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# THE TRZCINIEC CULTURAL CIRCLE BARROW FROM NIECIECZ WŁOŚCIAŃSKA IN THE SOUTHERN PODLASIE

#### ABSTRACT

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The societies of the Trzciniec Cultural Circle (TCC) were characterized by a complex and unique funeral rite. Despite its multidimensionality, it is possible to identify a number of patterns repeated in the ritual activity of these populations. This especially concerns barrow cemeteries erected during the classical phase of TCC development. To date, these types of structures are known from the southern (upland) provinces of this cultural formation. However, the barrow from Nieciecz Włościańska in Southern Podlasie that is comprehensively described here is the first richly equipped monument discovered in the northeastern (lowland) province of the TCC. The aim of this article is the complex characterization of the barrow and the interpretation of remains associated with the funeral rite. The authors apply standard archaeological methods supported by typochronological and radiocarbon analyzes to establish the chronology of this feature. The presented data is essential and crucial for understanding the northerneastern area of the TCC, which remains insufficiently recognized to date.

Keywords: funeral rite, Trzciniec Cultural Circle, barrow, under-barrow structures Received: 12.11.2020; Revised: 18.04.2021; Accepted: 14.09.2021

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## 1. INTRODUCTION

In conjunction with the construction of the 'Niewiadoma' retention reservoir on the Cetynia River, excavations near the village of Nieciecz Włościańska were conducted in 2012. As a result of this fieldwork, archaeological complex with total area 7.27 ha was explored, which included sites numbered 11, 12, 13, 14, 39 and 40. The work was led by Krzysztof Karasiewicz, Antoni Smoliński and Małgorzata Kiełbasińska (Przedsiębiorstwo Handlowo-Usługowe 'Anwit'), and the results are summarized in an unpublished report (Kiełbasińska *et al.* 2012).

The sites are located in the western part of the Siedlee Upland, which is a part of Southern Podlasie, a region characterized by a moraine landscape (Różycki 1969; Kondracki 2001, 341, Solon *et al.* 2018). The fieldwork area was situated around 2 km north of Nieciecz Włościańska (Sabnie county, Mazowieckie voivodeship). The site is located on a fattened hill, which is an extension of the longitudinal part of the slope of the Cetynia River valley (Fig. 1). This region gently rises to the south and it is actually a deforested wasteland. The area of the sites was covered by brown leached and acid soils, as well podzolic and luvisol soils (msip.wrotamazowsza.pl).

The titled barrow was discovered in the range of Nieciecz Włościańska, site 11, located in the southeastern part of the excavation area (Fig. 2). The archaeologists documented 56 features classified as having a 'Trzciniec culture' origin. Three had a funerary character (features nos 30, 109 and 144). Particularly interesting was feature 30 – the remains of a barrow. The aim of this article is the archaeometric characterization, as well as the cultural and chronological identification of the barrow, and the interpretation of the remains of the funeral rite documented below this almost completely levelled mound.

The characterization and interpretation of this feature is especially important because Trzciniec Cultural Circle (TCC) funeral structures remain poorly recognized (Makarowicz 2010a) in the northeast Vistula Basin (the so-called 'podlasko-mazowiecka group' by Gardawski 1959). It is worth emphasizing that, excluding Koryciny (Pawlata 2010), the barrow from the Nieciecz Włościańska represents the most northeastern extent of the TCC.

During the excavation of Nieciecz Włościańska, site 11, 122 features were documented, among which 59 were associated with the TCC. There were 47 pits, nine hearths, two flat cremated graves and the barrow. In the TCC features, 150 pottery fragments, 17 flint items, three animal bones, and one stone polisher were discovered.

It must be emphasized that TCC features were also excavated in neighboring sites (no. 12, 13 and 39). They occurred individually or in small groupings. However, the biggest

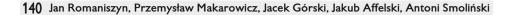
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Fig. 1. Location of the Nieciecz Włościańska sites (Esri®; GoogleMaps®)

concentration of 'Trzciniec' features is visible in Nieciecz Włościańska, site 11, within the vicinity of the described barrow. The observed arrangement of these features suggests their occurrence continues in a southern, southeastern, southwestern, and eastern direction beyond the excavated area.



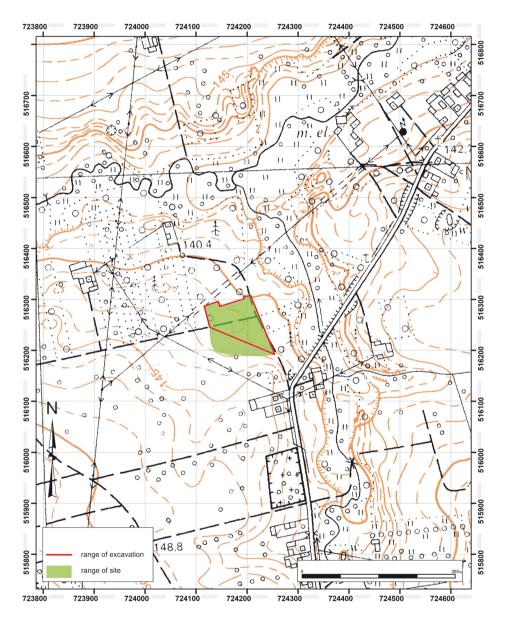


Fig. 2. Location of the Nieciecz Włościańska site 11 (PZGiK®)

# 2. THE BARROW (FEATURE NO. 30) AND UNDER-BARROW STRUCTURES

The remains of the barrow were situated in the southeastern part of the site (Fig. 3). It was totally levelled and was nearly oval in shape, with dimensions of  $16.8 \times 15.4$  m. The barrow was explored in 20 cm mechanical layers within four sectors (quarters) leaving bulk between them in the form of a cross-arrangement. Each subsequent layer was docu-

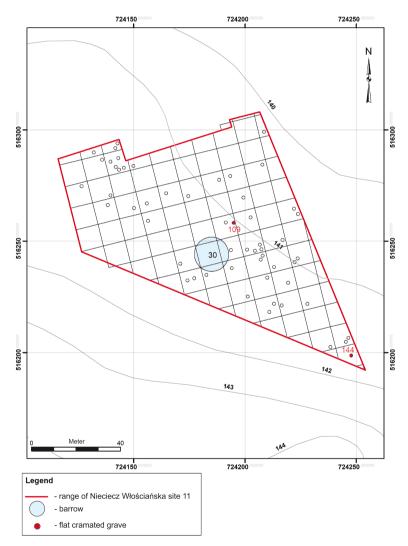
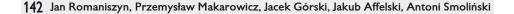


Fig. 3. Plan of Nieciecz Włościańska, site 11



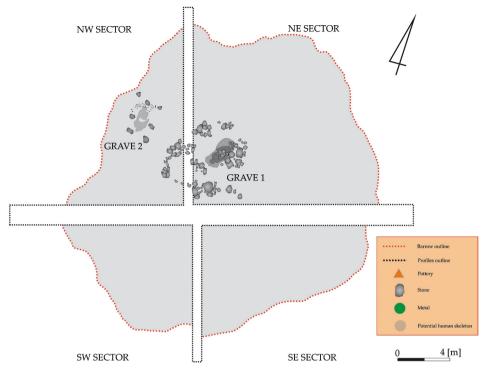


Fig. 4. Nieciecz Włościańska, site 11. Plan of feature 30

mented by drawings and photos. Observation of the profiles confirmed the mound was levelled in recent times. On the surface the excavators noticed two under-barrow features (potential burials) in areas characterized by darker colored soils. They were designated Grave 1 and Grave 2 (Fig. 4). As a result of the barrow exploration, 407 'Trzciniec' potsherds and seven pottery fragments dating to the transition from the Neolithic to the Early Bronze age were found. Moreover, excavations recovered 58 flint and two stone artifacts, 21 bronze items, and four cremated and crushed bone fragments that were too poorly preserved for analysis.

### 2.1. Grave 1

Grave 1 was located in the central part of the barrow, mostly in the northeast sector. It was a stone construction with an irregular (close to oval) shape consisting of around one hundred erratic stones (Fig. 5). This structure's dimensions were  $4.8 \times 4.2$  m and it was longer along the north-south axis. The feature consisted of a southwest and northeast 'chamber', both built from stones arranged in a discontinuous manner. The southwest

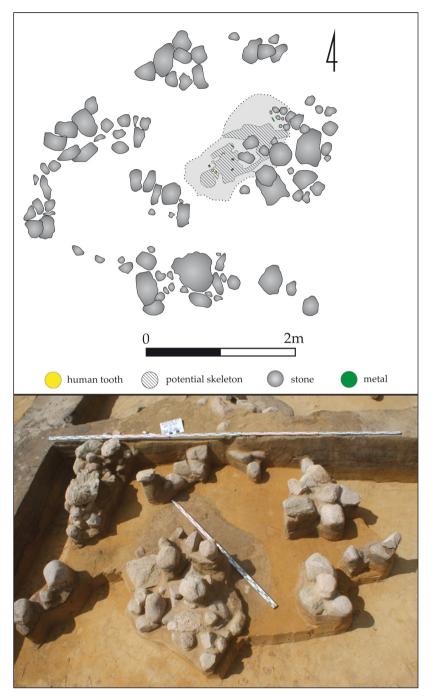


Fig. 5. Nieciecz Włościańska, site 11. The plan of Grave 1 (photo by M. Kiełbasińska, K. Karasiewicz)

chamber with dimensions of  $1.4 \times 0.95$  m was oriented on a northwest-southeast axis. In the southern part of the northeast chamber, with a shape close to oval and a diameter of  $1.85 \times 1.1$  m, in which the remains of a deceased in the form of two crushed teeth were recovered. Moreover, the excavators observed the outline of human remains had not preserved in the heavily washed soil. Based on this observation, it can be stated that the deceased was buried in a crouched position on the left side with the hands next to the face. The burial was oriented on a southwest-northeast axis with the head to the southwest.

In Grave 1, 17 pottery fragments, 17 bronze artifacts, and four flint items were found (Fig. 6). Among the bronze objects, two small spiral shields, seven spiral tubular elements,

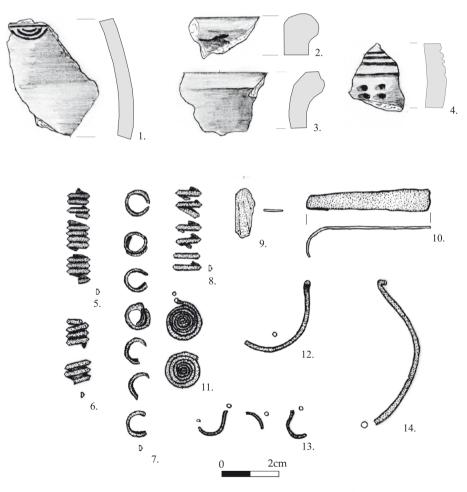


Fig. 6. Nieciecz Włościańska, site 11. Pottery fragments and bronze artifacts from Grave 1 (drawing by K. Machnio)

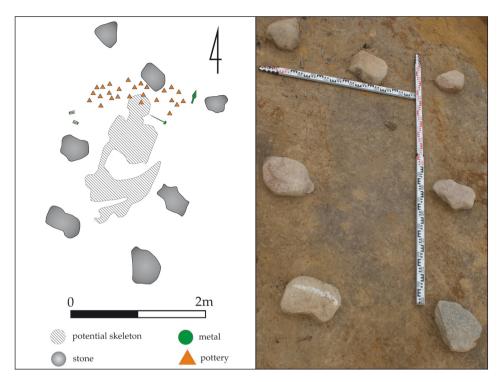


Fig. 7. Nieciecz Włościańska, site 11. Bronze artifacts from Grave 1 (photo by P. Kobek)

five wires (possibly fragments of a bracelet), two small laminas, and one large lamina were distinguished (Fig. 7). All these items had small dimensions (around 2 cm in length or diameter). Based on the position of the outline of the human remains, it can be assumed that, excluding one large plane lamina found in vicinity of the feet, the remaining bronze items were noticed near the deceased's chest or hands. Moreover, several flint flakes produced using the splintering technique, including a tranchet, were found in this grave but their association to the TCC is unclear.

## 2.2. Grave 2

Grave 2 was situated in the northwest sector of the barrow. It was a nearly rectangular construction oriented on a north-south axis with dimensions of  $3.05 \times 1.95$  m. This feature was built of six stones situated in the corners and along the middle of the long sides of the rectangle (Fig. 8). No bones were found within this construction; however, as with Grave 1, traces of the contours of a skeleton were observed on the washed soil surface. Based on



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Fig. 8. Nieciecz Włościańska, site 11. Plan of Grave 2 (photo by M. Kiełbasińska, K. Karasiewicz)

this, it can be assumed that the deceased was buried in a crouched position on the left side with the hands in the vicinity of the face. The burial was oriented on a northeast-southwest axis with the head to the northeast.

In the described feature, four bronze artifacts, including a spearhead, nail-head pin, and two spiral bracelets (Figs 9 and 10), and many fragments of vessels (pots) were documented. The spearhead measures 12.9 cm in length and 3.5 cm in width and was recovered to the northeast of the potential location of the head of the deceased in proximity to potsherds. Fragments of wood preserved inside its sleeve were sampled for radiocarbon analysis (section 3.2). The pin, which was 13.55 cm in length with a head measuring 1.55 cm in diameter, laid directly in the vicinity of the potential head of the deceased. Two bracelets 5.1 cm in diameter were recovered around 1 m to the northwest of the potential deceased.

In Grave 2, 66 pottery fragments were recovered. Many of them belonged to one vessel and were discovered in the vicinity of the potential head of the deceased. It is a gently profiled G112 type pot (Górski 2007, fig. 10) with a diameter around 10 cm and was ornamented with five horizontal lines and two wavy lines on the upper part of the shoulder. Additionally, fragments of pottery characteristic of the Neolithic in this area were found in

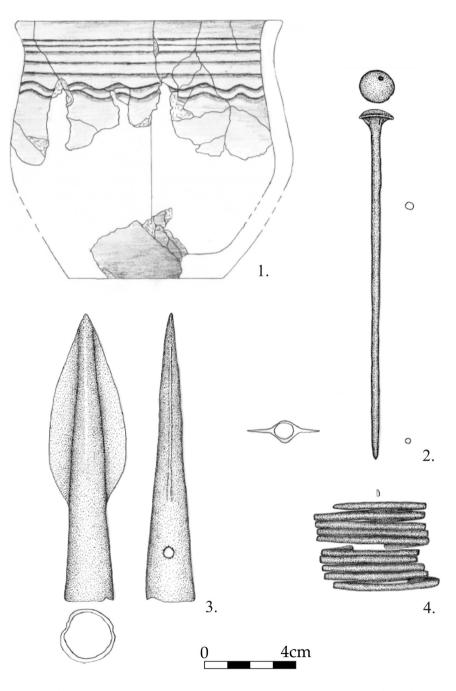


Fig. 9. Nieciecz Włościańska, site 11. The pottery and bronze artifacts from Grave 2 (drawing by K. Machnio)



Fig. 10. Nieciecz Włościańska, site 11. Bronze artifacts from Grave 2 (photo by P. Kobek)

the lower mechanical layers. Furthermore, four flint items, including a burnt flake, were found in this grave.

### 2.3. Other archaeological materials from the barrow mound

In addition to the finds from Graves 1 and 2, pottery fragments were excavated from different mechanical layers within the barrow outline (Fig. 11). In total, 324 fragments of TCC pottery and seven sherds from the transition from the Neolithic to Bronze Ages were registered inside the mound. These include potsherds with decoration including multiple incised horizontal, vertical, and wavy lines, horizontal grooves, and horizontal bars (decorative groups: I, III, XIV, XV, XVII, XXI based on Górski 2007).

Furthermore, three stone artifacts were documented in the upper layers of the barrow. A polishing stone made from quartzite was found in the northwest quarter. Another specimen produced from quartzite sandstone was excavated in the southeast sector. Additionally, a grinder made from granite was found in the upper layers of the barrow. Moreover, over 50 flint artifacts were registered within the range of the barrow. These were mostly specimens made using the splintering technique and can be associated with Bronze Age flint production technology. One diagnostic tool, a blade, was distinguished in this collec-

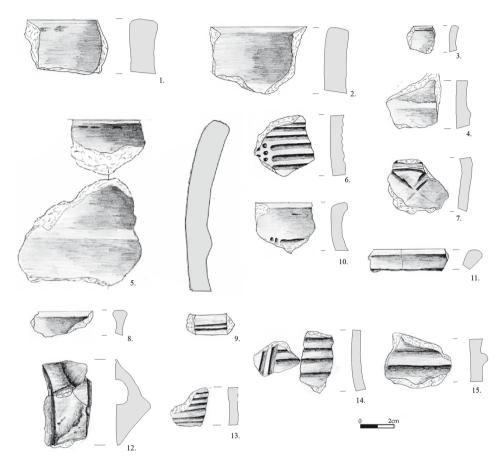


Fig. 11. Nieciecz Włościańska, site 11. Examples of pottery from the barrow (drawings by K. Machnio)

tion. It must also be mentioned that a number of the flint artifacts were heavily burnt. Finally, two small pieces of burnt bone were found in the upper layers of the mound. Unfortunately, because of poor preservation, they could not be anthropologically identified.

## 3. CULTURAL AND CHRONOLOGICAL ANALYSIS

The chronology of the Nieciecz Włościańska barrow was established using both relative (3.1) and absolute (3.2) methods. Specifically, the typochronological analysis of the diagnostic traits of the pottery (3.1.1) and bronze artifacts (3.1.2) as well as radiocarbon analysis of wooden fragment from inside the spearhead sleeve were conducted to estimate the most reliable timeframe in which the barrow from Nieciecz Włościańska was erected.

### 3.1. Relative chronological analyses

The relative chronology was primarily established based on the analysis of the traits of the ornamentation and, to a lesser extent, on macro- and micromorphology of the pottery. The technological features did not play a larger role in this case. The characteristics of the bronze artifacts from the under-barrow constructions in Nieciecz Włościańska are also important for establishing the relative chronology of the mound. It should be noted that, contrary to the western province of the TCC, the described area was distinguished by a limited occurrence of bronze items (Dąbrowski 2004, Karte 2). Nevertheless, both Graves 1 and 2 were richly equipped with metal artifacts.

#### 3.1.1. Typochronological analysis of the pottery

The type of pottery fragments excavated from Nieciecz Włościańska with horizontal and wavy lines (Figs 6: 4; 9: 1 and 11: 6, 9, 13, 14) is widespread throughout the 'lowland' version of the TCC. These patterns are often also accompanied by horizontal bars. Multiple wavy lines, typically three or four, are present on the body of vessels. In the Vistula Basin, they are most abundant in the territories of the Mazovian Lowland and Podlasie (Gardawski 1959, tabl. XLIV: 5, 6, 12; XLIVII: 29; XLVIII: 23-25; XLIX: 9; Taras 1995, tabl. IV: 1, 4; V: 7, 9; VII: 3; IX: 2; l. X: 1; XI: 1; XII: 1; XIII: 2; XXXIV: 10; Domaradzka and Józwiak 2011, ryc. 9: 6; Skorupska 2013, tab. 5: 5; Wawrusiewicz and Bienia 2014, ryc. 7: 4). A significant number of vessels ornamented with wavy lines and connections with other patterns come from the Polesie site in the southern part of Mazovian Lowland (Górski et al. 2011, ryc. 2.38). Single specimens are known from the Lublin Upland (Gardawski 1959, tabl. XLI: 22; Taras 1995, tabl. XLVII: 5), the San Basin (Adamik-Proksa 2019, tabl. CXIV: 4), as well as the western and northwestern borderlands of the TCC (Gardawski 1959, tabl. XIII: 17, 25; Makarowicz 1998, tabl. 71: 2). The same ornamentation occasionally occurs east of the Bug River (Makarowicz et al. 2016, fig. IV.298). The vessel with this pattern from Nieciecz Włościańska is not characteristic and quite unusual. The pot is short, and its proportions are closer to those of vases. A few similar specimens ornamented with wavy lines are known from the Mazovian Lowland (Gardawski 1959, tabl. XLVII: 24, 29; XLIX: 9).

The other diagnostic potsherds from Nieciecz Włościańska represent features typical of classical TCC materials. The characteristic attributes of this formation include horizontal lines, horizontal notches, and stamp ornamentation (Figs 6: 4 and 11: 15). Likewise, 'hanging' arches ornamentation (Fig. 6: 1) is known in the Mazovian and Podlasie areas (Grabarek 2012, ryc. 7: 2; Skorupska 2013, tabl. 2: 1; 5:2, 5).

Specific micromorphological elements are thickened and obliquely cut rims (Fig. 6: 2, 3; 11: 2, 8, 10, 11). These represent a sort of 'hallmark' of the classical stage of the TCC (Gardawski 1959; Taras 1995; Kłosińska 1997; Górski 2007, 2017; Makarowicz 2010a; Górski *et al.* 2011; Muzolf 2012).

To date, a periodization system has not been established for the described territory. Because of this, the relative chronology of this material is unknown. Certainly, it can be associated with the classic stage of the TCC, which existed through the late Early Bronze Age (period A2 according to P. Reinecke). The only specimen of a pot with wavy lines from Kuyavia, irrespective of taxonomical assignment - HT1 (Czebreszuk 1996, 159, 160) or HT1/3 (Makarowicz 1998, 103, 106, 107) – is associated with the early stage, which in this region dates to between the 19<sup>th</sup> and 17<sup>th</sup> centuries BC (Makarowicz 1998, fig. 13). Another fragment of a vessel with multiplied lines from San Basin (Skołoszów – Adamik-Proksa 2019, tabl. CXIV: 4) dates to the first part of the classical stage (assemblages of type A1) and dates to 1700-1600 BC (Adamik-Proksa 2019, 142-144). However, both periodization systems were developed in territories located quite far from the Nieciecz Włościańska site, not only geographically, but also culturally in terms of the different rhythms of the development of local TCC groups in these areas. Therefore, the most important observations considered here are from the site 1 in Polesie in the basin of Bzura River. In this light, the described ornamentation can be associated with the second pattern group (GS 2), which dates between the 17th and 15th centuries BC (Górski et al. 2011, 113, Fig. 3.2, 4.30).

In conclusion, it can be assumed that presented diagnostic pottery traits situate the analysed material from Nieciecz Włościańska in the early stage of the classical phase of the TCC development (Early-Classic horizon).

#### 3.1.2. Typochronological analyses of the metal artifacts

Graves 1 and 2 are among the most richly furnished TCC graves in terms of metal artifacts. The unadorned pin from Grave 2 has a poorly modeled and perforated nail-head. Because of these traits, this specimen is hard to unequivocally classify. Poorly modeled finials of bronze pins are characteristic of the Balczewo type, among which unadorned specimens occur (*e.g.* from Chachalnia near Krotoszyn). They are primarily known from Kuyavia and the northeastern part of Silesia. As with other pins of this type, they are associated with the early stage of the Tumulus culture (Vorlauzitzer kultur) (Gedl 1983, 42, 44, 45, Taf. 5: 115, 119, 44B).

The described specimen is also related to pins with punctured heads because of its perforation. However, the majority of this type of artifact has more distinctly conical or spherical heads. Regardless, these items also date to the early stage of the pre-Lusatian cultural development (Gedl 1983, Taf. 3-4). A single example of the same type of poorly modeled pin but with a decorated head comes from Skowarcz in Pomerania (Gedl 1983, Taf. 4: 100). The flat-convex head form of the pin from Nieciecz Włościańska is similar to those of specimens from Legnica and Wrocław-Osobowice in Lower Silesia, which similarly date to the early stage of the Tumulus culture (Gedl 1983, 66, Taf. 19: 244, 245). Based on this data, there is no doubt that the characterized pin dates to the BB<sub>1</sub> phase of the Bronze Age.

Interestingly, pins with the same head shape are known from under-barrow graves in different areas of the TCC. A 'post-Únětice' pin with a spherical and perforated head was found in Okalew, site 3, barrow 10, grave 2, at the confluence of the Warta and Prosna Rivers (Abramek 1971, tabl. 4: f; Kłosińska 1997, 9). A pin with a similarly perforated head to the Nieciecz Włościańska specimen came from grave 1a of the barrow cemetery in Dacharzów site 1, on the Sandomierz Upland (Florek and Taras 2003, ryc. 6: d). It has a decorated and twisted shaft. Analogues of this pin can be found among the Dunaújváros type, which is related to the Dolný Peter and Koszider horizons (Bóna 1975; 1992; Florek and Taras 2003, 42; Vicze 2011; Vicze et al. 2013), while its ornamentation relates more to items from the early and classical stage of the Tumulus culture (Florek and Taras 2003, 43). 'Southern' analogues include a specimen from Dacharzów dating to the BA<sub>a</sub>/BB<sub>a</sub>-BB<sub>a</sub> phases of the Bronze Age. A similar pin with a twisted shaft, although with decoration, is known from the grave under barrow 8 in Komarów in the Upper Dniester Area (Sulimirski 1968, fig. 26: 1; Romaniszyn and Makarowicz 2020). This specimen was found with other bronze artifacts typical of the Koszider horizon (Dabrowski 1972, 34, 115; Bóna 1975; 1992; Vicze 2011; Vicze et al. 2013). An analogical pin with smaller dimensions but from a similar context (*i.e.*, with a bracelet and spiral ornaments) was found in Bukówna barrow III, in the Upper Dniester Area (Swiesznikow 1967, Tabl. VIII; Dąbrowski 1972, tabl. XIV: 8-11; Makarowicz et al. 2016). Pins are also known from Putiatyńce and Beremiany in this region (Lysenko and Lysenko 2009, Fig. 5, Fig. 6, Fig. 7; Makarowicz 2009, Fig. 17). Similar specimens are also known from under-barrow graves in Netishyn and Ustenskoye on the Volhynian Upland (Berezanska and Samolyuk 2004; Lysenko and Lysenko 2009, Fig. 7: 2). All of these sites are exclusively barrow cemeteries located in different parts of the TCC range: from the Greater Poland Lowland in the west to the Dnieper Upland in the east. The presence of this type of pin in the TCC inventory was likely influenced by the Otomani/Füzesabony and Vatva cultures from the Carpathian Basin (Makarowicz 2010a, 341).

Spearheads are not sensitive chronological markers, and it is difficult to temporally classify this type of artifact. The specimen from Nieciecz Włościańska resembles both older examples (*e.g.* Babin in Western Pomerania – Blajer 1990, Tabl. II: 4, 5, 7, 8), as well as younger ones (*e.g.* Chycina in Greater Poland – Blajer 1999, Tabl. 18: 1, 2, 5). Morphologically, the spearhead from Nieciecz Włościańska is similar to a recently published specimen from Pomorowo in the Warmia Region, which is related to the Bagtep type and dates to BB<sub>1</sub> (Blajer *et al.* 2019, 70, 71).

Spearheads are typically found in the eastern provinces of the TCC, mostly in the Middle Dnieper area (Klochko 1994, 119, 124; 1998, 217, 236; 2006; Makarowicz 2009, Fig. 13; 2010a, ryc. 6.10), which is connected to a local metallurgical center (Klochko 1998). In the western enclaves of the TCC, only single examples of spearheads are known from, for example, Żyrardów, Kraski, and Tyszowce site 25A. The most similar analogue to the Nieciecz Włościańska specimen is known from Obuchiv in the eastern province of the TCC. How-

ever, contrary to the described artifact, the Obuchiv specimen has a small, perforated handle (Makarowicz 2010a, ryc. 3.19.). In total, around 30 spearhead specimens have been documented from TCC contexts to date (Makarowicz 2009, Fig. 13).

The two bracelets from Grave 2 occur commonly in the TCC in both the Upland and Lowland provinces. This type of artifact is documented both in hoards (mostly in the western part of the TCC – Blajer 2001, Mapa 72), as well as in funerary contexts throughout the TCC territory (Lysenko and Lysenko 2009, 350, 351; Makarowicz 2010a, Fig. 6.3). However, it is worth mentioning that this type of artifact has not yet been registered northeast of the Vistula River (Makarowicz 2010a, 341). The specimens from Nieciecz Włościańska are the first examples of spiral bracelets to be identified in this region.

Other bronze objects – perhaps elements of a necklace – are nondiagnostic in a chronological aspect. Based on the preserved fragments, the Nieciecz Włościańska specimens are considered similar in form to an artifact from barrow 8 in Komarów (Sulimirski 1968, 108; Fig 26). Inspiration for the pattern of spiral ornaments with small shields in TCC assemblages likely originated in both the Tumulus culture circle (Blajer 1999) from beyond the Carpathian Arc, as well as in the environment of Carpathian Basin cultures (Makarowicz 2010a, 341, 342).

The chemical and metallurgical analysis of the bronze artifacts will be the subject of a separate article; therefore in this text we will only mention that such objects recorded in the Nieciecz Włościańska barrow were made of high tin bronze.

### 3.2. Absolute chronology

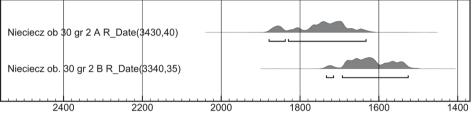
To establish absolute chronology, two samples of wood (parts of a javelin) that were poorly preserved inside the sleeve of the spearhead from Grave 2 were selected for radiocarbon analysis (Poz-57704, 3430±40 BP and Poz-57705, 3340±35 BP). The analysis was conducted using the AMS method in the Poznań Radiocarbon Laboratory and the obtained <sup>14</sup>C dates were calibrated using the OxCal program v. 4.4.2. (Bronk Ramsey and Lee 2013) against the calibration curve IntCal 20 (Reimer *et al.* 2020).

The obtained results oscillate around the second half of 18<sup>th</sup> century and first half of 17<sup>th</sup> BC (Table 1 and Fig. 12). The sample Nieciecz\_ob\_30\_gr2\_A provided wide time ranges after calibration: 1879-1622 BC (95.4% confidence level) and 1869-1641 BC (68.3% confidence level), with the period 1772-1676 BC as the most likely age (53.6% confidence interval). The result of the second sample (Nieciecz\_ob\_30\_gr2\_B) indicates a slightly younger chronology from between 1746 and 1518 BC (95.4% confidence level), more precisely from 1669-1540 BC (68.3% confidence interval), and the most likely age oscillates between 1635-1540 BC (61.5%). To establish the most reliable date range for both wood samples from the sleeve of the spearhead and, indirectly Grave 2 and the barrow, the *Combine* function was applied (Fig. 13.) in the OxCal program (Bronk Ramsey and Lee 2013). Based on this analysis, Grave 2 and the excavated barrow in general, most likely date to

No.	Laboratory signature	Feature	Material	BP	BC (68.3%)	BC (95.4%)
1.	Poz-57704 Nieciecz_ob_30_gr2_A	Grave 2	wood	3430±40	1869-1849 (9.2%) 1772-1676 (53.6%) 1654-1641 (5.4%)	1879-1839 (13.7%) 1826-1622 (81.8%)
2.	Poz-57705 Nieciecz_ob_30_gr2_B	Grave 2	wood	3340±35	1669-1656 (6.7%) 1635-1540 (61.5%)	1736-1716 (4.9%) 1692-1518 (90.5%)

 
 Table 1. Radiocarbon dates from the barrow in Nieciecz Włościańska (Oxcal v.4.4.2, Bronk Ramsey and Lee 2013)

OxCal v4.1.7 Bronk Ramsey (2010); r:5 Atmospheric data from Reimer et al (2009);



Calibrated date (calBC)

Fig. 12. Radiocarbon dates from the barrow in Nieciecz Włościańska

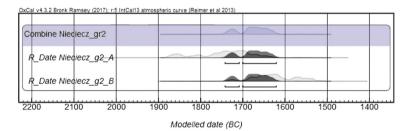


Fig. 13. Chronology of the barrow from Nieciecz Włościańska after application of the *Combine* function in the OxCal v4.4.2 program (Bronk Ramsey 2009)

between 1745 and 1566 BC ( $2\sigma$  confidence level), probably within the period from 1745-1612 (94.6%), which can be narrowed down to between 1731 and 1626 BC ( $1\sigma$ ), and again to between 1688 to 1626 BC (59.8%). It seems that the construction of the under-barrow structures (assuming they are contemporary) and the erection of the barrow above date to the end of first half and first quarter of the second half of the 17<sup>th</sup> century BC.

In light of the absolute and relative chronologies, the most likely time range of the 'episode' of barrow erection, including the grave interment and mound construction, should be placed between 1700 and 1600 BC, and more precisely during the first quarter of the second half of 17<sup>th</sup> century BC. Similarly rich 'Trzciniec' burials that also date to early periods of the TCC development include sites in Netishyn on Volhynia (barrow VIII - two graves; Berezanskaya et al. 2004; Makarowicz 2010a, 312, 313), Iwanowice Włościańskie, Góra Klin site grave 11 (Gajewski 1969), Komarów barrows 6 and 8 (Sulimirski 1964; Fig. 2; 1968, 107-108, Fig. 26: 7-9; Swiesznikow 1967, 85, tabl. I: 1-4, 7-10; Romaniszyn and Makarowicz 2020), and Ivanye barrow II, graves 1 and 2 (Sveshnikov 1968; Makarowicz 2008). A significant observation is that the barrow from Nieciecz Włościańska can be chronologically situated with those mentioned above, falling in the range of the early stage of the TCC, which relates to the first part of the classical phase. It is unusual that the inventory of the bronze artifacts from Nieciecz Włościańska and Netishyn are very similar. Although these sites are located over 400 km apart, in both cases, a spearhead, undecorated pin with a poorly vaulted and perforated head, and spiral bracelets were found. Despite its great distance from settlement clusters in the southern part of the TCC where the majority of barrow cemeteries are registered (Makarowicz 2010a, Fig. 4.1), the mound from Nieciecz Włościańska located in the northeastern province corresponds perfectly and confirms the renaissance of the 'kurganization' process directly connected with TCC societies during the first half of the 2<sup>nd</sup> millennium BC (Górski et al. 2003; Makarowicz 2010a).

# 4. THE BARROW FROM NIECIECZ WŁOŚCIAŃSKA IN THE CONTEXT OF OTHER TCC FUNERAL STRUCTURES

Numerous bronze ornaments (jewelry) excavated from Grave 1 suggest that this burial probably was that of a woman. The placement of spiral and tubular bronze elements in the vicinity of the deceased's chest evidenced these were probably fragments of a larger neck-lace. In the case of metal items from Grave 2, it can be assumed that they belonged to a male individual (a warrior?). This is primarily confirmed by the presence of the spearhead, an element associated with a military function which has been documented in other male burials in TCC contexts. This spearhead as well as a pin were placed next to the potential head of the deceased in Grave 2.

The presence of vessels confirms the deceased in both graves were supplied with ritual foods and beverages, a universal and common aspect of the funerary practices of the 'Trzciniec' society (Makarowicz 2010a, 272-276). Fragments of vessels and flint excavated below the mound and near the burial contexts provide evidence of complex ritual behaviors. These practices related to the funeral ceremony, which likely included ritual or commemorative feasts, destroying vessels, as well as consuming animal meat (Taras 1995, Florek and Taras 2003, 71, 72; Górski 2007; 2010; 2017; Makarowicz 2010a, 279, 280; Makarowicz *et al.* 2013; Romaniszyn 2015; 2018).

The symbolism and origin of the barrow funeral rites of the TCC societies have been frequently published in the archaeological literature (*e.g.* Górski 1996; 2010; Florek and Taras 2003, 70-72; Górski and Jarosz 2007; Makarowicz 2010a; 2010b; 2011). The much older chronology of the barrow described here allows us to consider the early mechanisms of the 'kurganization' process in the northern part of the TCC. It was a dynamic phenomenon that in very short time spread to different enclaves of this cultural formation, which is confirmed by radiocarbon dates (Górski *et al.* 2003; 2011; Makarowicz *et al.* 2021).

The analysis of the distribution of 'Trzciniec' sites indicates that barrow cemeteries and single mounds mainly occurred in the compact highland belts in the southern provinces of the described cultural formation (Makarowicz 2010a, 204). It seems, therefore, that the Nieciecz Włościańska mound is an excellent and unique polygon for studying the funeral rites of Middle Bronze societies in the northeastern part of the TCC. Additionally, this barrow was discovered within the borders of a settlement and another funerary feature was found in its vicinity (Features 109 and 144 - a flat graves), which further highlights the multidimensionality of the funerary rite system characteristic of the 'Trzciniec' society. This arrangement is similar to the situation from a large funerary and settlement complex in Polesie, site 1, in the Mazovian Lowland (Górski *et al.* 2011).

Despite the variability and complexity of the 'Trzciniec' funerary rite, a series of identifiers can be recognized that fit within a general sepulchral canon. In Southern Podlasie, and more broadly in the northeastern province of the TCC, few funeral features of this cultural formation have been recognized (Makarowicz 2010a, Fig. 4.3; Piotrowska 2012, Fig. 1). For this reason, it is difficult to define which funeral pattern was dominant in this area. The only necropolises that have been systematically excavated in this region are a cremation cemetery in Laski Stare on the edge of the Mazovian Lowland (Kempisty 1968), a complex of cemeteries and settlements in Polesie (Górski *et al.* 2011; 2012), and a barrow cemetery in Koryciny (Pawlata 2010).

With regard to the pattern of TCC funeral sites across the landscape, the described barrow represents the general tendency. Funerary structures were erected without exception on elevated landscape zones which were characteristic in shape and height (Górski 1996; 2017; Makarowicz 2010a, 207-218; 2011; Makarowicz *et al.* 2019). These are exposed places towering over their surroundings. The area of the Siedlce Upland on which Nieciecz Włościańska is located is characterized by a hilly landscape resulting from postglacial processes. The described monument was situated on the higher part of the slope. This location conforms to the general trend of the placement of funerary grave structures by the TCC societies (*e.g.* Makarowicz 2010a, 216, Fig. 4.9; Makarowicz *et al.* 2019).

Generally, TCC cemeteries were founded in the vicinity of settlements and less often within unspecified settlement zones (Makarowicz 2010a, 220; Górski *et al.* 2011; Piotrowska 2012, 101). It is also worth noting that the practice of erecting funerary features within the borders of settlements is primarily observed in the southern area of the TCC (Makarowicz 2010a, 220; Górski and Makarowicz in print). It should be emphasized that most of these features comprise flat, separated funerary structures, such as features 109 and 144 from Nieciecz Włościańska. Barrows indirectly associated with a settlement were discovered in Polesie (Górski *et al.* 2011). These remains included an under-barrow collective grave with sepulchral architecture as well as destroyed flat cremated graves (Górski *et al.* 2011, 27-300). Based on numerous radiocarbon dates, the established chronology confirmed these funeral structures were erected at different times (Górski *et al.* 2011, 133-146). Another example of a barrow within the border of a settlement comes from Adancăta in northeastern Romania (Niculică *et al.* 2013; Niculică 2015, Pl. XXXIX).

Based on existing data, it is not yet possible to define the exact chronological association of the settlement in Nieciecz Włościańska and the timing of the mound erection. In the literature, the habit of locating a funerary feature within the borders of a settlement is derived from the south (Věteřov and Otomani-Füzesabony cultures; Makarowicz 2010a, 220; Górski and Makarowicz in print). This hypothesis is confirmed by the higher frequency of graves within settlements in West Lower Poland. It seems this issue demands more detailed studies in the future.

A characteristic trait of the TCC funerary rite is the occurrence of complex and various sepulchral architecture. Different types of under-barrow features constructed from soil, wood, stone, or clay are documented among the TCC structures (Florek and Taras 2003, 63-69; Makarowicz 2010a, 228-242; Makarowicz *et al.* 2016). The barrow from Nieciecz Włościańska revealed two stone constructions with significant dimensions. It should be assumed that the erection of this grave structure involved and integrated the whole local community (Górski 1996).

Both under-barrow graves were structurally different from each other. Grave 1 was a large, irregular feature close to oval in shape inside of which space was provided to accommodate the burial of the deceased. The analysis of known TCC funeral constructions did not reveal any examples that strictly corresponds to the form of Grave 1. An architecturally similar stone structure was present in Costăna (Barrow-grave T1) in northern Romania (Boghian *et al.* 2012), although this monument is associated with the Babino culture. Moreover, structures of this type built from erratic stones or stone slabs have been discovered in both the northern (Okalew, kurhan 6; Abramek 1971, 71, ryc. 3: e) as well as the southern (Adăncata, T2, Komarów, kurhan 14, Bogucice; Sulimirski 1968, 108; Gardawski 1971, 153; Florek and Taras 2003; Niculică 2015, pl. XLIX) provinces of the TCC.

Although slightly smaller and simpler, the construction of Grave 2 is very interesting (Fig. 14). Almost identical funerary features with rectangular shapes and stones arranged in the corners and along the longer sides were found during recent excavations in Bukivna (Makarowicz *et al.* 2013; Lysenko *et al.* 2015; Makarowicz *et al.* in print), in the upper Dniester area. These included constructions in barrows 1/I/2010 (feature 3) and 7/I/2014 (features 6 and 7; Makarowicz *et al.* 2013; Lysenko *et al.* 2015; Makarowicz *et al.* in print). Contrary to the feature from Nieciecz Włościańska, the Bukivna did not contain bones (inhumated or cremated) and these constructions were interpreted as cenotaphs – sym-



Fig. 14. Nieciecz Włościańska, site 11. The stone construction of Grave 1 (foreground) and Grave 2 (background) (photo by M. Kiełbasińska, K. Karasiewicz).

bolic burials (Makarowicz *et al.* in print). However, it cannot be excluded that osteological material did not preserved due to unfavorable soil conditions (Makarowicz *et al.* in print). The re-analysis of the funeral rite from another TCC necropolis in the upper Dniester area at Komarów revealed the occurrence of the same type of funerary construction (Romaniszyn 2018). Examples of such structures were discovered in barrows 34 and 45 from this cemetery (Sulimirski 1968, 111ff.). In the second feature, as at Nieciecz Włościańska, cremated human remains were noticed (Romaniszyn and Makarowicz 2021). The comparison of the sepulchral construction from Nieciecz Włościańska and features from the upper Dniester area suggest that this type of funeral structure, although unique, comprised part of a universal pattern with deeper symbolism. However, the documentation of these features in completely different areas of the TCC opens further discussion about the funeral rites and symbolism of ritual behaviors of TCC societies from the 2<sup>nd</sup> millennium BC.

Based on fieldwork and the remains of small pieces of human bone, it is difficult to unequivocally state what type of burial (cremated or inhumated) was discovered in the graves beneath the Nieciecz Włościańska barrow. In the opinion of the excavators, all four bones recovered from the barrow showed traces of fire activity (Kiełbasińska *et al.* 2012, 4-6). Furthermore, in the vicinity of the stone constructions, smudges on the subsoil were observed that may have been associated with the burning process. This evidence suggests that fire was during the funeral ceremony prior to the construction of the mound. This sepulchral treatment consisted of burning the (wooden?) funeral construction with the deceased and grave goods inside. In the literature, this habit is call *in situ* cremation and this type of funerary behavior is known from different enclaves of the TCC (Kempisty 1978; Kłosińska 1987, 41; Górski 2007; Makarowicz 2010a, 244, 385).

There were two separate burials inside the Nieciecz Właściańska barrow. Funeral structures containing collective burials are characteristic of the ritual activity of the "Trzciniec" societies (Makarowicz 2010b; Górski 2017). They are registered throughout the TCC territory, from the western to eastern provinces (Makarowicz 2010a, 244-253; 2010b, 379-387). Among the different types of collective burials, 'paired burials' are distinguished, in which two deceased were interred under the same barrow (Makarowicz 2010a, 346). Examples of 'paired burials' are known primarily from the Volhynian Upland and have been documented at Netishyn (barrow VIII), Boratyń Wielki, Szepel, Peresopnica, Siekierzyńce, and Kordyshiv (Romaniszyn and Skrzyniecka 2019, 262). In the case of the example from Nieciecz Właściańska, the radiocarbon analysis did not distinguish whether these features were interred contemporaneously or at different periods. The analysis of the funerary inventory suggests the 'paired burial' included both a male and female individual. Recent studies of TCC funeral rituals indicate this type of burial occurs throughout the entire formation of this culture (Makarowicz 2010a, 381), as well as in local variants (Romaniszyn and Skrzyniecka 2019, 262).

Summarizing the above information, it should be stated that the society that erected the mound in Nieciecz Włościańska duplicated several specific schemes of sepulchral construction characteristic of the TCC. This is evidenced by the location of this barrow in a specific (sacral?) area of the landscape, the erection of a composite sepulchral construction, the funeral behaviors associated with the interment of the deceased, including probable fire activity, and covering the funeral components with a mound. The fragments of crushed vessels from Grave 2 suggest the society provided ritual nourishment for the deceased. The relics of funerary rites discovered in the Nieciecz Włościańska barrow confirm the heterogeneity and complexity of the TCC sepulchral behaviors, that nonetheless follow the general scenario of ritual activity known from these societies documented in the literature (Kośko 1991; Makarowicz 2010a, 276-280).

The rich individual funerary equipment of the deceased from the burial mound in Nieciecza Włościańska also requires comment. It seems that prestigious metal items initially were owned by selected groups or individuals. Following the tendency to equip the deceased during burial, the depersonalization of grave goods over time can be observed (Makarowicz 2003; 2010a). The rich burials from the earlier stage of TCC development do not have counterparts among later burials. Indeed, collective graves are predominant in later burials, making it difficult to attribute grave goods to specific individuals. This is viewed as a recession of individualizing and personalistic tendencies in favor of collective

behaviors (Makarowicz 2010a, 331). In this context, it should be noted that in the earlier stage of the TCC development, hoards are represented in greater numbers relative to later periods. These sets have a characteristic 'ornamentation suite' and they can highlight group identity in relation to 'countrymen' and 'strangers' (Blajer 1996, 98, 104). Some have been found within settlements and could have been collectively owned by the village community (Górski 2017, 110, 111). The rich funerary equipment of the deceased from the Nieciecz Włościańska barrow can be interpreted as reflecting the funeral rites observed primarily in the 'upland' area of the TCC, where the tendency of under-barrow graves to 'individualize death' and personalize grave goods, including those that indicate the sex of individuals, is visible. The issue of richly equipped barrows of the TCC societies has been previously discussed in detail (Makarowicz 2010a, 295-322).

It is possible that one of the reasons for community diversification and the development of local elites in relation to the western part of the TCC could have been the takeover by individual or groups of brokers in the amber trade (Górski 2017, 108-110). The discovery of the Nieciecz Włościańska barrow can lead to the conclusion that not all richly furnished burials should be associated, whether directly or indirectly, with amber or bronze distribution. Instead, some may be related to individual achievement of high social positions at a time of major and dynamic change during the stages of formation and territorial expansion of the TCC community (Górski 2017, 110).

## 5. CONCLUSIONS

The presented barrow is a funeral structure characteristic of the TCC. A picture of complex and specific burial practices is drawn by analyzing the relics of funeral constructions and traces of ritual behavior. The erection of barrows in exposed spaces, the occurrence of complex grave architecture, and archaeological evidence of multi-stage ritual activities that supplied the deceased with spectacular funerary goods were characteristic for this cultural formation.

The barrow from Nieciecz Włościańska is one of the few comprehensively excavated funeral features in the northeastern province of the TCC. Therefore, this monument has significance for characterizing barrow funeral rites as well as establishing the absolute chronology of the Trzciniec circle in this area.

The presented analyses delineated the probable time at which this barrow was erected. The mound was built at the end of first half of the 2<sup>nd</sup> millennium BC, probably in the first quarter of the 2<sup>nd</sup> half of the 17<sup>th</sup> century BC and should therefore be associated with the classical phase of the TCC. This was a period of intensification in the process of building barrows throughout the range of the described cultural formation. The mound from Nieciecz Włościańska located in the lowland area represents a number of traits characteristic for this type monument from other TCC provinces, mostly from the upland area. This

barrow testifies the complex and multidimensional ritual life of 'Trzciniec' societies and, along with barrows from Polesie, site 1 and Koryciny sites 5 and 6, confirms the transfer of the idea of erecting barrow cemeteries in a northeastern direction.

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