THE CEMETERY OF TARNOBRZEG LUSATIAN CULTURE IN KORYTNICA 5/3, IN THE SOUTHEAST OF POLAND

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POBOCHA, Patrycja. Tarnobrzegská skupina lužickej kultúry na pohrebisku Korytnica 5/3 v juhovýchodnom Poľsku. Príspevok analyzuje pramenný materiál priradený tarnobrzegskej skupine lužickej kultúry nájdený na pohrebisku Korytnica 5/3 ležiacom v katastri obce Sobków v okrese Jędrzejów v Svätokrížskom vojvodstve na juhovýchode Poľska. Štúdia sa opiera o spracovanie nálezov odkrytých v rokoch 2008 a 2009 ako aj počas záchranného výskumu, ktorý prebehol v roku 2010.

Kľúčové slová: archeológia; juhovýchodné Poľsko; Tarnobrzegská skupina lužickej kultúry; Hallstatt D;

Keywords: archaeology; Southeast Poland; Tarnobrzeg Lusatian Culture; Hallstatt D;

Introduction

Cemeteries are the basic source to research into the prehistoric society. ¹ Due to this research we can reconstruct life before ages. Necropolises of Tarnobrzeg Lusatian Culture are valuable sources about people from the Bronze and Iron Age in southeast Poland. This paper aims to present the results of excavation and the surface survey at cremation urn field of Tarnobrzeg Lustatian Culture in Korytnica 5/3.

The Tarnobrzeg Lusatian Culture

L. Kozłowski was the first who recognised Tarnobrzeg Lusatian Culture was in 1925² S. Czopek determined the chronological order for this culture (fig. 1). Figure 2 shows the Lusatian Culture territory in Poland.

¹ This thesis is part of my master thesis: The cemetery of Tarnobrzeg Lusatian Culture in Korytnica 3/5, in the municipality of Sobków, in the county of Jędrzejów, in the świętokrzyskie province (Prof. University of Wrocław Irena Lasak).

² MOSKWA, Kazimierz. Kultura łużycka w południowo-wschodniej Polsce. Rzeszów, 1976, p. 12.

Phase	Period	Absolute date
I1	OEBD/Ha-HaB1/	1200 BC-900
	HaB2	BC
I2-3	HaB1/HaB2 – HaC	900-700 BC
II	HaC-HaD1	700-550/500 BC
III1	HaD2-HaD3	550/500-400 BC
III2	LtB	400-300 BC

Fig. 1. Chronology of Tarnobrzeg Lusatian Culture (Czopek S. 2009, s. 22).

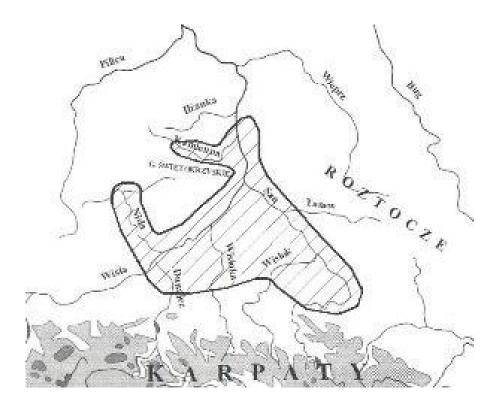


Fig. 2. The Tarnobrzeg Lusatian Culture.

Burials of TLC³ were mostly urn graves, sometimes without vessels and in early phases there was also inhumation⁴. As urn people of TLC used vases, egg-shaped pots and bowls. Vessels were often covered with a bowl positioned upside down, by scoop, vase or in the late phases by flat plates. Almost 50% of graves were

³ Tarnobrzeg Lusatian Culture.

⁴ SZYBOWICZ, Barbara. Cmentarzysko z epoki brązu w Bachórzu-Chodorówce. Analiza antropologiczna. Kraków, 1995, p. 20.

other vessels such as cups, scoops and miniature or flat plate⁵. In the burials of TLC, archaeologists found metal items, stone, glass, bone and clay artefacts. The metal items were recognised as pins⁶, nail-shaped earrings⁷, bracelets, necklaces, lusatian type greaves, bronze rings, beads, shields, pendants with spiral shield⁸, Kłyżów type rings⁹, heart and triangular shape pendants, tweezers¹⁰, razors, bronze needles, knifes (bronze and iron), sickle, axes, anvil, bits¹¹, swords and arrowheads¹². The collection of stone artefacts included flint flakes, arrowhead, sickle and stone grinder. In graves there were also pendants made of animal teeth, glass¹³, clay and bone beads¹⁴.

Polish archaeologists separated two groups of TLC located at west and east side of the Vistula River. I do not agree with that as there were graves at the necropolis of TLC on the east side of Vistula River arranged in rows¹⁵ (e.g. Grodzisk Dolny 2, Krzemienica, Kłyżów, Kosin, Tarnobrzeg¹⁶, Mokrzyszów, Gorzyce, Trójczyce)¹⁷. Some of the burials had stone constructions¹⁸. The cemeteries were located on sandy dunes near rivers or streams (e.g. Kłyżów 2, Mokrzyszów 2¹⁹, Knapy 6²⁰, Janowice Poduszowskie-Antoniów²¹, Opatowiec 1²², Krzemienica²³,

PRZYBYŁA, Marcin S. Wybrane aspekty obrządku pogrzebowego grupy tarnobrzeskiej. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, vol. XXV. Kraków, 2004, p. 91-101.

⁶ MOSKWA, ref. 2, p. 19-53.

MIRAŚ, Ireneusz - TWARDOWSKI, Wojciech. Pochówek z zausznicami gwoździowatymi z Kolonii Bąkowca, pow. Kozienice, stan. 1. In CZOPEK, Sylwester - TRYBAŁA-ZAWIŚLAK, Katarzyna (eds.). Tarnobrzeska kultura łużycka - źródła i interpretacje. Rzeszów, 2009, p. 449-457.

⁸ MOSKWA, ref. 2, p. 38-39.

⁹ TRYBAŁA-ZAWIŚLAK, Katarzyna. Kłyżów, stan. 2 i Mokrzyszów, stan. 2 – cmentarzyska ciałopalne z wczesnej epoki żelaza. Rzeszów, 2012, p. 163.

KOSTEK, Adam. Cmentarzysko grupy tarnobrzeskiej w Wietlinie III, gm. Laszki, woj. Przemyśl. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego za lata 1980-1984. Rzeszów, 1991, p. 35.

NIEMIEC, Łukasz. Niektóre elementy rzędu końskiego w materiałach tarnobrzeskiej kultury łużyckiej. In CZOPEK, Sylwester – TRYBAŁA-ZAWIŚLAK, Katarzyna (eds.). Tarnobrzeska kultura łużycka – źródła i interpretacje. Rzeszów, 2009, p. 407-411.

GODLEWSKI, Piotr. Cmentarzysko grupy tarnobrzeskiej w Manasterzu, stan. 6. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, t. XXV, Rzeszów, 2004, p. 51.

¹³ TRYBAŁA-ZAWIŚLAK, ref. 9, p. 168.

¹⁴ MATOGA, Barbara – MATOGA, Andrzej. Cmentarzysko halsztackie z Janowic Poduszowskich-Antoniowa w woj. kieleckim. In Wiadomości Archeologiczne, vol. L. Warszawa, 1985, p. 131.

¹⁵ East side group of Vistula river.

LIGODA, Joanna. Materiały ze zniszczonego cmentarzyska ciałopalnego w Tarnobrzegu, stan. 1. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, vol. XXV. Rzeszów, 2004, p. 113-115.

¹⁷ CZOPEK, Sylwester. Cmentarzysko ciałopalne z wczesnej epoki żelaza w Knapach. Rzeszów, 2004, p. 94.

¹⁸ West side group of Vistula river.

¹⁹ TRYBAŁA-ZAWIŚLAK, ref. 9, p. 14, 195.

²⁰ CZOPEK, ref. 17, p. 7.

²¹ MATOGA - MATOGA, ref. 14, p. 95.

²² GREŃ, Dariusz. Cmentarzysko ciałopalne kultury łużyckiej w Opatowcu woj. Świętokrzyskie. Master thesis. Kraków, 2008, p. 3.

²³ SZAREK-WASZKOWSKA, Ewa. Cmentarzysko kultury łużyckiej w Krzemienicy pow. Mielec.

Tarnobrzeg 1²⁴, Manasterz 6²⁵, Trójczyce²⁶, Lipnik²⁷, Furmany²⁸, Paluchy²⁹, Bachórz-Chodorówka³⁰, Łazy³¹, Wierzawice³², Brzegi³³).

The site

The archaeological site of Korytnica 5/3 is located on sandy terrace of the Nida river in the southwest part of Korytnica village. The archaeologist amateur and priest Stanisław Skurczyński discovered this site in 1922³⁴. In 1960, J. Marciniak had surface survey in Korytnica. He found pottery shards of Pomeranian culture and shard of early medieval vessel. *Archeologiczne Zdjęcie Polski* was held at this site in 1987. They had recognised 30 pottery shards of Przeworsk culture and few medieval shards. In 2002, there was a salvage excavation however no artefacts³⁵ were discovered. T. Zwierzchowski from Korytnica gave the Provincial Office of Protection of the monuments in Kielce 121 pottery shards in 2008. Therefore, the next year there was a surface survey which discovered many pottery shards of Trzciniec culture, Lusatian culture, Pomeranian culture, Przeworsk culture and medieval. In there the marks were cremated bones. The Provincial Office of Protection of monuments in Kielce decided to hold a salvage excavation in 2010. Dariusz Greń from Regional Museum in Pińczów undertook the excavation³⁶. In

In Materiały Rzeszowskiego Ośrodka Archeologicznego za lata 1970-1972. Rzeszów, 1975, p. 3.

²⁵ GODLEWSKI, ref. 12, p. 21.

PORADYŁO, Wojciech. Cmentarzysko ludności grupy tarnobrzeskiej w Trójczycach, gm. Orły, pow. Przemyśl. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, vol. XXII. Rzeszów, 2001, p. 59.

²⁷ BLAJER, Wojciech. Cmentarzysko w Lipniku, pow. przeworski, po trzech sezonach badań. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, vol. XXII. Rzeszów 2001, p. 279.

ORMIAN, Krzysztof – BRYLSKA, Magdalena – GUŚCIORA, Krystyna Jadwiga. Cmentarzysko z epoki brązu i wczesnej epoki żelaza w Furmanach, stan. 1, pow. Tarnobrzeg, woj. podkarpackie. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, vol. XXII, Rzeszów, 2001, p. 295.

²⁹ LEWANDOWSKI, S. Cmentarzysko epoki brązu i wczesnej epoki żelaza w Paluchach, woj. Przemyśl. In Sprawozdania Archeologiczne, vol. XXX. Rzeszów, 1978, p. 129.

³⁰ SZYBOWICZ, Barbara. Cmentarzysko z epoki brązu w Bachórzu-Chodorówce. Analiza antropologiczna. Kraków, 1995, p. 7.

JAROSZ, Paweł - SZCZEPANEK, Anita. Elementy obrządku pogrzebowego na cmentarzysku grupy tarnobrzeskiej w Łazach, pow. Jarosław. In CZOPEK, Sylwester - TRYBAŁA-ZAWIŚLAK, Katarzyna (eds.). Tarnobrzeska kultura łużycka - źródła i interpretacje. Rzeszów, 2009, p. 361.

ORMIAN, Krzysztof - WRÓBEL Jarosław. Pochówki szkieletowe z cmentarzyska ludności tarnobrzeskiej kultury łużyckiej w Wierzawicach stan. 18, pow. Leżajsk, woj. podkarpackie. In CHOCHOROWSKI, Jan (eds.) Studia nad epoką brązu i wczesną epoką żelaza w Europie. Księga poświęcona profesorowi Markowi Gedlowi na pięćdziesięciolecie pracy w Uniwersytecie Jagiellońskim. Kraków, 2007, p. 544.

MATOGA, Andrzej. Archeolog na probostwie. Ksiądz Stanisław Skurczyński (1892-1972). Kraków, 2008, p. 306.

³⁴ SKURCZYŃSKI, Stanisław. Archeolog na probostwie. In Pamiętnik Kielecki. Kielce, 1947.

³⁵ MATOGA, ref. 33, p. 378-379.

³⁶ GREŃ, Dariusz. Sprawozdanie z badań ratowniczych na stanowisku Korytnica 5/3. Archiv of Provincial Office of Protection of the Monuments in Kielce, 2010.

²⁴ LIGODA, ref. 16, p. 105.

2010, archaeologists found 29 urn graves with cremated bones and 8 pits with pottery shards and cremated bones³⁷.

Results

Graves

There was among 29 graves discovered at the site, which included 28 contained vessels and burnt bones. Grave 15 only contained bones as it was destroyed by modern agricultural activities. Furthermore, in 8 graves (1, 2, 3, 6, 9, 11, 13, 19) there were bowls (probably covers) and in grave 13 a miniature of vase. During the preparation of the bone there were 4 bronze rings discovered. There was no stone construction recorded. Outlines of grave pits were observable in 16 graves. 8 of the pits contained 138 pottery shards and several fragments of burnt bones. There was also a flint flake found in pit 30. Single graves dominated the urn field in Korytnica. Only one grave was identified where there were cremated bones of two people³⁸.

Pottery

At the sepulchral site in Korytnica there were 26 vessels discovered that were possible to identify and 13 unrecognized forms. Among the identified forms were vases, egg-shaped pots and bowls. M. S. Przybyła made the section of TSC pottery³⁹. He divided 28 characteristic and 16 non-characteristic forms of vessels. I used that section of pottery in my paper.

In the graves there were 16 vases discovered which were urns, 10 of which were identifiable. Among identified 7 types (1, 4, 5, 10, 12, 13, 36 tab. 1: 1, 6, 7, 14; tab. 2: 3, 4; tab. 3: 2) belong to type 27. The vessels were round bodies with outward-turned necks. 3 vases (9, 24, 26) were like type 25 with s-shaped vessels. 4 vases were type 27 that has smooth surfaces and 3 were partly smooth and part roughened surfaces and on the surfaces were knobs and grooves. 2 of the 27 type vases have lugs. These types of vases were also on the other TLC urn fields in Kielecczyzna. Similar sets of vessels were discovered in Nida⁴⁰ and Janowice Poduszowskie-Antoniów⁴¹. 2 of 25 types of vases have carefully smoothened surfaces and one was not smooth. In 2 of the s-shaped vessels had grooves and one of them had two lugs. The urn from the grave 24 had knobs. Analogues for 25 type vessels were at the cemetery in Nida⁴². M. S. Przybyła dated type 25 and 27 to third phase of TLC (HaD2-Lt).

³⁷ Anthropologist analyse was made for bones only from graves.

³⁸ More information about anthropolgy analyse in chapter *Anthropology analyse*.

³⁹ PRZYBYŁA, Marcin. S. Uwagi o chronologii ceramiki grupy tarnobrzeskiej. In Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego, vol. XXIV. Rzeszów, 2003, p. 27-53.

⁴⁰ GĄDZIKIEWICZ-WOŹNIAK, Maria - MIŚKIEWICZ, Jacek. Cmentarzysko kultury łużyckiej i grobów kloszowych z Nidy, pow. Kielce. In Materiały Starożytne i Wczesnośredniowieczne, vol. 4. 1977, p. 421.

⁴¹ MATOGA - MATOGA, ref. 14, p. 114.

⁴² GĄDZIKIEWICZ-WOŹNIAK - MIŚKIEWICZ, ref. 40, p. 425.

Egg-shaped pots were urns found in 7 graves (2, 6, 11, 14, 16, 20, 22; tab. 1: 3, 8; tab. 2: 1, 7, 9, 12,13). Only two of which were in good condition and the rest of them just had the lower part of the bodies, which were probably destroyed by modern agricultural activities. Almost every pot surface was covered with a layer of clay and crushed shards of pottery then smoothed with fingers resulting in uneven grooves. An urn from grave 2 had a coarse surface similar to the pottery from necropolis in Janowice Poduszowskie-Antoniów⁴³ and one ceramic from grave 11 with a coarse surface had visible finger trails (analogues in Opatowiec⁴⁴ and Janowice Poduszowskie-Antoniów⁴⁵). M. S. Przybyła dated egg-shaped pots to third phase of Tarnobrzeg Lusatian Culture.

At necropolis in Korytnica bowls were found as well which were probably used as covers because the shards from them were inside of urns. Bowls were in 9 graves (1, 2, 3, 6, 9, 11, 13, 19, 36; tab. 1: 2, 4, 5, 9, 13; tab. 2: 2, 5, 10; tab. 3: 3). Two of the bowls were like type 24, two like type 19, one like type 18 and one like type 41. The vessel from grave 9 was impossible to identify. The covers from grave 19 and 36 only had the lower part therefore it was difficult to say something about which type they were. Practically all the bowls had smooth surfaces with the exception of the vessel from grave 2. It had a rough surface with visible finger trails to maximal circumference of the body and then a smooth surface. The vessels from grave 1 had holes under the rim and it was a characteristic for TLC. The cover from grave 1 had a lug like knob. Bowls of type 24 coexisted with egg-shaped pots and type 41 with vases. Furthermore, bowls of type 18 covered egg-shaped pots and type 19 covered urns of type 27. Bowls from graves 1, 3, 6, 9, 13 and 24 had analogues at necropolis in Nida⁴⁶. Taking into consideration the chronology of TLC pottery established by M. S. Przybyła, I can say that bowls from the cemetery in Korytnica were from the IIB and III phases. The bowls of type 18 and 19 coexisted with urns from the III phase of TLC.

Among the pottery at necropolis in Korytnica one miniature vessel was discovered in grave 13 (tab. 2: 6). It was a small vase, type 25, with one lug. The vessel coexisted with a type 27 urn. Taking it into account that the miniature vase was dated to the III phase of TLC.

During the excavation in Korytnica there were 8 pit houses discovered with 138 pottery shards, which could not be associated with reconstructed forms. 6 fragments of the ceramics were groove, on one of the shard there was a knob and the other one had two coarse surfaces. Based of the properties of the pottery, it is difficult to establish the chronology. However, taking into consideration the stratigraphy of the pits and graves (graves 26 and 36 were deep-etched into pit 29), the pits were older than the graves as before necropolis this site was settlement.

⁴³ MATOGA - MATOGA, ref. 14, p. 116.

⁴⁴ GREŃ, ref. 22, p. 82.

⁴⁵ MATOGA - MATOGA, ref. 14, p. 421.

⁴⁶ GĄDZIKIEWICZ-WOŹNIAK - MIŚKIEWICZ, ref. 40, p. 2, 461, 438, 421, 425.

Metal items

There were metal items were found in 4 graves (1, 3, 13, 23) during the preparation of the bones. They were bronze rings with adjoining ends, the diameters of the rings were from 1,5 to 2 cm. The bronze rings were in every phase of TLC (mostly in urn graves, sometimes in pits at settlements)⁴⁷. The metal items from Korytnica could be dated, like urns, to the third phase of TLC.

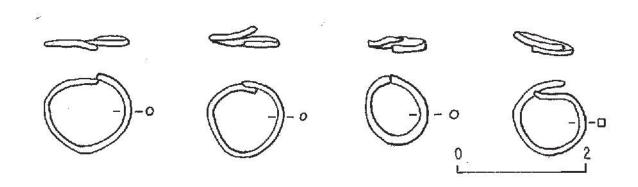


Fig. 3. Metal items from graves 1, 3, 13, 23.

Flint

One flint flake was found in pit 30 that was made from chocolate flint. Flints were usually at TLC cemeteries and settlements. Archaeologists have found flints in graves (Pysznica, Paluchy, Budy Głogowskie, Chmielów) and pits (Trzęsówka, Rudnik, Białobrzegi, Rzeczyca Długa)⁴⁸.

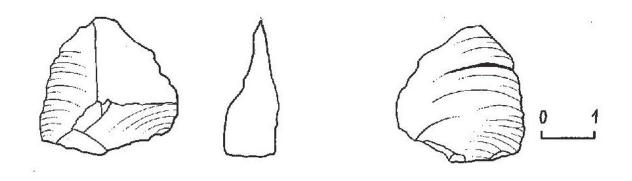


Fig. 4. Flint flake from pit 30.

⁴⁷ MOSKWA, ref. 2, p. 33.

⁴⁸ KADROW, Sławomir. Kilka uwag na temat krzemieniarstwa grupy tarnobrzeskiej kultury łużyckiej. In Grupa tarnobrzeska kultury łużyckiej. Rzeszów, 1989, p. 94, 99, 101, 102.

Other materials

Materials were from T. Zwierzchowski, who gave pottery shards to The Provincial Office of Protection of Monuments in Kielce in 2008, from a surface survey in 2009 and 2010 during excavation.

Altogether were 715 pottery shards, tens fragments of cremated bones, 2 fragments of bronze rings, 2 flint flakes, clay spindle whorl, whetstone and boratynka (coin) from 1664 discovered. The pottery shards included 7 fragments of flat plate with visible fingers trails. In addition, there were 2 big fragments of vases (probably TLC) and a fragment of sieve vessel (possibly from Przeworsk culture). On 15 fragments of pottery there were grooves, single, double and triple. Two shards of lower parts of the vessel were found with roughened surfaces, neck had finger trails, fragments on the lower part of the vessel had two horizontal lines and a zigzag pattern, two shards had coarse surfaces with fragments of finger impressions and two grooves, the last shard had 9 grooves and fragments of finger trails. Artefacts were found in 2008 and 2009 belonged to Trzciniec culture, Lusatian culture, Pomeranian culture, Przeworsk culture and medieval. Fragments of bones most likely were from TLC graves as many of them were destroyed. In Korytnica 2 flint flakes were discovered as well. They were 3,5 to 5 cm length and on the surface they had ripples. Flints were often found in TLC necropolis, but were usually found at surface, not in graves.

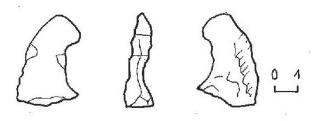


Fig. 5. Flint flakes.

Two fragments of bronze rings had a 0,5 to 1 cm in diameter. However, they were not good dating artefacts.

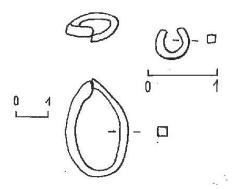


Fig. 6. Bronze rings.

The diameter of the clay spindle whorl was 3 cm and on one side it had an ornament.

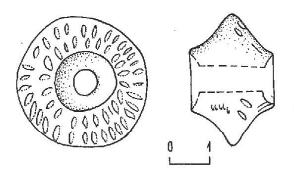


Fig. 7. The spindle whorl.

The whetstone were found on the surface in 2009 with the length of 12 cm and 3,5-4 cm wide. It is difficult to determine the age of it.

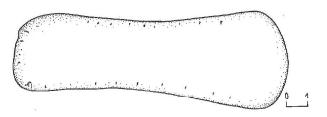


Fig. 8. The whetstone.

The boratynka was 1,5 cm in diameter.



Fig. 9. The boratynka.

Chronology of necropolis

Precise dating of the sepulchral site from Korytnica is difficult. The excavation was only one part of site Korytnica 5/3 and many vessels were destroyed. Metal items were found only in 4 graves, but bronze rings could not be dated as they were used in every phase of Lusatian Culture.

Dating the graves was based on typology of TLC pottery made by M. S. Przybyła. The typology is about vessels near San River but the pottery from Korytnica had analogues there. Vases and egg-shaped pots could be dated to

third phase of TLC (HaD2-LtB). Bowls were used in phase IIB and III, however types 18 and 19 coexisted with forms from III phase and were dated to III phase of TLC. Miniature vases were with urns from the third phase. Vistula River dated back to III phase TLC as well⁴⁹. The analysis of stratigraphy pit houses shows that they were older than graves. They could originate from the settlement group of Upper Silesia-Lesser Poland of Lusatian Culture because the site Korytnica 5/3 was in AZP like the "settlement with lusatian culture pottery". In addition, other material shows a multicultural site (Trzciniec culture, Lusatian culture, Pomeranian culture, Przeworsk culture, Medieval).

The database of archaeological sites at the left side of Vistula River gets bigger from one year to the next due to salvage excavations. Unfortunately, many of the findings are not published which is why it is difficult to determine the theory that it is only influence from east or migration to Ponidzie⁵⁰. Identification of prehistoric migration with archaeological artefacts is difficult as most from Kielecczyzna are not published materials⁵¹. Ponidzie has *Archeologiczne Zdjęcie Polski* but determine the TLC in Ponidzie. However, take into consideration that in Korytnica there were 29 graves discovered of TLC that we can say was probably from migration to Ponidzie where there is fertile soil. Presumably it was discovered at the end of the Bronze Age because near Korytnica where necropolis with artefacts of Upper Silesia-Lesser Poland of Lusatian Culture and Tarnobrzeg Lusatian Culture⁵².

Necropolis in Korytnica is a specific cemetery. There were artefacts found from the third phase of Tarnobrzeg Lusatian Culture and there were graves arranged in rows which was a characteristic for this culture near Vistula and San rivers, but not near the Nida river. Furthermore, there were no stones discovered at the graves that there usually were at TLC necropolis in Kielecczyzna. Archaeologists suggest a separation of new groups of Lusatian Culture in Ponidzie⁵³, but it does not make sense to me. The cemetery in Korytnica was almost like necropolis near the Vistula and San rivers but in the graves there were few metal items, however only part of site was excavated.

Anthropology analysis

The anthropology analysis done by Katarzyna Kliś, a student of the Department of Anthropology Institute of Zoology from Jaggielonian University, wrote her master thesis on *Anthropological analysis of human cremated remains form the ceme*-

⁴⁹ Nida, Janowice Poduszowskie-Antoniów, Opatowiec.

⁵⁰ refers to a region of Lesser Poland, which lies along the Nida, and which is much larger than the valley. It stretches from Checiny to Nowy Korczyn, Wikipedia.

DZIĘGIELEWSKI, Karol – GODLEWSKI, P. Wschodnie oddziaływania kulturowe na terytorium zachodniej Małopolski we wczesnej epoce żelaza – źródła i interpretacje. In CZOPEK, Sylwester – TRYBAŁA-ZAWIŚLAK, Katarzyna (eds.). Tarnobrzeska kultura łużycka – źródła i interpretacje. Rzeszów, 2009, p. 212.

Nida, Stradów, Janowice Poduszowskie, Sobków; GREŃ, ref. 22, p. 60; DZIĘGIELEWSKI - GO-DLEWSKI, ref. 49, p. 217.

⁵³ D. Greń, M. Matoga, D. Czernek.

tery of Lusatian and Pomeranian culture in Korytnica (świętokrzyskie)⁵⁴ with Dr hab. H. Głab.

Fig. 10 shows the results of the age and sex of individuals from Korytnica. In the 29 graves there were remains of 29 people discovered.

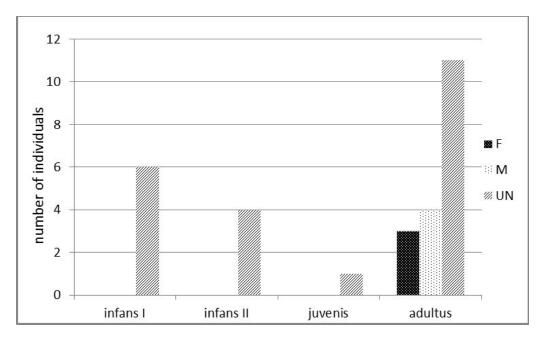


Fig. 10. The age and sex of indididuals in Korytnica (F-female, M-male, UN-unknown).

Fig. 11 shows age, sex, and number of individuals in one grave and the degree of burnout. The degree of burnout was determined on the basis of A. Malinowski's scale.

There were animal bones in two graves. Grave 15 contained only bones of one animal while in grave 27 were 3 animal bones.

During the preparation the urns were not a sighted anatomical system of cremated human remains. Anthropological analysis exposed patina on bones in 9 graves (1, 3, 11, 13, 16, 18, 19, 20, 23) but bronze artefacts were found only in 4 graves (1, 3, 13, 23).

K. Kliś looked into the oxidative stress and lesions as well. On the cremated remains from grave 9 (*infans I*) she discovered *cribra orbitalia*. It is marker of stress on the cranium. It is result of poor nutrition. On the bones from grave 19 (*adultus*) there was Osteoarthritis.

The poor preservation of human cremated remains could not precisely define the age but the maximum of mortality was in *adultus* (62%). The percentage of dead children of TLC necropolis was 20-39%. In Korytnica there was 36% so it was comparable to the other cemeteries from HaD.

KLIŚ, Katarzyna. Antropologiczna analiza cmentarzyska ciałopalnego kultury łużyckiej I pomorskiej w Korytnicy (świętokrzyskie). Kraków, 2014; K. Kliś assented to use her research to my master thesis.

	1				
number	age	sex	Number of	degree	
of grave			individu-	of bur-	
			als in one	nout	
1	. 1. 1	2	grave	4	
1	adultus	?	2	4	
2	adultus	М	1	4	
3	adultus	F	1	4	
4	adultus	?	1	4	
5	infans I	?	1	4	
6	infans I	?	1	4	
7	infans	3	1	4	
	II				
8	adultus	?	1	4	
9	infans I	3	1	4	
10	adultus	3	1	4	
11	adultus	M	1	3/4	
12	juvenis	F	1	3/4	
13	infans I	3	1	4	
14	infans I	3	1	4	
15	(animal				
	bones)				
16	infans I	3	1	4/5	
17	infans	3	1	4/5	
	II				
18	adultus	3	1	4	
19	adultus	F	1	3/4	
20	adultus	M	1	4/5	
21	infans I	3	1	4/5	
22	adultus	3	1	4	
23	infans I	?	1	4	
24	infans	?	1	4	
	II				
25	adultus	?	1	3/4	
26	adultus	M	1	3/4	
27	adultus	?	1	4	
28	adultus	?	1	4	
36	adultus	?	1	3/4	

Fig. 11. The age, sex, and number of individuals in one grave and the degree of burnout.

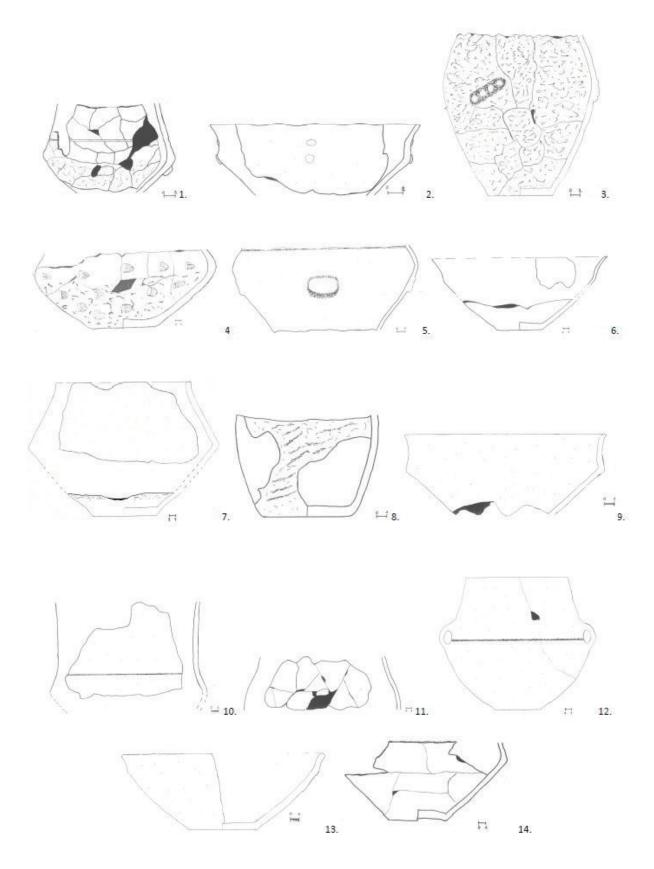
Conclusions

The Sepulchral site in Korytnica is located on the sandy terrace of the river like almost every TLC necropolis. The analysis of artefacts demonstrated that materials from Korytnica were dated to the third phase of this culture. The graves in the first sounding arranged in rows were found unique on the left side of Vistula River. At the site there were no stones found in the graves however this was a characteristic for cemeteries at the west side of Vistula River. The Korytnica 5/3 site is typically Tarnobrzeg Lusatian Culture but without many metal items. However site was only excavated in part and probably never will be fully.

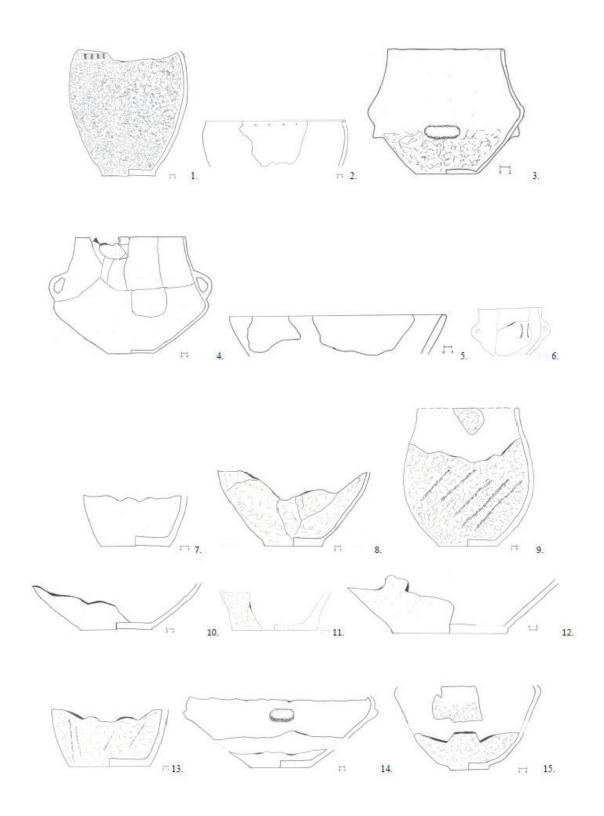
Some archaeologist would like to separate the Kielce group of TLC. I don't believe that it should be done, as archaeologist should focus on the life of people in the past ages, not to isolate another group of culture. In Bronze Age nobody would have thought "Which culture or group of culture I represent?"

In conclusion, I hope that the excavation of TLC in Ponidzie will continue and we will be able to discover new facts about the people who lived there in hallstatt D.

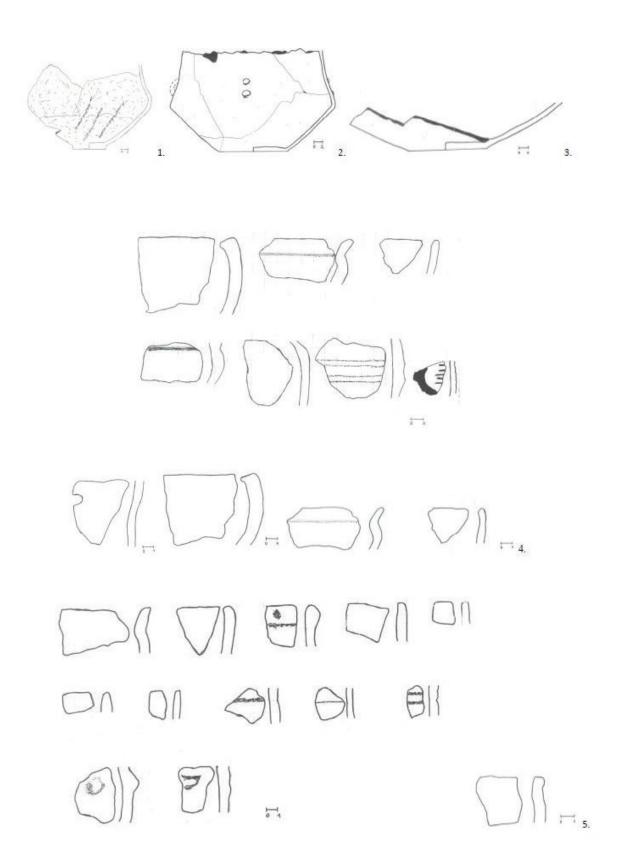
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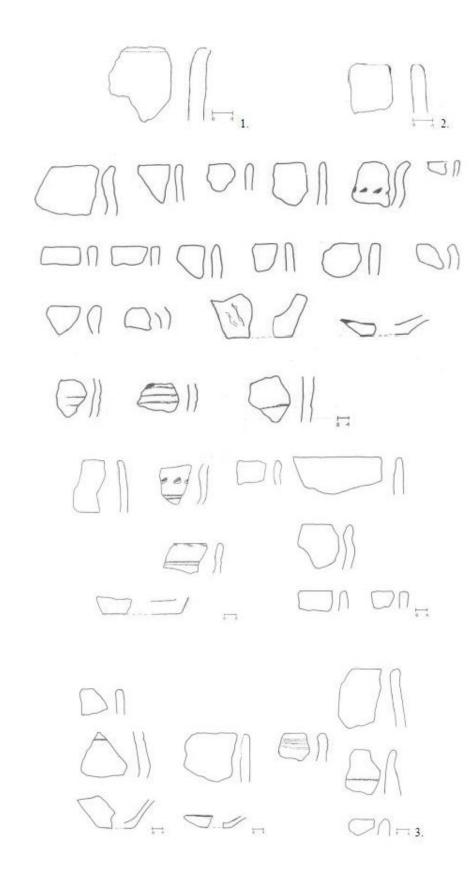
Tab. 1. Grave goods from graves 1 (1, 2), 2 (3, 4), 3 (5), 4 (6), 5 (7), 6 (8, 9), 7 (10), 8 (11), 9 (12, 13) and 10 (14). Drawn by D. Greń (1, 3) and P. Pobocha (2, 4-14).



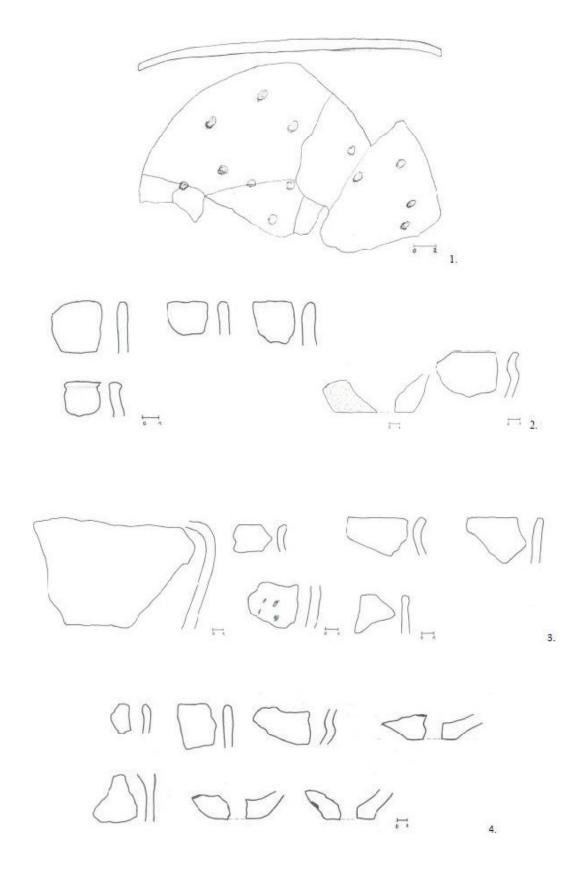
Tab. 2. Grave goods from graves 11 (1, 2), 12 (3), 13 (4, 5, 6), 14 (7), 16 (8), 17 (9), 18 (10), 19 (11), 20 (12), 22 (13), 24 (14) and 25 (15). Drawn by P. Pobocha.



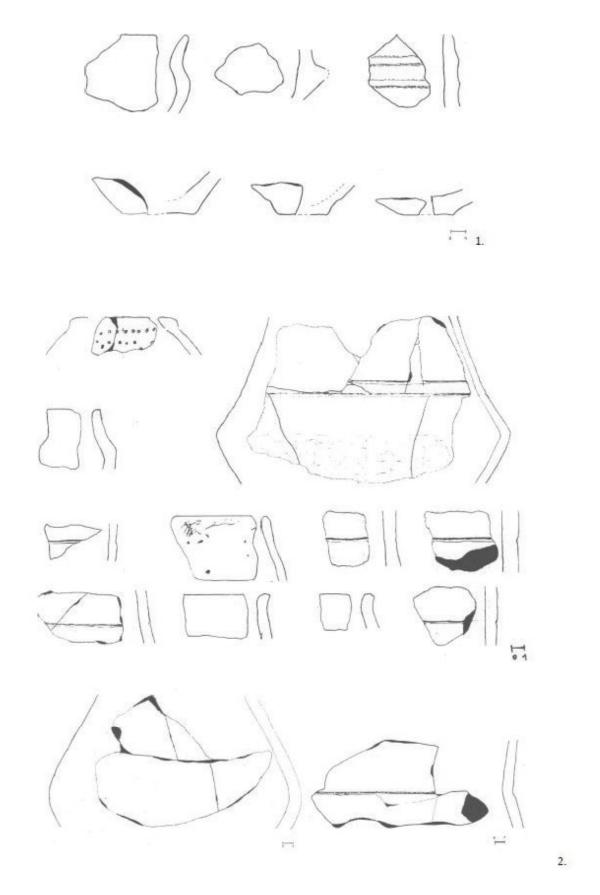
Tab. 3. Grave goods from graves 26 (1), 36 (2, 3), pottery shards from pits 29 (4) and 30 (5). Drawn by P. Pobocha.



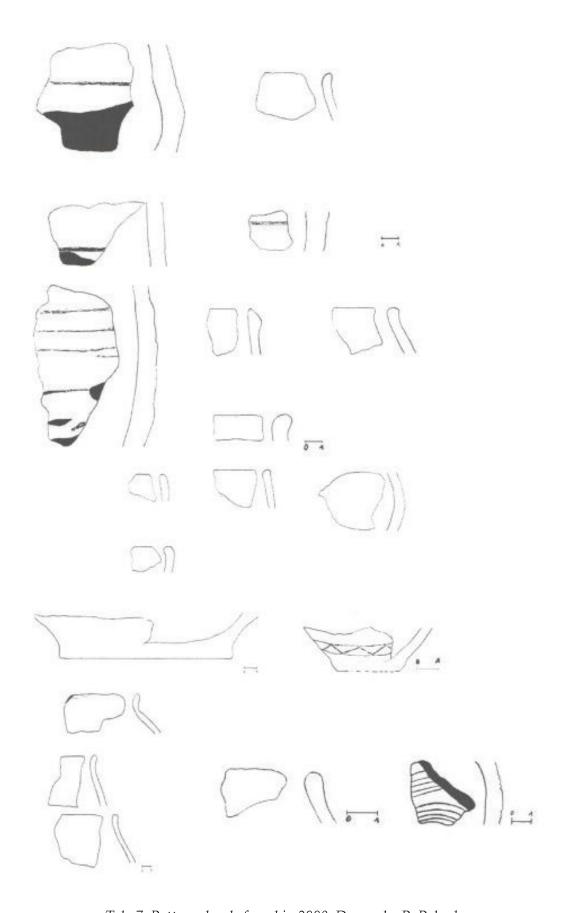
Tab. 4. Pottery shards from pits 31 (1), 34 (2) and fragments of ceramics from sounding 1. Drawn by P. Pobocha.



Tab. 5. The flat plate (1) and pottery shards from soundings 2 (2), 3 (3) and 4 (4). Drawn by P. Pobocha.



Tab. 6. Pottery shards from sounding 4 (1) and artefacts found in 2008. Drawn by P. Pobocha.



Tab. 7. Pottery shards found in 2009. Drawn by P. Pobocha.

grave	lo- ca- ti- on	type of grave	depth	outlines of grave pits (Y/N)	type of urn	type of cover	other vessel	bronze item	sex	age	Number of indi- viduals in grave
1	S1	u.g.	70 cm	N	v. t. 27	b. t. 19		X	3	adultus	2
2	S1	u.g.	70 cm	Y	p.	b. t. 24			М	adultus	1
3	S1	u.g.	70 cm	Y	v.; w. r.	b. t. 19		X	F	adultus	1
4	S1	u.g.	70 cm	Y	v. t. 27				3	adultus	1
5	S1	u.g.	70 cm	Y	v. t. 27				?	infans I	1
6	S1	u.g.	70 cm	Y	p.	b. t. 18			3	infans I	1
7	S1	u.g.	70 cm	Y	v.; w. r.				3	infans II	1
8	S1	u.g.	70 cm	Y	v.; w. r.				ś	adultus	1
9	S1	u.g.	80 cm	Y	v. t. 25	b. t. 35			?	infans I	1
10	S2	u.g.	45 cm	N	v. t. 27				?	adultus	1
11	S2	u.g.	45 cm	Y	p.	b. t. 24			М	adultus	1
12	S2	u.g.	45 cm	Y	v. t. 27			ĺ	F	juvenis	1
13	S2	u.g.	45 cm	Y	v. t. 27	b. t. 41	miniature of vase t. 25	X	?	infans I	1
14	S2	u.g.	45 cm	N	p.			ĺ	ś	infans I	1
15	S2	u. g.			destroy- ed grave					(animal bones)	
16	S2	u.g.	45 cm	Y	p.			İ	ś	infans I	1
17	S2	u.g.	45 cm	Y	w. r.				?	infans II	1
18	S2	u.g.	60 cm	N	w. r.				?	adultus	1
19	S2	u.g.	50 cm	Y	v.; w. r.	b. t. 41			F	adultus	1
20	S2	u.g.	80 cm	N	p.				М	adultus	1
21	S3	u.g.	40 cm	N	w. r.			ĺ	ś	infans I	1
22	S3	u.g.	35 cm	N	p.				3	adultus	1
23	S3	u.g.	35 cm	N	w. r.			Х	ś	infans I	1
24	S3	u.g.	30 cm	N	v. t. 25			ĺ	ś	infans II	1
25	S3	u.g.	35 cm	N	w. r.			ĺ	?	adultus	1
26 (and pit 29)	S4	u.g.	40 cm	Y/N	v. t. 25				М	adultus	1
27	S4	u.g.	40 cm	Y	w. r.				ś	adultus	1
28	S4	u.g.	40 cm	Y	w. r.			ĺ	?	adultus	1
36	S4	u.g.	40 cm	Y/N	v. t. 27	w. r.			ś	adultus	1
v. t. 25 - vase type 25											
p pot											
w. r without reconstruction											
b. t. 41 - bowl type 41											
u. g urn grave											

Fig. 12. The catalogue of graves (v. t. 25 - vase type 25; p. – pot; w. r. – without reconstruction; b. t. 41 – bowl type 41; u. g. - urn grave.