## FINDS OF METAL ELEMENTS OF ROMAN MILITARY COSTUME AND HORSE-HARNESS IN THE NORTH PONTIC AREA

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Metal details of Roman military costume and horse-harnesses form an extremely rare category of finds in the North Pontic area. In view of this, all new finds throw additional light on the problem of the Roman military presence in this region and on contacts between the area and the Roman empire (see in general: Tsvetaeva 1979; Kadeev 1979; 1981; Shelov 1981; Karvshkovskij/Klejman 1985, 99-124; Sarnowski 1988; Vinogradov 1990; 1992; Son 1993, 12-41; Zubar 1988; 1994a; 1995a; 1995b; 1997b). Archaeological monuments reflecting the Roman military presence in the area have become a theme of special interest only in recent years. In the main, finds of arms have been published, primarily the bone sword sheath endings from Tyras (Chernenko et al. 1989; Rolle et al. 1991, No. 167; Son/Nazarov 1993, 120-1, figs. 1-2; Vinogradov/Nazarov 1994, 104-6, fig. 1, 2-3) and Olbia (Rolle et al. 1991, No. 168; Son/Nazarov 1993, 121-2, figs. 3-4; Vinogradov/Nazarov 1994, 104-5, fig. 1, 1), as well as arms (details of a sword, spearheads, armour, helmets and *lorica hamata*) and details of military costume from the sanctuary at the Gurzuf Pass (Zubar 1993; Treister 1994, 96-7, fig. 3; Novichenkova 1998, 51-67), helmets from the Kuban basin (Raev et al. 1991, 491-2, No. 11; Treister 1994, 94-5, fig. 1, pl. 1b) and from Sochi on the North Caucasian Black Sea coast (Sudarev 1991; Treister 1994, 95-6, fig. 2). Two rare finds at Panticapaeum of bronze details of military costume have already attracted my attention: the detail of the cingulum or, more correctly balteus (Bishop/Coulston 1993, 96) buckle of the mid-1st century AD (Treister 1993a; 1994, 91-3, pl. 1a; 1995, 162-5, fig. 1, 3-4) and the belt plaque dated to the 2nd-3rd centuries AD (Treister 1993a; 1994, 98-9, fig. 4, 7; 1995, 180-1)<sup>1</sup>. At present I can complete the list

<sup>&</sup>lt;sup>1</sup> To the parallels already mentioned with the plaque from Panticapaeum, originating from Carnuntum, it is necessary to add that the subject, a dog hunting a bird, is also represented on open-cast knife handles from Belgium and Luxemburg (Faider-Feytmans 1979, Nos. 256-8, pl. 102). I would add the recently published plaque from the Augustan camp near Musov in Moravia (Balek/Sedo 1996, 406-7, fig. 7, 3) to the finds of *cingulum* plaques of the type found in Panticapaeum.

with one more find from the territory of the Bosporan Kingdom, as well as with finds from Chersonesos and Tyras.

That from Tyras has already been published and identified as the decoration of a horse-harness of the Provincial-Roman type (Klejman/Son 1983, 54-5, fig. 5). However, the parallels mentioned in the publication (one from Romania and one from Hungary) are insufficient. The plaque from Tyras has an exact parallel, perhaps cast in the same mould, originating from Bötzming (Oldenstein 1976, pl. 69, No. 902). Very similar finds come from Dura-Europos (Frisch/Toll 1949, pl. I, 2) and Thrace (Cat. Sofia 1984, No. 352). A similar plaque dated to the mid-2nd century AD is kept at the Seattle Museum (Mittens/Doeringer 1967, No. 314a). The plaques of that type, executed in the same technique and style (see below), originate also from fort Zugmantel in Taunus (late 2nd-first half of the 3rd century AD: Oldenstein 1976, pl. 87, No. 1131; Junkelmann 1992, 84, fig. 95; Jobst 1992, 186), Dura-Europos (Frisch/Toll 1949, pl. I, 1, 3), and the Lower Danube region (Simion 1995, 221, fig. 5, 5; 223).

One of the artefacts (Fig. 1, 1), although published a long time ago, has never been discussed in this context. This bronze object was found in the debris level of the necropolis of Chersonesos in 1908 (Repnikov 1927, 149). Among copper finds a 'lamellar pendant' was mentioned (CR St Petersburg 1908, 105, fig. 117; Repnikov 1927, 184, fig. 50). Given its shape, this is a horse-harness pendant, characteristic of 1st century AD Roman cavalry equipment, especially from the time of Tiberius to that of Nero. Such pendants, called 'Dreiblattanhänger' or trefoil pendants because of the tripartite composition of their lower part, were quite widespread, especially from southern England to France and the Rhine basin, but quite rare in Central Europe and the Mediterranean (see, for example, Bishop 1988, 96, 142-4, figs. 43-4, type 1; Bishop/Coulston 1989, 38, fig. 26, 8; Deschler-Erb 1991, 30-1, figs. 19-20; 66-7, Nos. 59-62, fig. 44; 1998, 115-22; 1999, 53-4, 166, Nos. 529-34, pl. 26; Unz/Deschler-Erb 1997, 39-40, Nos. 1380-92, pl. 51). The shape of these pendants probably goes back to the type of lunula with additional central pendant (Bishop 1987, 118-9, fig. 6; 1988, 96; Deschler-Erb 1999, 53). Trefoil pendants, richly decorated with silver encrustation and niello, originate from Doorwerth in the Lower Rhine area and from Xanten. They were hung from phalerae. These finds are securely dated to the mid-1st century AD (Bishop 1987, 118, fig. 5, 4; Junkelmann 1992, 78, figs. 85-6; 80, figs. 88, 90; Deschler-Erb 1999, 55). A similar pendant originates from the early fort of Hofheim in Taunus (Ritterling 1913, pl. XII, 37). It is noteworthy that lunulae with additional central pendants were found primarily in Roman camps in the Lower Rhine basin (Haltern, Asciburgium, Mainz, and Vechten) and southern England (Dorchester). The single find in Pannonia (Aquincum) is associated with the movement to the Danubian lands of Roman legions stationed on the Rhine in the late 1stearly 2nd century AD (Szirmai 1994, 407-9, figs. 4-6). However, a similar

pendant originates from fortress Carnuntum (Stiglitz 1987, 215, pl. 5, 2). Lunulae with holes for a central pendant are also known from 2nd-3rd century AD sites along the *limes* of Upper Germany and Raetia (Oldenstein 1976, pl. 44, Nos. 438, 441; pl. 45, Nos. 442, 445, 446, 449). In the North Pontic area only one find of such a fragmented bronze lunula with a rectangular hole is known (Fig. 1, 2: Gushchina/Zasetskaya 1994, 70, pl. 46, No. 433) – it was unearthed in barrow mound No. 41 near Ust-Labinskaya in the Kuban basin. It is securely dated after the find of a bronze strainer of the type Eggers 160 (Gushchina/Zasetskaya 1994, 69, pl. 47, No. 430) to the late 2nd-first half of the 3rd century AD (about finds of these vessels in the North Pontic area, see Guguev/Trejster 1992, 247, note 4). The find in the Sarmatian burial in the Kuban may be considered as a trophy taken in battle with Roman cavalry<sup>2</sup>.

However, much more modest bronze articles of the same type are also known, for instance the pendants from Servian in the Languedoc (Depeyrot *et al.* 1986, 156, fig. 55b, 7) or from Southwark in south-eastern England (Hammerson/Sheldon 1987, 169, pl. 2), comparable with the pendant from Chersonesos. In Southwark the pendant was found in the vicinity of a building erected in 74 AD (date from dendrochronology). Also found there was a coin of Nero, overstruck with Vitellius, dated to 69 AD (Hammerson/Sheldon 1987, 171-2). Similar bronze pendants in Magdalensberg originate from a context dating to the Claudian period (Deimel 1987, 312-3, pl. 83, 2-3).

The pendant found in Chersonesos is of special interest when related to data concerning the presence of Roman troops thereabouts. Chronologically, it corresponds closely to the presence in Taurice of Roman troops under the command of Tiberius Plautius Silvanus, most probably between 63 AD and

<sup>&</sup>lt;sup>2</sup> In connection with the find from Ust-Labinskaya, I must direct attention to one more find associated with Roman military equipment from the excavations of the socalled 'Golden Cemetery', namely a bronze cast top-pole in the shape of a boar's head, its eyes encrusted with green glass, threaded on a wooden rod (Gushchina/Zasetskaya 1994, 34, note 9; 58, pl. 29, No. 269). It was found in a rich warrior burial of the late 1st-2nd century AD in the barrow mound No. 15 near Tifliskaya (Gushchina/Zasetskaya 1994, 37, note 10; 40). Following V.V. Kropotkin (1970, 124), I.I. Gushchina and I.P. Zasetskaya (1994, 40) maintain that the top-pole is a "sign of a Roman standard", while the deceased is considered to belong to warriors "having some connections with the Roman army". It is clear from the context that the authors consider the warrior to have been a Roman ally, one of the leaders of a military association "which was established by the Romans from the local barbarian tribes" on the right bank of the Kuban river. According to Gushchina and Zasetskaya, finds in the burial of expensive bronzeware and silverware of Roman origin speak in favour of this hypothesis. However, standards with top-poles did not come into use with the Roman cavalry until the Antonine period. Analysis of a passage from Arrian (Techne Taktike 35.1-5) and images of such standards indicate that, most probably, the Romans adopted them from the Dacians and Sarmatians, and always decorated them with the head of a wolf or with a snake (Coulston 1991). Thus, although the top-pole from Tifliskaya had surely served as a standard, there

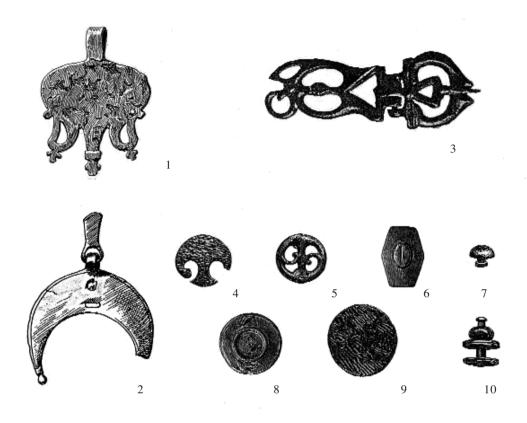


Fig. 1. Metal details of Roman military costume and horse-harness from the North Pontic area:

- 1. Chersonesos, excavations of necropolis, 1908 (After Repnikov 1927, 184, fig. 50).
- 2. Barrow No. 42 near Ust-Labinskaya, excavations of 1902 (After Guschina/Zasetskaya 1994, 70, pl. 46, No. 433).
- 3. Chersonesos, barrow No. 528, excavations of 1894 (After CR St Petersburg 1894, 74, fig. 107).
- 4-10. Chersonesos, barrow No. 492, excavations of 1894 (After CR St Petersburg 1894, 68, figs. 94-100).

66 AD (Zubar 1988; 1994a, 26-9). It may be supposed that this army included soldiers of marine infantry from the ships of the Ravenna squadron (Zubar 1988, 22-3; 1994a, 27). What do we know about the participation in the campaign of cavalry, particularly troops transferred from the Lower Rhine or Britain, given the parallels with the pendant from Chersonesos? Given the gravestones of soldiers and veterans from Aquileia, Emona, Virunum, Celeia and Poetovio (Oldenstein-Pferdehirt 1984, 397-9, fig. 2), the participation in T. Plautius Silvanus' expedition of soldiers of the VIIIth Augustan legion (Sarnowski 1988, 29), based in Illyria from the early 1st century AD onwards, is more or less certain. The participation of that legion in Claudius' British campaign of 43 AD – a possibility suggested by some scholars – is still an open question which cannot be resolved decisively with our current knowledge (Oldenstein-Pferdehirt 1984, 398-400). However, in 45 AD the legion formed a part of the troops in Moesia, given the inscription of Quintus Cornelius Valerianus (CIL II, 3272). Most probably, the legion was stationed at Novae before 69 AD (Oldenstein-Pferdehirt 1984, 400-2).

Some scholars have suggested that in the last third of the 1st century AD Roman troops were moved from Taurice to the Danubian provinces to strengthen the army in Moesia. There are no sources which may be securely associated with the presence of a Roman garrison in Chersonesos, as V.M. Zubar maintains (1994a, 29), but he does not exclude the possible presence of Roman troops in the Crimea in the 80s AD, commenting on the hypothesis of A.M. Gilevich (1965, 106-7) linking the Pribrezhneskij treasure of Roman coins with a Roman military expedition. Other scholars, like V.I. Kadeev (1981, 24) for instance, suggest that under the rule of Domitian Roman troops had not been moved from Taurice – proved to his satisfaction by the finds of Roman coins in Chersonesos and Charax (cf. Zubar 1994a, 29). Later on, the presence of a Roman garrison in Chersonesos is fixed for a comparatively short period after the end of Trajan's Dacian Wars and the establishment of the province of Dacia (Zubar 1994a, 34-7) up to the 130s AD, when a vexillatio, composed of soldiers of the I Italic legion, II Lucensian, and III Gallian cohortes, was stationed in Chersonesos. However, the pendant could hardly belong to this period. Furthermore, the building remains associated with the activity of the Roman garrison in Chersonesos are dated to a period not earlier than the mid-2nd century AD (Zubar 1994a, 44-9).

In 1894, in burial No. 528 of the Chersonesos necropolis, a bronze buckle with an open-worked plaque was found (Fig. 1, 3: CR St Petersburg 1894, 74, fig. 107; Minns 1913, 507, fig. 339). There is an almost exact parallel to it in the 2nd century AD buckle from Newsted, a fort on Hadrian's Wall (Bishop/Coulston 1989, 46-7, fig. 35, 4; 1993, 120, fig. 80, 5: Antonine). Noteworthy is the fact that buckles with such plaques have not been identified by J. Oldenstein (1976) from forts of the Upper German and Raetian *limes* of the 2nd-3rd centuries AD.

A complete set of details of belt decoration was found in tomb No. 492 at

the Chersonesos necropolis, also in 1894: "a big bronze fibula, a damaged bronze belt buckle, and 24 bronze buttons of various shapes and sizes, which had probably decorated the belt" (CR St Petersburg 1894, 68). Regrettably, the report reproduced neither the fibula nor the buckle, and only seven of the 24 plaques (Fig. 1, 4-10: CR St Petersburg 1894, 68, figs. 94-100) – however, even these drawings give enough data for certain comparisons.

The pelta-shaped plaques (Fig. 1, 4: type 'einfache Peltenbeschläge' – Oldenstein 1976, 178-82; CR St Petersburg 1894, 68, figs. 94-9 above left) have numerous parallels in the second half of the 2nd-3rd century AD along the *limes* in Upper Germany and Raetia, including those from Niederbieber, Holzhausen, Zugmantel, and Saalburg (Oldenstein 1976, pl. 53, Nos. 622-39), as well as in the territory of modern France and England (Boucher 1971, Nos. 855-6; Oldenstein 1976, 179, notes 591-2; Lloyd-Morgan 1987, 90, pl. IIa). Such plaques were also used to decorate horse harnesses (Palági 1995, 405, fig. 3, 10).

The open-worked plaque with a vertical axe and two spiral scrolls (Fig. 1, 5: type 'Doppelte Peltenbeschläge' – Oldenstein 1976, 185; CR St Petersburg 1894, 68, figs. 94-9 above right) finds exact parallels in Saalburg (Oldenstein 1976, pl. 55, No. 674) and Dura-Europos (Frisch/Toll 1949, pl. XVI, 152). Such a plaque, but much larger, originates from Marienfels (Oldenstein 1976, pl. 90, No. 1165).

The hexagonal plaque with *vulva* (Fig. 1, 6: CR St Petersburg 1894, 68, figs. 94-9 middle) has an exact comparison in Saalburg (Oldenstein 1976, pl. 34, Nos. 269-70). Oldenstein, who dated such finds from the mid-2nd to the 3rd century AD, mentions that such plaques are extremely rare across the fringes of Gallia and Germania, listing the finds at Nijmegen, Heddernheim, Mainz, Novaesium, etc. (Oldenstein 1976, 137-9). Recently, however, a catalogue of such plaques was published by M. Gschwind (1998, 128-30), who dates them to the 270s AD at the latest (Gschwind 1998, 115); the catalogue includes 56 finds of known provenance: Britannia Inferior, 7; Britannia Superior, 3; Belgica, 4; Lugdunensis, 2; Germania Inferior, 11; Germania Superior, 12; Germania Magna, 6; Raetia, 3; Italia, 1; Noricum, 1; Pannonia Superior, 4; Pannonia Inferior, 1; and Dacia, 1.

Rivets with hemispherical knobs in the upper part, of the type shown on figs. 94-9 below middle (Fig. 1, 7: CR St Petersburg 1894, 68), occur in warrior burials of the second half of the 2nd-3rd century AD on the Rhine and the Danube (Oldenstein 1976, 169), for instance in the cemetery at Regensburg (von Schnurbein 1977, pl. 91, 7; 166, 20-1), in Saalburg (Oldenstein 1976, pl. 46, No. 487), Urspring (Oldenstein 1976, pl. 46, No. 488) and Feldberg (Oldenstein 1976, pl. 46, No. 489).

The circular plaque with a concentric rim (Fig. 1, 8): CR St Petersburg 1894, 68, figs. 94-9 below right) has parallels among finds from Rückingen and the Saalburg (Oldenstein 1976, pl. 85, No. 1120), Zugmantel

(Oldenstein 1976, pl. 86, No. 1122), Gallia (Boucher 1971, No. 835), and Dacia (Petculescu 1995, 129, pl. 3, 2-4; 135, pl. 7, 6).

The above analysis indicates that it is most likely that the belt decoration from burial No. 492 of the Chersonesos necropolis belonged to a warrior who had previously served in Gallia or on the limes in Germania, not earlier than the mid-2nd century AD and most probably in the 3rd century AD. It is known that soldiers of the V Macedonian legion were quartered in Chersonesos about the middle of the 2nd century AD. They were gradually sent away and the garrison was completed by forces of the I Italic legion and, from the late 2nd century AD, by those of the XI Claudian legion. which had several subordinate *cohortes* of auxiliaries (the I Cilician, the I Bracars, and I Ala Atectorigiana: Zubar 1994a, 57; 1995b, 192-203; 1997b, 107-8; Savelya/Sarnowski 1999, 42-5; Zubar et al. 1999, 214-7). Based on the find in Chersonesos of a fibula belonging to the type spread through the limes of Upper Germany and Raetia, Zubar (1994a, 89-90) has already suggested that the garrison of Chersonesos included Thracians<sup>3</sup> and soldiers born in the western provinces (or soldiers who had served there prior to their transfer to Taurice). Analysis of the details of belt decorations from burials

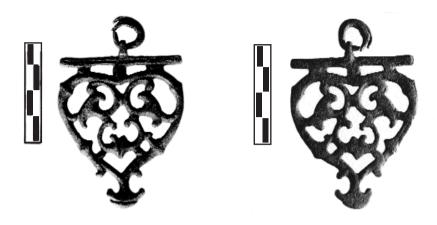
<sup>&</sup>lt;sup>3</sup> It is maintained that a considerable number of soldiers of Thracian origin served in the Roman garrisons not only of Chersonesos but also of Charax, Tyras, and Olbia (see, for example, Zubar 1994a, 88). In this connection one find from Olbia attracts attention. In 1985 a fragmented bronze statuette of a rider was found in trench R-25 (Krapivina 1993, 86, fig. 89, 4; 133). According to Krapivina (1993, 133-4), it represented a general or an emperor. It was dated by its context to the 2nd-3rd centuries AD and most probably found its way to Olbia "with a Roman garrison sent there". Exact parallels to this statuette are unknown, according to Krapivina. Bronze statuettes similar to the Olbia find were extremely widespread in Thracian settlements of the first centuries AD, and are dated primarily to the 3rd-4th centuries AD (Ognenova-Marinova 1975, 19-20; Kanceva 1988, 412; Vassilev 1994, 434). However, rare finds are also known from Dacia (Marinescu 1995, 292-3, fig. 2a). They served as votives to the Thracian rider god. The details of the decoration of some of the figurines—for instance a quiver, or a wreath, chlamis or patera in a hand-enable them to be attributed as images of Apollo (Ognenova-Marinova 1975, Nos. 17-25; Kalcev 1988, 408, No. 14, fig. 14). Among other figurines, for instance those in the Archaeological Museum, Sofia, L. Ognenova-Marinova (1975, Nos. 27-8) singles out a group of figures in chiton, cuirass and chlamys—the group has parallels among the finds from Ratiaria (Najdenova 1994, 303-4, fig. 13) and from Dacia (Marinescu 1995, 292-3, fig. 2a)—and a group of horsemen, dressed in chiton and cuirass (Ognenova-Marinov 1975, Nos. 31-43; see also Vassilev 1994, 429-30, fig. 1). The figures of such horsemen are characterised by a greater or lesser level of schematism. A characteristic feature of such statuettes is their manufacture in two parts: the horse and the rider were cast separately, and the figurine of the horseman, usually with legs stretched wide, was mounted on the horse (see Ognenova-Marinova 1975, Nos. 17-43; Kalcev 1988, 408, No. 14, fig. 14; 409, No. 19, fig. 20; Kanceva 1988, 411-2, figs. 1-3). Thus, the bronze figurine from Olbia surely testifies to the presence of a Thracian substratum in the population of Olbia, probably associated with the presence in the city of Thracians in the Roman garrison. However, it is hardly possible to link the find only with the garrison; moreover, it seems absolutely impossible to

at the Chersonesos necropolis gives weight to this hypothesis. Of special interest is an open-worked buckle (Fig. 1, 3) from burial No. 528 (1894) excavations). It has a parallel in Britain. The possible appearance on the northern shores of the Pontus of soldiers or officers who had previously served in Britannia is indicated indirectly by the recent identification of bronze enamelled objects from a Gorgippian tomb of the first half of the 3rd century AD (Cat. Moscow 1987, Nos. 268-269; Cat. Mannheim 1989, 185, Nos. 268-269, pls. 49-50; Cat. Tokyo 1991, Nos. 189-190; Treister 1993b, 799, fig. 13) as executed in the enamel workshops of Britannia in the 2nd century AD (perhaps even in the first half of that century). As E. Künzl (1995, 46) maintains, these artefacts are not evidence of long-distance trade; they should rather be discussed as "Zeichen der Hochschätzung solcher Emailarbeiten". In this connection should be mentioned the open-cast enamelled plaque composed of four pelta-shaped elements, originating from Kerch and kept in Oxford (Henry 1933, 121, fig. 31; Treister 1992, 91, fig. 17; 1993b, 798, fig. 12, 800). It has not been discussed by Künzl. The ornamental composition of the plaque is paralleled in the bronze à jour plaques of the late 2nd-first half of the 3rd century AD from Weissenburg, Straubing and Zugmantel (Oldenstein 1976, pls. 88-9, Nos. 1144-5, 1150), and in a phalera encrusted with silver from Novi (Cat. Sofia 1984, No. 359). In Oldenstein's opinion (1976, 237-9), these plagues could have been used as details of a military costume and of a horse-harness. The second variant seems more plausible in the case of the plaque from Kerch, which may be discussed as the detail of a gala horse-harness (Kunzl 1995, 42), and was executed, most probably, in the workshops of Britannia (cf. the decoration of the enamelled patera of the first half of the 2nd century AD from the Römisch-Germanisches Zentralmuseum, Mainz: Künzl 1995, 42-3, figs. 4-5; 46).

I shall now discuss a heart-shaped open-worked cast bronze pendant from the collection of G.A. Asliyan in Moscow (Figs. 2-3). According to him, it was found at the fortified settlement near the village of Mikhailovka near Kerch. The upper part of the pendant has a rectangular base and a loop with a ring. The pendant is cast in one piece with its base, to which it is connected by three vertical ridges: a longer one in the middle, and two shorter ones at the sides. The outer edge of the pendant is decorated with symmetrical widenings, two curves and a pelta-shaped projection below. The central part of the pendant is formed of three adjoining curves, two of them having pelta-shaped elements, and one composed of two semi-circles widening at the place of attachment. The pendant is relief and fluted at the front, while the back is flat and uneven.

Such pendants were used to decorate horse-harnesses. As M. Junkelmann

 $<sup>^4</sup>$  The total height with the ring is 7.3 cm; without, 6.25 cm; length of the upper base, 4.76 cm; maximum width of pendant, 4.93 cm; maximum thickness, 4.93 cm. The ring is 1.3 cm x 1.2 cm.



Figs. 2-3. Bronze pendant. Chance find near the village of Mikhailovka, Eastern Crimea. G.A. Asliyan Collection, Moscow. Photographs, M. Treister. Scale as indicated.

(1992, 86) has mentioned, open-worked pendants with revived Celtic motifs, including the so-called *Trompetenmotiv*, were widespread in the late 2nd-3rd centuries AD. With similar pendants also sword girdles were decorated (Bishop/Coulston 1989, 51-3).

Open-worked pendants of a similar shape, with a pelta-formed projection below, are known from Zugmantel (Oldenstein 1976, pl. 31, Nos. 219, 227, 228), Feldberg (Oldenstein 1976, pl. 31, No. 226), Straubing (Oldenstein 1976, pl. 31, 225), and Carnuntum (Jobst 1992, 198-9, Nos. 164-8), although the central parts of these pendants vary from that of the one under discussion. These pendants were also hung differently: either on hinges, like one of the pieces from Zugmantel (Oldenstein 1976, pl. 31, No. 219) and the pendant from Tamusida in Morocco (Boube-Piccot 1994, No. 210), or through holes in the upper parts for belts. These pendants belong to the 'Herzförmige durchbrochene Anhänger' group, according to Oldenstein (1976, 129), who stated that their shape was characteristic for the 3rd century AD, although it is very likely that they had already appeared in the second half of the 2nd century AD (finds of such pendants are concentrated primarily in the area of military camps in Upper Germany). The local manufacture of these pendants is confirmed by the find of a bronze semi-manufactured item in Eining, Bavaria (Gschwind 1997, 611-2, figs. 2-3; 633, No. 31).

The decoration of the upper part of the pendant under discussion has parallels among those published by Oldenstein but is of a different shape: in particular the pendants with Trompetenmotiv from Osterburken (Oldenstein 1976, pl. 43, No. 428) and Saalburg (Oldenstein 1976, pl. 43, No. 430), also dating to the second half of the 2nd-first half of the 3rd century AD (Oldenstein 1976, 161-2). A similar scheme of *Trompetenmotiv*, although framed in a circle, occurs, for instance, on the above-mentioned plaque from Zugmantel (Oldenstein 1976, pl. 87, No. 1131; Junkelmann 1992, 84, fig. 95; Jobst 1992, 186). Open-worked belt plagues with similar motifs occur: for example, from burial No. VIII/10 in Klosterneuburg near Vienna, dating to the first half of the 3rd century AD (Neugebauer/Grünewald 1975, 152-3, pl. 13, 3), or from Carnuntum (Mitscha-Märheim 1957, 49, fig. 2, 1; 51, fig. 4; Stiglitz 1987, fig. 6, 8). Another characteristic shape of plaques with open-worked decoration in the form of *Trompetenmotiv* is rectangular. This is known after finds of the late 2nd-first half of the 3rd century AD from Intercissa (Alföldi et al. 1957, pl. XLVII, 13), Regensburg (von Schnurbein 1977, 88-9, fig. 13a; pls. 82, 8; 91, 13; and 166, 18-9), and from Great Britain, Denmark, and Morocco (Boube-Piccot 1994, 84-6, pl. 9; 66). The Trompetenmotiv was also used to decorate fibulae, for instance those from Carnuntum (Carnuntum 1987, 270, fig. 30, 1) and Lauriacum (Jobst 1975, 120-1, group 46b-c).

It is evident that all the objects with *Trompetenmotiv* form a single chronological group of the second half of the 2nd-first half of the 3rd century AD. Most of them originate from the regions of the Rhine and Danubian *limes*, as well as from England<sup>5</sup>, while the spread of the motif was associated with the revival of the La Tène traditions (von Schnurbein 1977, 88). As I have tried to show, the plaques with *Trompetenmotiv* from Tyras, Chersonesos, and the vicinity of Kerch were most likely related to those regions.

Analysis of metal details of Roman military costume and horse-harnesses from the North Pontic area shows that the first specimens appeared there no earlier than the mid-1st century AD, and were very probably associated with Roman military expeditions in the Bosporan Kingdom and south-western Taurice. The numerous finds of the mid-2nd century-first half of the 3rd century AD from Tyras, Chersonesos, and the Bosporan Kingdom were associated with the presence of Roman garrisons, which included soldiers and officers who had seen earlier service in Britannia, Germania, and Raetia. These finds may also be explained by the service in those regions of people from the Northern Pontus. About the middle of the 2nd century AD, perhaps in the royal workshops of the Bosporan Kingdom and probably under the influence of Roman military belts, manufacture commenced of

 $<sup>^5</sup>$  These articles are well represented in Dura-Europos. See, for example, Frisch/Toll 1949, pls. I, 1-3; II, 9, 12; III, 28.

girdles with the royal *tamgas*, with buckle shields, belt endings and plaques imitating artefacts manufactured in the shops of Upper Germany and Raetia (Treister 2001).

## ABBREVIATIONS

ACSS Ancient Civilizations from Scythia to Siberia

ArchA Archaeologia Austriaca
BAR British Archaeological Reports

BerRGK Bericht der Römisch-Germanischen Komission

Carnuntum 1987 Carnuntum Jahrbuch 1986, Wien CIL Corpus Inscriptiones Latinarum

JbRGZM Jahrbuch des Römisch-Germanischen Zentralmuseums. Mainz

JRMES Journal of Roman Military Equipment Studies RA Revue archéologique

RossArch Rossiiskaya Arkheologiya (Russian Archaeology)
SA Sovetskaya Arkheologiya (Soviet Archaeology)

SGMII Soobshcheniya Gosudarstvennogo Muzeya izobrazitel'nykh

iskusstv-imeni A.S. Pushkina (Bulletin of the Pushkin Museum of

Fine Arts), Moscow

VDI Vestnik Drevnei Istorii (Journal of Ancient History), Moscow

## **BIBLIOGRAPHY**

Alföldi, M.R. et al. 1957: Intercissa (Dunapentele). Geschichte der Stadt in der Römerzeit, Budapest.

Balek, M./O. Sedo 1996: Das frühkaiserzeitliche Lager bei Musov – Zeugnis eines augusteischen Feldzugs ins Marchgebiet, *Germania* 74.2, 399-414.

Bishop, M.C. 1987: The Evolution of Certain Features, in: Dawson 1987, 109-39.

Bishop, M.C. 1988: Cavalry Equipment of the Roman Army in the First Century AD, in: Coulston, J.C.N. (ed.), *Military Equipment and the Identity of the Roman Soldier* (BAR International Series 394), Oxford, 67-195.

Bishop, M.C./J.C.N. Coulston 1989: Roman Military Equipment, London.

Bishop, M.C./J.C.N. Coulston 1993: Roman Military Equipment from the Punic Wars to the Fall of Rome, London.

Boube-Picot, C. 1994: Les bronzes antiques du Maroc IV, Paris.

Boucher, S. 1971: Vienne. Bronze Antiques, Paris.

Carnap-Bornheim, C. von (ed.) 1994: Beiträge zu römischer und barbarischer Bewaffnung in den ersten vier nachchristlichen Jahrhunderten, Lublin-Marburg.

Cat. Mannheim 1989: Gold und Kunsthandwerk vom antiken Kuban, Stuttgart.

Cat. Moscow 1987: Drevnee iskusstvo Kubani, Moscow.

Cat. Sofia 1984: Khudozhestven bronz ot rimskata epokha v Natsionalniya arkheologicheski muzej pri B.A.N., Sofia.

Cat. Tokyo 1991: The Treasures of Nomadic Tribes in South Russia, Tokyo.

Chernenko, E.V./V.M. Zubar/N.A. Son 1989: Buterol'iz Tirv, SA 2, 250-2.

Coulston, J.C.N. 1991: The 'Draco' Standard, JRMES 2, 101-14.

CR St Petersburg 1894: Comptes-Rendu de la Commission Impériale Archéologique, St Petersburg.

Dawson, M. (ed.) 1987: Roman Military Equipment. The Accoutrements of War.

- Proceedings of the Third Roman Military Equipment Research Seminar (BAR International Series 336), Oxford.
- Deimel, M. 1987: Die Bronzekleinfunde vom Magdalensberg, Klagenfurt.
- Depeyrot, G./M. Feugère/P. Gauthier 1986: Prospections dans la moyenne et basse Vallée de l'Hérault: monnaies et petits objet, *Archéologie en Languedoc* 4, 113-63.
- Deschler-Erb, E. 1991: Römische Militaria des 1. Jahrhunderts aus Kaiseraugst. Zur Frage des frühen Kastells, in: Deschler-Erb, E./M. Peter/S. Deschler-Erb, Das frühkaiserzeitliche Militärlager in der Kaiseraugst Unterstadt (Forschungen in Augst 12), Augst. 9-81.
- Deschler-Erb, E. 1998: 'Geflügelte' Pferdegeschirranhänger, in: Müller, F./A.F. Furger (eds.), *Mille Fiori. Festschrift für Ludwig Berger* (Forschungen in Augst 25), Augst, 118-25.
- Deschler-Erb, E. 1999: Ad arma! Römisches Militär des 1. Jahrhunderts n. Chr. in Augusta Raurica (Forschungen in Augst 28), Augst.
- Faider-Feytmans, G. 1979: Les bronzes romains de Belgique, Mainz.
- Frisch, T.G./N.P. Toll 1949: The Bronze Objects (The Excavations at Dura-Europos. Final Reports IV. 1), New Haven.
- Gilevich, A.M. 1965: Pribrezhnenskii klad rimskikh monet, *Numizmatika i Epigrafika* 5, 103-7.
- Gschwantler, K./A. Bernhard-Walcher (eds.) 1988: Griechische und römische Statuetten und Großbronzen. Akten der 9. Internationalen Tagung über antike Bronzen, Wien 21.-25. April 1986, Wien.
- Gschwind, M. 1997: Bronzegießer am raetischen Limes. Zur Versorgung mittelkaiserzeitlicher Auxiliareinheiten mit militärischen Ausrüstungsgegenständen, Germania 75, 607-38.
- Gschwind, M. 1998: Pferdegeschirrbeschläge aus der zweiten Hälfte des 3. Jahrhunderts aus Abusina/Eining, *Saalburg Jahrbuch* 49, 112-38.
- Guguev, V./M. Trejster 1992: Une oenochoé de bronze à scènes mythologiques provenant d'un kourgane sarmate de la région de Rostov, RA 2, 243-71.
- Gushchina, I.I./I.P. Zasetskaya 1994: 'Zolotoe kladbishche' rimskoi epokhi v Prikuban'e, St Petersburg.
- Hammerson, M./H. Sheldon 1987: Evidence for the Roman Army in Southwark, in: Dawson 1987, 167-74
- Henry, F. 1933: Les émailleurs d'occident, *Préhistoire* 2, 65-146.
- Jobst, W. 1975: Die römische Fibeln aus Lauriacum (Forschungen in Lauriacum 10),
- Jobst, W. (ed.) 1992: Carnuntum. Das Erbe Roms und der Donau. Katalog der Ausstellung des Archäologischen Museum Carnuntium in Bad Deutsch Altenburg, s.l.
- Junkelmann, M. 1992: Die Reiter Roms. Teil III: Zubehör, Reitweise, Bewaffnung,
- Kadeev, V.I. 1979: Khersones, Bospor i Rim, VDI 2, 55-76.
- Kadeev, V.I. 1981: Khersones Tavricheskii v pervye veka nashei ery, Kharkov.
- Kalcev, K. 1988: Bronzestatuetten aus dem Territorium von Augusta Trajana (Stara Zagora), in: Gschwantler/Bernhard-Walcher 1988, 404-10.
- Kanceva, T. 1988: Bronzestatuetten des thrakischen Reitergottes im Museum Nova Zagora, in: Gschwantler/Bernhard-Walcher 1988, 411-2,
- Karyshkovskij, P.O./I.B. Klejman 1985: Drevnii gorod Tira, Kiev.
- Klejman, I.B./N.A. Son 1983: Zapadnopontiiskie i provinzial'no-rimskie kul'turnoekonomicheskie svyazi Tiry, in: Dzis-Raiko, G.A. (ed.), *Materialy po arkheologii* Severnogo Prichernomor'ya, Kiev, 47-59.
- Kongressbericht Freiburg 1994: Akten der 10. Internationalen Tagung über antike Bronzen, Freiburg, 18.-22. Juli 1988 (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemburg 45), Stuttgart.

- Krapivina, V.V. 1993: Olviya. Material'naya kul'tura I-IV vv.n.e., Kiev.
- Kropotkin, V.V. 1970: Rimskie importnye izdeliya v Vostochnoi Evropye. II v. do n.e.-V v.n.e.. Moscow.
- Künzl, E. 1995: Großformatige Emailobjekte der römischen Kaiserzeit, in: Mols 1995, 39-49.
- Lloyd-Morgan, G. 1987: Professor Robert Newstead and Finds of Roman Military Metalwork from Chester, in: Dawson 1987, 85-97.
- Marinescu, L. 1995: Les statuettes en bronze de Dacie (III), personnage anonymes, in: Mols 1995, 291-6.
- Minns, E. 1913: Scythians and Greeks, Cambridge.
- Mitscha-Märheim, H. 1957: Völkerwanderungszeitliche Gräber aus Mannersdorf am Leithagebirge, *ArchA* 22, 45-53.
- Mittens, D.G./S.F. Doeringer (eds.) 1967: Master Bronzes from the Classical World, Cambridge.
- Mols, S., et al. (eds.) 1995: Acta of the 12th International Congress on Ancient Bronzes, Nijmegen 1992 (Nederlandse Archeologische Rapporten 18), Nijmegen.
- Najdenova, V. 1994: Les bronzes de Ratiaria (Mésie Supérieure), in: *Kongressbericht Freiburg*, 297-304.
- Neugebauer, J.-W./M. Grünewald 1975: Weitere römische Grabfunde aus Klosterneuburg, P.B. Wien-Umgebung, *Römisches Österreich* 3, 143-66.
- Novichenkova, N.G. 1998: Rimskoe voennoe snaryazhenie iz svyatilishcha u perevala Gurzufskoe Sedlo, *VDI* 2, 51-67.
- Ognenova-Marinova, L. 1975: Statuettes en bronze du Musée national archéologique à Sofia, Sofia.
- Oldenstein, J. 1976: Zur Ausrüstung römischer Auxiliareinheiten. Studien zu Beschlägen und Zierat an der Ausrüstung der römischen Auxiliareinheiten des obergermanischraetischen Limesgebietes aus dem zweiten und dritten Jahrhundert n. Chr., BerRGK 57, 51-284.
- Oldenstein-Pferdehirt, B. 1984: Die Geschichte der Legio VIII Augusta, *JbRGZM* 31, 397-433.
- Palágyi, S. 1985: Ein neuer Pferdegeschirrfund aus Pannonien und Möglichkeit seiner Rekonstruktion, in: Mols 1995, 401-8.
- Petculescu, L. 1995: Military Equipment Graves in Roman Dacia, JRMES 6, 105-45.
- Raev, B.A./A.V. Simonenko/M.Y. Treister 1991: Etrusco-Italic and Celtic Helmets in Eastern Europe, *JbRGZM* 38, 465-96.
- Repnikov, N.I. 1927: Dnevnik raskopok khersoneskogo nekropolya v 1908 g., in: Grinevish, K.E. (ed.), *Khersonesskii sbornik* 2, Sevastopol, 147-86.
- Ritterling, E. 1913: Das frührömische Lager bei Hofheim im Taunus, Wiesbaden.
- Rolle, R./M. Müller-Wille/K. Schietzel (eds.) 1991: Gold der Steppe. Archäologie der Ukraine, Schleswig.
- Sarnowski, T. 1988: Wojsko rzymskie w Mezji Dolnej i napótxnocnym wybrzeżu Morza Czarnego, Warsaw.
- Savelya, O.Y./T. Sarnowski 1999: Dve latinskie nadpisi iz Balaklavy i Khersonesa, *VDI* 1, 42-5.
- Schnurbein, S. von 1977: Das römische Gräberfeld von Regensburg (Materialhefte zur bayerischen Vorgeschichte, Reihe A, Bd. 31), Kallmünz.
- Shelov, D.B. 1981: Rimlyane v Severnom Prochernomor'e vo II v.n.e., VDI 2, 40-58.
- Simion, G. 1995: Méthodes de datation et de localisation des centres de production des bronzes romains découverts dans la région du Bas-Danube, in: Mols 1995, 215-28.
- Son, N.A. 1993: Tira rimskogo vremeni, Kiev.
- Son, N.A./V.V. Nazarov 1993: Znakhidi rimskoi zbroi v Tiri ta Ol'vii, Arkheologiya (Kiev) 1, 120-3.
- Stiglitz, H. 1987: Auxiliarkastell Carnuntum, in: Carnuntum Jahrbuch 1986, Wien, 193-

226.

- Sudarev, N.I. 1991: Dve nakhodi rimskogo vremeni iz g. Sochi, in: Abramov, A.P. (ed.), *Drevnosti Severnogo Kavkaza*, Moscow, 143-5.
- Szirmai, K. 1994: Eine Pferdegeschirr-Gattung mit Lunulaverzierung aus Aquincum, in: *Kongressbericht Freiburg*, 405-9.
- Treister, M.Y. 1992: Bronzoliteinoe remeslo Bospora, SGMII 10, 66-110.
- Treister, M.Y. 1993a: Rimlyane v Pantikapee, VDI 2, 27-50.
- Treister, M.Y. 1993b: The Celts in the North Pontic Area: a reassesment, *Antiquity* 67, No. 257, 789-804.
- Treister, M.Y. 1994: Roman Military Equipment in the Kingdom of Bosporus, in: von Carnap-Bornheim 1994, 91-9.
- Treister, M.Y. 1995: The Romans in Pantikapaion, ACSS 2.2, 157-81.
- Treister, M.Y. 1996: Essays on the Bronzeworking and Toreutics of the Pontus, in: Tsetskhladze, G.R. (ed.), *New Studies on the Black Sea Littoral (Colloquia Pontica* 1), Oxford, 73-134.
- Treister, M.Y. 2001: Local Imitations of the Details of Roman Military Costume in the Bosporan Kingdom, in: Thomas, R. (ed.), *Akten 14. Internationales Kongresses über antike Bronzen: Werkstattkreise: Figuren und Geräte. Köln, 21.-24. September 1999*, Köln, 363-73.
- Tsvetaeva, G.A. 1979: Bospor i Rim, Moscow.
- Unz, C./E. Deschler-Erb 1997: *Katalog der Militaria aus Vindonissa* (Veröffentlichungen der Gesellschaft Prof Vindonissa XIV), Brugg.
- Vassilev, V.P. 1994: Bronzestatuetten aus dem Heiligtum bei Lozen, in: *Kongressbericht Freiburg*, 429-34.
- Vinogradov, Y.G. 1990: Ol'viya i Trajan, in: Vostochnaya Evropa v drevnosti i srednevekov'e. Tezisy dokladov, Moscow, 27-32.
- Vinogradov, Y.G. 1992: Polemon, Khersones i Rim, VDI 3, 130-9.
- Vinogradov, J[Y].G./V.V. Nazarov 1994: Römische Besatzungstruppen in Olbia Pontica im 1. bis 3. Jh. und ihre Bewaffnung, in: von Carnap-Bornheim 1994, 101-8.
- Zubar, V.M. 1988: Propokhid Playtiya Silvana v Krim, Arkheologiya (Kiev) 63, 19-27.
- Zubar, V.M. 1993: Novi znakhidki fragmentiv rimskikh sholomiv v Tavridi, *Arkheologiya* (Kiev) 1, 66-70.
- Zubar, V.M. 1994a: Khersones Tavricheskii i Rimskaya Imperiya, Kiev.
- Zubar, V.M. 1994b: Ol'viya i Bospor u pershii treti II st., *Arkheologiya* (Kiev) 2, 148-51.
- Zubar, V.M. 1995a: The North Pontic Area and Septimus Severus, ACSS 2.2, 182-95.
- Zubar, V.M. 1995b: Zur römischen Militärorganisation auf der Taurike in der zweiten Hälfte des 2. und am Anfang des 3. Jahrhunderts, *Historia* 44.2, 192-203.
- Zubar, V.M. 1997a: O tak nazyvaemoi 'tavro-skifskoi' voine v istorii Ol'vii, RossArch 2, 85-90.
- Zubar, V.M. 1997b: The Stationing of Soldiers from the I Ala of Atectorigiana in Tauris, *ACSS* 4.2, 101-8.
- Zubar, V.M./O.Y. Savelya/T. Sarnowski 1999: Novye epigraficheskie pamyatniki iz rimskogo khrama v okrestnostyakh Khersonesa Tavricheskogo, VDI 2, 197-217.
- M.Y. Treister, Europaring 60, D-53123 Bonn, Germany.