Cavalry is not the first thing which comes to mind when one considers the activities of the Roman army. Naturally, that way of thinking is also present in works which focus their attention on the defensive capabilities of Roman frontier systems. Even though turf ramparts, watchtowers and camp remains are given the attention they deserve, the arrangements designed for mobile defence which required cavalry use, have received less interest, mostly due to the blurred and sketchy picture provided by the limited and fragmentary archaeological evidence.

Moreover, when it comes to the activities of the Roman army, connected with the Crimean Peninsula, the surviving literary records tend to diminish the role of the cavalry. And so, according to Tacitus’s account, the Roman troops used in the Bosporan war of AD 49 were composed mostly of infantry units, and the cavalry contingents were provided by the allied Sarmatian Aorsi tribe.1 Despite the fact that the particular passage in Tacitus’ account could have been a reflection of the real situation during the Bosporan war, the surviving archaeological and epigraphic evidence suggests quite a different overall picture.

The problem is that the informative value and chronological distribution of surviving pieces of evidence are uneven. And so, the majority of equipment finds come from the 1st century AD, while from these times virtually no epigraphic evidence has survived to our times. In contrast, the existence of many epigraphic sources coming from the 2nd and 3rd centuries AD provide us with a high amount of information about troop movements, while the cavalry equipment finds belonging to these times are rare.

Therefore, seven items which can be described as elements of horse furniture originate from the territory of Tauric Chersonesos, and most probably belong to the 1st century AD. All these items can be connected with the so-called expedition of the Moesian governor T. Plautius Silvanus, who crossed the Danube in the late Neronian times and probably reached as far as Olbia (some detachments could have been active even in the Crimean Peninsula). As the analysis of their context, chronology and connections with the expedition in question will be published elsewhere,2 here we have decided to quote only the outline of the discussion, in order to allow for a confrontation of the archaeological evidence with the surviving epigraphic records. The list of these cavalry artefacts is as follows:

1. A find of the most uncertain chronology and origins comes from the city of Chersonesos itself. It is a bronze part of a Roman hackamore (Fig. 1.7) of a so-called psalion.3 Analogies from

---

1 Tac., Ann. 12. 15.
2 The expedition of Plautius Silvanus was described in the Tibur inscription (CIL XVI 3608 = ILS 986), for more details, see Sarnowski 1990: 68–69; Sarnowski 2006a and Sarnowski 2006c. A detailed analysis of the context and chronology of the cavalry equipment finds from Chersonesos can be found in Gawroński, Karasiewicz-Szczypiorski, Modzelewski 2014: 45–60.
3 Kostromičev 2011: 108.
Novae may indicate that the item in question belongs to the late 2nd century AD, yet the other finds suggest a somewhat earlier date.⁴

2. In addition, a phalera pendant (Fig. 1.1), now lost, was recovered from the city’s necropolis in 1908.⁵ Such pendants were popular during the reign of the Julio-Claudian dynasty and the peak of their production can be firmly dated to the reign of Claudius.⁶ Therefore, the item could have found its way to the city of Chersonesos earlier. Some scholars are convinced that the above-mentioned pendant is somehow connected with the expedition of T. Plautius Silvanus.⁷ Others prefer a wider chronology.⁸

3. The other pendant type (Fig. 1.3), of an openwork pelta-form design,⁹ has analogies among Doorwerth finds,¹⁰ and can be firmly dated to the late Neronian times or to the very beginning of the Flavian period, perhaps between the 60s and 70s of the 1st century AD.¹¹ In comparison to the Doorwerth finds, the piece from Chersonesos is very simplified. It is probably a lower-quality version¹² of a form which was made for an officer’s use.

4. Another pendant of a phallic shape (Fig. 1.6) also comes from the city of Chersonesos. The item, obviously used as an element of horse furniture and as an apotropaic amulet, probably belongs to the 1st century AD.¹³

5. A further pendant, found in the port district, was made in a tear-drop shape (Fig. 1.4). The form clearly belongs to the 1st century AD.¹⁴

6. Another pendant was found in the northeastern part of the city in 1977. This lunate pendant (Fig. 1.2) was made from silver and decorated with an engraved representation of a bull.¹⁵ Lunate pendants were extremely popular in the 1st century AD and in the very beginning of the 2nd century AD.¹⁶

---

⁴ Kostromičev 2011: 108. For the Novae analogy, see Genčeva 2000: 62, fig. III 14. However, the find from Haltern may indicate that ornamented psalia with such wide nosebands were used from the beginning of the 1st c. AD, see Junkelmann 1992: 27. Wide-noseband psalia are also known from the sanctuary of Hercules Magusanus, from Empel on the territory of the ancient civitas Batavorum (near present day Nijmegen). The items in question almost certainly belong to the 1st c. AD, see van Driel-Murray 1994: 100. The later 2nd-century psalia have nosebands of an openwork design, see Junkelmann 1992: 33. Therefore, establishing a 1st-century chronology for the Chersonesos hackamore seems to be more probable.


---

Fig. 1. Parts of horse furniture from Tauric Chersonesos: 1–6: Pendants; 7: Psalion (after Kostromičev 2011: 106, 108)
Рис. 1. Части конской сбруи из Херсонеса Таврического. 1–6: подвески; 7: псалий (по Костромичёву 2011: 106, 108)
century AD; therefore, it is very difficult to estab-
lish a firm date for the find.\(^\text{16}\)

7. Two round bronze *phalerae* (*Figs. 2.2–3*) come from pre-revolution excavations. One is seriously damaged, while the other is quite well
preserved. The *phalera* in question is covered
with silver and bears traces of engravings,\(^\text{17}\) prob-
ably of a *niello* inlay.

A silvered and *niello*-engraved *phalera*, almost
identical in shape and decoration, was recov-
ered from the native Dacian hill fort at Ocnița (*Fig. 2.1*).\(^\text{18}\) The *phalera* was found in a votive pit
together with other elements of a horse harness.
The Ocnița example even looks as if it belonged
to the same set as the one from Sevastopol. It is
slightly bigger and its *niello* decoration is a bit
more sophisticated. However, this feature is nat-
ural for horse trappings composed of bigger and
smaller *phalerae*.\(^\text{19}\) Interestingly enough, a *phalera*
very similar to the one from Ocnița was discov-
ered at Augusta Raurica,\(^\text{20}\) but it is extremely
difficult to connect that particular find with the
Crimean garrisons.

Such *phalerae* were certainly commonly used
during the reign of the Julio-Claudian dynasty,
starting from the times of Emperor Tiberius. The
closing date of their use seems to have occurred in

1328; Bishop, Coulston 1993: 106, fig. 65.3; Kostromičev
prefers dating the find to the second half of the 1st c. AD
or to the beginning of the 2nd c. AD (Kostromičev 2011: 107).

\(^\text{17}\) Kostromičev 2011: 108.


\(^\text{19}\) This was the case for the set from Xanten, see Jenkins
1985: 141–164. The Xanten set was clearly used for forty
years before deposition, as one of its *phalerae* bears the
inscription *punctum: Plinio praef(ec.to) eq uitum*, see
On the basis of his nephew’s letter (*Plin., Ep.* 3.5), we
know for certain that Pliny the Elder served as a praefectus
alae on the Rhine frontier. He held this function during
the reign of Claudius, see Münzer 1899: 67–85; see also
Gawroński 1998: 36. However, the horse trappings in
question were buried during the Batavian uprising about
AD 70.

\(^\text{20}\) Deschler-Erb 1999: Taf. 33, 645.

AD 70,\(^\text{21}\) as none such items were recovered from
the newly-created upper German and Raetian
frontiers or from the province of Dacia. The *niel-
lo*-engraved *phalerae* belonged to a certain type
of Gallo-Roman harness. Such trappings were
certainly produced in Gaul,\(^\text{22}\) and they rapidly
went out of fashion as their centres of production
collapsed in the turmoil created by the Batavian
uprising.

The most logical explanation for the presence
of such *phalerae* at Tauric Chersonesos, and per-
haps of the other above-mentioned parts of horse
furniture, is the coming of some Roman cavalry

\(^\text{21}\) Petculescu correctly points out that the harnesses from
Xanten and Doorwerth remained in use for a long period
before they were buried during the events of AD 69–70
(Petculescu 1994: 69; see also Brouwer 1982: 165,
note 33). According to Petculescu, the last *niello*-engraved
*phalerae* were manufactured around that date.

\(^\text{22}\) Cf. Rabiesen 1990: 73–95. The production centre at Alesia
was working for twenty years, starting from about AD 60.
Rabiesen (1990: 85) establishes a closing date for the trapp-
ings production at about AD 80, but that is based on the
relative chronology of finds from the British and German
frontiers. The Batavian uprising seems to be a more logi-
cal explanation for the rapid collapse of production cen-
tres. The rising turmoil and subsequent massive transfer of
many auxiliary units certainly disturbed the buying mar-
tets. This factor had dire consequences for the production
of luxurious silvered horse trappings.
detachments during the late Neronian or early Flavian periods. This perfectly matches the expedition of T. Plautius Silvanus. The most convincing argument in favour of such a hypothesis is the Ocnita phalera, which was found in Dacia alongside the supposed route of the expedition, and looks as if it belonged to the same set as the one found at Sevastopol.

Furthermore, there are some traces of fire and fighting, detectable at various late Scythian sites, which can be dated, accurately to within ten years, to the middle of the 1st century AD. Some scholars connect these traces with the bellum Bosporanum and with the expedition of Didius Gallus of AD 49, while others with the expedition of T. Plautius Silvanus. The Sevastopol cavalry finds typologically fit perfectly with the earlier period and possibly could have been lost during the events of AD 49. The problem is that Tacitus, while discussing the Bosporan war, explicitly refers to the lack of cavalry among the Roman forces. Moreover, according to Tacitus, the bellum Bosporanum of AD 49 was fought on the territory of the Bosporan Kingdom and the late Scytnians were probably not involved in the conflict. Therefore, the traces of burning mentioned above should be connected with another event.

It is quite probable that in AD 62 the city of Chersonesos had problems with its Scythian neighbours. These Scythians were not nomads, as their forefathers, but they certainly fought as horse archers. Only cavalry could have been effective against such a foe. And the mounted troops offered a perfect solution to the problem, as such a rescue force could move very fast even in broken terrain. The course of events probably looked as follows: somewhere in AD 62 the Moesian army, operating in the borders of Dacia, received news about the problems in Chersonesos. There was no time for logistic preparations, thus T. Plautius Silvanus dispatched a cavalry relief force to solve the problem. The relief force travelled quickly along the Black Sea coasts and in a few days reached Scythian lands. The cavalrymen scattered over, started pillaging and burning to divert Scythian attention from the troubled city of Chersonesos. If that was the case, the presence of the Roman cavalry lasted for a very short time, and the Scythian king soon came to an agreement with the city of Chersonesos. The majority of cavalry finds have established chronology pointing to the middle of the 1st century AD.

---

23 Of course, no one would say that the expedition was travelling in the vicinity of the Ocnita fort. It could simply have found its way into Dacian hands during the expedition and then years later it could have been deposited at Ocnita fort.

24 Puzdrovskij 1992: 129–30. However, other scholars prefer to connect these traces with the expedition of Plautius Silvanus; for a critical view of such an approach, see Sarnowski 2006a: 128; see also Sarnowski 2006c: 87, note 14.


26 The Tibur inscription CIL XIV 3608 = ILS 986 in lines 23 and 24 refers to the siege of Chersonesos; about the veracity of that source, see Sarnowski 2006a: 129. Sarnowski points out that the spelling Chersonesos may indicate that the expedition only reached the Thracian coast. It seems that the author of the Tibur inscription had limited knowledge about the geography of the region, see also Sarnowski 2006c: 87–88. It is even possible that he mistakenly identified Tauric and Thracian Chersonesos.


28 Dispatching a seaborne relief force required extensive logistic preparation, such as gathering transport vessels, etc. It was also time-consuming and complicated, compare the account in the Peloponnesian War about the Athenian fleet departure on the eve of the Sicilian expedition, see Thuc. 6.30–32. Dispatching a cavalry force was cheaper and quicker.

29 During the Soviet-Polish war in 1920, the Soviet 1st Cavalry Army was reported to cover a distance of about 120 km daily, see Davies 2009: 148–149. There is no doubt that the 1st Army could maintain such amazing marching speed for days. The Philippic tombstone (AE 1969/70, 383) of Ti. Claudius Maximus depicts a member of an elite mobile cavalry unit, who captured the Dacian King Decebalus. Maximus is shown lightly armed, bearing only a shield, sword and a pair of javelins, see Junkelmann 1990: 174–175. About Ti. Claudius Maximus, see also Speidel 1970: 142–153. There is no doubt that such lightly-armed riders could travel very fast. A ride from Danube estuary to the city of Chersonesos probably lasted about five days.

30 Neronian or early Flavian coins are virtually absent in the city of Tauric Chersonesos, see Karasiewicz-Szczyphorski 2013: 67.

31 IOSPE I 3 369; see also D’jakov 1941: 91–92; Solomonik 1984: 10; Kutajsov 2001: 100.
Thus, if the proposed reconstruction of events is correct, it is quite possible that the above-mentioned cavalry finds belong to the Neronian period. However, frankly speaking, there is a slight possibility that some of these artefacts could have been used longer. The surviving firm evidence for the long use and late deposition of 1st-century AD cavalry harness pendants comes from Ewijk, located near present-day Nijmegen in the Netherlands. The pendant in question bears the inscription *punctim: leg(io) IX Hisp(ana)*. It seems that the pendant should have been deposited at Ewijk during the early years of Hadrian’s reign after the transfer of the Ninth Legion from Britannia.32 Anyone familiar with Roman horse harnesses would recognize the fact that such pendants were produced in the 1st century AD.

Moreover, the surviving epigraphic evidence confirms the presence of one unit which almost certainly possessed cavalry detachments in Chersonesos: an inscription of the cohors II Luc(ensium) from the Trajanic period.33 According to Spaul, the cohors II Lucensium equitata had been active as a part of the army stationed in Lower Moesia from AD 86 onwards (with the base established at Razgrad, ancient Abrittus), before it left the province before AD 134.34 Therefore, it is quite possible, in light of the above-mentioned evidence from the Netherlands, to speculate that some of the cavalry finds under discussion belonged to the soldiers who served in that unit.

Nevertheless, two factors make such an interpretation highly unlikely. First of all, it is more probable that the time of deposition of so many artefacts happened closer to the date of their production, i.e. if the items in question had been buried later, a smaller sample should have survived to our times. Furthermore, anyone familiar with Roman military equipment knows that the great majority of finds come from the 1st century AD, due to the constant practice of dumping unserviceable equipment. As a result, artefacts from that period were very frequently deposited, due to unit movements and intentional storing. Later this practice ceased, mostly due to the storage of raw material. The establishment of permanent bases also influenced this process, as in the new camps the practice of re-cycling damaged equipment became easier and more common. Paradoxically, if the Roman cavalry troops only stayed for a very short time, as should have happened in the times of the T. Plautius Silvanus expedition, they simply had a better chance of producing more traces of their presence. We should remember that such cavalry relief raids required high mobility and the practice of dumping or leaving unserviceable equipment could have occurred very frequently.35 This picture clearly corresponds with the amount of available information. As certainly happened in the case of the cohors II Lucensium, only small detachments of the original units were present at the location, encamped in permanent bases. In such conditions, the cases of deposition of unserviceable equipment should have happened less frequently. Therefore, thanks to the circumstances discussed above, the chronological interpretation of all these cavalry finds suggests a Neronian deposition date. If so, we would not have any firm evidence of mounted troop existence at Chersonesos in the Trajanic period.

Furthermore, with no surviving Roman defensive structures from the Neronian or Trajanic periods, and with limited – though existing – evidence confirming the “Trajanic” occupation of the Balaklava-Kadykovka fort,36 we are able to recreate the activities of the contemporary Roman cavalrymen, no matter from which time, only through the sheer power of the imagination. And so, we can speculate that the *chora of*

---

35 This was the case of the famous Corbridge deposit, which was dumped on the eve of the Dacian war, see Bishop, Coulston 1993: 35–36.
36 Karasiewicz-Szczypiorski, Savelja 2012: 174, figs. 1:5, 6, 7 and 3–5.
Chersonesos needed constant patrolling in order to detect potential threats.

The situation changed radically during the Antonine and Severan periods: a highly developed system of defensive structures existed around the ancient city of Chersonesos, located alongside the so-called Sapun Ridge, where the Romans had erected a chain of observation towers (Fig. 3). The Sapun Ridge forms a natural barrier, which divides the Heraclean Peninsula, on which the rural territory of the city of Tauric Chersonesos was located, from the distant eastern Inkermann and Balaklava valleys and from the lands inhabited by the “barbarians”. From the towering ridge, the borderland area could have been easily observed and any hostile activity could have been detected sufficiently early. At the top of Sapun Ridge, the borderland area could have been easily observed and any hostile activity could have been detected sufficiently early. At the top of Sapun Ridge, the remains of two Roman observation posts, similar in layout and dimensions, were found. These watch posts were located at the sites of Kazackaja Hill and Kavkaz Bair. Two more numerous Roman garrisons occupied the citadel of Chersonesos and the Kadykovka fort, located in the Balaklava Valley, on the important route to the Balaklava Bay. This defensive system was certainly manned by infantry, which garrisoned the outposts, and cavalry, burdened with the job of patrolling and scouting along the Sapun Ridge (cf. Fig. 3).

With such a long presence of the Roman army, we should expect an increased amount of information. On the contrary, an opposite thing occurs: despite the presence of permanent defensive structures, the number of surviving small finds related to cavalry is considerably low. Only the epigraphic records provide a certain amount of information, but they are fraught with interpretational problems.

Moreover, some surviving artefacts can only presumably be connected with cavalry. And so, at the Roman outpost at Kazackaja Hill, among other finds, two damaged *lorica squamata* scales were found (Figs. 4.6–7). These scales belong to sets of armour typical for the late Antonine or Severan periods, made from long and narrow scales and fastened under the neck by two flat ornamented closers. One broken piece certainly belonged to a cuirass composed from long and narrow scales (Fig. 4.6), as it has no traces of holes, which should have been drilled in its damaged upper part. On the contrary, the other piece could have been very long and wide (Fig. 4.7). Such large scales were not only used in human armour, but were also fastened to the horse barding, as analogies from Dura Europos may indicate. Among other small finds from

---

38 For a short summary of the tasks performed by the defensive system, see Karasiewicz-Szczypiorski, Savelâ, Gawroński 2015: 285–287. It seems that the location of the Balaklava-Kadykovka fort was chosen to secure access to the Balaklava Bay port, see Kovalevskaja, Sarnowski 2004: 47.

39 Bishop, Coulston 1993: 117.

40 As in the case of the cuirass known from Newstead, see Bishop, Coulston 1993: 116.

41 The fragment in question is preserved very fragmentarily, yet originally it was at least 5 cm wide and 7 cm long, judg-
Kazackaja Hill, there were three trilobate tanged triangular arrow tips and a fragment of an iron socket, clearly belonging to a spearhead (Figs. 4.8–11). But all these items could have been used by infantry as well.

To make matters worse, pieces of horse furniture are very badly represented in the assemblages from the Antonine and Severan periods. And so, from the old pre-revolution excavations comes a copper alloy plate, of an openwork design, shaped in the form of two symmetrical pelta-type ornaments (Fig. 5.3). The item was clearly part of decorated horse furniture. Also an openwork leaf-shaped pendant was recovered from the Balaklava-Kadykovka fort (Fig. 5.2). As analogies from Celles-Les-Waremmes in Belgium may indicate, such pendants adorned horse trappings, hanging from breast or crupper straps. A similar but bigger and slightly differently decorated pendant was recovered from Kerč (Fig. 5.2).43 In addition, on the territory of the Balaklava-Kadykovka fort, a bisected bronze rectangular plate was found (together with a small bronze ring, cf. Fig. 6). The item certainly belonged to a set of horse trappings. Such rectangular fittings or strap endings were characteristic of the 1st century AD. However, analogies from Buciumi in Romania, as well as the images of riders from the base of the Antoninus Pius column in Rome, allow for changing the dating to the 2nd or early 3rd centuries AD. In addition, a small pendant, dated to the 2nd century AD, found in the Preslav inscription, see AE 1991: 1378 and Sarnowski 2006b: 236–246. The Bosporan elites certainly copied Roman military fashions, see Treister 2000a: 363–373. However, it seems that the pendant from Kerč is of Roman origin.

331
the city of Chersonesos, could have been a part of horse furniture (Fig. 1.5).\(^{50}\)

A bronze gryphon head (Fig. 7.2) also comes from the same city, and it is most probably part of a parade cavalry helmet or a decorative element of a gladiatorial helmet. Despite the fact that the gryphon’s head is connected with the Goddess Nemesis, analogies from other parts of the Roman Empire show that it was a part of cavalry parade equipment and could have been used during typical Roman *hippika gymnasia* performances.\(^{51}\) It is noteworthy that the presence of *hippika gymnasia* performances at Chersonesos is indirectly attested by other archaeological finds. So far, the only cavalry training ground or manege was found on the Heraclean Peninsula. Analogies from other parts of the Empire and even pictorial evidence suggest that such training grounds were used to teach riders and horses rapid turns: in such a case some artificial barriers are necessary as they enforce turning.\(^{52}\) The manege from the Heraclean Peninsula should have been in use in the times of Diocletian,\(^{53}\) but the date for the recovered structure was based on stamped *tegulae* used during its construction. However, these tiles could have covered an earlier structure, as it is difficult to imagine a situation in which horses bred for the cavalry based at the Balaklava-Kadykovka fort were deprived of adequate training grounds.\(^{54}\) Moreover, the later superstructure could have been built on the earlier training ground, finished with perishable materials (simple straw or hay bundles are much safer for riders during falls). But so far the lack of sufficient evidence for the earlier use of the Heraclean training ground excludes categorical statements.

There is yet another interesting clue which has to be discussed in connection with the find of the

\(^{50}\) Kostromičev 2011: 106. On the photographs published in *Saalburg Jahrbuch* from the year 1924 the elements of horse furniture shown look slightly different, but the practice of adorning crupper or breast belts with such narrow and long fittings with pendants was typical for the 2nd c. AD, see the above note 44.

\(^{51}\) Kostromičev correctly points out that numerous analogies, like those from Nydam, make the cavalry interpretation more probable (Kostromičev 2009: 3–14). Yet, the Nydam find was reported to be attached to a wooden pole, which disintegrated just after discovery. This suggests a secondary use as a standard, see Grane 2007: 237. Such gryphon or eagle heads were certainly used as parts of cavalry helmets, see Junkelmann 1996: 48–49. Such helmets also appear in Roman triumphal art from the 1st c. AD onwards. A clear example of such a helmet can be seen on the trophy relief from Turin, kept in the Museo di Antichità, see D’Amato, Sumner 2009: 104.

\(^{52}\) As pictorial evidence from northern Africa indicates, the Roman riders trained this aspect of horsemanship by following a figure which resembled the Arabic numeral eight. The training grounds were intentionally built with high walls to teach riders and horses rapid turns and facilitate learning manoeuvring in small spaces, see Speidel 1996: 59.

\(^{53}\) On the dating of the training ground in question, based on stamped Diocletianic *tegulae*, see Kovalevskaia, Sarnowski 2002: 89–90.

\(^{54}\) The authors of the original publication on the training ground, though they incorrectly described it as an enclosure made for keeping goats, dated its remains roughly to the late Roman period. However, they had suggested that the initial phases of the enclosure were built after AD 250, see Kuzmištin, Ivančik 1998: 219–221. However, this is pure speculation, based on the correlation of the supposed economic change (from wine production to goat keeping) with the coming of the Goths. As nothing like that happened in reality and the structure in question is certainly a horse training ground, then its initial phases should be correlated with the period of cavalry presence. And such a situation occurred somewhat earlier, in Severan times (we have no firm evidence for the later Roman army presence at Chersonesos; its return is dated to the reign of Diocletian). Therefore, it is possible that the initial phases of the enclosure could have been erected even during the first half of the 2nd c. AD.
bronze gryphon’s head: in Ostrov, in present-day Romania, a 2nd-century AD cavalry helmet was found, made in the form of a Phrygian cap, with cheek pieces decorated with the images of Castor and Pollux (now in Constanța Archaeology Museum). The Phrygian cap was adorned with the representation of an eagle’s head: the point is that it was a piece of real battle equipment, as there was no mask attached. Interestingly enough, a 2nd-century AD monument from the Grosvenor Museum in Chester bears a representation of an auxiliary Sarmatian horseman wearing such a piece of equipment. Therefore, one can speculate that the appearance of a fragment of a gryphon’s head helmet and the supposed presence of large-scale (horse?) armour at the Kazackaja Hill outpost is not a coincidence. And indeed, it is quite possible that in Severan times, after the problems with the Bosporan Kingdom, the arms and armour of Roman horses were remodelled according to Sarmatian fashion, in order to match the fighting styles of the Bosporan cavalry. The subject warrants further investigation. It is also noteworthy that some troopers used standard Roman equipment: a rivet from the auxiliary cavalry helmet of Hedderenheim/Niederbieber type was found on the territory of Chersonesos (Fig. 7.1). This find may suggest that the supposed “sarmatization” of cavalry equipment was far from complete.

Moreover, the theory about the presence of cavalry at the Kazackaja Hill outpost can be given further support: the analysis of the bone remains recovered from the site indicates that at least some horsemeat was consumed at the site. Furthermore, horsemeat was consumed only occasionally, probably in times of great need, and one can easily imagine that only animals unfit for service were slaughtered. Yet, despite the certain presence of horses at the Kazackaja Hill post, we should stress the fact that this is only indirect proof of cavalry presence at the site.

We should also add that in the vicinity of the citadel of Tauric Chersonesos ten horse burials were found, roughly dated to the Roman period. However, as all these finds come from pre-revolutionary excavations, the lack of surviving proper documentation prevents precise chronological assignment: only two of these burials were reported to contain identified coins, belonging to the late Roman period (from Constantine to Arcadius). Therefore, it is also possible that all other burials also belong to the late Roman period. Nevertheless, the presence of such burials may indicate that mounted forces played an important role in the defence of Tauric Chersonesos.

55 D’Amato, Sumner 2009: 188–189.
56 As in the case of the Phrygian style masked Crosby Garrett helmet, now in a private collection, see James 2011: 133. Interestingly, the cavalry parade helmet had a gryphon’s image attached to the top of the cap.
57 For a photograph of the Grosvenor Museum Chester monument, see James 2011: 217.
58 Such an interpretation of the Grosvenor monument and Ostrov helmet can be found in D’Amato, Sumner 2009: 191. However, it should be stressed that the Spangenhelm interpretation clue is closer to the artist’s intentions and seems to be closer to the real helmet, used by the Grosvenor horseman.
59 See supra note 46.
60 The Bosporan horse from the period were very heavily influenced by Sarmatian arms and armour, see Mielczarek 1999: 86–88.
61 Kostromičev 2011: 50, 53. Such helmets, made with protruding crossbar reinforcements, attached with the use of conical rivets, were extremely popular in the 2nd and 3rd c. AD, see James 2004: 102.
63 On the horse burials from Chersonesos, see Karasiewicz-Szczyiorski 2013: 77–78.
Therefore, in order to obtain precise information about cavalry forces employed in the defence of Tauric Chersonesos, we have to examine epigraphic evidence. Sadly, the epigraphic records give us no firm proof of cavalry presence in the Antonine period. The only piece of evidence comes in the form of an inscription (Fig. 8), which mentions a certain M(arcus) Maecilius, a soldier from the cohors I Bracaraugustanorum. According to Spaul, that particular unit was active in Lower Moesia from AD 99 to AD 134. Therefore, the inscription should belong to the Trajanic or Hadrianic periods. But newly-obtained photographs have revealed the fact that the Roman number ‘I’(one) was inscribed in the form of a sign similar to the letter ‘T’. Therefore, it is quite possible that the stonemason made a mistake and tried to fix it by adding a horizontal bar above the letter ‘I’. If that was the case, it is quite possible that he had in mind the cohors II Bracaraugustanorum equitata instead. In addition, it is noteworthy that the particular unit came to Lower Moesia much later, Shortly before AD 145. If our reconstruction of the inscription is indeed true, the unit should have been active in the Crimea after that date. One can argue that without firm evidence such speculations are unjustified. But we should bear in mind that someone must have been doing the patrolling, screening and scouting alongside the newly-created Sapun Ridge defensive system and we have no other candidate for that role.

The situation changed considerably in Severan times. From the vicinity of the Balaklava-Kadykovka fort, from the nearby graveyard, comes a tombstone of a trooper named Iul(ius) V(ales), decorated with an image of a Thracian rider. The stone states that the trooper served in the ala Atector(igiana) turmae Ce[si]. The ala I Gallorum Aectorigiana was attested in the Balkans.

64 IOSPE I 553; Sarnowski 1990: Tab. 3, p. 80, no. 60; Solomonik 1983: 33: M(arcus) Maecilius / mil(es) c(a)/ ho(ris) I(I) Bra(caragustanorum equitata?) / mil(itav)it an(nis) X cen(turia) / Bicani/ h’eres f(ecit). According to Rostovcev’ (1909: 21), the cohort in question was I Bracaraugustanorum. On the other hand, Zubak (2004: 80), though accepting the above-mentioned possibility, suggested a more probable (in his opinion) reading: I Bracarum. He pointed out that the latter unit was based at Durostorum, in a place where the legio XI Claudia had its permanent base (one should remember that soldiers of that particular legion formed the backbone of Crimean vexillationes from the late 2nd c. AD onwards). Before the revolution, the identification with I Bracaraugustanorum was justified, bearing in mind the limited available evidence, but nowadays the increased amount of data enables renewed discussion. In contrast, I Bracarum is less probable, due to the fact that the soldier shown on the monument wears his gladius on the right side of the body: that particular fashion went out of use in the later 2nd c. AD. S. James (2011: 188) states that the change was completed about AD 200; therefore, the monument should have been created before that date, perhaps even before AD 150. This excludes the argument connected with the legio XI Claudia as it appears at Chersonesos later, in Severan times. Therefore, the discussion should focus on the identification with I or II cohors Bracaraugustanorum.

65 Spaul 2000: 89–90.

66 As the army of Lower Moesia was responsible for the maintenance of the Crimean garrisons.


68 D(is) M(anibus) / Iul(ius) V(ales) eq(ues) / alae Atector(igiana) / turmae Ce[si]/ vix(it) annis XXXX / posuit Iul(ius) Vales aest(es) bene merenti, see Savelja, Sarnowski 2000: 191–192; Zubak 2004: 98.
from AD 154 onwards and in 224 was still based at Tomis.\textsuperscript{69} Therefore, it is quite possible that after the Bosporan war, which happened during the reign of Septimius Severus, Crimean garrisons received cavalry reinforcements.\textsuperscript{70} The above-mentioned presence of cavalry finds at Balaklava-Kadykovka fort suggests that at least some detachments of that unit were stationed there.

It is also noteworthy that a probably mid-3\textsuperscript{rd}-century stone from Chersonesos seems to mention an irregular unit of Dalmatian horse: vix (illatio) mil[(itum)] legg(ionum) XI] Cl(audiae) et I Ital(icae) [et eqq(itum)] Dalmarum.\textsuperscript{71} However, in regard to that particular inscription we should stress two facts. First of all, large parts of the inscription have been restored and we have no firm confirmation about Roman army presence at Balaklava at the time.\textsuperscript{72} Secondly, even if the reconstruction of the missing letters is correct, we have no precise information about the character of the unit in question. It could have been an irregular detachment of Dalmatian horsemen, or less probably, a part of the cohors III Dalmatarum equitata, stationed then in Sacidava in Dacia.\textsuperscript{73} Nevertheless, their presence should have been very short-lived. The general conclusion is that from the beginning of the 3\textsuperscript{rd} century AD the Chersonesos cavalry contingent was strengthened considerably, most probably in reaction to the Bosporan war, but they were withdrawn soon in the turmoil of the 3\textsuperscript{rd}-century crisis.

\textsuperscript{69} Spaul 1994: 48.
\textsuperscript{70} The situation looks similar at the Aj-Todor fort, located near present-day Jalta, where the vexillatio alae I Arreucorum was present during Severan times, see IOSPE \textsuperscript{1} 677; Sarnowski 1990: Tab. 3, p. 80 no. 73; Sarnowski 2000: 269. On the intervention of the Roman army during the Bosporan war, see Sarnowski 2006b.
\textsuperscript{72} As all troops were withdrawn earlier. Some evidence suggests that the general withdrawal of the Crimean vexillations had something in common with the preparations of the Persian campaign of Gordian III, see Gawroński 2011: 66; see also ibidem: 63 note 18, for a discussion of the reliability of numismatic evidence for establishing a closing date for the end of Roman presence in Balaklava.
\textsuperscript{73} Spaul 2000: 306.
At this point we should recall the finds of the large scales and the discussion about the possible significance of the gryphon's head helmet from Chersonesos. As already stated, they can somehow be connected with the Balkan cavalry tradition. If our interpretation is correct, these two finds may suggest the presence of Sarmatian-modelled cavalry of Balkan provenience. It matters not the *ala Atectorigiana* had Gallic origins. As can be judged on the basis of the figured evidence of the Gerulata (Slovakia)\(^7\) and Tipasa (Tunisia)\(^5\) tombstones, some cavalry units of supposed Germanic origins (Tungrian and Canninefatian), after a long stay on the Danubian frontier, had adopted Sarmatian fighting styles, such as the use of long *contus* lances.\(^6\) Moreover, there is firm archaeological evidence that the local Thracian warriors had adapted Sarmatian fighting styles as early as in the 1\(^{st}\) century AD.\(^7\) This hypothesis provides further support to the theory that strengthening the cavalry contingent was somehow connected with the Bosporan war. If this was the case, the transfer of the *ala Atectorigiana* horsemen was triggered by the need for finding troops able to match the heavily-armoured Bosporan horse. On the other hand, the slopes of Sapun Ridge required constant patrolling. This could have been done by some lighter troops, perhaps horse archers (the finds of arrowheads discussed above can support such a hypothesis). Additionally, such a scheme of cavalry use repeats the solutions known from other regions. For example, in Upper Germania and Rhaetia, horse units stationed in the Welzheim, Friedberg and Aalen forts were never used to penetrate the barbarian lands, as the nearby mountainous terrain excluded the use of cavalry. In clear contrast, the very same troops could move very fast along the frontier, using fine Roman roads, and respond to any attempts in breaching the border.\(^7\) As one can see, such a system, albeit on a smaller scale, was copied in the Tauric Chersonesos. Lighter troops, horse archers perhaps, were used for patrolling and screening duties along the Sapun Ridge, while heavier horse, probably stationed at Balaklava fort, would be sent into action in response to any serious threat. It is also noteworthy that the system developed over time. The basics were introduced in the Antonine period, but the subsequent response to the Bosporan war triggered sending reinforcements, in the form of the transfer of the formidable the *ala Atectorigiana*. With that, the development of the system was finally completed. The general conclusion is that the defensive system worked quite well, as we have no traces of violence in the area.

\(^7\) For the Gerulata tombstone, see Speidel 2004: 121.
\(^5\) For the Tipasa stone, see Junkelmann 1992: 144 and Bishop, Coulston 1993: 111.
\(^6\) For a different view on the subject, see Speidel 2004: 121–122. Speidel argues that such lances are an effect of adopting an indigenous Germanic tradition, but the Sarmatian connection with the long *contus* lances seems to be more probable. For the Gerulata and Tipasa stones, see also Speidel 1987: 63.
\(^7\) As the finds from Čatalka tumulus may indicate, see D’Amato, Sumner 2009: 198–199.

\(^78\) Breeze 2012: 61, 78.
В пограничной зоне сельской округи Херсонеса Таврического в первых веках нашей эры функционировали римские посты (рис. 3). Безопасность греческой общины охраняло, вероятнее всего, три наблюдательные башни, расположенные вдоль хребта Сапун-горы. В результате предыдущих исследований найдено две из них, которые были расположены в местах, носящих местные названия: Казацкая (Kazackaja Hill) и Урочище Кавказ (Kavkaz Bair). Третий пост находился, вероятнее всего, в местности называемой Карагач (Karagač). С этой (южной) части Сапун-горы был виден форт в Балаклаве-Кадыковке (Balaklava-Kadykovka), который дополнял систему охраны пограничной зоны, а также контролировал единственную выгодную дорогу к Балаклаве. Удерживание коммуникаций между фортом и башнями, а также контроль лежащих дальше на восток Инкерманской и Балаклавской долин, вероятно, требовало использования кавалерии.

Опираясь на анализ археологических (рис. 1, 2, 4–7) и эпиграфических источников, авторы пытаются сделать реконструкцию механизма смены гарнизонов, постов на границе через подотделы, выделенных из некоторых alae и cohortes equitatae, базировавшихся в Нижней Мезии. Конница находилась, вероятнее всего, в составе всех vexillationes высылаемых в Тавриду, количество всадников однако изменялось со временем. Во времена правления династии Северов участие кавалерии было, вероятнее всего, наибольшим. Возможно также, что именно тогда вооружение римской кавалерии начали модифицировать, опираясь на сарматские образцы, с целью подгонки к стилям борьбы конницы Боспорского царства.

Перевод Наталия Рудько

Radosław A. Gawroński
Institute of Archaeology
University of Cardinal Stefan Wyszyński
ul. Wóycickiego 1/3
01-938 Warszawa, pl
rgawr@o2.pl

Radosław Karasiewicz-Szczypiorski
Institute of Archaeology
University of Warsaw
ul. Krakowskie Przedmieście 26/28,
00-927 Warszawa, pl
radoslaw.szczypiorski@gmail.com

Ancient authors


Abbreviations

BAR-IS British Archaeological Reports. International Series
BJb Bonner Jahrbücher
CIL Corpus Inscriptionum Latinarum, Berlin, 1863 ff.
IOSPEIF B. Latyschev, Inscriptiones antiquae Orar Septentrionalis Ponti Euxini. Inscriptiones Tyrae, Olbiae, Chersonesii Tauricae aliorum locorum a Danubiousque ad regnum Bosporanum, Petropoli 1916.
JRMES Journal of Roman Military Equipment Studies
JRS Journal of Roman Studies
MAIÈT / МАИЭТ Materijaly po Arheologii i Ètnografii Tavriki / Материалы по Археологии и Этнографии Таврики
RA / РА Rossiskaja Arheologija / Российская Археология
SJ Saalburg Jahrbuch
Stratum Plus Stratum plus. Archaeology and Cultural Anthropology
VDI / ВДИ Vestnik Drevnej Istorii / Вестник Древней Истории
ZPE Zeitschrift für Papyrologie und Epigraphik

**Literature**


Rabiesen, E. 1990. La production d’équipement de cavalerie au ler s. après J.C. a Alesia, JRMES 1, 73–98.


