAN Ukrayiny, 125-152.
- Petrauskas O. V. and Shishkin R. G. 2013. *Mogil'nik i poseleniye chernyakhovskoy kul'tury u s. Velikaya Bugayevka (arkheologicheskiy istochnik) (= Oium 2)*. Kiyev: Institut arkheologii NAN Ukrainy, Institut istoricheskogo obrazovaniya NPU im. M.P. Dragomanova.
- Pospieszny Ł. and Bełka Z. 2015. Dieta i mobilność u schyłku starożytności. Szczątki ludzkie z cmentarzyska w Karczynie/Witowach stan. 21/22 w świetle badań izotopowych. In: J. Bednarczyk and A. Romańska (eds), *Karczyn/Witowy stan. 21/22. Birytualne cmentarzysko kultury przeworskiej z Kujaw* (= *Studia i materiały do dziejów Kujaw* 12). Poznań, Inowrocław: Instytut Prahistorii Uniwersytetu im. Adama Mickiewicza, Fundacja Ochrony Dziedzictwa Kulturowego Społeczeństw Kujaw "Cuiavia", 179-195.
- Prummel W. 1992. Early medieval dog burials among the Germanic tribes. Helinium 32 (1-2), 132-194.
- Rasch M. (ed.) 2001. Ölands järnåldersgravfält 4. Böda, Högby, Källa, Persnäs, Föra, Smedby, Södra Möckleby, Ventlinge, Segerstad, Gräsgård och Ås. Stockholm: Riksantikvarieämbetet och Statens historiska museer.
- Rogatko J. 1991. Znaleziska szczątków zwierzęcych na cmentarzyskach grupy masłomęckiej i kultury czerniachowskiej. *Archeologia Polski* 36 (1-2), 151-191.
- Rożnowski F. and Cymek L. 2015. Analizy antropologiczne szczątków kostnych z cmentarzyska w Czarnówku, stan. 5, pow. lęborski (materiały z lat 2008-2015). In J. Andrzejowski (ed.), *Czarnówko, stan. 5. Cmentarzyska z późnej starożytności na Pomorzu 1 (= Monumenta Archaeologica Barbarica, Series Gemina 5*). Lębork, Warszawa: Muzeum w Lęborku, Fundacja Monumenta Archaeologica Barbarica, 69-137.
- Rybová A. 1979. Plotiště nad Labem. Eine Nekropole aus dem 2.-5. Jahrhundert u. Z. I. Teil. *Památky* archeologické 70(2), 353-489.
- Scheibner A. 2013. Der Hund in der mitteleuropäischen Eisenzeit. Wirtschaftliche, rituelle und soziale Aspekt (= Berliner Archäologische Forschungen 12). Rahden/Westf.: Verlag Marie Leidorf GmbH.

- Schuster J. 2014. Złoty wiek Czarnówko w okresie wpływów rzymskich i w okresie wędrówek ludów. In J. Andrzejowski and J. Schuster (eds), Okruch złota w popiele ogniska. Starożytne nekropole w Czarnówku i ich tajemnice. Lębork, Warszawa: Muzeum w Lęborku, Fundacja Monumenta Archaeologica Barbarica, 53-89.
- Schuster J. 2015. Przybysze ze Skandynawii małe cmentarzysko z okresu wędrówek ludów. In J. Andrzejowski (ed.), *Czarnówko, stan. 5. Cmentarzyska z późnej starożytności na Pomorzu* 1 (= *Monumenta Archaeologica Barbarica, Series Gemina* 5). Lębork, Warszawa: Muzeum w Lęborku, Fundacja Monumenta Archaeologica Barbarica, 15-42.
- Schuster J. 2018. Czarnówko, stan. 5. Osiem grobów okazałych narodziny nowych elit w II wieku po Chr. w basenie Morza Bałtyckiego. In J. Andrzejowski, M. Pruska and J. Schuster (eds), Czarnówko, stan. 5. Cmentarzyska z późnej starożytności na Pomorzu 2 (= Monumenta Archaeologica Barbarica. Series Gemina 8). Lębork, Warszawa: Muzeum w Lęborku, Fundacja Monumenta Archaeologica Barbarica.
- Šedo O. 2004. K výkladu nálezů koster zvířat na sídlišti z doby římské ve Vyškově. In E. Kazdová, Z. Měřínský and K. Šabatová (eds), *K poctě Vladimíru Podborskému: přátelé a žáci k sedmdesátým narozeninám. Zu Ehren von Vladimír Podborský: von Freunden und Schülern zum siebzigsten Geburtstag*. Brno: Ústav archeologie a muzeologie, Filozofická fakulta Masarykovy univerzity v Brně, 473-478.
- Shishkin R. H. and Petrauskas O. V. 2010. Doslidzhennya mohyl'nyka chernyakhivs'koyi kul'tury Chervone-2. In Zbirka tez dopovidey na konferentsiyi "Chernyakhivs'ka kul'tura: aktual'ni problemy doslidzhennya", 15-17 zhovtnya 2010 r. Kyev: Natsional'nyy Pedahohichnyy Universytet im. M. P. Drahomanova, Instytut Istorychnoyi Osvity Kafedra Istoriyi ta Arkheolohiyi Slov'yan, Laboratoriya Arkheolohichnykh Doslidzhen', 85-87.
- Sielicka K. 2015. Przyczynek do badań nad rolą psów w społecznościach środkowoeuropejskiego Barbaricum. *Przegląd Archeologiczny* 63, 147-175.
- Skóra K. 2017. Opening of graves in the cemetery of the Wielbark Culture in Kowalewko. A preliminary analysis. *Fasciculi Archaeologiae Historicae* 30, 193-210.
- Skóra K. 2018. How much do we know about the opening of graves in the cemetery of the Wielbark culture in Czarnówko? Some remarks on the basis of research in 2017. Przegląd Archeologiczny 66, 193-223.
- Skóra K. and Troszczyńska-Antosik M. 2012. Cmentarzysko z okresu rzymskiego w Waplewie, pow. olsztyński. *Wiadomości Archeologiczne* 63, 145-159.
- Słupecki L. 2003. *Mitologia skandynawska w epoce wikingów*. Kraków: Zakład Wydawniczy "NO-MOS".
- Słupecki L. 2017. Wróżby i wyrocznie pogańskich Skandynawów. Kraków: Zakład Wydawniczy "NOMOS".
- Sobociński M. 1975. Zwierzęce szczątki kostne z osad otwartych okresu wpływów rzymskich na Pomorzu Wschodnim. *Pomorania Antiqua* 6, 505-530.
- Suprunenko O. B. and Hopkalo O. V. 2014. Divochyy kostyum final'noho etapu chernyakhivs'koyi kul'tury (za materialamy pokhovannya u Lavrykivtsi). In H. Yu. Ivakin (ed.), *Vid Venediv do*

Rusi. Zbirnyk naukovykh prats' na poshanu doktora istorychnykh nauk, profesora Denysa Nykodymovycha Kozaka z nahody yoho 70-littya. Kyyiv: Instytut Arkheolohiyi NAN Ukrayiny, 205-224.

- Svoboda B. 1965. Čechy v době stěhovani narodů (= Monumenta Archaeologica 13). Praha: Nakladatelství Československé Akademie věd.
- Szyndlar Z. 1989. Szczątki żółwi błotnych *Emys orbicularis* (L 1758) ze stanowiska grupy masłomęckiej. In J. Gurba and A. Kokowski (eds), *Kultura wielbarska w młodszym okresie rzymskim* (materiały z konferencji) 2. Lublin: UMCS, 73-74.
- Tejral J. 2004. Mušov und Czarnówko Bemerkungen zu weiträumigen Verbindungen zwischen germanischen Herrschaftszentren. In H. Friesinger and A. Stuppner (eds), Zentrum und Peripherie – gesellschaftliche Phänomene in der Frühgeschichte. Materialien des 13. Internationalen Symposiums: Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donauraum, Zwettl, 4. - 8. Dezember 2000 (= Mitteilungen der Prähistorischen Kommission der Österreichischen Akademie der Wissenschaften 57). Wien: Verlag der Österreichischen Akademie der Wissenschaften, 327-384.
- Tomka P. 2005. Langobardenforschung in Nordwestungarn. In W. Pohl and P. Erhart (eds), *Die Langobarden. Herrschaft und Identität (= Forschungen zur Geschichte des Mittelalters 9)*. Wien: Österreichische Akademie der Wissenschaften, 247-264.
- Tuszyńska M. 1995. Cmentarzysko płaskie kultury oksywskiej i kultury wielbarskiej z młodszego okresu przedrzymskiego i okresu wpływów rzymskich w Pruszczu Gdańskim, woj. gdańskie, stanowisko 7. In W. Filipowiak (ed.), Najnowsze kierunki badań najdawniejszych dziejów Pomorza. Szczecin: Muzeum Narodowe, 211-219.
- Vaday A. 2015. The Langobard cemetery from Ménfőcsanak. *Antaeus. Communicationes ex Instituto Archaeologico Academiae Scientiarum Hungaricae* 33, 163-242.
- Werner J. 1962. Die Langobarden in Pannonien. Beiträge zur Kenntnis der langobardischen Bodenfunde vor 568 (= Abhandlungen – Neue Folge 55A: Textteil). München: Verlag der Bayerischen Akademie der Wissenschaften.
- Węgrzynowicz T. 1982. *Szczątki zwierzęce jako wyraz wierzeń w czasach ciałopalenia zwłok*. Warszawa: Państwowe Muzeum Archeologiczne.
- Zhuravlev O. P. 2013. Opredeleniye osteologicheskikh materialov. In O.V. Petrauskas and R. G. Shishkin (eds), Mogil'nik i poseleniye chernyakhovskoy kul'tury u s. Velikaya Bugayevka (arkheologicheskiy istochnik) (= Oium 2). Kiyev: Institut arkheologii NAN Ukrainy, Institut istoricheskogo obrazovaniya NPU im. M. P. Dragomanova, 383.
- Zwolska P. 2014. Pies. Antyczny przyjaciel. Kraków: Wydawnictwo Avalon.