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63

CONTENTS

Conference proceedings presented at 3rd meeting „Early Iron Age in Central Europe” held in Wrocław on 4-6th July, 2019

<i>Zoltán Czajlik</i> Aerial archaeological investigation of Hallstatt tumulus necropolises in Transdanubia and in adjacent areas. An overview	5
<i>Grechko Denys</i> How far did the nomads go to the West around the middle of the 6th century BC?	15
<i>Anja Hellmuth Kramberger</i> A brief remark on selected Iron Age pottery from the Gradina Monbrodo near the Cisterna bay in Istria	25
<i>Paulina Kowalczyk-Matys</i> Early Iron Age lead artefacts from Lusatian culture sites	39
<i>Bine Kramberger</i> A highway into our past. New data on the Early – and Late – Iron Age lowland settlement in the Maribor area (NE Slovenia)	47
<i>Dragoş Măndescu</i> Daily bread for the afterlife or feeding the people? Pottery as status marker in an outstanding burial from Valea Stâinii necropolis (Romania)	75
<i>Doris Mischka, Katja Hagemann, Daria Abramov</i> Pots and pins from Early Iron Age burial mounds of Simmelsdorf-St. Helena, Germany	99
<i>Franciska Zsófia Sörös</i> Some remarks on the type of wide open bracelets with double snakeheads	109
<i>Iryna Shramko, Stanislav Zadnikov</i> The Bilsk fortified settlement and the Hallstatt world	123
Regular papers	
<i>Wojciech Bronowicki</i> Grodziszczce 7 – nowe dane na temat osadnictwa mezolitycznego strefy sudeckiej na Dolnym Śląsku	149
<i>Agnieszka Przybył</i> Kilka uwag o długim ziemnym grobowcu kultury pucharów lejkowatych ze stanowiska Muszkowice 18	173

THE BILSK FORTIFIED SETTLEMENT AND THE HALLSTATT WORLD

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Abstract: The Bilsk fortified settlement, the largest in Europe of the Early Iron Age (8th–4th centuries BC), located on the left bank of the Dnieper, demonstrates links with the Hallstatt culture, Greek civilization and nomadic Scythian culture, starting from the second half of the 7th century BC. The article discusses one of the vectors of cultural influences from the Hallstatt world, traced on the basis of long-term excavations. In the material culture of the second half–late 8th–first half of the 7th century BC, the influence of the Basarabi cultural complex is most noticeable, and in the second half of the 7th–6th centuries BC the impact of the cultures and cultural groups of the East Hallstatt Circle. As a result of migration processes in the local environment, objects of western types became widespread, Hallstatt imports are also known. In the domestic and sacred sphere, the society also borrowed some ideas. New data that significantly expanded our understanding of the nature and degree of the Hallstatt influence on the local sedentary population was obtained as a result of excavations in 2013–2019 mound necropolis Skorobir.

Keywords: Northern Black Sea region, Dnieper forest-steppe Left Bank, Bilsk fortified settlement, Skorobir necropolis, migrations, Carpathian-Danube, East Hallstatt region, import, influences, second half of the 8th–6th centuries BC

INTRODUCTION

With the advent in the second half–late 7th century BC in the forest-steppe of the northern Black Sea region of the Scythian tribes, the appearance of the material culture of the local population changed significantly. As we know, the changes affected, first of all, weapons and details of horse harness. Objects designed in the so-called “Scythian animal style” also appeared. In sets of jewelry, cowrie shells, earthenware beads, and rosette beads, which probably entered the forest-steppe through the Caucasus, become common (Bruyako 1999, 51; Ryabkova 2010, 182–186). In the burial mounds of the nomads, we found Near-Asian objects taken by the Scythians as trophies (Alekseev 2003, 111–117).

At the same time, objects of the Early Scythian complex begin to be deposited in cultural layers of settlements inhabited by agricultural, non-Scythian sedentary populations representing traditions associated with the influence of the Hallstatt cultures of the Carpathian-Danube region. It is not surprising that at such settlements, some of which were founded in the 8th century BC, Hallstatt features are quite well expressed (Daragan 2011, 616, 759–760; Kashuba 2012, 245; Andrienko 2019, 49–56; Smirnova *et al.* 2018, 232), which was noticed by scientists of the last century. Therefore, having become acquainted with the materials of the Nemirov fortified settlement (8th–6th centuries BC), located on the southern Bug River (Fig. 1: 17), A. Spitsyn (1911) raised the question of the connection of the Scythians with the Hallstatt culture (Kashuba 2008, 56–60). A. Potapov (1929) also drew attention to the black-polished ceramics found at the beginning of

the last century by V. Gorodtsov (1911) at the Bilsk fortified settlement (8th–4th centuries BC), unusual for the monuments of the Dnieper Left Bank. These works laid the foundation for a new direction in the studies of forest-steppe monuments of the Early Iron Age of the Northern Black Sea region.

At the modern level of development of the pre-Scythian and Scythian periods in the Northern Black Sea region, scientific concepts of the historical and cultural development of various territories located east of the Carpathians, in the forest-steppe region of the Dniester, Southern Bug and Dnieper basins, at the beginning of the Early Iron Age were created. The archaeological cultures formed as a result of several migration flows developed under the strong influence of the early, middle and late Hallstatt cultures of the Carpathian-Danube region, the results of direct contacts, imports and imitation were traced. As a result, things of Central European production fell on these territories, some ideas penetrated, Hallstatt traditions (Kashuba 2000, 241–244; 2012, 237–238, Fig. 2; 3, 245–246; Fialko 2006, 70–72; Kashuba, Daragan 2009, 65–86; Daragan 2011, 597–598, 616–617, 759–760; Bandrivsky 2014, 404–415; Bochkarev, Kashuba 2018, 208). So, as a result of a migration wave from the Dniester basin and direct migrations of the carriers of the Basarabian culture, in the Middle Dnieper in the 8th century BC the Zhabotin settlement appears (Daragan 2011, 733). It developed under the strong influence of the Middle Hallstatt cultures of the Carpathian-Danube (Basarabi) and the cultures of the Eastern Carpathian region (Sholdanesti) (Kashuba 2000, 140–147; 2012, 244; Daragan 2011, 475–476). To designate the phenomenon of Hallstattization of a rather large territory east



Fig. 1. Archaeological sites of Western, Central and Eastern Europe mentioned in the article: 1 – Bilsk; 2 – Lyubotin; 3 – Pazharnaya Balka; 4 – Popovka; 5 – Radichev; 6 – Ivankovich; 7 – Glevakha; 8 – Bobritsa; 9 – Sinyavka; 10 – Tarashcha; 11 – Vladimir economy; 12 – Flyarkovka; 13 – Repyahovataya Mogila; 14 – Zhurovka; 15 – Zhabotin; 16 – Prussy; 17 – Nemirov; 18 – Olbia; 19 – Berezan; 20 – Dobrina; 21 – Ravna; 22 – Ferigile; 23 – Hidalmas; 24 – Mezócsát; 25 – Lanuvio; 26 – Prozor; 27 – Budinjak; 28 – Stična; 29 – Grmada; 30 – Hallstatt; 31 – Otzing; 32 – Rovná; 33 – Thalmässing-Alfershausen; 34 – Im Ried-Ost; 35 – Adelschlag-Weißenkirchen; 36 – Hirschlanden; 37 – Eberdingen-Hochdorf; 38 – Heuneburg, Speckhau; 39 – Magdalenenberg; 40 – Oss-Zevenbergen

of the Carpathians, M. Kashuba justified and introduced the term “Hallstatt of the Northern Black Sea region” (Ha NP) (Kashuba 2012, 246–247). The researcher also included the territory of the Dnieper Left Bank in this zone of the influence of Hallstatt cultures, where one of the settlements of the early Early Iron Age, one of the well-researched settlements in Eastern Europe, is located the Bilsk fortified settlement (8th–4th centuries BC) (Fig. 2).

In the second half of the 8th century BC migrants from the right bank of the Dnieper (probably from the Zhabotin region) founded dozens of settlements on its left bank, including those near the village Bilsk (Kovpanenko 1967, 183; Shramko 1987, 59; Andrienko 2000, 100; Shramko 2004, 103–106; 2006, 33, etc.). Migrants were carriers of the ideas of Basarabi culture, cult practices of the Carpathian-Danube traditions that survived in the local environment until the end of the 3rd quarter of the 6th century BC (Shramko 2006, 36–42; Shramko, Zadnikov 2006, 25–26; Shramko 2013, 135–136), as well as, possibly, the Hallstatt iron-making tradition (Shramko, Buynov 2012, 326–327). Some parallels with the Bârsești-Ferigile culture are noticeable. The influence of Hallstatt cultures and various cultural groups was reflected, first of all, in the ceramic complex (Fig. 3: 1–13, 16–18), rare forms of ritual vessels (Fig. 3: 14), types of clay altars (Fig. 3: 15), found in the layers of the end of 8th–7th BC at the Western fortification of the Bilsk settlement. The collection of metal objects formed over the years of excavations

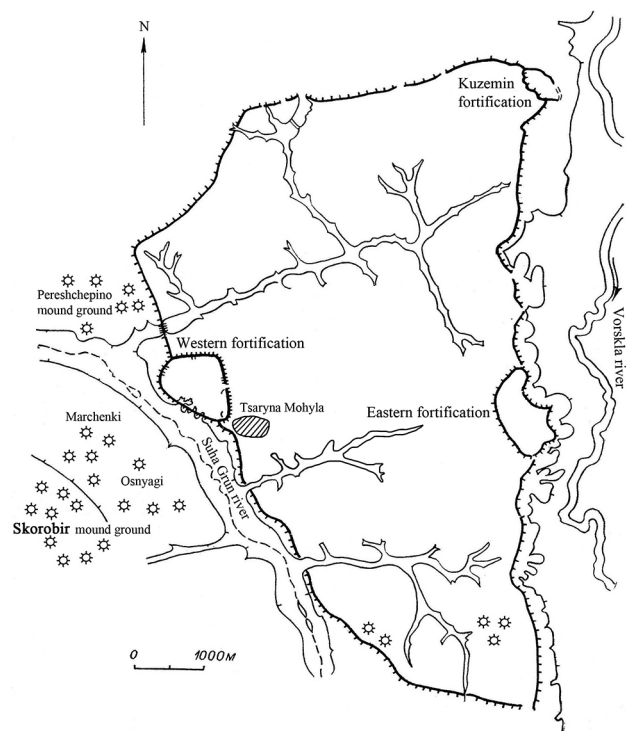


Fig. 2. Plan of the Bilsk fortified settlement (after Shramko 1987, Fig. 2).

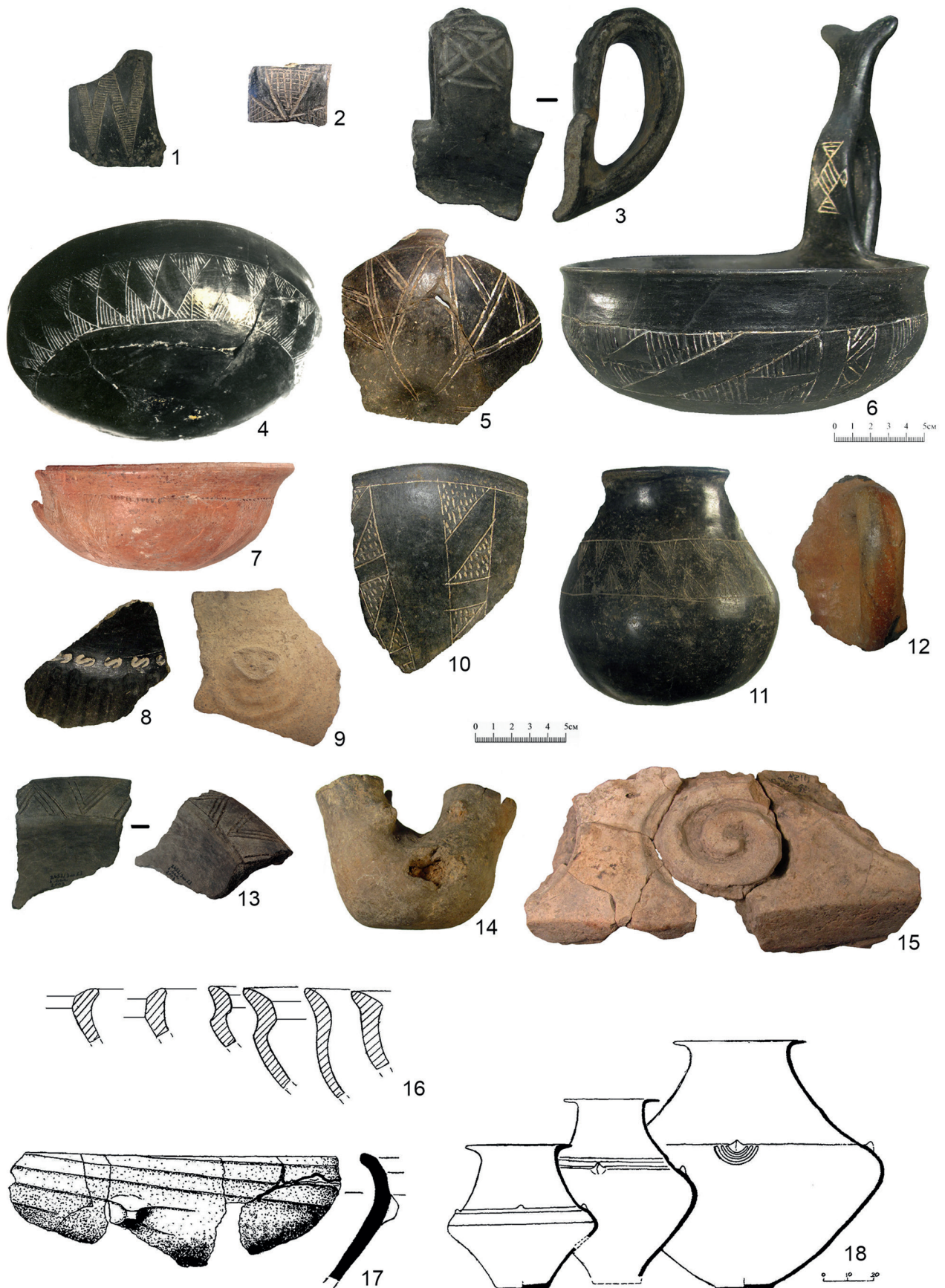


Fig. 3. Samples of tableware, vessels of rare shapes and a fragment of clay altar from the end of 8th-7th BC. Western fortification of the Bilsk fortified settlement: 1-3, 5, 7-8, 10, 15-18 – ash hill 5; 4, 9, 14 – ash hill 19; 6 – ash hill 10; 11-12 – ash hill 28; 13 – ash hill 13 (1-15 – photo I. Shramko; 16-18 – after Shramko 2006, Figs. 8: 18-20, 11: 9, 12-17).

(Figs. 4–7) indicates the connection of the local population with the cultures and cultural groups of the East Hallstatt circle, southeastern Alpine region, culture Bârsești-Ferigile of southern Carpathian region. Hallstatt imports and imitations highlighted in the material culture of the Bilsk fortified settlement and its burial grounds indicate that the connection of the local population with the Hallstatt world and the influence of the Hallstatt culture were stable for more than two centuries, from the second half to the end of the 8th century BC until the end of the 6th century BC.

MATERIALS AND METHODS

The purpose of the article is, based on the analysis of objects of material culture, to trace the connections of the Bilsk fortified settlement with the circle of Hallstatt cultures in the second half-the end of the 8th–6th centuries BC¹. Considering this problem we relied, first of all, on the results of our many years of research on the territory of the Western fortification of the Bilsk fortified settlement (Fig. 8). A special place was taken by materials from the latest excavations of burial mounds in the Skorobir necropolis (Shramko, Zadnikov 2014, 34–44; 2017b, 47–53; Shramko 2017, 368–380; Shramko, Zadnikov 2018, 6–22; 2019, 14–15; 2020, 5–13) (Fig. 9), as well as earlier, published materials of our predecessors and colleagues (Gorodtsov 1911; Kovpanenko 1967; 1973, 248–249; Potapov 1929, 162–168; Grakov 1971, 151–164; Shramko 1987, 33–42; Maleev 1991, 59–60; Havrysh 1999, 20–21; Chernenko *et al.* 2004, 27–30 and others). The main research methods are stratigraphic, typological and analogy. The dates of the discovered objects were established, first of all, on the basis of objects of antique import, which systematically arrived in Bilsk, starting from the third quarter of the 7th century BC (Zadnikov, Shramko, 2011, 138–147; Zadnikov 2014). The objects of material culture used in the article from the excavations of Boris Shramko, Iryna Shramko and Stanislav Zadnikov are currently kept in the funds of the Museum of Archeology of V.N. Karazin Kharkiv National University and the Historical and Cultural Reserve “Bilsk”.

RESULTS AND DISCUSSION

¹ In the context of the archaeological material we are considering, we are talking about the Hallstatt culture, represented by the Western and Eastern regions of its distribution (Hallstatt cultural circle). The East Hallstatt zone also includes the cultural groups of the South-East Alpine region (Teržan 2021). To the East, on the territory, on the territory of the Carpathian-Danube region, under the influence of the Central European Hallstatt culture in the early, middle and late Hallstatt periods, the so-called “Hallstatt” cultures and cultural groups of the Carpathian Danube were formed and developed. They formed their own cultural circle, which had a direct impact on the cultural appearance of the more eastern regions of the East Carpathian and Dniester-Dnieper regions. As a result, of migrations and cultural contacts, Hallstatt imports and some ideas were spread in this area. The zone of distribution of Hallstatt influence in the forest-steppe of the Northern Black Sea region also includes the region of the Vorskla basin, where the Bilsk settlement is located (for more details, see Kashuba 2012).

Analysis of settlement material

Considering the problem of the connection of the local population with the Hallstatt cultural circle, first of all, it should be noted a bronze sword with a tongue handle (*Griffzungenschwert*) (Fig. 10), found in 1962 at the Bilsk settlement (Kovpanenko 1973, 248). However, this accidental find should be considered only as a fact of the discovery of a rare Central European artifact within the site. The sword is 53 cm long, the 45 cm long blade has a slight extension in the lower part, along the profiled ribs (Kovpanenko 1973, 248, Fig. 1). Found on the territory of the forest-steppe Ukraine, researchers attribute such swords to the Ha A period (Klochko 2006, 202–203; Bandryvsky 2014, 128). The author of the first publication considered the sword from the treasure of the 9th century BC to be a more complete analogy of the Bilsk find, Hidalmas in Transylvania (Fig. 1: 23) (Kovpanenko 1973, 249). The dating proposed by him does not contradict the observations of other researchers (Eberts 2016, 23; Milcent 2017, 90). In the opinion of Yu. Maleev that the sword came to the settlement with the first wave of migrants (1991, 60) and, probably, even then it was considered a rarity. However, since this item has no archaeological context and belongs to a different archaeological era, we do not exclude the possibility of its getting to Bilsk even before the appearance of migrants from the right bank of the Dnieper. In this case, it can be associated either with the tribes of the Bondarikha culture, occupying the territory east of the Dnieper at the end of the Bronze Age or brought by one of the nomads.

Later, during the 7th–6th centuries BC Hallstatt imports and ideas continue to penetrate the forest-steppe, including the left bank of the Dnieper, where a population with the traditions of the Hallstatt cultural circle lived. Representatives of one of these groups in the middle of the 7th century BC, probably moved into the forest-steppe Bug region and settled on the Nemirov fortified settlement (Kashuba 2012, 245–246; Smirnova *et al.* 2018, 232). In addition, the constant migration of small groups of the population to the area of the middle Vorskla and the Psel tributaries from the western regions of the forest-steppe, possibly from the territory of the Eastern Precarpathia, is not excluded. From these areas during the 7th–6th centuries BC, in Bilsk imports (Figs. 4: 3, 5, 12–13; 5), as well as items (Figs. 4: 1–2, 4, 6–7, 8–11; 6: 1–13; 7), which were later made in local workshops according to the western model. As a rule, these are ordinary household items for various purposes: iron flat hatchets with wings (Fig. 7), iron tweezers (Fig. 5), a bronze trapezoidal pendant with a punched pattern (Fig. 4: 12), iron razors (Fig. 6: 10–12), bronze earrings (Fig. 4: 8–11), some types of pins (Fig. 4: 1–7), popular in the southeastern areas of the Hallstatt culture (Carancini 1975, Taf. 5–11, 40–42; 102, 104), as well as on the territory of the Wysocko culture (Svetlichnaya 1996, 158–159, Fig. 3; Klochko, 2007, 88; Nosova 2009, 112–113; Daragan 2011, 611–612). Almost all items that we attribute to Hallstatt imports, as well as items of western types, were found in the cultural layer of the ash mounds of the Western fortification of the Bilsk fortified settlement (Fig. 8). Let's consider some of them, which, in our opinion, deserve special attention.



Fig. 4. Bronze pins (1-7), earrings (8-11), bone and bronze pendants (12-13) from excavations at the Western fortification of the Bilsk fortified settlement: 1, 7, 9, 12 – ash hill 10; 2, 4 – ash hill 5; 6 – accidental find, ash hill 24; 5 – ash hill 12; 6, 13 – ash hill 28; 8, 11 – ash hill 54; 10 – ash hill 13 (photo and drawing I. Shramko).

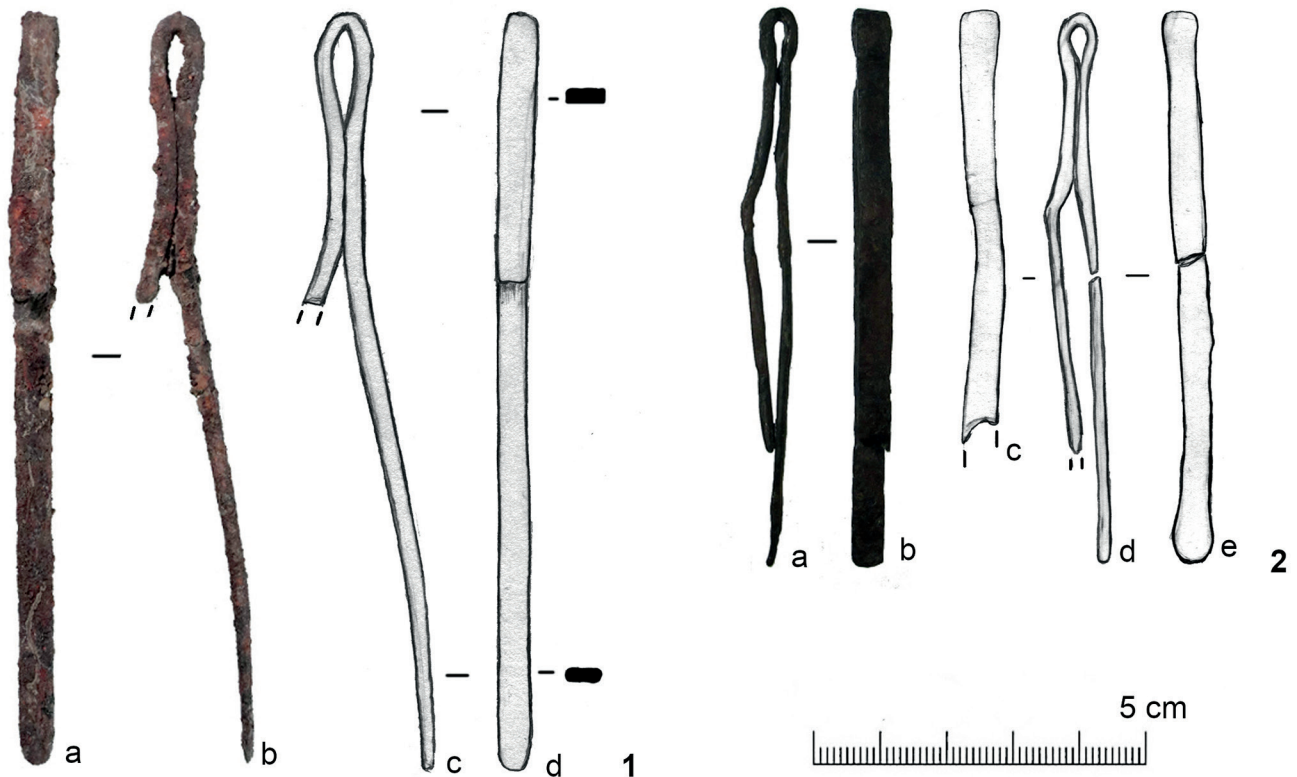


Fig. 5. Tweezers from the excavation of the Western Fortification: 1 – ash hill 5; 2 – ash hill 10 (photo and drawing I. Shramko).

Rare items include a bronze pin in the shape of the letter M (Fig. 4: 5), found in ash hill 12 of the Western fortification of the Bilsk fortified settlement (Grakov 1971, 159). Such *Doppelnadeln* seem to be of Illyrian origin (Petrenko 1978, 19). They appear in the Balkans around the middle of the 6th century BC, and from there they enter the Northern Black Sea region and Asia Minor (Nosova 2009, 112–113, Fig. 4). Their popularity in the forest-steppe can be explained by their connections with the production centers of Southern Europe, where nail-like pins were also widespread (Petrenko 1978, 19). The possibility of their manufacture on the territory of the Dnieper Right Bank is not excluded, from which a rather narrowly localized representative series of finds originates (Petrenko 1978, 19, Table 14: 1–12). It is quite possible that they appeared in Bilsk together with the Greek import of the second–third quarter of the 6th century BC from Berezan, where fragments and a whole pin in the form of the letter M were found (Nosova 2009, 110, 114). By this time can be attributed and materials of the ash hill 12 of West Bilsk (Shramko 1987, Figs. 12–15).

The only specimen is a bronze trapezoid pendant decorated with punch ornaments (Fig. 4: 12). This decorative element was popular in the Hallstatt world (Hallstatt a Býčí skála 1969, Fig. 2; Peroni 1973, Figs. 1: 24, 9: 8; Metzner-Nebelsick 2007, Abb. 5: 1). On the territory of the Dnieper Right Bank it is known in the complex of the Chornolis culture (Tretyakov 1949, 233, Fig. 7, 3–5; Skoryi *et al.* 2016, 106–127; Klochko, Kozymenko 2011, 124). However, for the Scythian time, the Bilsk find is still the only one in the forest-steppe. The pendant was found in one of the ash hill in Western Bilsk, among the

materials from the last quarter to the end of the 7th-first half of the 6th century BC.

A rare find, so far the only one east of the Dnieper, is a pendant in the form of a *bone double axes – labryses* (Fig. 7: 13). It is decorated with several parallel lines on the blades. The product has a well-smoothed, shiny surface, which indicates its intensive or prolonged use, most likely, as an amulet. The pendant was found in a manor house of the first quarter of the 6th century BC Western Bilsk. On the territory of the forest-steppe Right Bank of the Dnieper, an object of this shape, made of iron, was found in burial 1 of the Repyahovataya Mogila mound (Ilinskaya, Mozolevsky, Terenozhkin 1980, Fig. 4: 2). Labris hatchets are well known in the Balkans (Kilian-Dirlmeier 1997, Taf. 92–95, 106). They were used as amulets, pendants, and cult items. Such a thing could find itself in a foreign cultural environment only together with the bearer of its cultural circle.

Iron razors of various shapes are quite indicative (Fig. 6: 10–13). Of the four known on the Dnieper Left Bank, three were found in the ash-hills of the Bilsk fortified settlement (Fig. 6: 10–12). The variety of types indicates that a stable form has not been developed for this type of product, probably only the idea of their use was borrowed. In addition to the Bilsk fortified settlement, an iron razor (Fig. 6: 13) was found during excavations of the Lyubotin fortified settlement (late 6th–4th centuries BC) in the Seversky Donets basin (Fig. 1: 2) (Shramko 1998, Fig. 11:25). All razors are found with material from the late 6th -first half of the 5th century BC.

Undoubtedly, iron tweezers are among the unique imports (Fig. 5). Two specimens were found in the cultural deposits



Fig. 6. Iron knives (1-9) and razors (10-13) from the excavations at the Bilsk (1-12) and Lyubotin fortified settlements (13): 1, 10 – ash hill 10 (photo I. Shramko); 2-5 – ash hill 28 (photo I. Shramko); 6 – ash hill 13 (photo I. Shramko); 7-9 – ash hill 7 (photo I. Shramko); 11 – ash hill 12 (photo I. Shramko; drawing after Shramko 1967, Fig. 7: 9); 12 – ash hill 1 of the Tsarina Mogila settlement (after Skoryi *et al.* 2019, Fig. 19: 3); 13 – excavation 9 (after Shramko 1998, Fig. 27: 3).



Fig. 7. Adze axes from excavations at the Bilsk fortified settlement: 1 – ash hill 7; 2 – East Bilsk, excavation 26; 3 – Eastern Bilsk, excavation 25; 4 – settlement Barvinkova Gora; 5 – settlement Tsarina Mogila (1–3 – photo I. Shramko; 4 – after Shaporda, Shtanko, Ovcharenko, 2019, Fig. 5; 4; 5 – after Skoryi *et al.* 2019, Fig. 306: colors insert IV).

of the ash hills 5 and 10 of the Western fortification of the Bilsk fortified settlement (Fig. 8). One, small size (Fig. 8: 2) can be attributed to the end of the 7th-first half of the 6th century BC. The second, larger one (Fig. 5: 1) is dated within the 6th century BC. Despite the wide distribution of such objects in the Hallstatt world (Gedl 1988, Taf. 5; 27; Drack 1989, 60, Abb. 3a) in the Northern Black Sea region, they have been found so far only in Bilsk.

In cultural deposits of the 7th–6th centuries BC iron knives of western types are also common in the Bilsk fortified settlement (Fig. 6: 1–9), the origin of which we associate with the Carpathian region. Their prototypes were found at the sites

of the forest-steppe Dniester region (Kashuba, Goltseva 1991, 199, Fig. 2: 8, 202, Fig. 4: 3) and the Middle Dnieper region (Terenozhkin 1961, 170, Figs. 36: 84, 49: 5, 7) of the pre-Scythian period, they are known in the early Hallstatt period culture of Koziya-Saharna (Kashuba 2000, 330, Fig. XXX: 19, 20). Iron knives found in the Zhabotin settlement have similar forms (Daragan 2011, 515, Fig. IV: 53). On the territory of the



Fig. 8. Plan of the Western Fortification (after Shramko 1987, Fig. 6) with the designation of the places of finds of objects made of bone, clay, and metal, which are mentioned in the article.

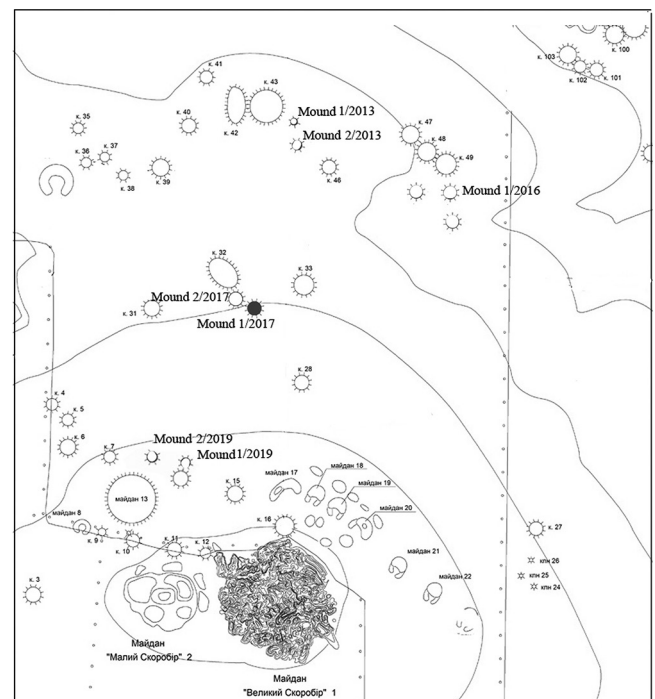


Fig. 9. Plan of the Skorobir burial ground (after Shaporda, Korotia 2018, Fig. 5) with the investigated mound (kurgans) 2013–2019.

Bilsk fortified settlement, the earliest specimens were found in the deposits of the first half-mid 7th century BC (Shramko 2006, Fig. 12: 25). Various variants of knives of elongated proportions with a straight or inclined handle for attaching the handle, with a straight or slightly raised blade tip are known from the cemeteries Ferigile (Romania) (Fig. 1: 22), Dobrina and Ravna (Bulgaria) (Fig. 1: 20–21), the Hallstatt burial ground (Austria) (Fig. 1: 30) (Kromer 1959, 23–25; Mirchev 1962, Plate XXV, XXX; 1965, 35, 43, Pl. X, XI; Vulpe 1967, Pl. XVII, XVIII; Drack 1989, 80, Abb. 16: 20, 22; Shramko 1994, 45). In the early Scythian period, various versions of such knives became widespread throughout the entire territory of the forest-steppe (Andrienko 1976, Fig. 9: 5; Shramko 1987, Fig. 12: 21; Bessonova, Skory 2001, 223, Fig. 64; Daragan 2004, 39, Figs. 3, 46).

As known, *flat adze-axes* with lateral protrusions of Asia Minor origin as a result of the influence of Hallstatt period

cultures became known in the Ukrainian Forest-steppe as early as the end of the Bronze Age (Kashuba 2000, 329, Fig. XXXIX: 15; Gershkovich 2016, 115). They were widespread in the Hallstatt world, where there are both bronze prototypes and iron specimens, typologically close to the forest-steppe specimens (Wesse 1990, Taf. 28–30). On the territory of the Bilsk archaeological complex there is a fairly representative collection of these tools (Fig. 7), which became widespread and further developed in the local environment (Shramko 2020, 83–85).

The objects of bronze, iron and bone discussed above are, in one way or another, largely associated with the East-Alpine Hallstatt, as well as with the Carpathian region. This group of things, undoubtedly, did not come to Bilsk as a result of trade exchanges or military actions. The objects were brought by the population, in whose cultural environment, tools of work, everyday life and jewelry of similar types were common in everyday life, to which other researchers also noticed (Svetlichnaya 1996, 157–158, Fig. 3; Nosova 2009, 103; Kashuba 2012, 245). Iron tools and most of the western types of bronze jewelry (bracelets, pins, earrings), based on known prototypes, were probably made in local workshops. They became widespread in the forest-steppe Scythia, covering the territory of the Dnieper Left Bank (Petrenko 1978, 19; Shramko 1987, Figs. 12: 1–6; 16: 2, 5; 34: 5–9; Andrienko 1996, 353–358; Daragan 2011, 442–443). It is important to note that bronze and iron objects of Hallstatt production (sword, pendant, tweezers, razors) were not found in burial complexes, since they did not determine the status of the buried person, were not indicators of prestige. Most of these household items were used by the population in everyday life.

Analysis of burial materials

The introduction of the local elite to the traditions of the Hallstatt cultural circle can be traced at a different, more complex level of perception of ideas, primarily those related to the sacred sphere.

So, in the necropolises of the Bilsk fortified settlement, in addition to objects, the appearance of which may be associated with the introduction of a Scythian material complex into the local environment (weapons, bridle, some types of beads, things in an animal style), black-polished dishes were found (pots, scoops, bowls, cups), which served as a ritual set. Under the influence of Hallstatt traditions, some categories of objects of the early Scythian time in the forest-steppe were decorated in a certain way. For example, pots with metal applications in the form of triangles, consisting of triple circles (Fig. 11: A, 1). Tiaras are gold plaques of geometric shapes (Fig. 11: A, 2–12), which had East Hallstatt prototypes and became popular in the local environment (Fialko 2006, 69–72, Fig. 4; Daragan 2010, Fig. 5). Such decorations (pins, decorative plaques in the form of triangles, concentric circles and triangular circles) could be made in various workshops of the Scythian forest-steppe. For example, it has been suggested that staff-shaped pins were made at the settlement of Grishchentsy (Right Bank of the Dnieper) (Petrenko 1978, 16–17; Nosova 2009, 109–110). It is interesting that the area of their

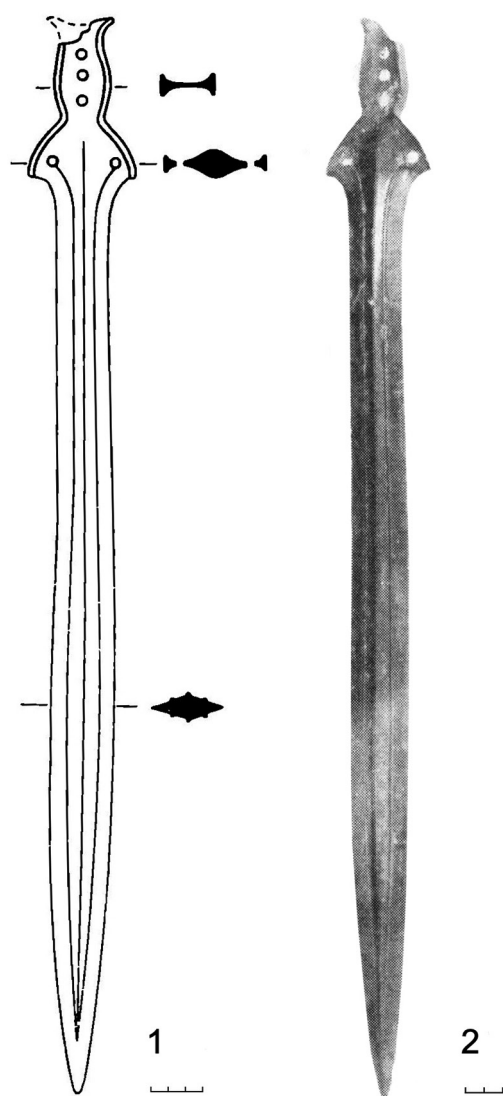


Fig. 10. Bronze sword of the Central European type. An accidental find on the territory of the Bilsk fortified settlement (after Kovpanenko 1973, 248, Fig. 1; Maleev, 1991, Fig. on p. 59).

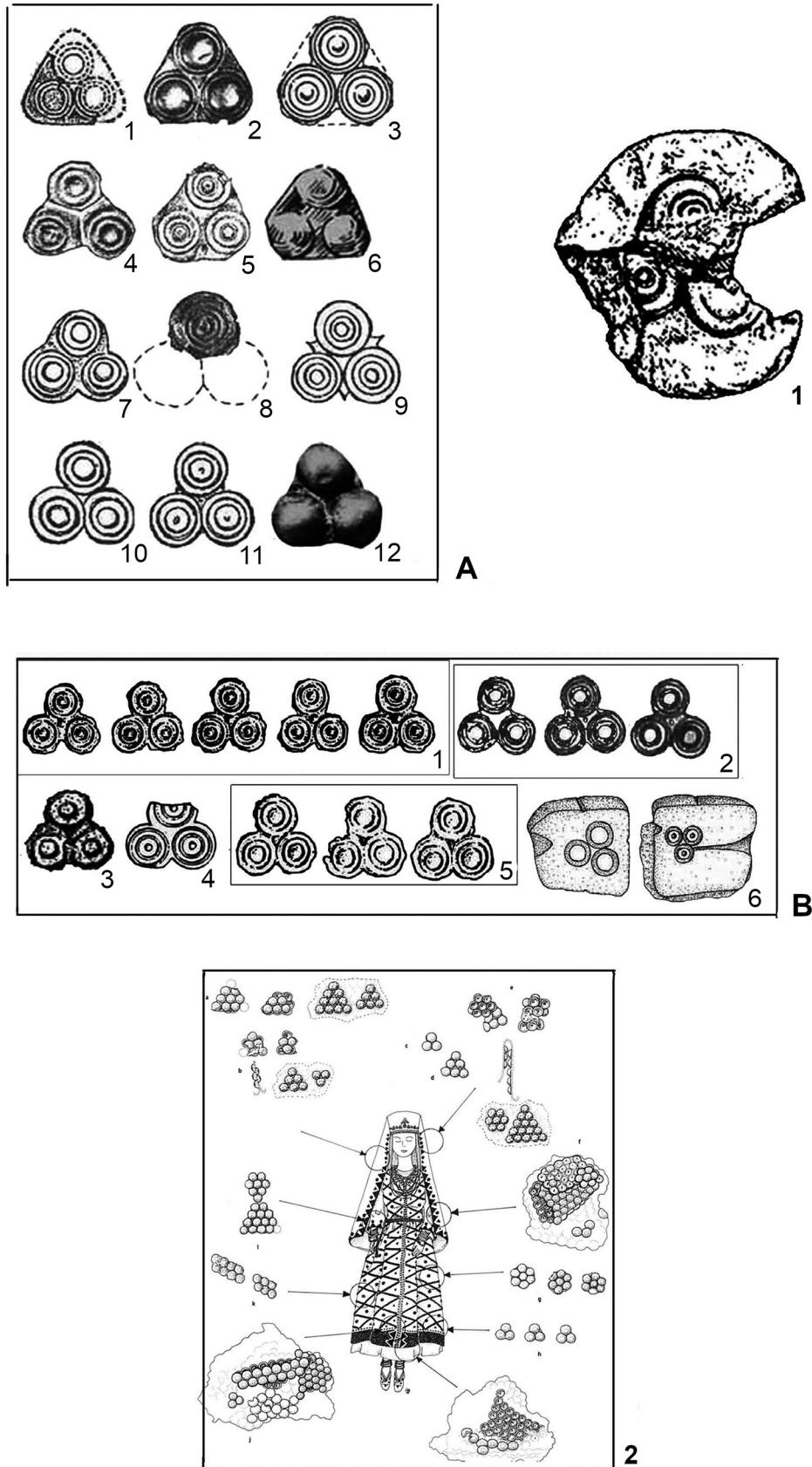


Fig. 11. Plaques decorated with concentric circles and hemispheres in the territory of Central Europe and forest-steppe Scythia: A – Middle Dnieper plaques from the territory of the Dnieper forest-steppe (after Daragan 2010, Fig. 8: 1–12); 1 – earthen mold (after Fialko 2006, Fig. 3: 12); B – plaques and a casting mold (Kalakaca Beske) from the territory of the eastern Hallstatt region (after Daragan 2010, Fig. 18); 2 – reconstruction of the princess's funeral costume from burial 27, mound 48 of the Stična burial ground (after Hellmuth 2008 (2010), Abb. 5).



Fig. 12. Mound (kurgan) 1/2017 of the Skorobir burial ground: 1 – general view of the grave with the designation of the main areas of the location of the finds; 2 – remains of a leather product decorated with bronze plaques; 3 – bronze mirror; 4, 5 – fragments of greek table vessels; 6 – elk antler palm; 7 – astragalus (photo I. Shramko).

distribution (the Ros river basin) coincides with the places where hairpins in the shape of the letter M were found (Petrenko 1978, 19), as well as gold appliqué plaques for decorating a woman's headdress (Bobritsa, mound 35, Sinyavka, mound 100) (Fig. 11: A, 2–3) (Kovpanenko 1981, 13–15, 51–52). All these types of jewelry are found in the materials of the Bilsk archaeological complex, which indirectly indicates inter-tribal ties, not excluding the marriage unions of representatives of two forest-steppe regions that found themselves in the zone of Hallstatt influence coming from the Balkan-Danube region.

Having a western origin, close traditions and established ties with the western regions of the forest-steppe, migrants already in the third quarter of the 7th century BC established trade and exchange relations with the ancient policies of the Northern Black Sea region, first with Berezan, and then with Olbia (Fig. 1: 18–19), which became the main trading partner (Zadnikov 2017, 69–70). Bilsk turned out to be the only settlement east of the Dnieper, where from that time continuously until the end of the 4th century BC Greek imports were received (Zadnikov 2014).

Starting from the second half-the end of the 7th century BC in the cultural deposits of settlements and in the burial grounds of the Bilsk archaeological complex, objects of Scythian material culture become common. Among the materials of the 7th–6th centuries BC Bilsk fortified settlement has bronze casting molds for casting two- and three-blade arrowheads (Shramko, Zadnikov 2017a, Figs. 1–2), blanks of bone and horn products (Shramko 2015a, 499–500), iron tools (Shramko 1994). At the same time, some artistically designed products of the Scythian types are not serial and have no direct analogies in the Scythian culture, which indicates their local distribution and manufacture by local craftsmen who creatively work in the Scythian pictorial tradition (Shramko 2019a, 56).

It is possible that in the early period the carriers of the Scythian nomadic culture were incorporated into the local environment. In this case, the Scythian chiefdom and the tribal elite of the local, sedentary population formed a single, upper, elite stratum of society. Ordinary pastoralists apparently also joined the local population, forming mixed families. Over time, it was probably possible to speak only of the descendants of the indigenous Scythian nomads, some of whom tried to preserve their identity. A similar model of the coexistence of the autochthonous population with the newcomer is noted by other researchers (Bruyako 2005, 310–311). At the same time, the cultural traditions of the sedentary population do not change. In the materials of the settlements, the cult practice becomes even more pronounced, clay altars and complex religious premises are being built (Shramko, Zadnikov 2006; Shramko 2019b, 41–44, Fig. 2; 2021, 191, Fig. 13). Sacrifices of dogs, goats and pigs are still practiced (Shramko 2015b, 46–47; Zadnikov 2015, 48–49), which indicates that the alien, non-cultural population in the archaic period did not constitute the majority and did not have a noticeable effect on the already established traditions of autochthonous. Various methods of burial in the Bilsk necropolises indicate the heterogeneity, complex social and ethnic composition of the region's population (Makhortykh

2013, 248–252), among which there were also people from the nomadic Scythian society.

The results of analyzes of 35 samples of bone remains from the territory of the settlement and burial mounds turned out to be somewhat unexpected. Thus, it was found that the inhabitants of the Bilsk fortified settlement were characterized by low mobility, not typical of nomadic societies, they ate local products (agriculture, cattle breeding), and the military functions of most of the buried warriors were probably limited to the protection of the settlement and the surrounding territories (Ventresca Miller *et al.* 2019, 1410–1412). Thus, it is possible that only a part of the Scythian pastoralists who came to the Left-Bank forest-steppe remained in the settlements, joining the local environment of the sedentary population, becoming members of one society. It is likely that a significant number of them continued to lead a nomadic life, participated in military operations, were not tied to their permanent place of residence and were not buried in the burial grounds of the local population. So, for all the years of excavation of the Bilsk necropolises, only a few cases of burials are known in which the main elements of the nomadic rite are observed: *dromos*, horse grave, catacomb (Makhortykh 2013, 247–248). In most cases, the same type of burial structures (pits, wooden crypts) were encountered with a certain set of variants (Makhortykh 2013, 252). Their variability, the diversity of features of the funeral rite and the set of things left in the grave are explained by the belonging of the buried to different social groups, for example, to warriors of different ranks, the aristocratic elite, the elite of an ethnically heterogeneous, mixed society.

Consequently, acquaintance with ancient culture and innovations introduced by the nomads affected the main spheres of life of the local tribal elite associated with military activities and endowed with priestly functions; however, the basis of the material culture of the ordinary, agricultural, sedentary and peaceful by nature population remained the same. Crafts developed. Production and cult traditions have not changed, trade relations with the ancient centers and with the tribes of the western part of the forest-steppe, historically connected with different areas of the Hallstatt world, continued to be maintained.

New evidence of ties to the Hallstatt culture

Relatively recently, a complex was first discovered in one of the burial mounds of the Bilsk fortified settlement – the Skorobir necropolis, which makes us think once again about the influence of the nomadic Scythian culture, ancient civilization and the cultures of the Hallstatt circle on the local population.

The necropolis occupies a fairly large territory to the west of the Bilsk fortified settlement, and is located on the left, gentle bank of the Sukhaya Grun River (Psel tributary) (Figs. 2; 9). According to the available data, more than 100 mounds have been recorded within its limits, however, most of them cannot be localized due to the annual plowing of fields and, as a result, the leveling of mounds. In different years, the central part of the necropolis was purposefully investigated by Vasily Gorodtsov (1906–the year of the research) and Boris Shramko (1965, 1975–years of exploration). Since 2013, it has



Fig. 13. Bronze staple plaques from the Skorobir burial ground and a map of the distribution of Typ BES 01b - Thalmässing plaques in Europe: 1 - a fragment of a leather product decorated with bronze plaques (photo I. Shramko); 2 - a sample of attaching bronze plaques to a leather base (photo I. Shramko); 3 - bronze plaques, Type 1 (photo I. Shramko); 4 - bronze plaques, Type 2 - Skorobir, mound 1/2017 (photo I. Shramko); 5 - map of distribution of BES 01b - Thalmässing plaques in Europe (after Fontijn, van der Vaart 2013, Fig. 7: 17).

been systematically studied by scientists from V.N. Karazin Kharkiv national university (Iryna Shramko and Stanislav Zadnikov).

Kurgan 1, which we excavated in 2017, was located in the central part of the necropolis (Fig. 9). By the time of excavations, it was heavily plowed up, almost invisible on the horizon. The height of the embankment was only 0,2 m from the level of the modern day surface. The burial chamber had a sub-square shape in plan and was oriented along the north-south line (Fig. 12: 1). The remains of a middle-aged man and a young girl were found in the burial. The dead were laid with their heads to the west. In addition to the usual for this necropolis burial implement in the form of dishes, items of military equipment, greek imports, the grave contained unique items that were first encountered not only at the monument, but also on the territory of the Northern Black Sea region. The good preservation of the objects and the context of their discovery indicate the unusual nature of the open burial (Shramko, Zadnikov 2018, 7–12, Figs. 3–7; Shramko 2018, 25–26; Shramko, Zadnikov 2019, 14–15).

Greek imports found in the burial (vessels and mirrors of the Borystenite type) give a date no earlier than the last third of the 6th century BC. A more likely date is the beginning of the last quarter of a century, between 525 and 512 BC, which within the European chronology corresponds to the period Ha D2/3. The upper chronological border of the complex is determined by the line after which the production of Borystenite mirrors was discontinued (Zuev 2020, 291–292).

We are talking about two objects that were not noticed by the robbers, since by the time they entered the grave, a significant part of the burial chamber was covered with settled soil. The objects were found near the eastern wall of the grave (Fig. 12: 1–2), among the things of Scythian types and objects of greek import, which were deliberately left in the burial (Shramko, Zadnikov 2018, Fig. 3).

Since the items of interest to us are made of leather, in the field they were treated with preservative solutions and were removed from the grave as a monolith. Their further deep cleaning was carried out in laboratory conditions. Things are still under restoration, however, in view of their importance for the European scientific community, we decided to report on some preliminary results of our observations, which we presented in the form of working versions, do not pretend to be a final conclusion, but rather raise problematic questions².

So, during the clearing of the burial and the extraction of the found items, it became clear that we are dealing with a rare set of leather items decorated with bronze plaque-brackets, which were first found on the territory of Scythia. Although the decoration of sewn-on plaques is known from the finds of leather belts from a horse bridle in the Scythian world, they had a different way of connecting with the leather base of the product and belong to other chronological periods

(Ilinskaya 1968, 114, Fig. 30; Gryaznov 1980, 25; Fig. 12; Mohylov 2008, 41, 305, Fig. 87: 1–39). The items were found at a short distance from each other, lying rolled up. Both items show a combination of two types of plaques differing in the shape of the caps and their design (Fig. 13: 3–4):

- – Type 1 – plaques with a small smooth convex cap without ornamentation (Fig.13: 3);
- – Type 2 – plaques with a flat cap, on which there is a pattern in the form of concentric circles with a dot in the middle (Fig. 13: 4);
- – plaques of both types have triangular antennae curved inward (Fig. 13: 1–2).

For the first time, the technique of decorating products with the help of plaque staples (using the stapler principle), which we recorded, was well known in Western and Central Europe (Fig. 14: 5), during the periods from Ha C to Ha D (Trachsel 2004, 440, Type: BES 01b–Thalmässing). Martin Trachsel, developing a typology of carts and horse equipment of the Hallstatt era, singled out such plaques into a separate type–Facing (German: BESATZ) of leather and wood (BES) –BES 01b–Thalmässing type (Fig. 13: 1). He shows three different versions of such plaques (Trachsel 2004, 440, Type: BES 01b), differing in the way they are attached:

- – the first variant – antennae with hanging, not bent ends (Fig. 14: 1a);
- – **the second variant** – antennae whose ends are bent to one side (Fig.14: 1b);
- – the third variant – antennae curved inside (Fig. 14: 1c).

Thus, for the convenience of further description of such plaques, we propose to make some additions to the proposed typology and, accordingly, designate them as BES 01b-1; BES 01b-2; BES 01b-3. It should be noted that only plaques fastening of variant 3 (BES 01b-3) were found in mound 1/2017 at Skorobir burial ground (Fig. 13: 1–2), however, represented by two different types of hats (Fig. 13: 3–4).

Scientists are not always able to offer a specific interpretation of the appearance of products and determine their purpose. In some cases, only the context of the finds indicates them. Nevertheless, there are quite expressive examples illustrating the peculiarities of using plaque-staples to create various decorative patterns on some categories of objects. Among them are details of wagons, horse harness, individual parts of a costume, for example, a belt. To decorate hats or dresses or dresses in some areas of the Hallstatt world, they also used studs or plaques with a loop on the back. However, in almost all cases, these were simple plaques with a convex cap without ornamentation. They differed only in size and methods of attachment to the base.

Decorate parts of a wagon and horse equipment

For example, for the Thalmässing-Alfershausen burial complex (Ha C1) (Bavaria, Germany) (Fig. 1: 33), a variant of the use of plaque-staples for attaching a horse bib to the leather base was proposed (Koch 2004, Abb. 29: 2). In the burial Otzing (Bavaria, Germany) (Fig. 1: 31) of the second half of

² The main points related to this discovery were voiced in our joint report at a conference in Wroclaw in July 2019 (Shramko, Zadnikov, 2019, 14–15), and a preliminary, informational article was published in the collection of the Historical and Cultural Reserve “Bilsk” (Shramko, Zadnikov 2018, 7–12, Figs. 3–7).

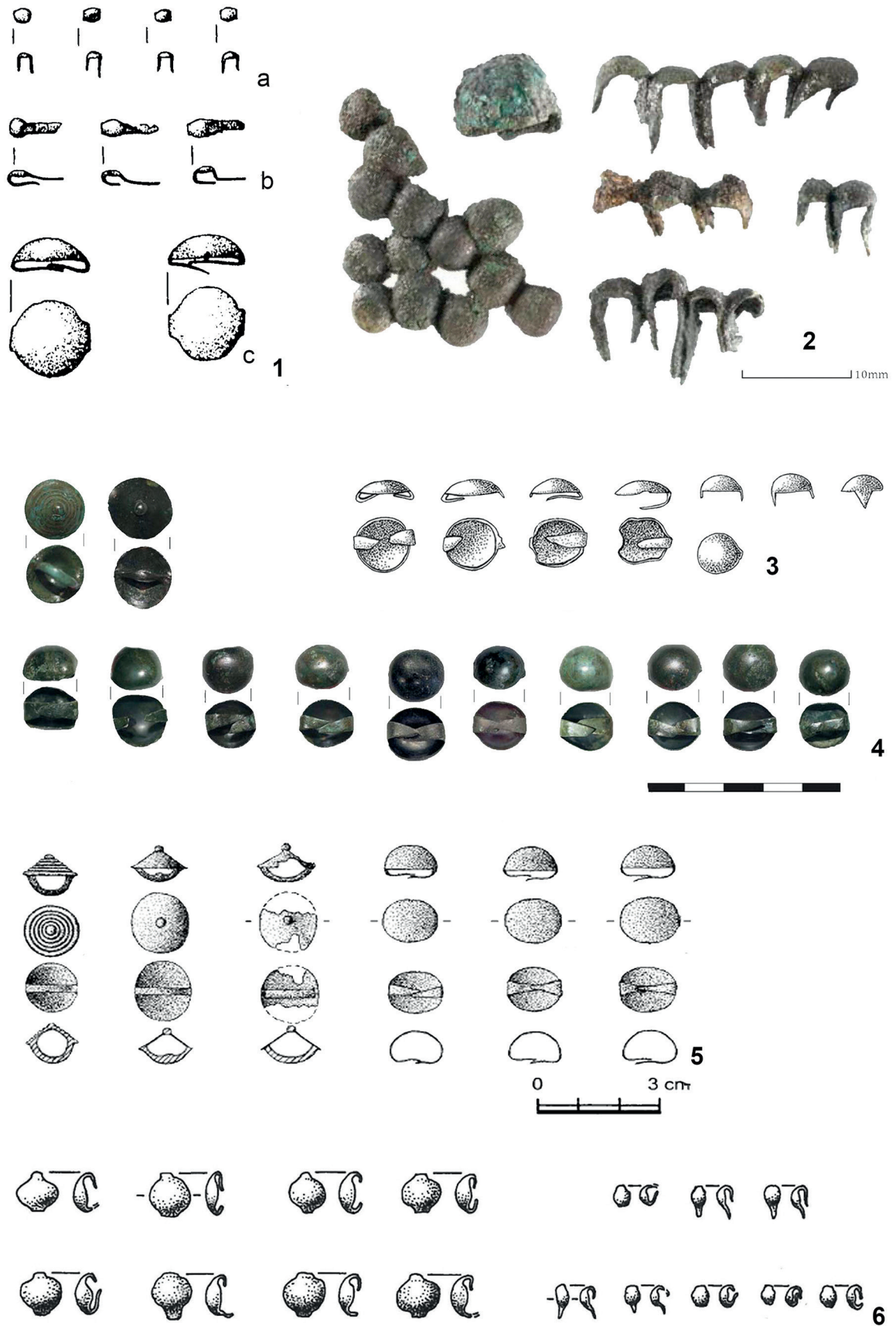


Fig. 14. Plaques type BES 01b - Thalmässing: 1 - Plaques type BES 01b - Thalmässing (after Trachsel 2004, 441); 2 - Oss-Zevenbergen (after Fontijn, van der Vaart 2013, Fig. 7: 16); 3 - Adelschlag-Weißkirchen (Bavaria, Germany) (after Schneider 2019, Abb. 2); 4, 5 - Rovné (after Chytráček *et al* 2019, Fig. 21); 6 - Im Ried-Ost (after Hoppe 2005, Taf. 4: 30-41).

the 7th century BC bronze staples were used to decorate parts of a wagon and horse equipment (Classen *et al.* 2013, Fig. 14; Gebhard *et al.* 2016, P. 1–3; Vaart-Verschoof, Schumann 2017, Fig. 7). An early Hallstatt wagons with a set of horse harness was found in the Adelschlag-Weißenkirchen burial mound (Bavaria, Germany) (Fig. 1: 35) (Schneider 2019, Abb. 2: 3). Among the sets of the bridle, separate plaques-staples were found, probably from the decoration of the belts (Fig. 15: 3). Based on the context of the discovery of an accumulation of bronze staples in the burial Oss-Zevenbergen (the Netherlands) (Fig. 14: 2) (Fontijn, van der Vaart 2013, Fig. 7.16), they are also associated with the decoration of a horse harness. Plaques-staplers of various sizes (Fig. 14: 4–5), presumably related to decorative elements of a horse harness, were found in an elite burial Ha D3/LT A Rovná (Southern Bohemia, Czech Republic) (Fig. 1: 32) (Chytráček *et al.* 2015, 82, Abb. 10: 1–4, 13–22, 27–29; 2018, 294–295, Abb. 10: 1–4, 13–22, 27–29) on the eastern edge of the West Hallstatt region. This is the latest chronologically and the most eastern geographically located complex of the currently known staple plaques in Central Europe. The only find of a horse belt decorated with button plaques with loops on the back comes from a burial (Ha D2) in Eberdingen-Hochdorf (Baden-Württemberg, Germany) (Fig. 1: 37) (Koch 1999, 53, Abb. 12; 2006, 16, Abb. 12).

Thus, the tradition of decorating horse harness with sewn-on stapler-shaped plaques was most popular in the West Hallstatt region during the Ha C period. Complexes of the Ha D3/LT A period are rare and do not have an accurate interpretation. However, the use of this decorative element is recorded at the end of the 6th – beginning of the 5th century BC.

Costume elements

In the south-eastern regions of the Hallstatt world, apparently, it was also quite early, back in the 8th –7th centuries BC other types of plaques were also used – plaques-loops and plaques-studs, with which they adorned headgear (hats, helmets), belts, and embroidered women's dresses. They were popular in the southeastern Alpine zone. A notable princely burial in the mound Stična (Slovenia) (Fig. 1: 28) of the Ha C2 period (Lower Carniola or Dolenjska) stands out. The complex gives an idea of the burial costume of a noble woman (princess), richly decorated with a large number of separate plaques with hemispherical caps (Hellmuth Kramberger 2015, 154–157, Fig. 12).

Bronze decorative elements were attached to the base of helmets (Fig. 15: 1–2) in the 8th century BC found in the Budinjak burial mound (Croatia) (Fig. 1: 27) (Škoberne 1999, Fig. 53, 59; Škoberne, Šoln 2001, Fig. on page 8). In the same way, an early Hallstatt helmet (bowl-shaped helmet) from mound 17, burial 6 (Early Hallstatt period, second half of the 8th century) Grmada (Slovenia) (Fig. 1: 29) was decorated, supplemented with circular inserts of sheet bronze (Tecco Hvala 2017, 167, 251, Pl. 24, 4). In this part of the Hallstatt world, several types of women's headwear are known, in the design of which additional elements (inserts, pendants) are used. The development of the tradition of making earlier helmets decorated with plaques-loops and plaques-studs

(Fig. 15 1–2), as well as later headdresses made of bronze sheet, in the ornamentation of which is noticeably imitating the early prototypes (Balen-Letunić 2004, 232, Fig. 13, 242, Fig. 20). Also known are leather belts decorated with small plaques with a smooth, convex cap (Fig. 16: 4), as well as belt plaques made of sheet bronze (Fig. 16: 3) (Iapodes 2014, cat. 20–21, 24; Bakarić 2017, cat. 29; Bakarić *et al.* 2018, cat. 23). For the later period, button plaques with concentric circles on the cap are also known (Fig. 16: 5).

Belts decorated with sewn-on patches, staple patches and rivets were also popular in southern Germany during the Ha D1 and Ha D2 periods. Of particular interest to us are finds of leather belts (Fig. 15: 10–13) in the Magdalenenberg burial ground (Baden-Württemberg) (Fig. 1: 39), as well as parts of belts of this type at other sites in this region (Fig. 15: 1–9). Items from the Magdalenenberg burial ground are decorated with convex studs, rivets or staples with a smooth convex head (type BES 01b-2) attached to the leather base of the belt. In addition, the belts have metal inserts and ends with a hook (Fig. 15: 10–13). The tips are simple short or long rectangular plates of sheet bronze, smooth or covered with a geometric pattern using the embossing technique (Spindler 1971, Taf. 33: 9, 40: 1; 1972, Taf. 11, 12; 1973, Taf. 17, 3; Taf. 28: 1, 38: 3, 42: 1). The plates are riveted to the main part of the belt. The belts were 3–9 cm wide. It is difficult to judge the length of the belts due to their incomplete preservation. They were worn on the buried person as an element of a costume (Fig. 15: 10–12). Most of the belted burials belonged to women.

The famous belt (Fig. 17: 1) from the burial of an Etruscan warrior at the end of the 6th century BC, was also decorated with small embroidered plaques, discovered in 1934 near Lanuvio (Lazio, near Rome) (Fig. 1: 25) (Zevi 1993, 417, Fig. 6; Lipkin 2014, 52, Fig. 13). Outwardly, it is similar to the narrow belts from Magdalenenberg (Fig. 15: 10–13), however, unlike them, it has a round buckle that fixed the ends of the belt. The same buckle had a leather belt (8th–5thBC) (length 51 cm, width 2,8 – 3,2 cm) found in the North Balkan region (Fig. 17: 3), in the Prozor burial ground (Croatia) (Fig. 1: 26) (Iapodes 2014, cat. 14), as well as a belt (Fig. 17: 2) from a burial in Speckhau (Baden-Württemberg) (Fig. 1: 38) (Arnold 2012, 100, Fig. 2; Arnold, Murray 2016, 124, Fig. 9: 5) in the design of the belt with a buckle, the way of decorating the leather base with small convex plaques, two variants of the design of the belt buckle are noticeable: a hook at the end of a bronze plate or a round buckle in the form of a ring (Figs. 17, 15: 10–13). The spread of the second option is not limited to southwest Germany (Speckhau). Similar leather belts were found in other areas of the Hallstatt world: Lanuvio (Italy), Prozor (Balkans).

In general, the examples discussed above indicate that during the Ha C period, in the territory north of the Alps, there was a tradition of decorating carts and horse harnesses with bronze plaques of various sizes with a smooth convex head without ornamentation. On the reverse side, the plaques had antennae for attaching to the leather base of the object. Such stapler plaques, made as a separate, integral element of decoration, were most popular in the Ha C period, but such fastening is also known in Ha D3/LT A. In the Ha D period, staples, along with other types of fastening to the base, were

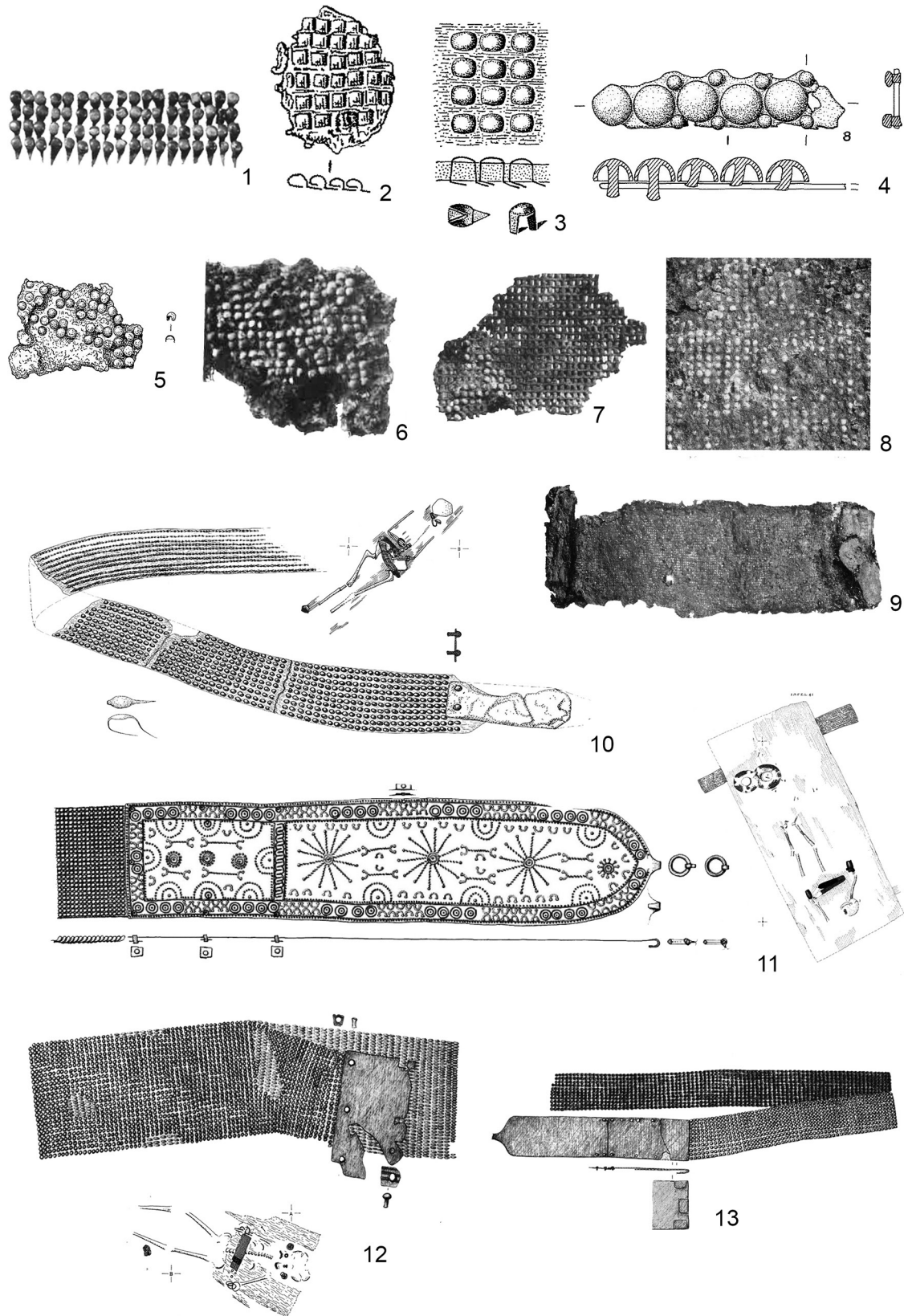
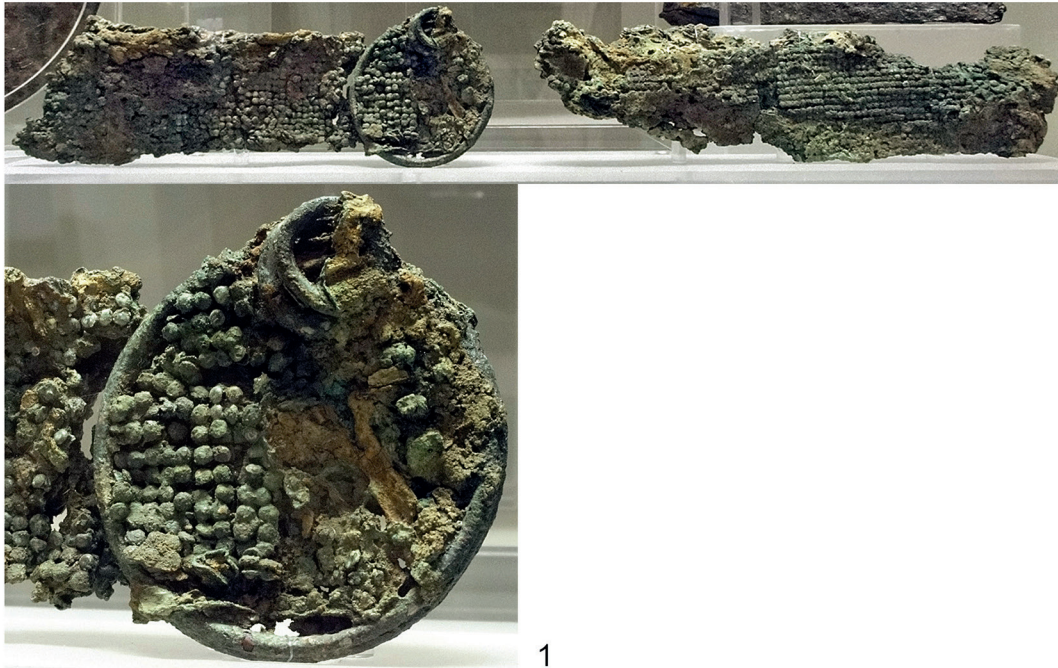


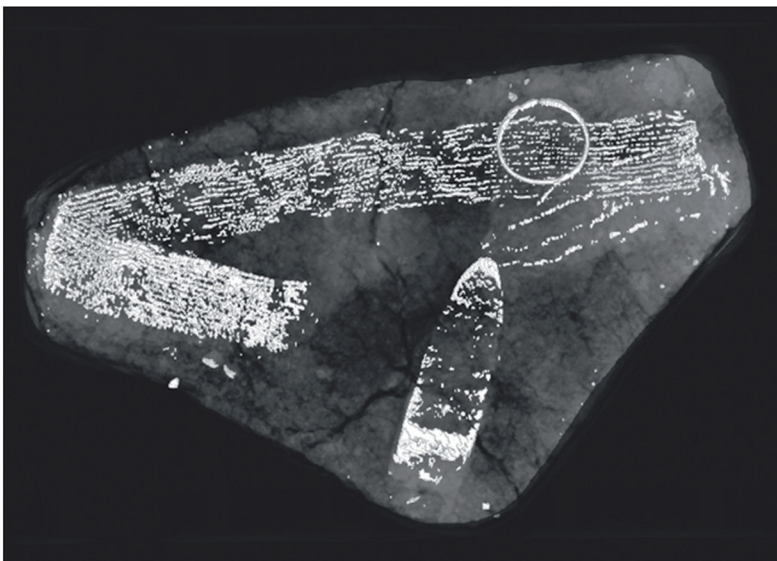
Fig. 15. Leather belts decorated with bronze plaques and plates from the territory of southern Germany: 1-9 – samples of fastening bronze plaques to leather belts; 10-13 – leather belts from burials in the Baden-Württemberg area; 1 – Kaltbrunn (after Maier 1958, Taf. 71: 1); 2 – Erkenbrechtsweiler (after Zürn 1987, Taf. 73A: 13); 3 – Hirschlanden (after Zürn 1970, Taf. 29: 6); 4 – Pfullendorf (after Zürn 1987, Taf. 376: 8); 5 – Gäufelden (after Zürn 1987, Taf. 55:11); 6-7 – Engelwies (after Maier 1958, Taf. 72: 1-2); 8-9 – Hirschlanden (after Zürn 1970, Taf. 91); 10 – Magdalenenberg, Burial 32 (after Spindler 1972, Taf. 11); 11 – Magdalenenberg, Burial 76 (after Spindler 1973, Taf. 38); 12 – Magdalenenberg, Burial 16 (after Spindler 1971, Taf. 33: 9); 13 – Magdalenenberg, Burial 21 (after Spindler 1971, Taf. 40: 1).



Fig. 16. Headdresses, belts and samples of bronze plaques for clothing decoration from the territory of the south-eastern Alpine region: 1–2 – Boudinjak helmets; 3–4 – belts; 5–9 – bronze plaques for decorating clothes; 1 – Tumulus 3, Budinjak (after Škoberne, Šoln 2001, Fig. on page 8); 2 – Tumulus 139, burial 6, Budinjak (after Škoberne, Šoln 2001, Fig. on page 3); 3 – Tumul 1, Sultanov grob, tomb 1, Skradnik, Ogulin, Croatia (after Iapodes 2014, cat. 20–21, 24); 4 – excavations 1881, Prozor (Otočac) (after Iapodes 2014, cat. 14); 5 – Prozor, Excavations conducted in 1900 (AMZ inv. P-12529) (after Bakarić 2017, cat. 47); 6 – Prozor (Otočac), Croatia (P13134) (after Bakarić *et al.* 2018, cat. 9); 7 – excavations 1876, Hrvatsko (Vlaško) Polje (AMZ P-13660) (after Bakarić *et al.* 2018, cat. 10); 8, 9 – grab 27, mound 48, Stična (after Hellmuth 2008 (2010), Abb. 4: a, c).



1



2



3

Fig. 17. Leather belts with round buckles from the territory of the Hallstatt culture: 1 – Lanuvio (after Lipkin 2014, 52, Fig. 13); 2 – Speckhau Tumulus 17, Grave 4 (after Bettina, Murray 2016, Fig. 9: 5); 4 – excavations 1881, Prozor (Otočac) (after Iapodes 2014, cat. 14).

used to decorate leather belts, combining them with plate-clasps of sheet bronze.

South of the Alps, in the southeastern Alpine region during the Ha C, 8th–7th BC the tradition of decorating items with small bronze plaques with various types of fastening (eyelet, studs) (Fig. 16: 5–9), as well as applique work (Fig. 11) was also widespread. These decorative elements were sewn onto a leather base or attached to it in the form of separate studs. In contrast to the northern territories, this decor technique was used only to decorate parts of the costume: headgear (hats, helmets) and belts. However, for the D period, there are not many finds of leather products; the technique of imitating earlier sewn-on plaques and studs in the form of a punch pattern on waist plates and headdresses can be traced.

In all these cases, if you do not pay attention to the type of attachment, externally plaques with loops, studs and antennae look the same. They have a convex shape, a smooth cap, no ornament. Plaques of this form were widespread in the Hallstatt world and are known in the territory of the Scythian culture.

However, the set found in the Bilsk necropolis has a number of differences and so far does not find direct (exact) analogies either in the Scythian world or in the circle of Hallstatt cultures, although, of course, it is related to the traditions of the latter.

What are the plaques found in the Skorobir burial ground – one of the largest necropolises of the Bilsk fortified settlement, in which representatives of the local aristocracy were buried?

Plaques with a type 1 cap (Fig. 13: 3) were the most common in the Hallstatt culture and, as we have already noted, have different attachments (loop, stud, antennae, and rivets). Their appearance is probably related to the rivet idea popular in the Hallstatt world. Such plaques of various sizes are well known since the 8th century BC. However, according to the method of fixation and the shape of the antennae, the Bilsk plaques type 1 find the most exact matches in the burial complex Rovná (Fig. 14: 4–5) belonging to the period Ha D3/LT A, which may indicate a close time frame of their production, possibly even in workshops in the same region. Externally similar plaques on the South German belts have their own, local manufacturing peculiarity and fastening technique (the ends of the staples are bent in one direction) (type BES 01b-2). This feature should probably be seen as a line of the local manufacturing tradition. An earlier chronological position (Ha D1b, 580–540 BC) is occupied by the burial complex (burial 17) Im Ried-Ost (Bavaria, Germany) (Fig. 1: 34), in which plaques were found (Fig. 14: 6), related to the decoration of women's clothing (Hoppe 2005, Taf. 4). The closest analogies to these objects are plaques from Rovná and Skorobir (Figs. 14: 4–5, 13: 3).

Type 2 plaques are more localized within the Hallstatt world. Patterns with concentric circles adorned women's headdresses were popular in Ha C2–Ha D1 in the southeastern Alpine zone. The main territory for the spread of this tradition is the area of Lower Carniola (or Dolenjska), where a casting mold was found at the settlement of Kalakaca Beske for making plaques from triple concentric circles (Fig. 11: 1).

The most famous monument, in which a gold diadem was decorated with plaques from triple circles (Fig. 11: 2), is burial 27 of mound 48 Stična (Helmuth-Kramberger 2015, Fig. 12: 3). While studying this complex, Anja Hellmuth made a number of important observations, which also indicate a connection between gold plaques of different types, including those close to ours in size and design, with the decoration of the clothes of noble women (Hellmuth 2008 (2010), Abb. 5; Hellmuth Kramberger 2015, 146, Fig. 3). However, plaques in the form of concentric circles with a point in the center (type 2) with antennae for attachment are not yet known. Only in the burial grounds Rovná and Prozor similar variants of the type 2 plaques were found (Figs. 15: 4–5, 16: 5), but they are not an exact analogy and have a different attachment. Plaques from Rovná are made in the form of a stepped pyramid (cone), which in plan looks like a plaque with concentric circles.

Thus, direct analogies to the type 2 plaques found in mound 1/2017 of the Skorobir burial ground are not yet known. This is probably a new type of staple plaques, which may be associated with the territory of the Hallstatt culture.

On the bronze plates-inserts of belts, made using the technique of chasing on metal sheet, found in burial sites in southwestern Germany, there are also elements of patterns consisting of concentric circles with a point in the middle (checkers), in combination with other figures that form geometric patterns (Fig. 15: 11), however, this ornamental tradition may have been borrowed from the eastern Alpine region of the Hallstatt culture (Maier 1959, 172–173). It is limited only by the application of an element of concentric circles on the surface of a bronze sheet plate decorated using the chasing technique. Plaques type 2 with ornamentation of concentric circles are not known in southern Germany.

In addition, in the southeastern Alpine region (Lower Carniola or Dolenjska) during the Ha C2/D1 period, patches in the form of triangles with three convex hemispheres and concentric circles were also popular. Individual plaques in the form of concentric circles are also known. For this series of decorative elements, several typological schemes have been proposed (Fialko 2006; Daragan 2010; Helmuth Kramberger 2015), demonstrating the popularity of such decorations in Central Europe and the forest-steppe zone of the Northern Black Sea region (Fig. 11: A, B). In both regions, such plaques were used to decorate burial utensils and women's headdresses (Fialko 2006, 70–72; Daragan 2010, 96–99).

Under the influence of the East Hallstatt fashion, the motif of concentric circles with a dot in the center became popular in the forest-steppe Scythia (Fig. 11: A). A good selection of Central European analogues is available in individual articles of Ukrainian researchers (Fialko 2006, 65–69; Daragan 2010, 97–98). It is important for us that plaques made in this style were found in early burial mounds of the Bilsk necropolises (Fig. 11: A, 5, 11), in complexes of the 7th century BC (Gorodtsov 1911, Table 3: 5; Shramko 1987, Fig. 71: 12; Chernenko *et al.* 2004, 28, Fig. 49). About the popularity of Hallstatt ideas among the local population of the forest-steppe Scythia in the second half-late 7th – first half of the 6th century BC evidenced not only by finds of objects with such elements, but also a high probability of their local manufacture. Thus,

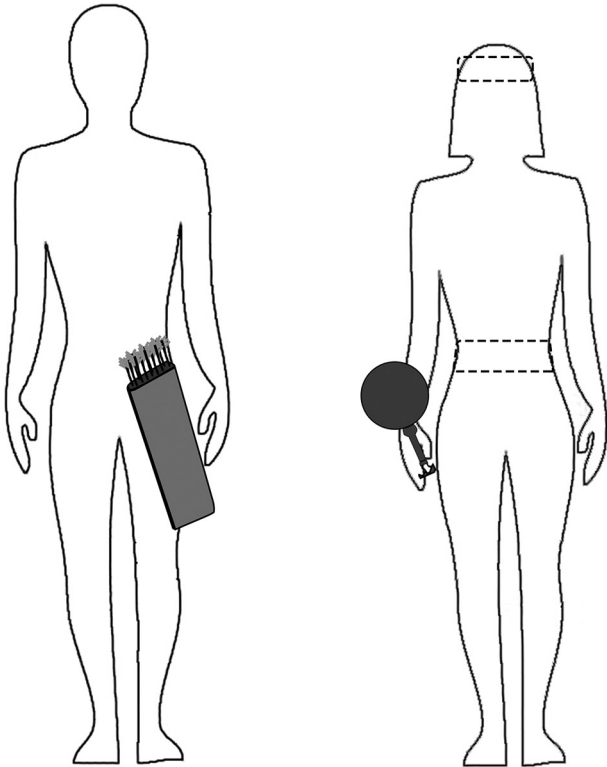


Fig. 18. Supposed belonging of some categories of objects (quiver and a set of clothes) to those buried in mound 1/2017 of the Skorobir burial ground (reconstruction I. Shramko).

a clay mold for casting a bronze stamp found at the Tarashcha fortified settlement in the Middle Dnieper region (Fig. 11: 1) serves as one of the proofs. According to Elena Fialko, this fact, as well as a series of other items found in the Right-bank Dnieper forest-steppe, demonstrate the close ties of the local forest-steppe population with the world of Hallstatt cultures and the introduction of the population of the forest-steppe Scythia to some European traditions (Fialko 2006, 67, 71–72). At the same time, she draws attention to the fact that such decorations are not known in the burials of the steppe Scythians. The materials of the Bilsk fortified settlement and its necropolises show that these Central European traditions were also adopted by the population of the Dnieper forest-steppe Left Bank. In the late 7th – first half of the 6th century BC in the forest-steppe, a group of elite female burials stands out, in whose costume Central European features are noticeable, there is a tradition of decorating objects (vessels) and headdresses with gold appliqué (Fialko 2006, 67–73). In this case, it should no longer be about imports, but about borrowing an idea, developing a certain standard for distinguishing a special group of female elite burials.

Some researchers suggest limiting the chronological framework for the existence of such a Central European tradition on the territory of the forest-steppe Scythia to the time interval of the second half of the 7th century BC without crossing the border of this century (Daragan 2010, 108–109). At the same time, new materials from the excavations of the Skorobir burial ground (Shramko, Zadnikov 2017b, 47–53; 2020, 5–13) show that the period of female elite burials in the

forest-steppe is more likely to cover the time period from the last quarter to the end of the 7th century BC until the middle – beginning of the third quarter of the 6th century BC, when all the components of the magnificent funeral rite are still preserved, including women's headdresses decorated with gold plaques. These observations of ours are based on the results of new excavations of the mounds of the Skorobir burial ground.

In the process of restoration of leather items from the mound 1/2017, it became finally clear that they represent different parts of the costume, the same in manufacturing technique and style of decoration. One of the items turned out to be a headdress, the appearance of which will become completely clear after the completion of the restoration work. The identification of the second item is not yet fully clear. With a high degree of caution, it can be attributed to the belts; however, until the completion of the restoration, we leave this version at the level of a working hypothesis. Plaques of two types were attached to the leather bases (Fig. 13: 3–4).

In both cases, the type 1 plaques were background, and the type 2 plaques formed small zones (inserts) that set a certain rhythm for the composition. The number of plaques in all inserts (type 2) is the same. The same distance is also maintained between the inserts, which allows us to speak of the thoughtfulness of the entire composition. The peculiarities of the manufacture and design of products, traced during the restoration work, make it possible to consider these items as one set of clothing. The work on it is not finished yet, so we cannot show the reconstruction of the appearance of the objects yet. Over time, after the completion of the work of the restorers, a separate article will be devoted to this issue. So far, on the silhouette of a person, we will designate only the zones with which these objects were associated (Fig. 18).

Thus, in our opinion, the European-style clothing set found in the mound was made in the East Hallstatt region and is associated with the traditions of the population of the southeastern Alpine zone (Lower Carniola or Dolenjska). Indirectly, this is indicated by many Hallstatt imports found on the territory of the Bilsk fortified settlement, as well as prototypes of Hallstatt things, which later became widespread on the territory of the forest-steppe Scythia, including in the Dnieper Left Bank. A bronze plaque of three built circles in the form of concentric circles with fastening in the form of three studs on the back was recently found in the forest zone (Radichev fortified settlement), on the right bank of the Desna (Fig. 1: 5), however, unfortunately, it belongs to accidental finds (Karavaiko 2016, Fig. 3: 7).

Who owned the Hallstatt items?

The results obtained allowed us to establish the purpose of the found objects, to show their connection with the Hallstatt cultural tradition, which has become popular among the settled population of the forest-steppe Scythia. However, to which of the two buried did the found items belong?

To a large extent, the context of the finds clarifies the situation. Both artifacts were found near the eastern wall of the burial chamber, in the sacred zone (Fig. 12: 1, zone D), among

ritual objects such as a bronze antique mirror (Fig. 12: 3), a set of dice (Fig. 12: 7), local and Greek vessels (Fig. 12: 4), elk antler palm (Fig. 12: 6), etc., (Shramko, Zadnikov 2018, 9–10). In our opinion, these objects, compactly folded in one specific place, represented a priestly set of things intended for carrying out certain rituals. It is no coincidence that the belt, like the headdress, was not worn on the deceased person. Pieces of what were probably ritual clothing were deliberately left among other objects of worship.

At the same time, a quiver with a set of arrows decorated with gold plaques in an animal style was found near the western wall of the grave (Fig. 12: 1, zone C) (Shramko, Zadnikov 2018, Fig. 6: 3). An important element of the quiver was an iron cone covered with gold foil (Shramko, Zadnikov 2018, Fig. 6: 13) – an innovation that appeared in the Northern Black Sea region in the last quarter – the end of the 6th century BC (Andruh 1988, 165, 169; Alekseev 2003, 183).

In addition, parts of a sacrificial animal were left in the grave (Fig. 12: 1, zone B) and a Greek proto Thasos amphora that stood in the southeastern corner of the burial chamber (Fig. 12: 1). In the robbery zone (Fig. 12: 1, zone A), the remains of two individuals were partially preserved: a young girl and a young man. Judging by the location of the limbs, the bodies of the deceased layed parallel to each other, with their heads to the west.

The arrangement of things in the grave and the established fact of a pair burial suggests that the weapons belonged to a man. In relation to him, the weapon lay on the right, near his head. In this case, it is logical to assume that the girl was intended for a set of religious objects, including a set of clothes (Fig. 18).

On the one hand, the finds of objects of Central European types in the Dnieper left bank in general and in Bilsk in particular, as we have seen, are quite admissible and even common, taking into account the western vector of cultural ties of the local population over the two centuries that have passed before the burial. On the other hand, such a set of imported items has not yet been known in the Northern Black Sea region and does not look quite common in a burial ground of a forest-steppe settlement on the territory of the Dnieper Left Bank.

Who buried in a mound in the last third of the 6th century BC?

Could those buried in the mound 1/2017 of the Skorobir burial ground be nomads – participants in military campaigns in the middle 6th century BC to Central Europe, who took part in the defeat of Heuneburg and returned with trophies, as our colleague suggests (Grechko 2019, 6).

Indeed, the burial contains innovations of Eastern nomads of the last third of the 6th century BC, which at this time penetrate into the Northern Black Sea region. The temptation to link Hallstatt imports with their campaigns to Central Europe is understandable, linking them to the topical problems of European archeology. However, since our colleague was guided only by the data of the preliminary publication of the

authors of the excavations, a number of inconsistencies are noticeable in the arguments presented by him.

First, the item in which it is proposed to see a belt similar to the South German samples is not such. The product is a women's headdress, which has no analogues in southwestern Germany. At the same time, the tradition of decorating women's hats with a soft base (dense fabric, leather) with separate plaques of various types of geometric shapes, including concentric circles, is associated with another region of the Hallstatt world, and also spread in the forest-steppe zone on both banks Dnieper. In recent years, female burials of the 6th century BC with headdresses decorated with gold plaques of several types were found by us in the Skorobir necropolis (Shramko, Zadnikov 2017b, 47–53; 2020, 5–13).

Secondly, if the found items are a set made in the same technique and decorated in the same style, one part of which is not related to the West Hallstatt region, then the second item also cannot be related to it. There are a number of other controversial points and inconsistencies in this issue, which were mentioned above.

An important counterargument was also the recently published results of analyzes of anthropological material of a wide time range, originating from the Bilsk fortified settlement and the Bilsk necropolises. They showed low mobility of the population, as well as a sedentary lifestyle. It has been established that the people buried in the burial grounds of the Bilsk fortified settlement were mostly not nomads, did not participate in distant raids, which is consistent with H. Parzinger's opinion that the cause of the defeat of Heuneburg was internal conflicts and unrest in the middle of the 6th century BC (Parzinger 2020, 31).

In our opinion, the burial complex discovered in 2017 needs a comprehensive study, which has not yet been completed. Restoration work is underway, additional studies of the material are planned. Therefore, at this stage, it is too early to draw any final conclusions, and even more so, broad generalizations.

So far, it seems that in the mound 1/2017, located in one of the early necropolises of the Bilsk fortified settlement, representatives of the tribal nobility, included in the burial practice of the local population, were buried. Of course, a unique set of clothes deserves special attention. It can be noted that the plaques, stylistically similar to those used in the decoration of the two found objects, were well known in the forest-steppe as early as the last quarter to the end of the 7th century BC.

At this time, Hallstatt ideas of decorating burial dishes and women's headdresses became popular on the territory of the Dnieper forest-steppe Right Bank and Left Bank. On both banks of the Dnieper, rich burials of representatives of the local nobility were found; in the basin of the Ros River, a casting mold was found for making such jewelry. But, of course, in our case, a set of clothes is a rare import item. However, for the Bilsk fortified settlement, which in the early period of its development was included in the remote, eastern Hallstatt periphery with close cult traditions, it seems quite logical to get such rare samples of European costume on the settlement.

CONCLUSIONS

The representative collection of artifacts, formed over many years of archaeological excavations, primarily of the ash mounds of the Western fortification of the Bilsk fortified settlement, indicates the unusualness of this settlement, founded by migrants from the Right Bank of the Dnieper in the second half – end of the 8th century BC. The appearance of the first Central European import is also connected with these events. Attention is drawn to the ceramic complex, which traces the influence of the Middle Hallstatt Basarabi culture, first of all, in the ornamentation of polished tableware with such a magical sign as the “Maltese cross”, as well as well-recognized elements such as a “checkerboard”, radial ornament, spirals, “scales”, shaded triangles. Findings such as a *kernos* vessel and ornamented clay altars with spiral designs are indicative. These materials demonstrate the Hallstatt influence at the level of tradition and cult practice.

In the middle – second half of the 7th century BC in the material complex, some features of the late Hallstatt period culture of Bârsești-Ferigile from the southern Carpathian region become noticeable. Analogies are traced in some forms of ceramics, as well as in types of iron single-edged knives of elongated proportions with a handle highlighted on the side of the blade. Such knives became the leading form in the forest-steppe, where they remained popular in the 7th–6th centuries BC. During this period, the influence (some samples of ceramics, clay products, as well as some types of decorations) of the Wysocko culture is also noticeable.

In the second half – late 7th–6th century BC the influence of East Hallstatt cultures and cultural groups is noticeable, especially the southeastern Alpine region. We associate with it the appearance in Bilsk of several types of metal decorations, among which there are rare pendants, as well as a double axes – labris hatchet made of bone. The only example is a double M-shaped pin of Balkan origin. Rare import items include iron tweezers, which are not yet known in the rest of the forest-steppe Scythia. The most common iron axes with wings, which were made in local workshops, were widespread throughout the forest-steppe region of the Northern Black Sea region and were not imported at that time. Moreover, they are further developed in the local environment.

Burial mounds excavated in 2013–2019 in the Skorobir necropolis gave new, unexpected results. For the first time, rich female burials of the 6th century BC were discovered at the site, with headdresses decorated with gold plaques of various types and shapes, among which plaques in the form of concentric circles with a dot in the center and hemispheres stand out. Similar plaques, found in several mounds of the Dnieper Right Bank, have parallels in the Hallstatt culture and demonstrate the local population’s perception of Central European ideas in the field of decor and the sacred sphere. The burial complex of the last third of the 6th century BC, which we discovered in 2017, turned out to be unique. Among the objects of worship, a set of women’s clothing was found, made in the Central European technique. The decor shows the traditions of the southeastern Alpine Hallstatt (Lower Carniola cultural group). The correspondences found in the

monuments of the forest-steppe Scythia are also very convincing. Comparison of the found objects with the known materials of the Hallstatt culture does not allow us to associate them with the West Hallstatt region, and even more so with the trophies brought by the nomadic Scythians after their participation in the defeat of the Heuneburg fortress. The occurrence of such rare items in the burial mound of the Bilsk fortified settlement requires a different explanation, but until the processing of the collection materials is completed, it is too early to draw final conclusions.

In general, the Bilsk archaeological complex (the fortified settlement and the burial grounds) in the early period of its development demonstrates stable ties with the circle of Hallstatt cultures of the Carpathian-Danube region, East Hallstatt region, and the East Alpine region. Traced cultural ties and influences with the Hallstatt cultural circle, along with the well-known facts of established trade relations with Greek centers, as well as the influence of the nomadic Early Scythian culture, noticeably distinguishes this Bilsk fortified settlement from other monuments of the forest-steppe Scythia.

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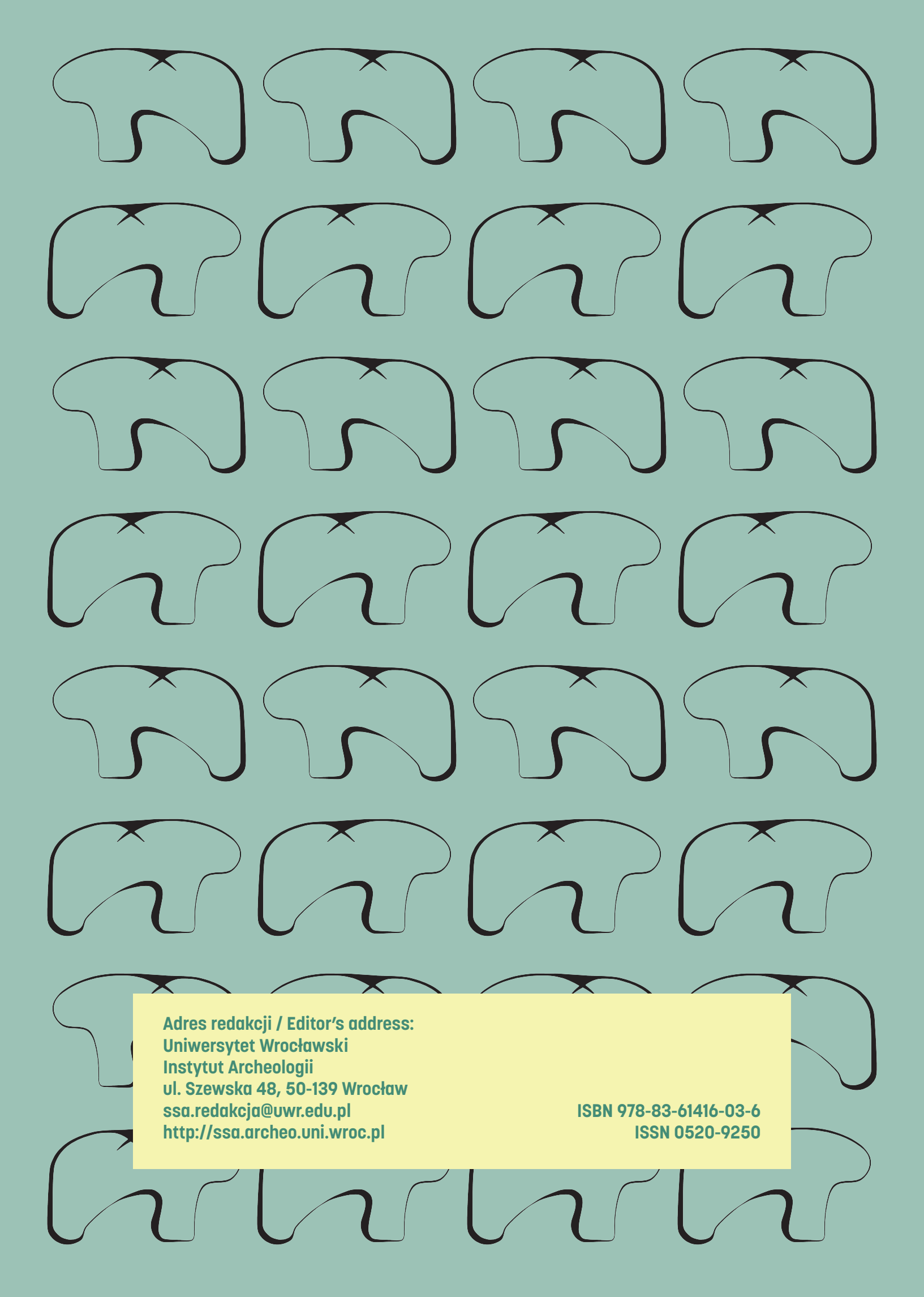
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