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HORSE-HARNESS FROM THE NOMADIC BURIAL NEAR THE VILLAGE OF YASHKUL IN KALMYKIA AND THE EAST CELTIC HELMETS IN EASTERN EUROPE*

The article is devoted to the analysis of the Sarmatian burial complex from Kalmykia which yielded a bridle set, including a silver breast plate made of secondary used overlay of the neck guard of the helmet of Novo Mesto type which can be dated no earlier than the second quarter of the 1st century BCE, possibly the middle or second half of the century. In this connection the elements of the bridle set are analyzed to establish the date of the burial, which seems to be in frames of the second half of the 1st century BCE — early 1st century CE. The results of Pb-Pb isotope analyses of samples of the neck guard and one of the phalerae allow to suggest that the metal of the objects originate either from the Western Rhodope Mountains or from the deposits of Baia Mare ore district. In the case of the phalera the origin of the metal can be identified more reliably as the deposit of Eastern Rhodope mountains. Further discussed are the finds of iron helmets of the Eastern Celtic type in ritual hoards in the Lower Don and Kuban regions and those of late variants of the Novo Mesto type, coming from a cremation burial ground near the village of Mutin on the right bank of the river Seim.

Key words: Sarmatia, East Celtic helmets, secondary used neck guard of the helmet of Novo Mesto type.

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КОНСКАЯ СБРУЯ ИЗ КОЧЕВНИЧЕСКОГО ПОГРЕБЕНИЯ У СЕЛА ЯШКУЛЬ В КАЛМЫКИИ И ВОСТОЧНОКЕЛЬТСКИЕ ШЛЕМЫ ВОСТОЧНОЙ ЕВРОПЫ

Статья посвящена анализу сарматского погребального комплекса из Калмыкии, в котором обнаружен уздечный гарнитур, включающий серебряный нагрудник, изготовленный из вторично использованной накладки нашейника шлема новоместского типа, который датируется не ранее второй четверти I в. до н.э., возможно, серединой или второй половиной века. В связи с этим анализируются элементы уздечного гарнитура для установления даты погребения, которое, по-видимому, относится ко второй половине I в. до н.э. — началу I в. н.э. Результаты Pb-Pb изотопного анализа образцов нашейника и одного из фаларов позволяют предположить, что металл предметов происходит либо из Западных Родоп, либо из месторождений Бая-Маринского рудного района. В случае фалара происхождение металла можно более уверенно определить как месторождение Восточных Родоп. Далее рассматриваются находки железных шлемов восточнокельтского типа в ритуальных кладах на Нижнем Дону и Кубани, а также поздних вариантов новоместского типа, происходящих из кремационного могильника у села Мутин на правом берегу реки Сейм.

Ключевые слова: Сарматия, восточнокельтские шлемы, вторичное использование нашейника новоместского типа.

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Introduction

In the burial of a warrior in the KVCH-37 kurgan group near the village of Yashkul in Kalmykia (fig. 1, 4), a horse-harness set was found, including horse-bits, two phalerae and a neck guard of the helmet, re-used as a breastplate. The date of the burial is under discussion (Skripkin 2000: 22; Mordvintseva 2005: 186; Glebov et al. 2014: 79; Zasetskaya 2016: 96; cf. Otchir-Goriaeva 2002: 386; Ochir-Goriaeva 2019: 37—38), however, regardless of whether it should be dated to the late 1st century BCE or already to the 1st century CE, it is obvious that the elements of the horse bridle set under discussion date from no later than the middle or the second half of the 1st century BCE.

The details of the horse-harness were found all-together in one cache in the eastern wall of the grave pit, representing a small niche (60 × 35 cm) with flat arch 40 cm high, rectangular in shape, with a long side located along the wall of the pit (Ochir-Goryaeva, Lapa 2002: 202—203, figs. 2—5; Otchir-Goriaeva 2002: 359—363, figs. 5—8; Ochir-Goryaeva 2019: 7—16, figs. 4, 6—7, 10—12).

They include: an iron single-jointed bit mouthpiece with straight rod-shaped bit shanks decorated with gold foil inlays, with two rectangular loops, and with rounded ends, each of which is decorated with a hemispherical gold plaque with filigree and granulated decoration and a round inlay of blue stone (or lapis lazuli?) in the center, two flat gold rings, decorated on the front side with a row of depressed circles, two gold spoon-shaped tips of belts, two large gilded silver phalerae, decorated with curled images of a goat and a feline predator, a silver overlay of the helmet neck guard, which served as a horse breastplate and seven gold small round bridle plaques with inlays of carnelian and colored glass of various shapes made — one large in the center and six small ones around the circumference.

Horse bits

Iron bit shanks from Yashkul belong to the type of straight rod-shaped with rectangular protruding loops and round or disc-shaped endings (fig. 2) (Ochir-Goryaeva, Lapa 2002: 201, fig. 2; 202; Otchir-Goriaeva 2002: 357—360, figs. 6: 2; Ochir-Goryaeva 2019: 11—12, fig. 7; Voronyatov 2022: 382—383, fig. 10: 16).

Iron bit shanks with ends decorated with round (and sometimes hemispherical) gold plaques with images of curled-up predators decorated with polychrome stone, paste and glass inlays originate from the rich Sarmatian burials, in particular, in Sadovyy burial mound in Novocherkassk and burial mound no. 28 near the village of Zhutovo in the Volga-Don interfluve, the fact already mentioned by M.A. Ochir-Goryaeva, who noted that the closest analogies to the bit shanks date to the 1st century CE (Ochir-Goryaeva, Lapa 2002: 205; Ochir-Goryaeva 2019: 31—32).

According to Ochir-Goryaeva, “given their decorative principle, the plaques on the ends of the bit shanks from the Zaporizhzhya burial mound are the closest parallels to those from Yashkul. These plaques are much simpler, but, like the Yashkul ones, they have a hemispherical convex shape and are decorated with a nine-petal rosette” (Ochir-Goryaeva 2019: 32). This is not an entirely correct comparison, given the fact that bit shanks from the Zaporizhzhya kurgan show iron rounded ends overlaid with gold foil (Mantsevich 1976: 171, fig. 6; 182—183, no. 4), while the ends of the bit shanks from Yashkul are made completely of gold and are decorated with complex filigree and granulation as well as a round inlay of a blue-colored stone (lapis lazuli?) in the center (fig. 2: 3—7). From this point of view, they should rather be compared with the ends of the bit shanks (Mantsevich 1976, 183) (or the ends of the belts) from burial mound no. 1 near the Zubov Farmstead in the Trans-Kuban area (Gushchina, Zasetskaya 1989: 114, № 115; Voronyatov 2022: 382).

The next important point is the adornment of the front side of the bit shanks with inlays in the form of wide zigzags of gold foil (fig. 2). In a similar technique, but inlaid with narrow straight or wavy gold stripes, there are decorated iron bit shanks from a burial of the first half of the 1st century CE no. 1 in the burial mound no. 1/1995 of the Oktyabrsky-V cemetery in the Volga-Don interfluve (fig. 3: 1—4) (Mys’kov et al. 1999: 151, no. 20; 153, no. 55, fig. 5: 2. 3. 5; Kiyashko, Mys’kov

2000: 47, no. 20; 48, no. 55, fig. 8: 2; Arkheologicheskoe nasledie 2013: 111 (ill.), no. 224; Antipenko 2016: 92, 108, fig. 3: 5). An equally important parallel is a fragmented iron bit shank from the burial no. 1 in the kurgan no. 3/1997 of the Oktyabrskiy-II necropolis. The end of the bit shank with a rounded convex part has been preserved. The rod is decorated with mesh inlays formed by narrow straight stripes. The convex hemispherical ending is decorated with triangular gold plates, and the flat edge is decorated with a frieze in the form of a "running wave" of straight or S-shaped segments of narrow strips (fig. 3: 5—8) (Unpublished, mentioned: Mordvintseva, Khabarova 2006: 120).

Details of bridle bands

Seven small (diameter 3.7 cm) round gold bridle plaques are decorated with inlays of carnelian and colored glass of various shapes: one large in the center and six small ones around the circumference (fig. 4: 5—11) (Ochir-Goryaeva, Lapa 2002: 202, fig. 3; Otchir-Goriaeva 2002: 357, fig. 5; Ochir-Goryaeva 2019: 10, fig. 6). In the burial mound no. 1 near the Zubov Farmstead, 7 gold bridle plaques were found, showing with a similar composition of the location of the inlays and similar sheet loops on the rear (Dumberg 1901: 95, fig. 1; Mantsevich 1976: 183, 185, fig. 19: 1—7; Gushchina, Zasetskaya 1989: 114, no. 113, pl. XII; Anfimov 1987: 212 (fig. below); Kat. Hamburg 1993: 247, no. 161; Mordvintseva, Treister 2007: vol. 2, nos. B.13.6—7, pls. 9; 51; Voronyatov 2020: 281—287, figs. 1—2, 4; 2022: 381—382, fig. 10: 1—7; Cat. St. Petersburg 2020: 633, nos. 241.1—2). S.V. Voronyatov drew the attention on the similarity of these elements of the horse bridle sets from the burial mound near the village of Yashkul and the burial mound no. 1 near the Zubov Farmstead: among other things. They are brought together by the presence of seven bridle plaques (Voronyatov 2022: 381—384, figs. 10—11), and not six, as on the headbands from Sadovyy burial mound and burial mound no. 28 near the village of Zhutovo. What S.V. Voronyatov did not pay attention to is that also 7 gold bridle plaques 4.7 cm in diameter were found in burial no. 1/1984 near the village of Kosika in the Lower Volga region (Dvornichenko, Fedorov-Davydov 1993: 163, fig. 14; Fedorov-Davydov 2001: 117, pl. 31; 147, no. 10 (in the description there is erroneously mentioned, that four phalerae were found); Cat. Rome 2005: 133, no. 87), while the use of beaded wire, in particular for framing of soldered balls of granulation, brings the execution of these openwork plaques closer to the decoration of the ends of the bit shanks from Yashkul.

There is no reason to claim that the spoon-shaped pendants or belt tips, found in the burial complexes of Asian Sarmatia, are objects that migrants from the east brought with them from Southern Siberia (Mordvintseva 2011: 351; 2015: 117; Vlaskin et al. 2018: 61). In spite of visual proximity, the finds from the burials of Asian Sarmatia vary from the items from Southern Siberia and Transbaikalia, both regarding their construction and their manner of manufacture (Treister 2019b: 205—208; 2021: 93—94). A pair of gold spoon-shaped pendants or belt tips originating from the burial in Yashkul (fig. 4: 3—4) stands out both regarding their shape and in filigree decoration, while the teardrop-shaped cells were inlaid with paste or enamel (Otchir-Goriaeva 2002: 359, fig. 6: 3—4; 360; Treister 2019b: 205, 206, fig. 8: 5—6; 2021: 93, 112, fig. 5: 5—6; Voronyatov 2022: 382—383, fig. 11: 6).

Two flat gold rings, decorated on the front side with a row of depressed circles (fig. 4: 1—2) (Ochir-Goryaeva, Lapa 2002: 202; Otchir-Goriaeva 2002: 359, fig. 6: 1; 360; Voronyatov 2022: 382—383, fig. 10: 16), do not find exact analogies. A flat gold ring, decorated with eight inlays of turquoise in drop-shaped and oval cells, framed by a row of granulation, with a clip, was found in a burial mound near the village of Dachi in the outskirts of Azov (Cat. Tokyo 1991: 107, no. 115; Bespalyy 1992: 179, fig. 3: 2; 187, no. 9; Cat. Paris 2001: 212—213, no. 237; Gabuev 2005: 16, no. 6; Cat. St. Petersburg 2008: 96, no. 17; Kat. Leoben 2009: 217, no. 78; Brosseder 2011: 406, fig. 53: 6), but this ring belonged to a belt for carrying a sword, and not to a horse bridle.

Phalerae from Yashkul

The phalerae consisted of a bronze base (lost), overlaid with a gilded silver plate. In the center of the composition of one of the phalerae there is figure of a goat curled up in a ring in a low relief (fig. 5: 1—3); on the second phalera there is a feline predator (fig. 5: 4—6). The flat field in and around the figure is covered with rows of punched circles. A round medallion with a figure is outlined with a relief ridge covered with long arcuate (inner side) and oblique (outer side) notches. A row of short arc-shaped notches passes between them along the top of the ridge. This composition turns into a wide flat field, the edge of which is decorated by two incised lines. Behind them, along the very edge of the phalera, there runs a row of punched semicircles. On a flat field there are three pairs of rivets: two — opposite each other, one — at right angles to their axis. The rivets probably attached the plaque to the base (Otchir-Goriaeva 2002: 360—362, figs. 7; 9: 5—6; 379—382; Ochir-Goryaeva, Lapa 2002: 202, no. 4; Zasetskaya 2016: 90—105, fig. 1, pl. 1: д—е; 2019: 15—16, 23—31, 41, 47, 77, 78, 85, Ill. 8; 159—160, no. 69, pl. XXVIIa; Ochir-Goryaeva 2019: 12—15, 32—37, figs. 10—11 (here the phalera with the image of the goat is reproduced erroneously two times); Voronyatov 2022: 381—383, fig. 11: 4—5; Treister, Chugaev 2022: 92, figs. 14: 1; 15).

It has already been noted that the phalerae from Yashkul occupy an intermediate place between the two groups of phalerae: those of presumably Bactrian or Parthian workmanship, dating to the 2nd century BCE (group 1, according to the classification by I.P. Zasetskaya) and later phalerae, which became widespread in the North Pontic region from the late 2nd — early 1st century BCE, the phalerae of the so-called “Pontic graphic style” (according to the classification by V.I. Mordvintseva) or group 2 (according to Zasetskaya). With the first group the phalerae from Yashkul are united by the composition and construction (the presence of three loops), with the second group — by the size and filling of the background with a punched ornament (Mordvintseva 2005: 186—187; Zasetskaya 2016: 95—96; 2019: 29—30). At the same time, it should be noted that the filling of the background of the phalerae from Yashkul differs from the decoration in the form of punched dots or their rows, which are characteristic of the phalerae of group 2 and has no parallels on the other phalerae. I.P. Zasetskaya does not give an answer to the question about a possible center of the manufacture of phalerae from Yashkul (Zasetskaya 2016: 96; 2019: 31), nevertheless, it is obvious that probably the Sarmatian craftsman tried to reproduce the composition of the phalerae of Parthian (?) origin that he had before his eyes, while including in it the image of the nomadic animal style. Most likely, we can suggest their manufacture in the Lower Volga region or in the Kuban region, probably no later than the first half of the 1st century BCE. In particular, the circle-shaped framing decoration of the phalerae resembles the decoration of the edge of the phalerae (here in the form of bulges) with scenes of the tormenting of a goat from a secondary burial, discovered in 1899 in a burial mound near Cossack village Vozdvizhenskaya in the Kuban region (Mordvinceva 2001: 81, no. 85, pl. 47; Mordvintseva 2002: 157—161; Firsov 2010: 341, fig. 25; 342). At the same time, the possibility of manufacture of the phalerae in the Balkans or in the North-Western Pontic region cannot be ruled out, taking into account, among other things, the attribution of the breastplate of this horse-harness set (see below).

Neck guard of the helmet of the East-Celtic type

The breastplate of the horse set from Yashkul is a silver arc-shaped plate with a bronze rim along the edge, decorated with four large hammered M-shaped figures; a row of rivets runs along the outer and inner edges, the heads of the rivets are decorated with cross-shaped cuts on the front side, and the resulting sections — with parallel short cuts. The rivets along the edges are fixed in checkerboard pattern (fig. 6) (Otchir-Goriaeva 2002: 362—363, figs. 8; 9: 4; 370—372; Ochir-Goryaeva, Lapa 2002: 202, no. 5; 204, fig. 5; 205; Mihaljević, Dizdar 2007: 125—126; Raev, Simonenko 2009: 75—77, fig. 8: 1; Simonenko 2014: 264, fig. 11: 5; 265; 2015: 194, 195,

fig. 63: 5; Glebov et al. 2014: 79, 80, fig. 1: 3; 81; Ochir-Goryaeva 2019: 15—16, 25—27, figs. 1: 9; 12; Voronyatov 2022: 379—380, fig. 7; Treister, Chugaev 2022: 92—93, figs. 14: 3; 16).

This plate, showing traces of repair, originally represented an overlay of the neck guard of a helmet of the of the late group of East-Celtic (or Novo Mesto) type, the main finds of which originate from the territory of Slovenia (Schaaf 1988: 304—307; Mihaljević, Dizdar 2007: 123—128, map 2). The production of helmets of the late group confidently correlates with the territory in the valleys of the Sava, Drava and Mura rivers, inhabited by the Celtic Taurisci tribes (Guštin 2008: 118—121; 2011: 126—127). It is assumed that, based on the chronology of the late group of East Celtic type helmets found in burials of the La-Tène D2 period, this helmet (or the neck guard of the helmet) could reach Sarmatia earlier than the middle of the 1st century BCE (Glebov et al. 2014: 82: basing on the dating cited by Istenič 2010: 140—142), at the same time, Glebov and co-authors do not take into account the following. At present, the end of the La-Tène D1 period is dated, in any case, no later than 50/40 BC (Haffner 1974: 69; Karwowski 2004: 64–65; Rieckhoff 2008: 5–7; 2018: 173–198; Stöckli 2018: 209; all with bibliography) or, especially most recently, even to 85—80 BC (Rieckhoff 2008: 7—10, fig. 7; 2018: 187—190, figs. 4—5; Metzler, Gaeng 2009: 456—458, figs. 402—403; Stöckli 2018: 209—233). An intermediate solution — ca. 60 BCE — was also proposed (Brandt 2001: 66—67). Thus, we cannot exclude the dating of the helmet, to which the neck guard from Yashkul belongs, also to the second quarter of the 1st century BC.

Results of Pb-Pb isotope analyses

The metal of one of the phalerae and the helmet neck guard was analyzed. The epithermal deposits of eastern Rhodope Mountains and deposits of the same genetic type of Baia Mare ore district, located within the Inner Eastern Carpathians are equally likely to be the source of silver for these items. In the case of the phalera the origin of the metal can be identified more reliably, as the deposit of Eastern Rhodope mountains (Treister, Chugaev 2022: 97—99, figs. 24—26).

Conclusions

A horse bridle set from Yashkul represents a combination of a secondary used item of Western origin (a fragment of an Eastern Celtic helmet (fig. 6)) and the products of local craftsmen. As for the large phalerae (fig. 5) — it is obvious that probably the Sarmatian craftsman tried to reproduce the composition of the phalerae of Parthian (?) origin that he had before his eyes, while including in it the image of the nomadic animal style. Most likely, we can suggest their manufacture in the Lower Volga or in the Kuban region, most probably no later than the first half of the 1st century BCE. As shown above, the breastplate was made from a helmet neck guard overlay, which can be dated no earlier than the second quarter of the 1st century BCE, possibly the middle or second half of the century.

Small bridle phalerae (fig. 4: 5—11) are unique, but even they find even distant parallels among the bridle plaques from the burial mound no. 1 near the Zubov Farmstead in the Trans-Kuban region. In principle, an undoubted connection may be traced between the sets of horse bridles from these two complexes. A detailed analysis of various finds from the burial mound no. 1 near the Zubov Farmstead makes it possible, in my opinion, to fairly confidently date this complex within the second half of the 1st century BCE, hardly later than the last quarter of this century (Gushchina, Zasetskaya 1989: 87; Shchukin 1992: 108; cf. Voronyatov 2022: 385—386). It is also obvious the connection between the rendering of the endings of the bit shanks and the bridle plaques from Kosika, a complex that can be synchronous or somewhat earlier (third quarter of the 1st century BC), than the burial near the Zubov Farmstead. Only the parallel of the rendering of the bit shanks from Yashkul with those an analogy from the complex from the Oktyabrsky-V cemetery (fig. 3: 1—4), including a glass skyphos, and dated in frames of the first half of the 1st century CE may indicate that this bridle complex took its final shape at the turn of the eras or in the very first

decades of the 1st century CE (Treister 2019a: 401). Signs of repair of one of the bridle plaques, in which the loop for fastening was lost (fig. 4: 5), may testify in favor of a certain duration of its use.

As for the helmet of the Novo Mesto type, the overlay of the neck guard of which was used as a horse breastplate, the finds of iron helmets of the Eastern Celtic type in ritual hoards in the Lower Don region (burial mound no. 18 of Tsarskiy cemetery (figs. 1: 3; 7) (Glebov et al. 2014: 77—78, 80, fig. 1: 1; 2020: 355—365, figs. 1—4; Simonenko 2015: 193, 195, fig. 63: 2)) and the Kuban region (burial mound no. 1 of Boykoponura cemetery (figs. 1: 2; 8) (Raev et al. 1990: 121, 126—127, fig. 41; Raev et al. 1991: 476, fig. 10; Treister 1992: 41—42, fig. 8; Marchenko 1996: 67—68, fig. 105: 2; Cat. Paris 2001: 160, no. 158; Glebov et al. 2014: 78—80, fig. 1: 2; Simonenko 2014: 262, 264, fig. 11: 1—3; 2015: 193, 195, fig. 63: 1; Kazakevich 2015: 193—194)) should also be noted. These helmets dating to the late 2nd — the first half of the 1st centuries BCE, presumably were acquired by the nomads during the Mithridatic wars (Glebov et al. 2014: 82; 2020: 375—376). V.P. Glebov and co-authors find it difficult to determine when and during which events the helmet, the neck guard of which was reused in Yashkul, should be associated (Glebov et al. 2014: 82). In my opinion, this could very likely have happened as a result of the Asia Minor campaign of Pharnaces of Bosporus in 47—46 BC, in which, as I assumed, the Sarmatian chieftain buried in Kosika also participated (Treister 2005a: 223—240; 2005b: 322—330). This option is also correlated with the chronology of the late group of helmets of the Novo Mesto type.

Five helmets of late variants of the Novo Mesto type come from a cremation burial ground near the village of Mutin on the right bank of the river Seim (fig. 1: 1) (burials nos. 4, 5, 8A, 12, and 13). In two cases (burials nos. 8A, 12) they were used as urns inserted into ceramic vessels. The cheek-pieces and neck guards of the helmets from the burials nos. 12 and 13 are adorned with ornamental decoration in relief (Terpilovskiy, Zharov 2018: 142—143; Terpilovskij 2014: 333. — Burial no. 8A: Terpilovskiy, Zharov 2013: 412, fig. 2: 1; 413; 2018: 139, fig. 3: 1; Terpilovskij 2014: 333, 342, fig. 8: 1; Terpilovs'kiy 2019: 7, figs. 3: 1; 9. — Burial no. 5: Terpilovskij 2014: 333, 341, fig. 7: 1). In the case of the helmets from the Mutin burial ground, there is every reason to assume the possible origin of the warriors buried there between the middle of the 1st century BCE and the beginning of the 1st century CE, probably around the turn of the eras, from the region of Lower Saxony (Treister 2021: 191—197). In this regard, it is also necessary to recall the only helmet of this type found in Poland — from the burial no. 25 of the Siemiechów cemetery (Jażdżewska 1986: 71—72, figs. 10—11; Łuczkiewicz 2009: 83—84, fig. 4; 2012: 122—123, fig. 12).

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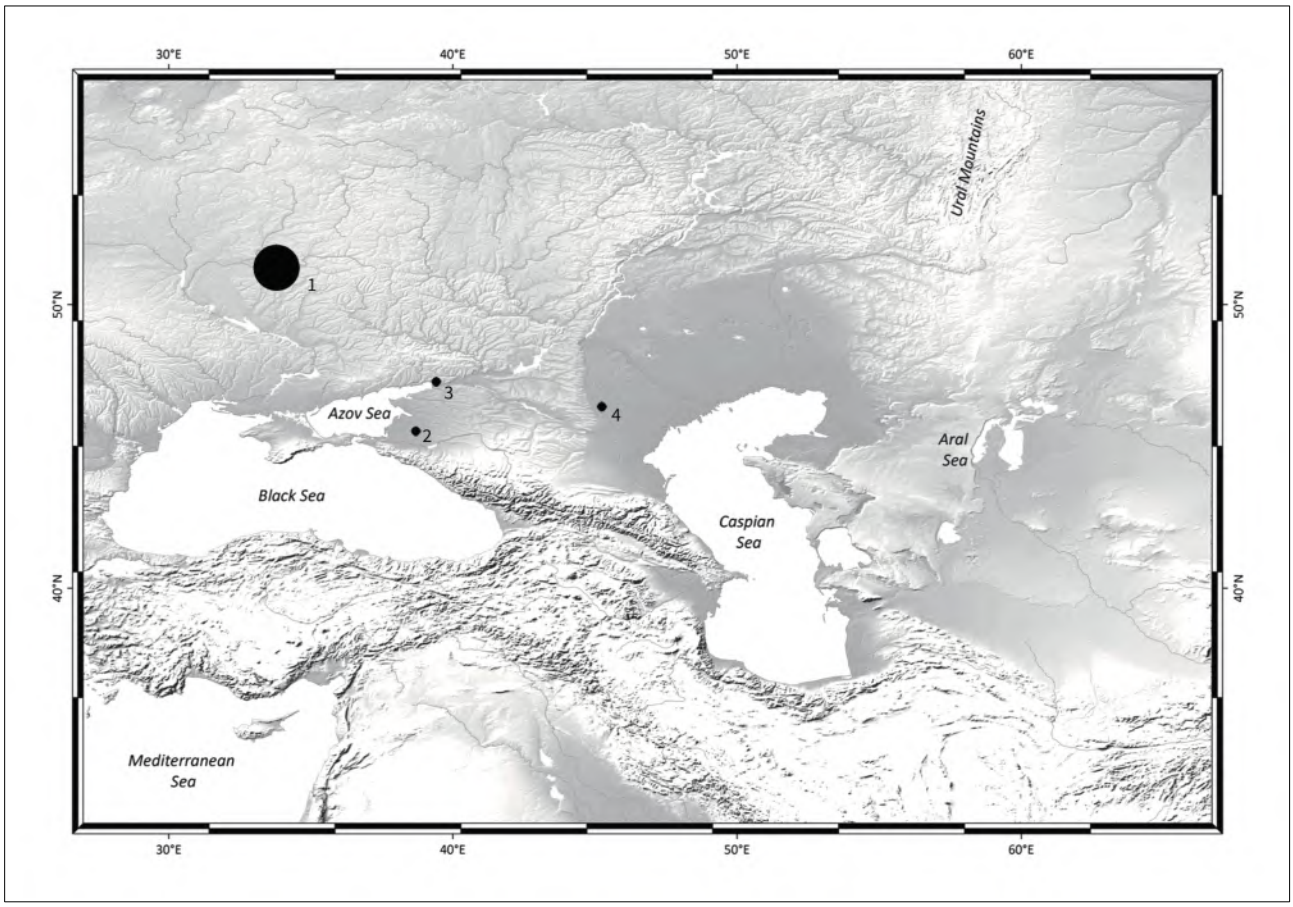

Fig. 1. Finds of helmets of Eastern Celtic types and their elements in Eastern Europe. *1* — Mutin, *2* — Boykoponura, *3* — Tsarskiy; *4* — Yashkul. Map, M. Treister, 2023.

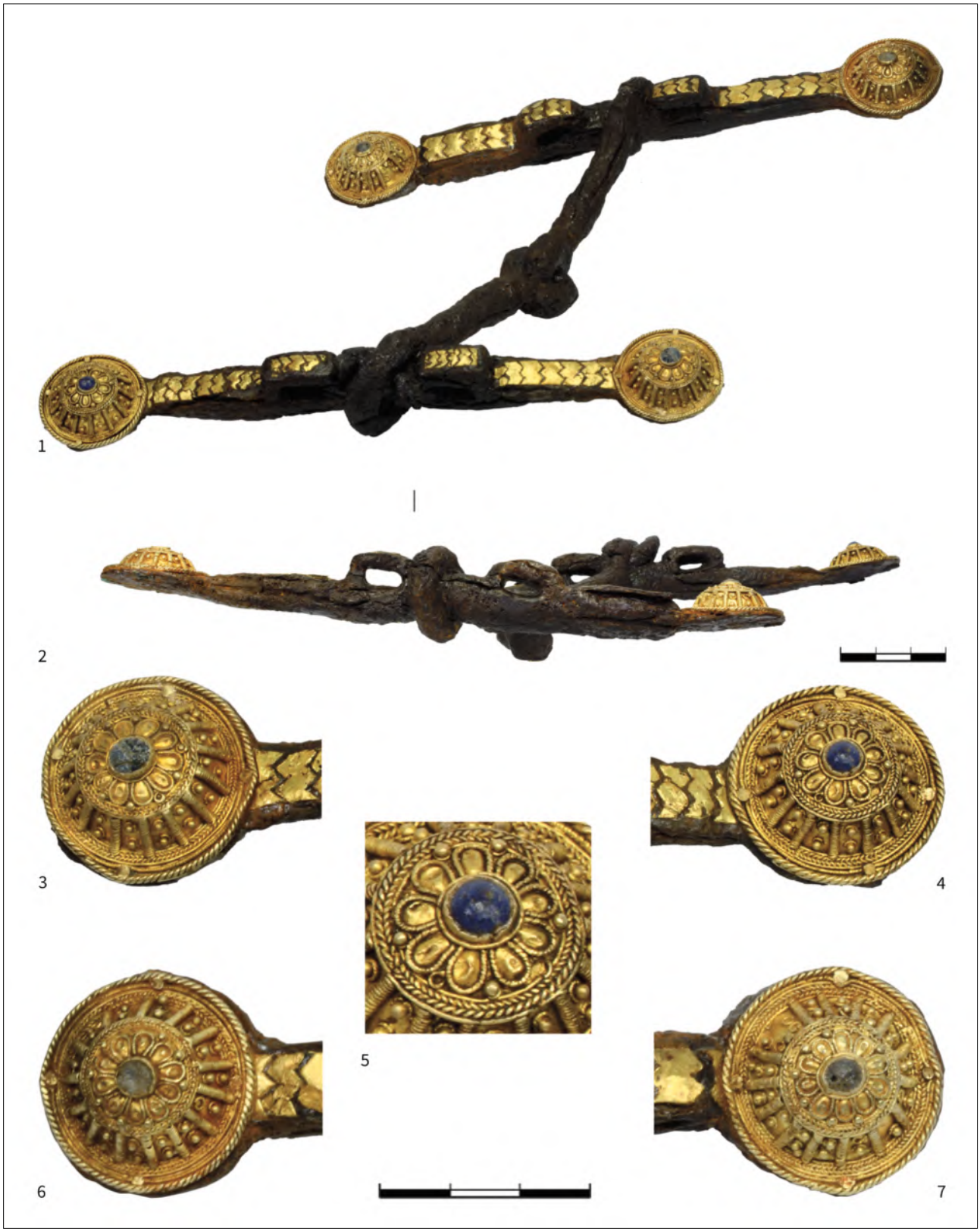

Fig. 2. Horse bits. General views and details. Yashkul. Burial mound no. 1/1988, burial no. 1. Elista, National Museum of Kalmykia, inv. no. КП 7653/12. Photos by M. Treister, 2015.



Fig. 3. Iron bit shanks with gold inlays. Volgograd, Volgograd Regional Local Lore Museum. *1—4* — Oktyabr'skiy-V. Burial mound no. 1/1995. Burial no. 1. General views and details, инв.-№ 30200/34; *5—8* — Oktyabr'skiy-II. Burial mound no. 3/1997. Burial no. 1. General views, inv. no. 31507/59. Photos by M. Treister, 2015.



Fig. 4. Elements of horse bridle. General views. Yashkul. Burial mound no. 1/1988, burial no. 1. Elista, National Museum of Kalmykia. *1—2* — inv. no. КП 7653/1—2; *3—4* — inv. no. КП 7653/3—4; *5—11* — inv. no. КП 7653/5—11. Photos by M. Treister, 2015.

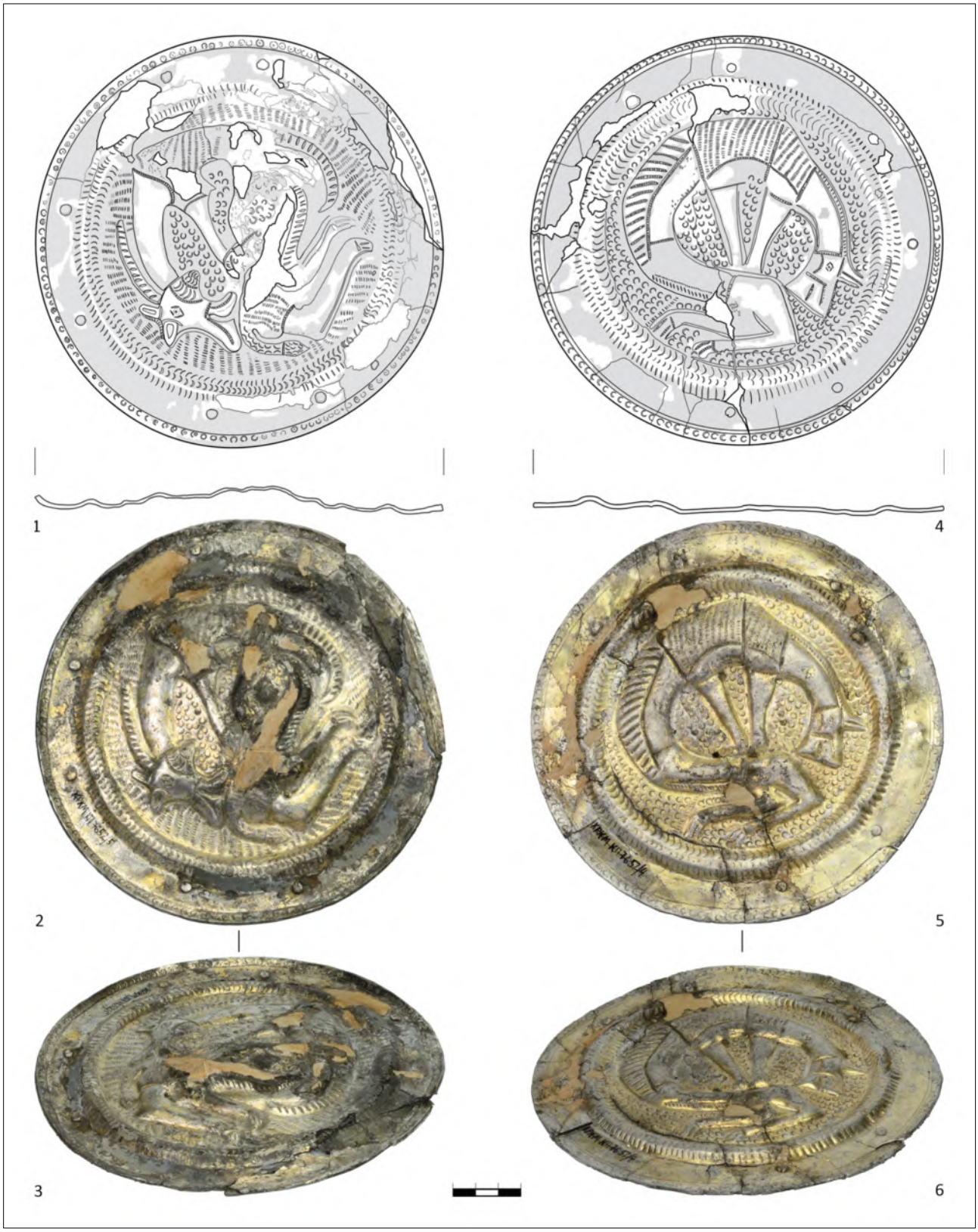

Fig. 5. Silver-gilt phalerae and breastplate of horse-harness. General views. Yashkul. Burial mound no. 1/1988, burial no. 1. Elista, National Museum of Kalmykia. *1—3* — inv. no. КП 7652/5; *4—6* — inv. no. КП 7652/4. 1, 4 — drawings by N. Bespalaya, 2015; 2—3, 5—6 — photos by M. Treister, 2015.

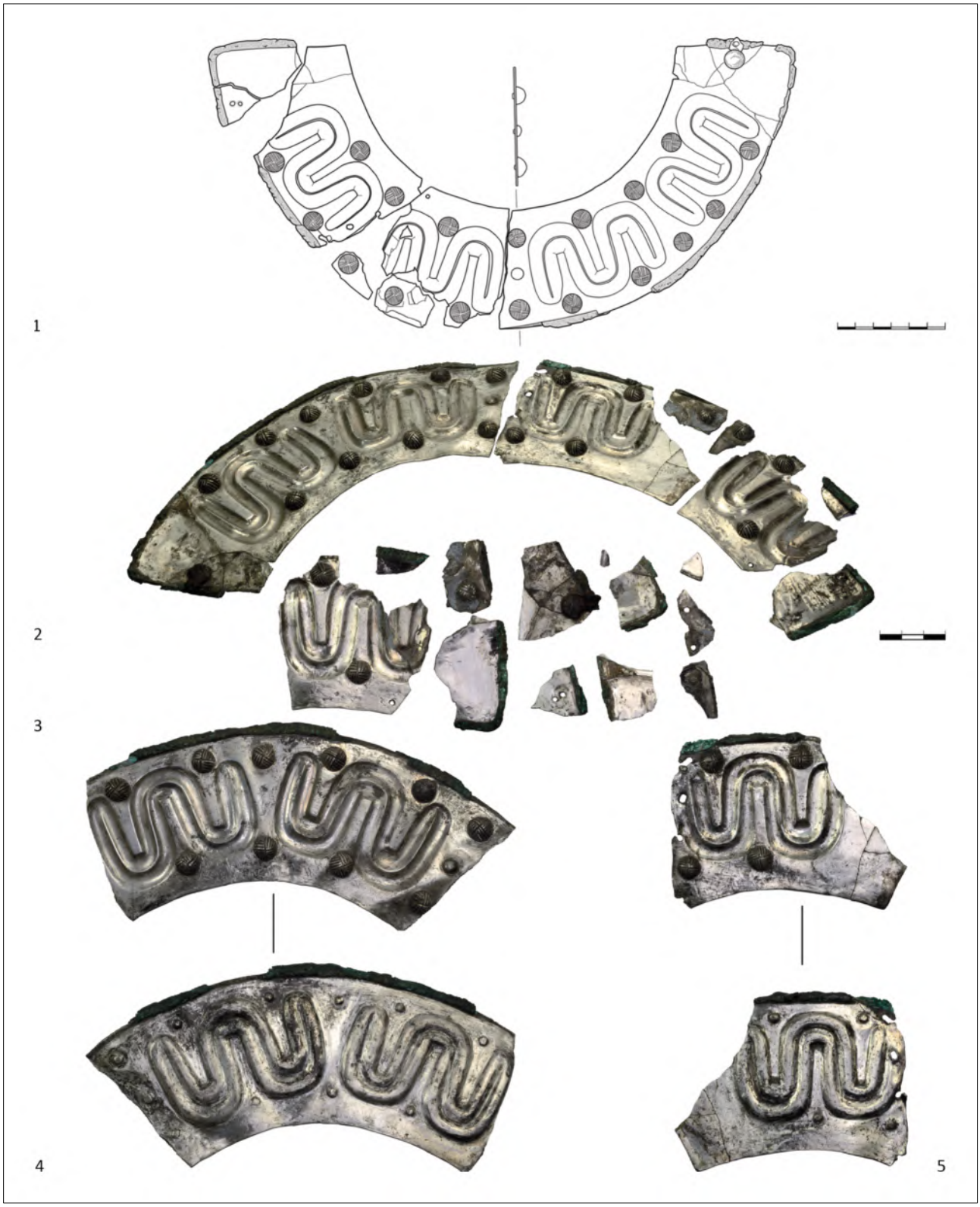

Fig. 6. Silver breastplate of horse-harness. General views and details. Yashkul. Burial mound no. 1/1988, burial no. 1. Elista, National Museum of Kalmykia, inv. no. КП 7652/3. 1 — drawing by N. Bespalaya, 2015; 2—5 — photos by M. Treister, 2015.



Fig. 7. Iron helmet of East Celtic type. General views. Tsarskiy. Burial mound no. 18/2011. Azov, Historical-Archaeological and Paleontological Museum-Reserve, inv. no. КП-31042/254. Photos, Azov, Historical-Archaeological and Paleontological Museum-Reserve.



Fig. 8. Iron helmet of East Celtic type. General views. Boykoponura. Burial mound no. 1/1973. Krasnodar, State Historical-Archaeological Museum-Reserve named after E.D. Felitsyn, inv. no. F2 6332/1. 1—3, 5 — after Raev et al. 1991, 476, fig. 10, Taf. 29; 4, 6 — after: Cat. Paris 2001, 160, no. 158.