

PREHISTORIC OCCUPATION AT TASH BAIR NEAR NOVGRAD (RUSE DISTRICT) AND ITS CULTURAL-HISTORICAL POSITION IN THE EASTERN BALKANS

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Abstract

The Tash bair mountain ridge at the confluence of the Yantra and the Lower Danube has been the subject of intensive archaeological research by a Bulgarian-German team since 2018. Significant prehistoric settlement sites existed there in the Late Neolithic, Middle Bronze Age, and Early Iron Age. Based on the stratigraphic observations of the settlement layers, a substantial relative chronological classification for the prehistoric periods was elaborated for the first time. Beyond this, a series of radiocarbon dates allows a first absolute chronological classification of the extensive find inventories from the prehistoric periods. The development of occupation at these sites was closely linked to the development of the water system in the lowlands of the Yantra and Studena reka rivers, which continues into historical times. During the prehistoric period, it was an important center where various cultural groups can be found that are also characteristic of the northern bank of the Danube (Wallachia). Apparently, Tash bair functioned for a long time as a bridgehead between the two banks of the Lower Danube, which emphasizes its strategic position.

Keywords: Prehistoric occupation – environmental factors – settlement ditches – Late Neolithic – Middle Bronze Age – Early Iron Age – radiocarbon dating.

<https://doi.org/10.53250/stprae18.63-91>

Introduction

The mountain ridge of Tash bair is a dominant landmark above the lowlands near the confluence of the Yantra River and the Lower Danube. It also dominates the confluence of the Studena reka valley coming from the southwest and the Yantra. The geofactors favoring settlement, such as the strategically dominant position near the southernmost point of the Danube's course with an important river crossing, the direct access to the Yantra near its mouth and a pronounced south-facing slope, led to a concentration of important settlement and fortification sites, the chronology of which extends over various periods from the Late Neolithic to the Early Middle Ages (fig. 1). In addition, the routes along the Lower Danube, Studena reka and Yantra crossed here, the latter providing access to the Balkan passes. At all times, the Danube represented a geographical obstacle, but it functioned as an important communication and exchange route in prehistory until the Late Iron Age. Moreover, the importance of riverine food resources should not be underestimated.

Stefan Stefanov (1974) has already mentioned the existence of a large Roman site here in his basic compilation of archaeological sites on the lower Yantra. The significance of the multi-period site complex on the southern slope of Tash bair, however, could only be worked out in the course of the Bulgarian-German survey, which was carried out between 1997 and 2001 in a study area along the lower course of the Yantra and between the *limes* fortifications of Novae and Iatrus (Krauß 2006a, cat. 48).

After further sites were discovered in satellite images in the following years, an interdisciplinary project funded by the German Research Foundation (DFG) since 2018 is now investigating the extent to which the concentration of sites can be attributed to the favorable location at this supra-regionally important crossing point and the reasons for their later abandonment. The research has been carried out as a joint project of the National Archaeological Institute and Museum of the Bulgarian Academy of Sciences (NAIM-BAS) and the Institute of Prehistory, Early History and Medieval Archaeology of the University of Tübingen (Germany). A working group of the Geographical Institute of the University of Leuven (Belgium) as a collaboration partner carried out investigations on the river history of the Yantra near its mouth. Various scientists from other institutions carried out special investigations.

Based on the stratigraphic observations of the settlement layers at sites 1, 3, and 4 at Tash bair, a substantial relative chronological classification for the prehistoric periods from the Late Neolithic to the Early Iron Age could be made for the first time for the Yantra catchment area. A series of radiocarbon dates allows us to discuss their absolute chronology. In this paper, therefore, the focus will be less on the excavated features and more on the finds and their chronology. The analysis is largely based on the results of the first part of the project (2018–20), which were recently published (cf. Vagalinski et al. 2023a), as well as on unpublished material from the second phase of the project (2021–23). Therefore, literature references can be largely dispensed with at this point.

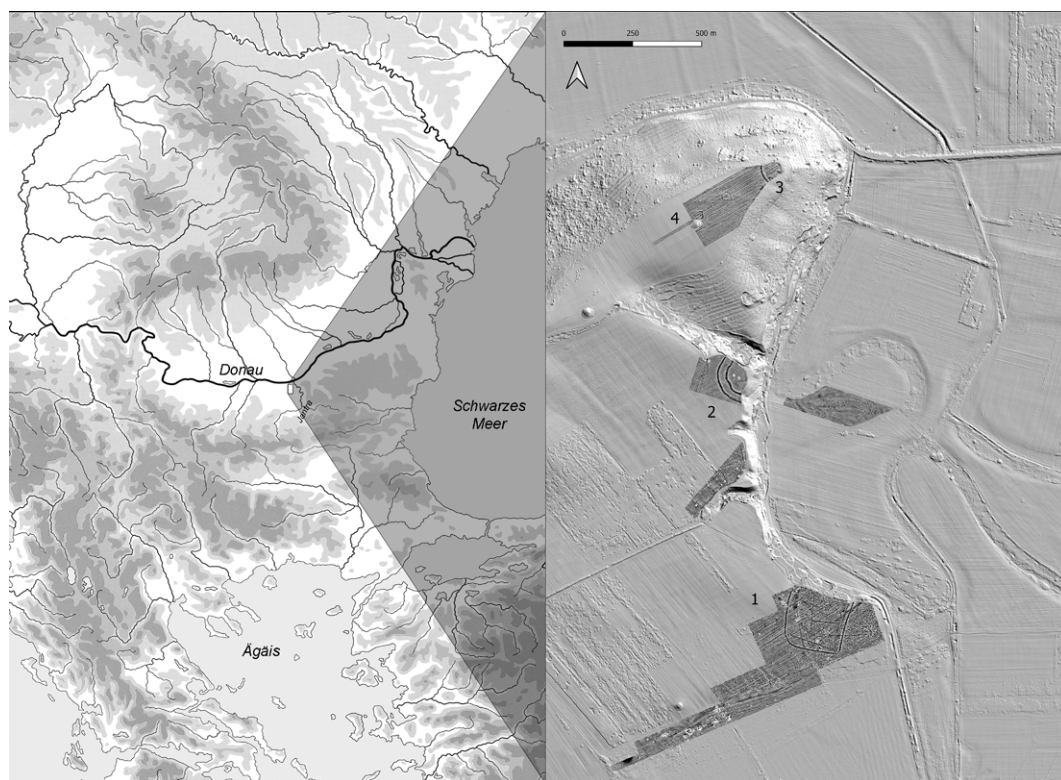


Figure 1. *Geographical position of Tash bair at the southernmost point of the Danube River. LiDAR Image of the Tash bair ridge with geomagnetic mapping (Eastern Atlas Berlin) of archaeological sites 1–4. Image Credit: R. Krauß.*

The Neolithic

If one considers the available material and chronological studies for the entire lower course of the Danube River in context, there is a clear focus on the beginning of the Neolithic from the late seventh to the first half of the sixth millennium BC and then again on the beginning of the Copper Age in the early fifth millennium BC. This situation also clearly reflects the research interests in the beginning of sedentism, agriculture, and animal husbandry in the region on the one hand, and in the cultural environment of the spectacular finds at the beginning of copper and gold metallurgy on the other, the latter having been represented above all by the opulent burials of the Varna cemetery. An additional focus on the beginning of the Copper Age resulted from the sensational discovery of fortifications – already known for some time in the form of multiple palisade fortifications of the lower settlement layers at Tell Polyanitsa, as well as other sites, and more recently also in the form of massive stone walls at the tell sites of Provadia, Sushina, and Suvorovo (Chohadzhiev & Krauß 2019). A lot of radiocarbon dates are thus available for the above-mentioned timespans, while the periods in

between and after them are hardly documented with absolute dating (cf. Görsdorf & Boyadzhiev 1996; Tsirtsoni 2016).

The period in the second half of the sixth millennium BC, which is represented in Thrace in the settlement sequence from Karanovo III to IV or Aşağı Pınar 5 to 3, offers an abundance of find material in northern Bulgaria, too, which has so far only been roughly structured (e.g., Todorova & Vajsov 1993; Popov 1996). Larger collections of material from this period in northern Bulgaria come from the sites of Samovodene and Kachitsa, as well as from the upper settlement layers of Koprivets and Hotnitsa-Orlovka. The excavator Petar Stanev (2002) proposed a division of the material from Samovodene into phases A, A-B1, B2, and B2-C. In his opinion, the reason for the still unclear sequence of the individual building levels is that the area of the settlement was investigated only by small excavation trenches. Nevertheless, the few finds offer a small insight into the development of ceramic shapes of this period. The eponymous site of Hotnitsa-Orlovka was in fact investigated just by small trenches ahead of an infrastructure project (Chohadzhiev & Chohadzhiev 2014). The materials presented in earlier publications are unstratified and often hardly identifiable in detail simply because of the poor quality of the published photographs and drawings (cf. Ilcheva 2002). The material from Kachitsa is unpublished, apart from cursory mentions in various journal articles (Stanev 1976, 1981, and 1982). More extensive Late Neolithic material comes from trench A at Koprivets. The ceramic finds were assigned to the Hotnitsa I and II levels by Volodya Popov (1996, 37, 165ff). He assigned further material from the Chakmak Tepe and Magaritsata sites near Byala to Hotnitsa I and Vădastra culture (Popov 1996, 183ff). In addition, material from various sites was assigned to the Boian I phenomenon (Popov 1996, 191ff). This clearly outlines the heterogenous appearance of the north Bulgarian Late Neolithic and its problems. There is a great deal of excavated material which, due to a lack of reliable stratigraphic observations, can be assigned mainly stylistically to different cultural groups, without their relative chronological relationships being clear.

The Late Neolithic occupation of site 1 at Tash bair (ca. 5200–4900 BC) is of particular importance here (fig. 2). Due to the favorable position on the long-extended terrace on the southern slope of Tash bair, close to the mouth of the Yantra River into the Danube, this settlement has a key position for the settlement system in the region during prehistoric times. It is the earliest settlement at the mouth of the Yantra, which is known so far¹ and covers at least 6 ha.

¹ It cannot be ruled out that neolithization at the mouth of the Yantra River began already in the Early Neolithic, contemporary to the known sites at the middle course of the river (Dzhulyunitsa, Koprivets, Orlovets). During the geomorphological investigations, settlement remains were found when core drilling at a site in the river lowlands ca. 3.5 m below the present surface, which were dated to ca. 6000 calBC. However, their cultural assignment must remain open for the time being until clarification by an excavation. So far, the Late Neolithic settlement on the southern slope of Tash bair is the earliest clearly identifiable site at the Yantra estuary after the end of the last Ice Age.

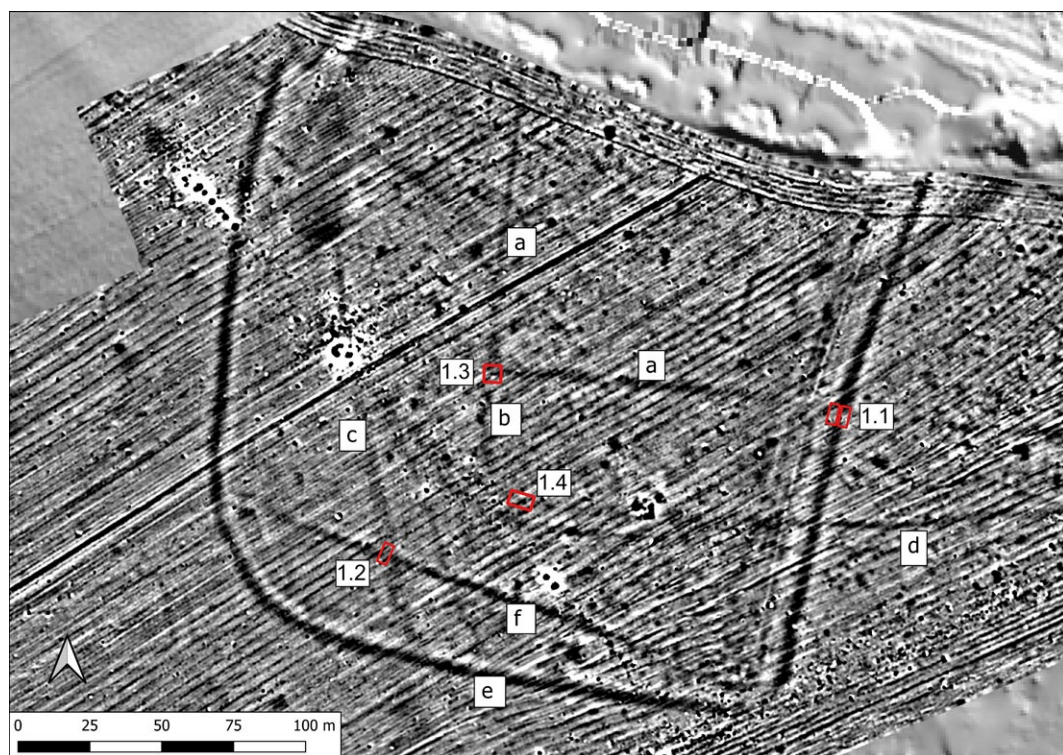


Figure 2. Geomagnetic mapping (*Eastern Atlas Berlin*) at Tash bair, site 1, with the position of excavation trenches 1.1–1.4. (a–d) Late Neolithic ditches; (e–f) early Medieval ditches. Image Credit: S. Conrad.

At the beginning of the Bulgarian-German research project, several Late Neolithic features have already been identified at site 1, whose exact time and space position seemed to be unclear at first. Besides common material of the north Bulgarian Late Neolithic (Hotnitsa/Kachitsa), ceramic forms of Vădastra, Boian and even Hamangia are represented. The latter phenomenon has its center of distribution in Dobrudzha (Haşotti 1997; Todorova 2011, 54ff). To the west, connections to Vinča A to C are possible based on absolute chronology (cf. Krauß 2023b, 139).

Based on large-scale geomagnetic measurements (cf. Ullrich et al. 2023, 102f, figs. 3–5), four linear or double-linear anomalies were identified, which targeted excavation trenches proved to be Late Neolithic ditches (fig. 2a–d). In the case of ditches a–c, the Late Neolithic date is confirmed by both finds and radiocarbon dates (trench 1.4, see below). Only the double ditch d (feature 1.4.7), which was difficult to define during the excavations, can be plausibly dated to a late phase of the Late Neolithic based on its stratigraphic position and the finds only. The stratigraphic relationship of the three other ditches a–c, which should be dated earlier than ditch d, is not sure for the time being.

The ditch a has a preserved width of approximately 1.90 m and a depth of up to 1.20 m. In the western part it is angled at 90°; there was probably a passage here. A first section of the ditch was recorded in the double trench 1.1 (cf. Vagalinski et al. 2023c, feature 1.1.6/15), and the corner context was examined later in trench 1.3.¹

Ditch b most likely corresponds to feature 1.4.10 and was at least 2.10 m wide and 0.95 m deep. If the identification with the circular ditch in the geomagnetic mapping is right, then it appears to run in a circular arc.² This is the earliest feature attested in trench 1.4 and possibly (though not surely confirmed) the earliest of the ditches excavated so far. Radiocarbon dates on ruminant bones are available from both contexts (feature 1.3.11 [Poz-156808: 6140±40 BP]; feature 1.4.10 [Poz-156809: 6200±40 BP]) that indicate a date between the 53rd and 51st centuries calBC (table 1).

Ditch c was identified in the excavation trench as a relatively shallow double trench running NNW–SSE (features 1.2.4 and 1.2.6/8; Krauß & Conrad 2023). Three radiocarbon dates (Poz-120368: 6155±35 BP; Poz-120370: 6170±40 BP; Poz-120371: 6120±35 BP) place these ditches in the 51st to 50th centuries calBC, i.e., the first two phases of the north Bulgarian Late Neolithic represented at Tash bair, site 1. Comparable dates are available from Kachitsa and Hotnitsa–Orlovka (Görsdorf & Boyadzhiev 1996).

Regarding the function of these trenches, we are currently only dependent on assumptions, especially since their original depth and width can no longer be determined. With regard to their position in relation to the surface finds identified (Kecheva et al. 2023, site 1) and in view of their course, ditches a, b, and d appear to have represented certain demarcation of the actual settlement area. Ditch features are common elements of the Neolithic settlements and can be found at numerous sites. Due to large-scale rescue excavations and geomagnetic prospections, their number in Bulgaria has increased considerably in recent years (Roodenberg et al. 2014; Nikolova 2018; Aleksandrov et al. 2024).

During the 2022 archaeological campaign, a series of pit complexes with numerous ceramic finds was uncovered here which are currently still being processed (fig. 3). Due to the stratigraphic overlaps of some of them, they offer certain potential to differentiate several phases of the Late Neolithic. At least two stages were identified in trench 1.3, and at least three in trench 1.4. A comparison to finds from the neighboring sites mentioned above could make it possible to better sort and chronologically classify the Late Neolithic finds in north central Bulgaria.³ Radiocarbon dates are now available for some

¹ This ditch (feature 1.1.8/15) was provisionally dated to the Late Iron Age in the publication of the excavations carried out in 2019 (Vagalinski et al. 2023b; Conrad & Krauß 2023b, 262ff, tables 4 and 5). The reason for this was some ceramic sherds found in the ditch filling, which contaminated the original filling. The dating to the Late Neolithic was corrected by the excavations carried out in 2022, the results of which will be published in the Novgrad – Tash bair 2 volume (feature 1.3.11).

² Ditch b will also be included in the Novgrad – Tash bair 2 volume, which is currently in preparation.

³ The detailed results of this investigation will be published in the Novgrad – Tash bair 2 volume.

Sample	Site	Feature	Material	Species	LabCode	14C BP	STD	calBC (2 σ)
TB 26	Site 1	4/1/09	charred seeds	<i>Triticum New Type</i>	Poz-174130	6210	40	5320–5000
TB 23	Site 1	Ft 1.4.10, trench at W profile	bone	<i>Bos</i>	Poz-156809	6200	40	5280–5000
TB 24	Site 1	3/1/10	charred seeds	<i>Prunus non spinosa, Fragn.</i>	Poz-174030	6200	40	5280–5000
TB 12	Site 1	Ft 1.2/1.2.4 NW (niv. 28.58–28.11 m)	bone	<i>Cervus elaphus</i>	Poz-120370	6170	40	5240–5000
TB 09	Site 1	Ft 1.2 NE/1-2-7/8 (niv. 28.40–28.10 m)	bone	<i>Bos</i>	Poz-120368	6155	35	5260–4980
TB 22	Site 1	Ft 1.3.11 BNE 4, ditch bottom 4th level	bone	large ungulate	Poz-156808	6140	40	5260–4940
TB 13	Site 1	Ft 1.2NE/1.2 7/8 (niv. 29.30–28.94 m)	bone	<i>Bos</i>	Poz-120371	6120	35	5250–4930
TB 29	Site 1	Ft 1.4.4	charred seeds	<i>Prunus non spinosa, Fragn.</i>	Poz-174060	6110	40	5240–4880
TB 28	Site 1	Ft 1.4.13	charred seeds	<i>Hordeum distichon/vulgare</i>	Poz-173985	6105	35	5210–4890
TB 11	Site 1	Ft 1.2/1.2.4 NW (niv. 29.30–29.08 m)	bone	large ungulate	Poz-120369	5545	35	4470–4310
TB 27	Site 1	Ft 1.4.26	charred seeds	<i>Triticum New Type/Lens culinaris</i>	Poz-174131	4120	35	2920–2520
TB 20	Site 3	Ft 3.6S (niv. 58.60–58.10 m) up to above stones	bone	<i>Bos</i>	Poz-156798	3625	35	2090–1890
TB 21	Site 3	Ft 3.6.4 (niv. 57.71–57.59 m)	bone	<i>Bos</i>	Poz-156807	3615	35	2070–1870
TB 19	Site 3	Ft 3.6S (niv. 58.35–58.10 m) under stones	bone	large ungulate	Poz-156797	3600	35	2060–1860

Table 1. List of radiocarbon dates for the prehistoric features at Tash bair (continued on the next page).

Sample	Site	Feature	Material	Species	LabCode	^{14}C BP	STD	calBC (2σ)
TB 01	Site 3	Ft 3.6, ditch filling (niv. 58.32–58.03 m)	bone	<i>Bos taurus</i>	Poz-108792	3585	35	2040–1840
TB 03	Site 3	Ft 3.6, ditch filling (niv. 58.80–58.58 m)	bone	<i>Bos taurus</i>	Poz-108794	3555	35	2010–1770
TB 07	Site 3	Ft 3.1.1., Qu. A, 30–40 cm (niv. 61.38–61.28 m)	bone	large ungulate (cat-tle-sized)	Poz-115807	3165	30	1510–1390
TB 08	Site 3	Ft 3.1.1., Qu. A, Pl. 2 (niv. approx. 61.21 m)	bone	<i>Bos</i>	Poz-115808	3135	30	1470–1350
TB 05	Site 3	Ft 3.3, south; Ft 3.2.1; 20+ cm; PL2–3 (niv. 63.97–63.58 m)	bone	large mammal	Poz-115804	3110	30	1460–1300
TB 02	Site 3	Ft 3.1.1., Qu. B, layer B1 (niv. approx. 61.30–61.35 m)	bone	<i>Bos</i> or large ungulate	Poz-108793	3035	30	1410–1210
TB 06	Site 3	Ft 3.1.1., Qu. A, 50–60 cm (niv. 61.18–61.08 m)	bone	<i>Bos</i>	Poz-115806	3035	35	1430–1190
TB 04	Site 3	Ft 3.3; Ft 3.2.1; betw. planum 2 and 3 (niv. 63.77–63.38 m)	charred wood	not determined	Poz-115331	2990	30	1350–1110
TB 14	Site 4	Ft 4.3 W-105 (niv. 92.50–92.40 m)	charred wood	<i>Quercus cf. cerris</i>	Poz-146649	2980	35	1320–1080
TB 18	Site 3	Ft 3.7.1 (niv. 66.11 m)	charred wood	not determined	Poz-156584	2940	30	1260–1020
TB 17	Site 4	Ft 4.3 W-105 (niv. 92.17–91.99 m)	charred wood	<i>Rosaceae cf. Maloideae</i>	Poz-147042	2930	90	1390–870
TB 31	Site 1	Ft 1.3.2, grave	bone	<i>Homo sapiens</i>	Poz-179985	2920	30	1240–1000
TB 16	Site 4	Ft 4.3, E-115/116	charred wood	<i>Fraxinus cf. excelsior</i>	Poz-146651	2800	30	1030–870
TB 15	Site 4	Ft 4.4.110; NW quadrant	charred wood	<i>Quercus cf. cerris</i>	Poz-146650	2795	30	1020–860

Table 1. List of radiocarbon dates for the prehistoric features at Tash bair.



Figure 3. *Trench 1.4, planum 9, at Tash bair, site 1. Late Neolithic features, after the end of excavation. Image credit: UAV (J. Sprißler).*

of the Late Neolithic features (feature 1.3.10 [Poz-174030: 6200 ± 40 BP]; feature 1.4.9 [Poz-174130: 6210 ± 40 BP]; feature 1.4.13 [Poz-173985: 6105 ± 35 BP]; feature 1.4.4 [Poz-174060: 6110 ± 40 BP]). Provisionally, the Late Neolithic ceramic assemblage from Tash bair can be ordered chronologically based on the stratigraphic observations at site 1.

At the beginning of the development are biconical bowls with fluted decoration on the shoulder (fig. 4) that could be derived from the earlier material of the late Early Neolithic (Ovcharovo–Gorata, Samovodene). In the further course, this fluting was supplemented by indentation and incised decoration, while the vessel forms remained largely the same. Fine ceramics are dominated by biconical bowls with a high-set rim. The development of Late Neolithic pottery led to the appearance of forms decorated only with incised patterns, which are hardly represented at Tash bair (fig. 5.4, 20, and 21). This third stage is well documented in the find material from Hotnitsa–Kaya bunar (Ilcheva 2002, 144ff). Coarse ware also demonstrates development as many coarse vessels are covered with finger-trailed pattern barbotine. While the early phases of the Late Neolithic pottery production were still dominated by the rounded forms of the earlier tradition, they eventually developed into more sharply carinated shapes. Biconical jugs with cylindrical necks and knobbed handles appeared at the end, again common at Hotnitsa–Kaya bunar (Ilcheva 2002, 148), and also at Kachitsa (Stanev 1982, obr. 14–17). These forms are also present at Samovodene (Stanev 1985, obr. 3) but were

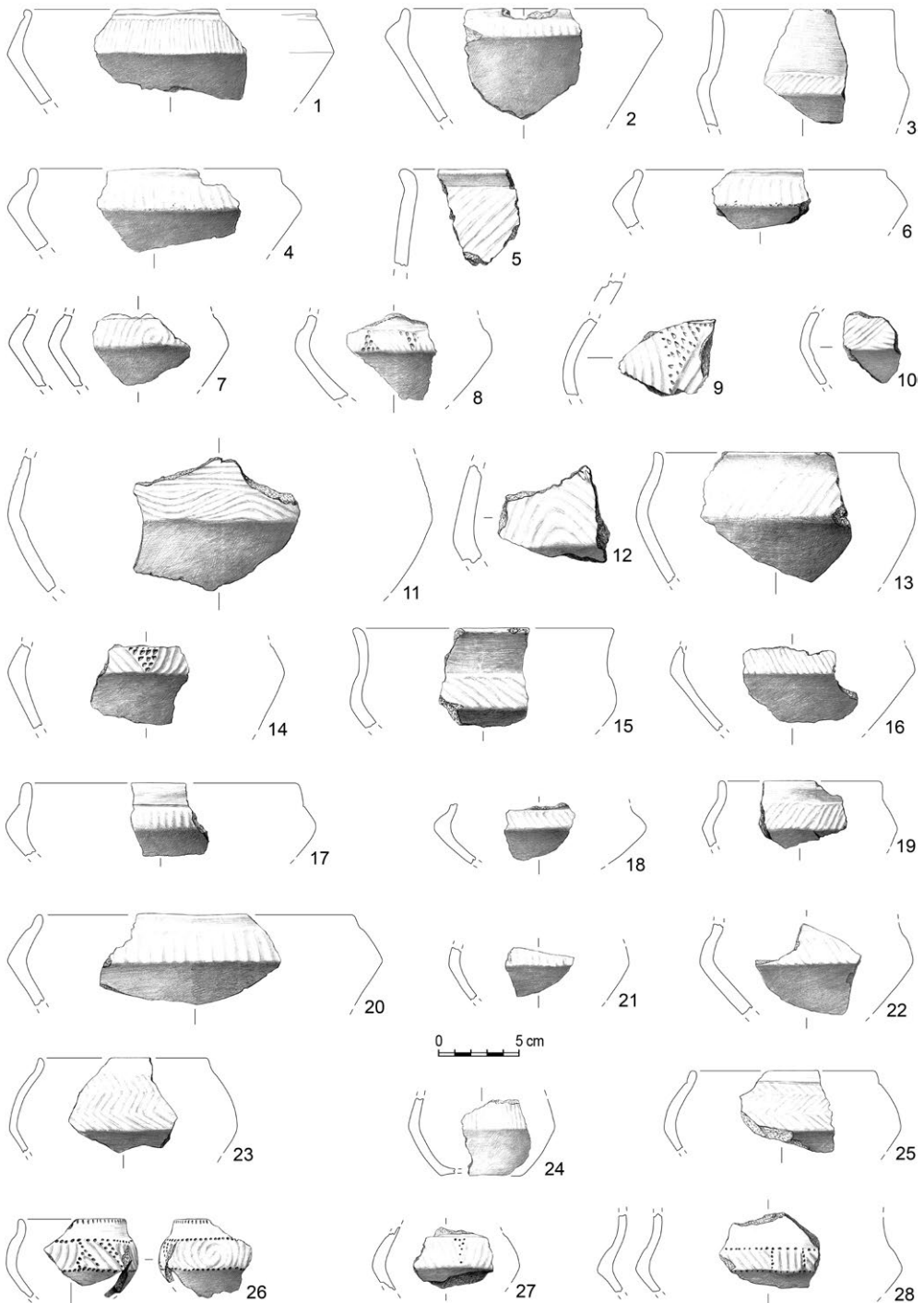


Figure 4. Late Neolithic pottery with channelled decoration from Tash bair, site 1. Image Credit: B. Terzieva and R. Krauß.

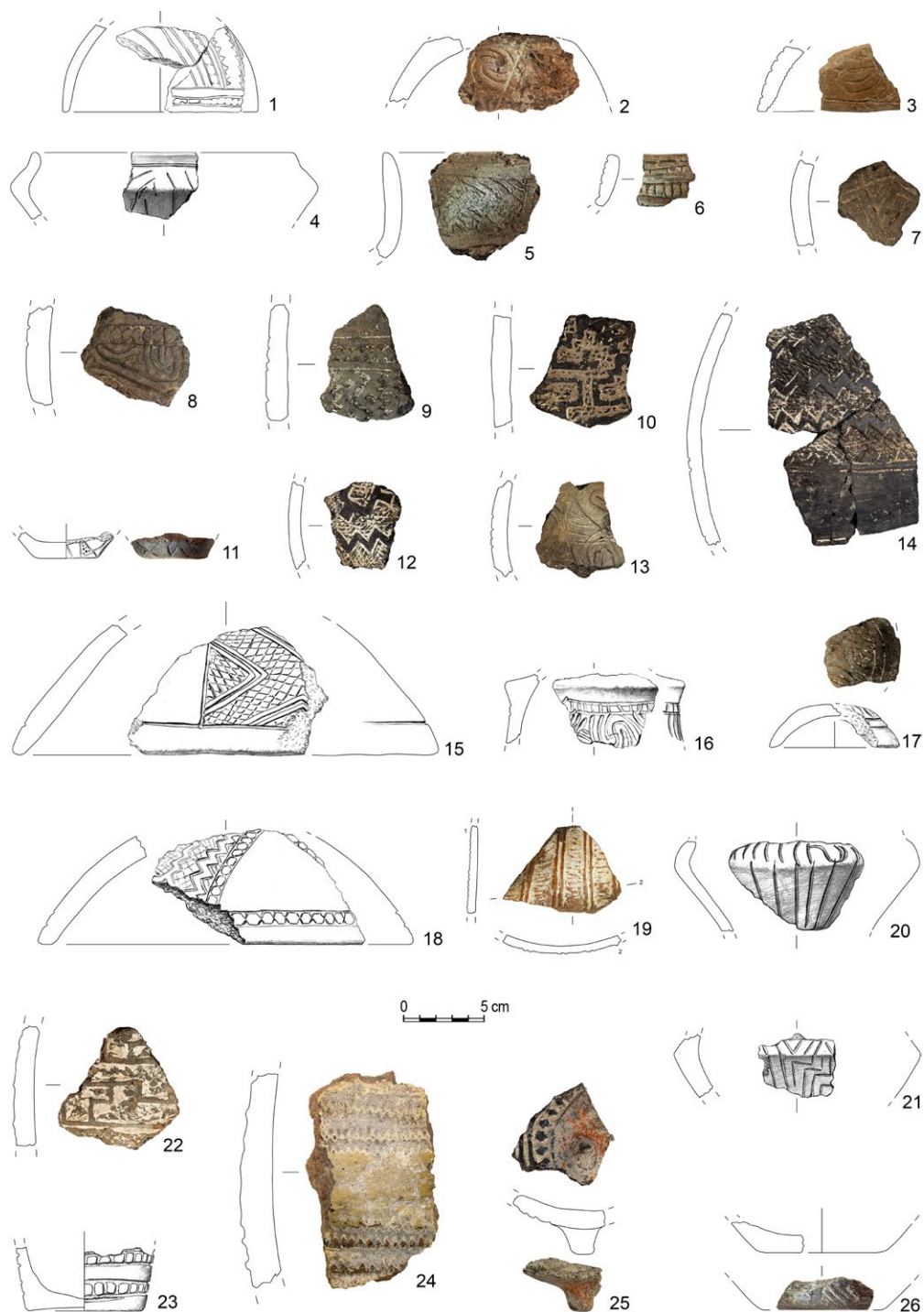


Figure 5. Late Neolithic pottery with incised and white-incrusted decoration from Tash bair, site 1.
Image Credit: B. Terzieva and R. Krauß.

assigned by Stanev to its earlier phase A-B1 (cf. Stanev 2002, Taf. 6). Compared to the straight knobbed handles on cylindrical jars, which are a diagnostic shape of Karanovo III (cf. Stanev 2002, Taf. 7), the slanting knobbed handles on biconical forms should be of a later date.

The north Bulgarian cultural groups mentioned above show strong links to the Boian and Vădastra groups in Wallachia (Gaul 1948; Berciu 1961). It is clear that both groups had bridgehead settlements in the areas south of the lower Danube (Naydenova 2005), and it seems possible that the Late Neolithic settlement at Tash bair was one of the most important of these sites. This assumption is based on the high percentage of pottery with characteristics considered typical of the Vădastra culture: lavish excised decoration, specific shapes, etc. (fig. 5.1–3, 5–19, and 22–25).

The Chalcolithic and Transitional period

The beginning of the Chalcolithic marks a shift in the settlement life at Tash bair. After the intense Late Neolithic occupation, the area seems to have been abandoned as no Early and Middle Chalcolithic materials have been found so far. The absolute chronological position of the Early and Late Chalcolithic has been the subject of intense debate in recent years (Hansen et al. 2008; Gaydarska 2011; Reingruber et al. 2011; Tsirtsoni 2016). There is a remarkable overlap of radiocarbon dates for both phases, which makes difficult their chronological classification (cf. Görsdorf & Boyadzhiev 1996; Boyadzhiev 1998).

Some scattered finds and one radiocarbon date (Poz-120369: 5545±35 BP) from site 1, both from the upper filling layer of the Late Neolithic ditch in trench 1.2, indicate that Tash bair was resettled or at least visited during the Late Chalcolithic (cf. Krauß & Conrad 2023; Krauß 2023a, P 1/242, pl. 22). This result from our research at Tash bair corresponds clearly with the results of earlier field surveys on the lower Yantra. In contrast to a settlement concentration on the upper reaches of Batinsko dere (and the areas further east), only a few small Chalcolithic settlement sites were found along the lower Yantra itself (Krauß 2006a, 223ff).

The end of the Late Chalcolithic can be grasped even more clearly, as all tell sites in this area were abandoned by 4200 cal BC at the latest (Hansen et al. 2008; Chohadzhiev & Krauß 2019).

In terms of research history, the following time has been viewed as a Transitional period¹ to the Early Bronze Age (EBA; Morintz & Roman 1968; Roman 1971; Todorova 1979; Georgieva 1993).² Since this is a comparatively long period of time, it made sense to divide it into phases. The determination developed in southern Romania on the basis of the various sites of Cernavodă (Roman 1971; Morintz 2001) is suitable for this purpose, although it was only adopted selectively by Bulgarian research (cf. Nikolova 1999).

¹ The term ‘Transitional period’ was first proposed for Bulgaria by Henrieta Todorova (1979).

² The latest review of research on the Transitional period was made by Ivan Suvandzhiev (2022).

Instead, Ivan Vajsov (2002) developed his own structure based on the sequence of burials at Durankulak, describing the 42nd to 37th centuries as the Post-Chalcolithic and the 36th to 32nd centuries as the Proto-Bronze Age.

Interestingly, two radiocarbon dates on samples from the geomorphological core drilling in the central area of the floodplain close to the mouth of the Yantra (T9C13_467/RICH-28435: 5075±27 BP; T9C17_280/RICH-28446: 5294±28 BP) lay within this timespan (Vagalinski et al. 2023a, 294f). The dates were made on a piece of wood from a sediment layer in an old riverbed and on a sediment sample from a terrace deposit from transect 9 (Lopez del Olmo et al. 2023, fig. 14, table 5).

In the wider area, numerous settlement sites of the Transitional period have been identified on the lower reaches of the Yantra (Krauß 2006a, 75ff), but there was apparently no significant settlement at Tash bair itself during this period.

The Bronze Age

Several researchers have contributed to the development of Bronze Age chronology and periodization in Bulgarian historiography (Mikov et al. 1952; Katincharov 1974, 1975, 1981, 1982, and 1984; Panayotov 1984, 1985, 1988, 1989, and 1995; Leshtakov 1992; Boyadzhiev 2003). The investigations at a large number of tell sites in Upper Thrace, such as Ezero, Dyadovo, Karanovo, and Galabovo allow for the identification of three phases of the EBA: phase I (Ezero) with the inclusion of an earlier period contemporaneous with Cernavodă III, phase II (Mihalich), and phase III (Sveti Kirilovo). The tripartite periodization system has also been adopted for northern Bulgaria. The development of these lands in the EBA and Middle Bronze Age (MBA) is related to Cernavodă III, Coţofeni, Kostolac, Vučedol, Tei, Verbicioara, and Vatina, identified until the mid-twentieth century in southern Romania and Serbia, whose Bronze Age chronological and periodization schemes were largely influenced by the Central European chronology (Alexandrov 2018). On the basis of the above review of the current advances in the study of the chronological parameters of the EBA expressed in newly obtained radiocarbon dates, some corrections and re-dating of individual phases have become necessary. For the purposes of this paper, the following chronological boundaries can be used for the beginning and end of the EBA, the beginning of the MBA, and the internal division and duration of each phase: EBA I 'Ezero' (~3500–2900 BC), EBA II 'Mihalich' (~2900–2500/2400 BC), EBA III 'Sveti Kirilovo' (~2500/2400–2200/2100 BC), and MBA 'Galabovo' (~2200/2100–1600/1500 BC).¹ As in the Chalcolithic, a single, small flat settlement seems to have existed at site 1 in the Early

¹ After Alexandrov (2020, 251, fig. 1). In particular, it is difficult to distinguish EBA III from MBA on the basis of the finds alone. The radiocarbon dates from the end of EBA III also overlap very strongly with those of MBA. It is therefore not possible to make a meaningful distinction between EBA III and MBA in northern Bulgaria (Krauß 2006b; Aleksandrov & Hristova 2014; Leshtakov & Tsirtsoni 2016; Krauß 2024).

Bronze Age, which is indicated by a few finds scattered on the surface or relocated by later features.

The determination of the Middle Bronze Age on the lower course of the Danube is again closely related to our research in the catchment area of the Yantra and the neighboring areas. In northern Bulgaria, no tell sites or larger stratigraphic sequences are known so far that can be linked to the sequences of the Tei and Verbicioara cultural groups in southern Romania (Krauß 2006a). For the time being, one of the few known sites is the settlement near Vladinya (Lovech Municipality) which was recently investigated during rescue excavations (Valentinova et al. 2020a and 2020b). The latest radiocarbon dates collected allow these facies to be narrowed down to the time between the 23rd and 17th centuries BCE (Krauß 2024). This chronological delimitation makes sense because it corresponds to the horizon of the Mycenaean Shaft Graves, which allows them to be connected over a large area with the Apa-Hajdúsámson hoarding horizon in the Carpathian Basin, which in turn corresponds to level Br-A2 of the South German Bronze Age (Hänsel 1968; David 2002; Metzner-Nebelsick 2013). The Bulgarian finds are located in a geographically middle position in-between the Aegean, and the Carpathian region.

As far as the beginning of the Late Bronze Age is concerned, the Zimnicea-Cherkovna-Plovdiv find horizon, which can be found over a large area in the Eastern Balkans, provides a good starting point (Alexandrescu 1973; Hänsel 1976; Panayotov 1989). The north Bulgarian sites do not offer sufficient settlement stratigraphies for this period either, which is why it makes sense to look initially at the cultural development in the neighboring areas. Significant highlights can certainly be seen here in the end of the Mycenaean palace culture and the fall of the Hittite empire around 1200 BC (Jung & Weninger 2002).

There is evidence of a significant settlement at Tash bair, especially from the Middle to the Late Bronze Age. The initial construction of the inner ditch at Tash bair, site 3, dates to the Middle Bronze Age, as well as very likely the outer ditch (fig. 6). If our assumption is correct, the preserved double quarter-circle can be expanded to form a full circle, which would make it one of the largest preserved circular enclosures in the Eastern Balkans. Comparable sites from the Middle Bronze Age are known, particularly from southern Bulgaria.

Corresponding ceramic finds come from the bottom layer of the inner ditch, and their time position is secured by radiocarbon dates. This ditch was apparently still in use during the Late Bronze Age and even later during the Early and Late Iron Age, and also during the Late Roman Period (fig. 7; cf. Vagalinski et al. 2023b; Conrad & Krauß 2023b, 270ff, table 7; Krauß 2023a). Diagnostic ceramic forms of this period are wish-bone handles on large bowls, and various shapes of single-handled jugs, sometimes with large spouts (fig. 8).

For the Late Bronze Age, radiocarbon dates are available from the second layer of the outer ditch (Poz-156584: 2940±30 BP), and from two different features within

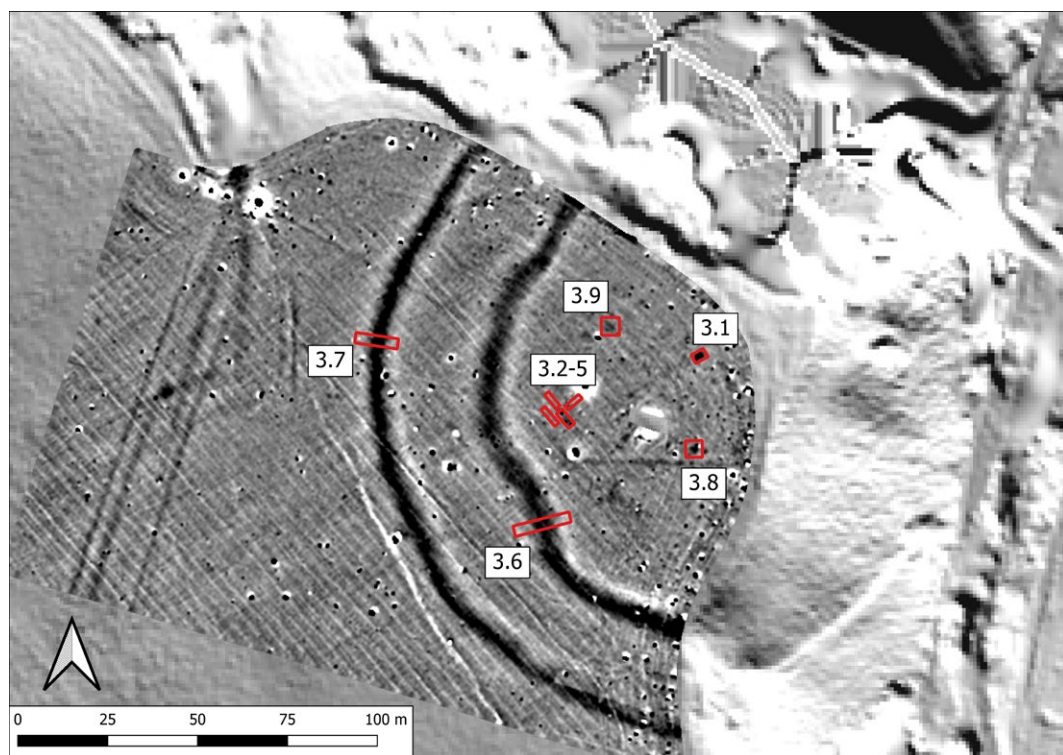


Figure 6. Geomagnetic mapping of the circular double ditch at Tash bair, site 3 (Eastern Atlas Berlin), with the position of excavation trenches. The edge of the high terrace is clearly visible in the LiDAR image. Trenches 3.1–5, Late Bronze Age features; trench 3.6, inner ditch; trench 3.7, outer ditch; trench 3.8, late Roman pit; trench 3.9, late Roman pit house. Image Credit: S. Conrad.

the enclosure. We have a total of eight radiocarbon dates on short-lived samples (Poz-115331: 2990 ± 30 BP; Poz-115804: 3110 ± 30 BP; Poz-115806: 3035 ± 35 BP; Poz-115807: 3165 ± 30 BP; Poz-108793: 3035 ± 30 BP; Poz-115808: 3135 ± 30 BP; Poz-108792: 3585 ± 35 BP; Poz-108794: 3555 ± 35 BP), most of which can also be related to one another stratigraphically. The finds from this period mainly come from the two features mentioned above and are not easily identifiable (fig. 9). Characteristic for the ceramic assemblage are vessels with stepped necks and large cups.

The first construction of a ditch and an earthwork which fortified the spur of the Tash bair is also dated to the Late Bronze Age (site 4, figs. 10 and 11; cf. Kecheva et al. 2023, no. 4). The ditch (cut by our trench 4.3) could be dated by two radiocarbon dates to about the same time horizon as the Late Bronze Age features at site 3 (Poz-146649: 2980 ± 35 BP; Poz-147042: 2930 ± 90 BP; Vagalinski & Traykova 2023; Conrad & Krauß 2023a). Here, as in the Late Bronze Age phase of the inner ditch at site 3, numerous rubble stones were thrown into the ditch, presumably when the site was abandoned. Un-



Figure 7. North profile of the inner ditch at Tash bair, site 3: (a) Middle Bronze Age layer; (b) Late Bronze Age layer; (c) Late Iron Age layer; (d) late Roman layer. Image Credit: S. Conrad.

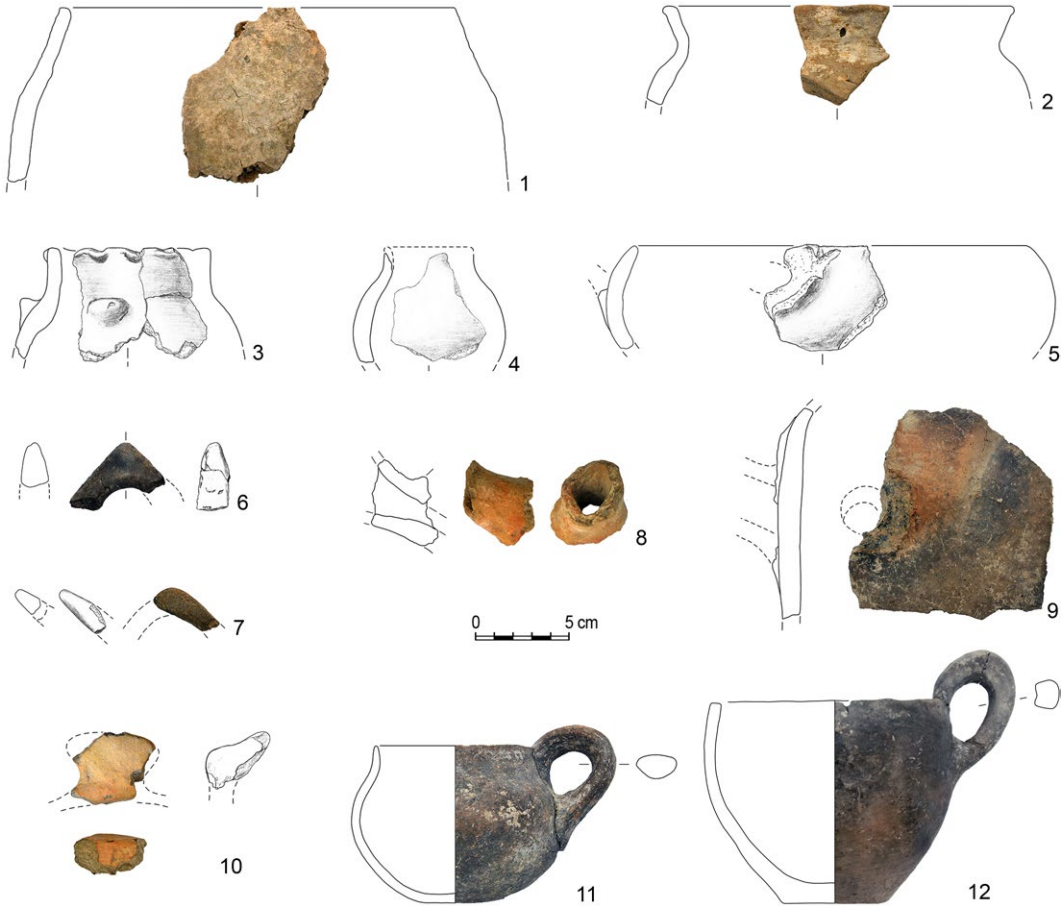


Figure 8. Middle Bronze Age pottery from Tash bair, site 3. Image Credit: A. Frey and R. Krauß.

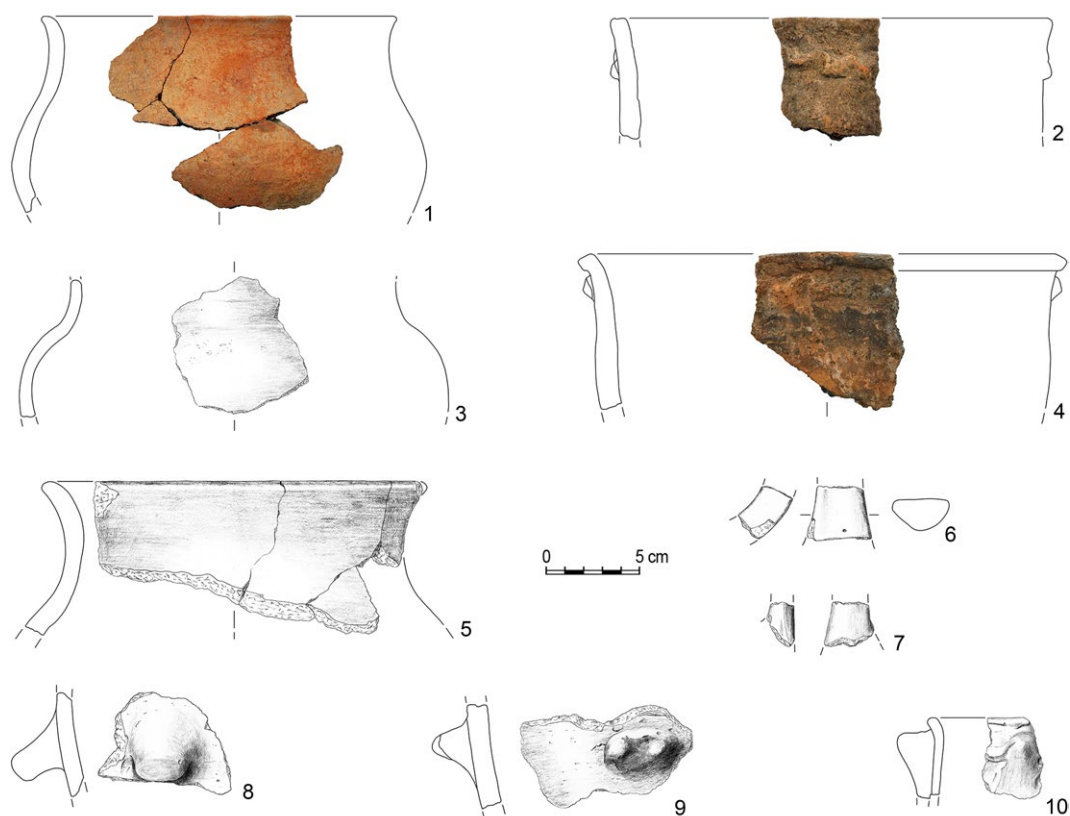


Figure 9. *Late Bronze Age pottery from Tash bair, site 3. Image Credit: A. Frey and R. Krauß.*

fortunately, no dateable finds from this period were uncovered here or in the separated, protected area of the spur.

Apart from the important ditch construction works at the Tash bair, there were flat Middle and Late Bronze Age settlements at site 1, which are currently only documented by survey finds. The Late Bronze Age and Early Iron Age settlement on the eastern terrace of the Yantra lowlands near the old mill of Novgrad has been known for a long time. Parts of it came to light during dike construction work in the 1920s and 1930s (Stefanov 1974).

The Early Iron Age

The primary determination of the Early Iron Age on the lower course of the Danube goes back to Bernhard Hänsel (1976) and was further specified and labeled due to the later excavations, especially at Sboryanovo (Stoyanov 1997). In earlier research for northern Bulgaria, we proposed a development of the Early Iron Age pottery in four stag-

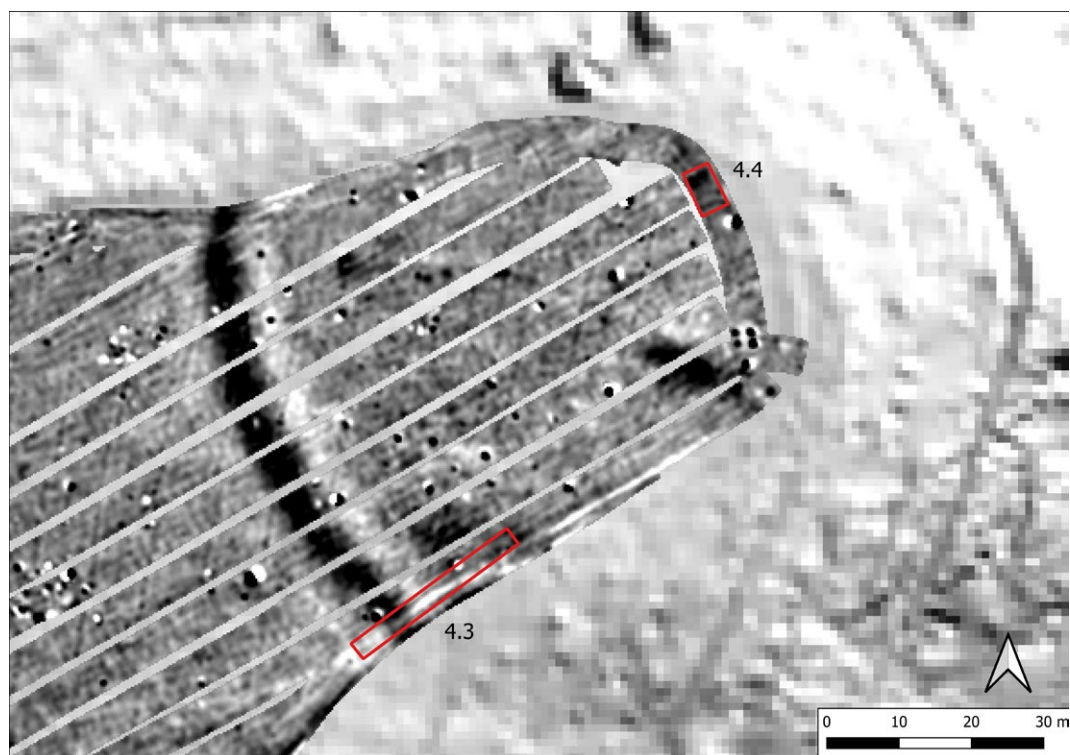


Figure 10. *Fortification of the promontory, with ditch and earthen wall at Tash bair, site 4. Geo-magnetic mapping (Eastern Atlas Berlin) and position of trenches 4.3 and 4.4, with the LiDAR map as background. Image Credit: S. Conrad.*

es (Krauß 2006a; Conrad & Krauß 2020): phase I, Stamped pottery (Hänsel's Tsenovo type); phase II, 'Sboryanovo', phase III, 'Tlachene' (as a preliminary stage of the classical Basarabi ware); and finally phase IV, the Basarabi culture in the narrower sense.

This development can be paralleled with the groups in Thrace (Nekhrizov & Tzvetkova 2018) and can be delimited precisely in absolute chronological terms (Conrad & Krauß 2020).

With some reservations, some finds from Tash bair can be assigned to the Tlachene stage. On the other hand, two Early Iron Age pits were investigated on the spur of Tash bair (trench 4.4). One of them was dug into the earthen wall, which was built during the Late Bronze Age and reused at this time (fig. 12). Another pit complex lies within the enclosed area of the fortification. Several diagnostic pottery vessels were found. They include a jug and several bowls with fluted decoration as well as a sherd with a stamped row of S-hooks (fig. 13). Channeled decoration preceded, but also co-existed with stamped decoration (Nekhrizov & Tzvetkova 2018, 24; Ailincăi 2020, 459f). The pottery thus belongs to the Sboryanovo stage in our scheme of the Early Iron Age pottery. Channeled pottery and ceramics decorated with stamped S-hooks were found at the cemetery of



Figure 11. *The promontory, with trenches 4.3 and 4.4 at Tash bair, site 4. View from the north.*
Image Credit: UAV (M. Offermann).

the eponymous site (Stoyanov 1997, tables VIII, IX, and XI). Similar connections have been published for the Babadag and Lower Danube culture area (Ailincăi 2016, 334f). A chronologically distinguishable appearance of the S-hooks is observed at the end of period III according to the scheme of Nehrizov and Tsvetkova (2018, 26) for southern Thrace at the end of the 10th century BC. This is matched by the radiocarbon dates obtained, which date the two pits to the turn of the 11th century BC (Poz-146650; Poz-146651).

Evidence of the existence of a large settlement of the Basarabi phase of the Early Iron Age (ca. 8th – mid-6th c. BC) is available in the ceramic assemblage from site 1 at the southern slope of Tash bair (fig. 14; Krauß 2006a, cat. no. 48; Kecheva et al. 2023, site 1; Krauß 2023a). In addition, extensive Early Iron Age settlements – especially from the Basarabi phase – could also be found along the old, silted-up Yantra meanders in the lowlands (Kecheva et al. 2023, site 24; Krauß 2023a, 232f). On the one hand, due to the numerous Basarabi finds, the settlements at Tash bair and its surroundings can be seen as ‘bridgeheads’ for this culture which according to the current state of research was mainly spread north of the lower Danube in what is now Romania. However, recent research results are increasingly bringing to light such finds south of the Danube (cf. Petrova et al. 2020; Vasileva 2022; Agre 2004 and 2008), so that the current picture may be due to the current state of research.



Figure 12. *Early Iron Age pit cutting the Late Bronze Age earthen wall at Tash bair, site 4. Above: orthophoto of a part of the south profile of trench 4.3, with the pit. Below: photo of planum 4. Image Credit: J. Sprißler and S. Conrad.*

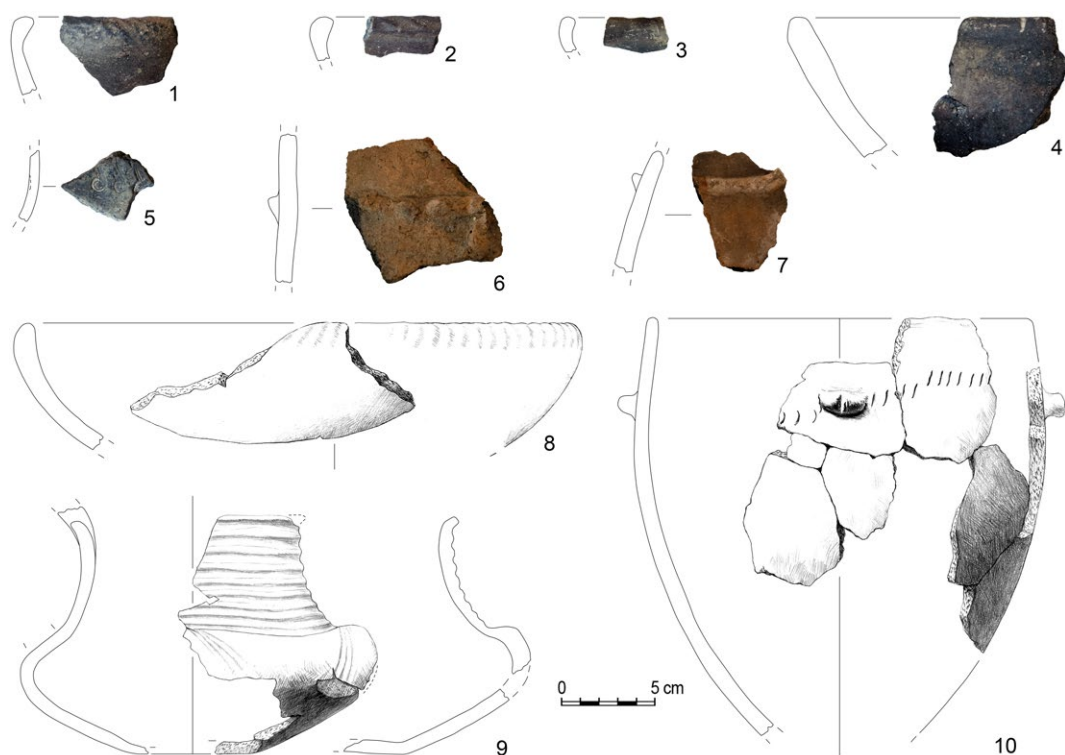


Figure 13. *Iron Age pottery from two pits at Tash bair, site 4. Image Credit: B. Terzieva and R. Krauß.*

For the time being, all these finds from the slope of Tash bair and the Yantra lowlands come from field surveys; no features were investigated. Further, detailed stratigraphic observations are required to clarify the question of how the development within this Early Iron Age settlement is to be assessed.

Conclusion

The concentration of prehistoric settlement sites at Tash bair near Novgrad is to a large extent due to the favorable geographic location of the site in terms of occupation and transport. On the one hand, the Danube reaches its southernmost point of the overall course here, and the geographical situation with the narrow lowland plain in the Svish-tov–Zimnicea section offers – as evidenced by various historical examples – a favorable location for crossing the Danube. In addition, a well-known route to and from the Balkan range passes leads along the Yantra, which may have been part of a route from Asia Minor to Central Europe.

Both the long southern slope of Tash bair and the proximity to the meanders of the Yantra in the river lowlands near the confluence with the Danube were of particular

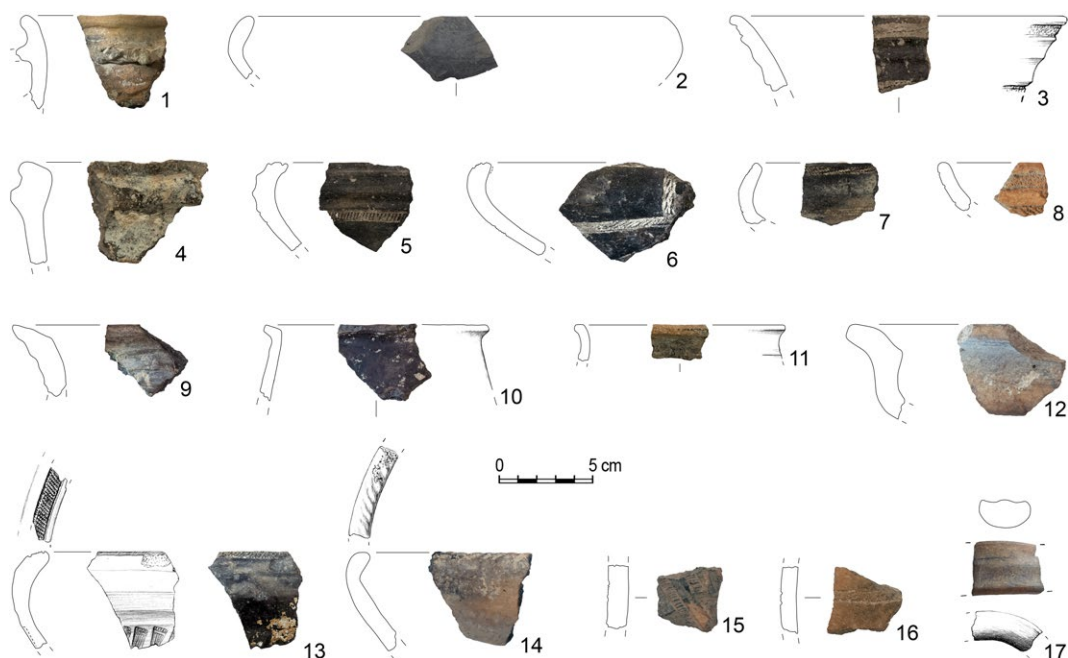


Figure 14. Early Iron Age finds of the Tlachene and Basarabi cultural groups from Tash bair, site 1. Image Credit: B. Terzieva and R. Krauß.

importance for the development of the settlement and fortifications. In addition, the surrounding area offered very good conditions for agricultural use. The development of the Late Neolithic settlement was probably determined by the route along the Yantra River and the spread of the Neolithic population along it. If one takes into account the strong spread of the Vădastra culture in southwestern Romania (as well as the Early Iron Age Basarabi culture), the favorable location of the site was very decisive for the transmission of cultural elements across the Danube.

In the Chalcolithic and the Early Bronze Age, i.e., over a period of almost 3,000 years, Tash bair and its surroundings initially seem to have played only a subordinate role in settlement life. At the same time, only relatively small settlements from this period are known in our study area on the lower course of the Yantra. With regard to the reasons for this recognizable marginalization of the region, it can be assumed that the focal points of settlement during this period were in what is now northeastern Bulgaria, but primarily in Thrace (Alexandrov 2018; Vasileva & Minkov 2018).

As evidenced by the ditches and extensive settlements, it was only in the Middle and Late Bronze Ages and the Early Iron Age that a settlement and regional power center developed again at Tash bair and its surroundings. It was probably only during this period

that the road connection along the Yantra regained its importance as part of a communication line from Asia Minor and southeastern Thrace across the Carpathians to Central Europe. This could be related to the flourishing metallurgy and the intensification of supra-regional trade activities.

Even in the Late Iron Age, smaller fortifications still existed at Tash bair that monitored the access to the Yantra and the Danube. However, they were undoubtedly subordinate to the fortified centers at Byala and Svishtov. In Roman and early medieval times, Tash bair and its surroundings continued to be densely populated, but its importance as a strategic position declined more and more. A certainly important reason could be determined by geomorphological investigations; around the turn of the Christian era, the Yantra meanders below Tash bair began to silt up, reducing the waterflow and shifting the riverbed to the eastern part of the estuary plain due to increasing sedimentation (cf. Lopez del Olmo et al. 2023). One reason for this can be seen in the advanced deforestation and simultaneous increase in agriculture in the catchment area of the river, which is also reflected in the pollen profiles. The construction of the fort of Iatrus at the beginning of the fourth century on the eastern terrace on the new riverbed is probably to be seen as a consequence of these serious anthropogenic landscape changes. At the end of the Early Middle Ages, i.e., with the end of the First Bulgarian Empire, Tash bair and the surrounding lowlands were abandoned and subsequently not resettled. This can be taken as an indirect confirmation that direct river access to the Yantra and thus to the Danube can be seen as a consistent prerequisite for the development of prehistoric occupation at Tash bair.

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