

PARADE HELMET MASKS FROM ROMAN DACIA: RE-INTERPRETING EQUIPMENT THROUGH THE STUDY OF MILITARY RELIGION

*Tomasz Dziurdzik**

* Institute of Archaeology, University of Warsaw; tdziurdzik@wp.pl

Rezumat. Coifurile romane cu mască, respectiv vizieră sunt o categorie de piese de echipament militar rare ca descoperiri arheologice, dar spectaculoase prin frumusețea și importanța lor. Acestea imită forma capului uman, cu sau fără coif și adesea sunt acoperite de ornamente în relief, atent elaborate, care includ motive mitologice și apotropaice. Mai mult decât atât sunt realizate din metale strălucitoare: bronz sau chiar argint. Aceste caracteristici le fac să atragă atenția specialiștilor în tehnică militară romană și admirația publicului larg. Astfel de măști au fost descoperite și pe teritoriul Daciei Romane. Două au fost găsite în râul Olt și se crede că provin din situri arheologice de pe malul acestuia, iar o altă descoperire provine din șanțul castrului roman de la Gilău și se consideră că proprietarul ei a pierdut-o. Se crede că aceste coifuri făceau parte din echipamentul de paradă al cavaleriei romane. Toate piesele de care ne ocupăm aici aparțin unei subcategorii de coifuri, rar întâlnite, care reprezintă capete de femei sau zeițe.

Este totuși greu de crezut, ținând cont de disciplina severă din armata romană, că pierderea unei astfel de piese de echipament militar ar fi rămas neobservată, mai ales dacă ținem cont de raritatea acestor artefacte la nivelul întregii Europe. Ultimele studii despre practicile religioase din mediul militar roman ne permit să realizăm o reinterpretare a acestor descoperiri foarte speciale. Considerăm că merită privite aceste coifuri și ca ofrande aduse de soldați sau de trupe pentru asigurarea victoriei într-o viitoare întreprindere militară. Această teorie pare mai credibilă dacă ținem cont de locul lor de descoperire și de analogiile din afara Daciei Romane.

Cuvinte cheie: Imperiul roman, cavalerie, coif, măști, culte militare, depuneri rituale.

Cavalry parade helmets with face-masks constitute a special, very distinct category among Roman military equipment from the times of Principate. So far only about 150 pieces have been found and published, many of them surviving only in fragmentary condition. The rarity of such finds combined with their visual beauty make them the focus of public attention, as in the case of the so-called Crosby Garrett helmet found in 2010 by a metal detectorist and auctioned off by Christie's for £2.3 million to a private collector despite a massive fund-raising campaign to secure its acquisition by a museum, or the Plovdiv mask, stolen from the Archaeological museum of that Bulgarian city in 1995 during an armed robbery and returned only in 2015. In that case it is worth noting that only that mask was stolen, even though it was displayed

together with other valuable objects, including golden rings, meaning that the thieves were aiming at that particular centrepiece. However, the true value of such helmets lies not just in their material worth and artistic beauty, but in their importance for scholars dealing with the Roman army, as they constitute an important source for the study of military symbols and ideology, mythology and religion, and also for such specific problems as the ownership of arms in the Roman army.

The purpose of such helmets remains a matter of disputes. It has been argued that the early, 1st century AD pieces are sturdy enough to be considered of use in battlefield conditions¹; the later, 2nd to early 3rd century examples, are made using other technologies, their thinness suggesting very limited usefulness as protection². Also, the shapes of later helmets underwent changes reducing their practicality. While the early examples are very similar to a more-or-less standard Roman cavalry helmet, but with the addition of a face-mask, in the 2nd century the rear pieces of some such helmets develop their own, dedicated shapes. If not worn as a complete set, both mask and rear piece put on at the same time and fastened, they would fall from the wearer's head, as they were not designed to function independently³.

Their two parts, mask and rear piece (in one morphological type the mask also has a separate visor covering the middle of face⁴), cover the whole head of the wearer up to the neck. The helmets depict human heads, bare or helmeted, with very detailed facial features, hair and pieces of equipment, providing a total illusion as to the identity of the soldier that wears them. Often they are additionally richly decorated, with apotropaic patterns, mythological scenes and motives, making them a perfect source for the study of military iconography. They also are an interesting topic for chronological studies, as in many cases they can be precisely dated according to their stylistic features, especially the hairstyles⁵. Their importance is even more prominently marked by the fact that many of them are made of precious bronze or even silvered, adding to their artistic qualities also the perception of high material worth in antiquity. However, even the iron helmets of this type were most probably items of high value due to their rarity and workmanship, the particular shape with several openings and the prominent nose in the middle being in fact easier to achieve in bronze, which is a much more plastic material⁶.

Moreover, they are also an important source for the study of the organization and customs of the Roman army. A detailed account by Arrian of Nicomedia⁷ provides us with the information that such equipment was used during *hippika gymnasias*, a special activity of the cavalry that combined aspects of training with those of a show or parade. According to this relation, they were used to distinguish the

¹ Meijers, Schalles, Willer, 2007; Negin, 2013.

² Junkelmann, 1996, p. 53; for other opinion, based on weak grounds, see Narloch, 2012.

³ Junkelmann, 1996, p. 56.

⁴ Robinson, 1975, Cavalry Sports type F; Kohlert, 1978, type III.

⁵ Kohlert, 1978, p. 28-29.

⁶ Kellner, 1978, p. 43.

⁷ Arrian, *Ars tactica*, 32.3–44.3.

officers and best horsemen of a unit during the maneuvers. However, it has been argued, with good reasons, based on the sturdiness of materials used, that at least the early examples could have also found combat use as real protection of soldiers' faces⁸. Thus, helmets with face-masks combine several factors that make them splendid archaeological finds and center pieces of any museum collection. However, the fact that they are studied mostly from a perspective of iconography or military studies means that their archaeological context often remains somewhat neglected.

So far three finds of such pieces of equipment from Dacia have been published. In all three cases we deal with masks of two-piece helmets representing female faces. Two of them, from Cincșor⁹ and Reșca¹⁰, have been accidentally found in the river Olt and have been interpreted as having been washed away from one of the military sites located further upstream and therefore lacking any kind of stratigraphical, chronological or closer topographical information about their actual use in Roman times. The mask from Gilău, on the other hand, has been found during regular archaeological excavations at the bottom of a ditch running around the military camp and is believed by the discoverer to have been lost there before this ditch was filled up to be replaced by the next phase of the defense system¹¹. As the filling up of that ditch can be more or less accurately dated based on the analysis of the sequence of building phases, we possess some more accurate data about the time of its use and the circumstances of its deposition. As such, according to all available catalogues and studies on the topic of Roman helmets with face-masks, there seems to be a noticeable difference between the amount of information on the finds and their context that we have available between the mask from Gilău and the other two. However, the aim of this article is to challenge the *status quo* in that matter and to offer a new interpretation on that subject, based on an analysis of analogies from other parts of the Empire and on the probable role of such equipment in Roman military religion and the cult customs of the soldiers.

It is very interesting to note that all three masks belong to the so-called female type, that is, they represent faces with clearly feminine facial features and hairstyles¹². The depictions appear to closely follow the changes of current fashions influenced by the hairstyles of female members of the Imperial family. Masks of this type also frequently include representations of elements of jewelry, such as various diadems and hair ornaments, thus making the interpretation of depicted sex all the more obvious. The role of female masks remains a mystery, the most commonly repeated theory being that they could represent Amazons¹³. This issue is however of little relevance for the present study.

⁸ Meijers, Schalles, Willer, 2007.

⁹ Dragotă, 1987; Isac, 2009, p. 192-193.

¹⁰ Garbsch, 1978, p. 69-70; Robinson, 1975, p. 124-125; Vlădescu, 1981; Isac, 2009, p. 192.

¹¹ Isac, 2009, p. 191-192.

¹² Robinson, 1975, Cavalry Sports type E; Kohlert, 1978, type VI; Bartman, 2005, type IIIb.

¹³ Robinson, 1975, p. 124; Dixon-Southern, 1997, p. 128; Garbsch, 1978, p. 36.

It is a striking fact that all three masks from Dacia belong to this category, since such helmets constitute only about 20% of all helmets with face-masks found till today. Interestingly, except for some isolated finds from Italy, all the other female helmets come from a rather concise area: the Danubian provinces and Germania superior, most having been found in the immediate vicinity of Roman military installations or inside them. So far there were no convincing attempts to divide this category into morphological types. In most cases, all female masks are grouped into a single type in the typology of all helmets with face-masks, regardless of the evident variations between the particular pieces. The most recent, by Elizabeth Bartman (2005)¹⁴, proposes two subtypes, but the line of this divide is not entirely clear, as it mostly relies on her interpretation of the role played by such masks, and does not take into account the evident chronological and territorial differences. As such, it is of little value for the study of the matter, as it is entirely subjective and speculative. Even less consideration has so far been given to the rear parts of female helmets, but the really low number of known examples somehow justifies this. Still, regardless that a well thought out typology is unfortunately lacking, some stylistic features, especially the hairstyles, and quite well-dated analogies from neighboring regions of Roman Empire (especially the mask from Visegrád in Hungary)¹⁵ allow to narrow the time of the production of the masks found in Dacia to around the end of the 2nd century AD. The archaeological context of the finds gives little further chronological clues about the period of their use. The mask from Gilău was found at the bottom of a defensive ditch belonging to the phase III¹⁶. The replacement of those defenses by those of the next phase has been dated to towards the end of the 2nd century AD, giving the date when the ditch with the mask inside it was filled with earth. The others are chance finds from river beds, lacking any stratigraphic context. In the case of the mask from Cincșor there is also the open problem of its peculiar shape, with one of the sides flattened. It has been proposed that either it has been crushed during the post-depositional processes, or alternatively, that this is the effect of a conscious attempt to make the mask better fit the face of a wearer suffering from some form of deformation of face¹⁷. However, there are no indications that any of the approximately 150 helmet masks in the whole Roman Empire was made to fit the specific facial features of a certain person. From a statistic point of view, this theory will probably remain impossible to prove or reject, since most people would not require any noticeable modifications of the basic shape and the total number of helmets is low. Still, one may suggest that the deformation might be rather due to the fact that the mask was never truly finished. Since helmets with face-masks were luxurious pieces of equipment meant for show, we should expect not only the highest quality of artisans' work, but also that such an elaborate piece would be purposefully used to cover and hide the imperfect facial features of the wearer behind the ideal face represented on the mask. On the other

¹⁴ Bartman, 2005.

¹⁵ Garbsch, 1978, p. 70.

¹⁶ Isac, 2009.

¹⁷ Isac, 2009, p. 192.

hand, it might be possible that the mask was damaged on purpose as some form of ritual treatment before it was deposited.

In this context it appears that the current interpretations concerning the context of finds of masks in Dacia can be refined by using analogies from other parts of the Roman Empire and by analyzing the connected military rituals, both religious and funerary. It is worth noting that helmets with face-masks, and especially the masks themselves, are often found in contexts that suggest their extreme symbolic and ritual importance. Several examples were found in rich tombs of 1st century AD, obviously of persons of non-Roman origin, but already displaying a kind of mixed burial customs combining elements of their indigenous spiritual culture with new influences and elements of Roman material culture. To this inconsistent group belong the extremely rich burials from Gaul, Thrace and Syria, representing various traditions and developments, but in all cases the buried persons were members of the local aristocracy acting as officers or leaders of allied troops in Roman service¹⁸. On one hand they used the masks as markers of their elite status within a provincial society or one that had any kind of client relation, thus underlining their position in relation to the Roman state and the resulting access to imported luxurious objects. This allowed them to negotiate the process of acculturation to their benefit, but on the other hand, it shows their continuing involvement in the indigenous culture, through the adoption of a Roman element of military equipment into the local custom of grave offerings, including in some cases their employment as a form of a funerary mask.

Similarly, helmets with face-masks also found an extremely important role in the ritual depositions performed in the 1st century AD on the territory of the tribe of Batavians. They were placed together with other objects in pits and purposefully buried, for example on the Kops plateau near modern Nijmegen in the Netherlands¹⁹. When we consider the fact that many of those helmets were covered with hair or animal fur to imitate hairstyles, we might suggest that this ritual could be somehow related to the cult role of the human head in the Celtic cultural sphere. Still, it represents a development of a ritual and cult practice that arose in the contact zone between the *local* and the *foreign*. It appeared only after the advent of Roman rule and of the Roman army, when some members of the local population got the access to impressive pieces of parade equipment. This custom could therefore be described as a result of complex cultural interactions that accompanied the acculturation of soldiers and frontier zones.

Yet another group of helmets with face-masks that can be interpreted as related to cult activities belongs to a horizon of metal hoards from the so-called *Agri Decumates* in Raetia and Germania superior, related with the events around AD 233–254²⁰. Barbarian raids and the subsequent abandonment of the area by Romans resulted both in the hiding of large amounts of bronze and iron artifacts and scrap metal and their later non-recovery. Although some of the hoards belonging to the

¹⁸ Junkelmann, 1996, p. 26.

¹⁹ Willems, 1992; van Enskevort, 2007, p. 14-15.

²⁰ Kellner, 1978; Keim, Klumbach, 1976; Kellner, Zahlhaas, 1983; Rind, 1991, p. 91-92.

horizon exhibit features that clearly mark them as objects collected for melting down and re-working in the times when the supply of raw material was limited. Most of the hoards containing the helmets with face masks, especially those that are complete, are notorious exceptions. Those finds contain a much higher proportion of artifacts in good, working condition, or are even completely formed of such full value objects. Among them special attention must be drawn to the hoard from Weißenburg, which has been interpreted as containing the equipment and votive deposits from a temple, most probably a small chapel located in the *vicus* of the nearby fort²¹. The presence of a bronze vessel bearing the name of Epona, the goddess of horses and riders, together with depictions of other military gods and goddesses, points to the high possibility that we are in fact dealing with a temple frequented by members of the military and suiting the particular religious interests of horsemen stationed in the fort *Biriciana*²². It was located in the *vicus* surrounding the fort in its immediate vicinity and could even have been an official military temple, in that case most probably a chapel adjoining the training grounds of the unit. It is an important piece of evidence for the role of helmets with face-masks as votive offerings in the military religion, whether it was an official offering on behalf of a unit or only a private deposition of a single soldier. We can suppose that the female helmets were connected with the cult of female goddesses, be it Epona or the group of divinities known as the *Campestres*. They were a peculiar development of the interaction between the Gallo-Germanic idea of triads of protective goddesses, Romanized as *Matres*, with the Roman military religion. The goddesses were connected with the *campus*, training grounds. This cult quickly spread along the Roman cavalrymen, mostly thanks to the fact that the Germanic and Celtic horsemen were the most numerous among all auxiliary cavalry. Moreover, the Batavians, along with other neighboring tribes from Germania, constituted the vast majority of the mounted Imperial guard in the 1st and 2nd century. Members of this unit often became promoted as NCOs and officers in other units. Since the higher ranking soldiers were expected to preside over the religious life of their subordinates²³, this resulted in the rapid spread of the cult of *Campestres* among all units of cavalry in the Roman army. Moreover, the apparent decline of the cult of Epona and *Campestres* around the half of 3rd century²⁴ well matches the end of *hippika gymnasia* and associated parade equipment.

In such ritual contexts we should also consider the 2nd century masks found in Dacia. While one may suggest that the masks had iron rear pieces that did not survive till modern times (this is probably the case in Gilău), it seems far more probable to assume that either there were no rear pieces connected with them at all, meaning that the masks did never function as pieces of helmets, or that the rear pieces had much lower ritual meaning. This matches well with the fact that not only on the whole territory of the Roman Empire there were found much more masks than rear

²¹ Kellner, Zahlhaas, 1983.

²² Kellner, Zahlhaas, 1983, p. 46.

²³ Compare the situation in the legions, Kolendo, 1980; Kolendo, 1988.

²⁴ Irby-Massie, 1996, p. 293.

pieces, but also the total number of iron masks is higher than iron rear pieces. Therefore it appears probable that many masks were never parts of helmets, but rather existed separately. We can propose that they had their own ritual meaning. Similarly, the theatre masks were almost never represented with the straps required for their wearing or the wigs that covered the rear part of the wearer's head. Still, they worked as markers of cultural identity²⁵, being used by those who perceived themselves as members of the Greek-Roman world, mostly used in spaces and circumstances that had nothing in common with theatrical performances or even the Greek or Latin literary culture. Still, especially in the less developed in this aspect Northern provinces the theatre mask was a powerful symbol used to express one's cultural aspirations, a symbol which pars pro toto contained just the front half of the total object used in theatre. The same allowed a mask to represent a whole parade helmet, allowing a dedicant to use just the most important part of a complex object. Moreover, in this case the mask acts as a kind of double symbol – it represents both an important element of the military religion, and also alludes to the *romanitas* of the person making such an offering in a temple.

In this religious, ritual and social context of helmet masks one can propose a different interpretation of the finds from Dacia. One must also take into consideration the fact that those objects were both highly valuable, rare and important. Bearing in mind their size, the interpretation that the masks from Cincșor and Reșca were washed away from some military sites seems rather improbable. On the other hand, it is possible that they were purposefully thrown into to the river as an offering, whether by Roman soldiers or by their enemies who managed to get into possession of that element of equipment. Such depositions often included items of extreme material worth and of symbolic importance. A horseman's mask perfectly fits into this category, being not only a luxury, but also a symbol of high military status and a symbol of belonging to the Roman army and to the cultural circle of the ancient civilization. There are some further examples of this practice²⁶. If the offering was made by a Roman soldier, one can also add to the list the reason that the mask probably represented, or at least was connected to the female divinities that were the special protectors of cavalry. This would make it a most suitable offering for example at a river crossing, representing a special threat to the horses and riders. Additionally, it has already been noted that the unit stationed at fort in Cincșor, from which the mask was believed to come, contained no horseman²⁷. If we assume that the mask was indeed a river offering this problem altogether disappears, since the ritual could have been performed during any movement of soldiers in the area.

In this context it is interesting to note the two inscriptions on the side of the mask from Reșca²⁸. They have been interpreted as mentioning the two consecutive

²⁵ Rose, 2000.

²⁶ Bartman, 2005, p. 100.

²⁷ Isac 2009, p. 193.

²⁸ Garbsch, 1978, p. 69-70.

owners of the item²⁹. However, if we accept the hypothesis that the mask served as a votive offering we can assume that those are the names of two soldiers dedicating the item. Since we remain unsure about the rules governing the ownership of such parade equipment, as Arrian of Nicomedia only mentioned that its wearing was the privilege of officers and best horsemen, this seems quite probable. Moreover, there are cases of other masks that bear an inscription mentioning only the sub-unit; those would be votive offerings made on behalf of the whole group of soldiers.

A special case is the mask from Gilău, interpreted so far as an item lost and accidentally covered with earth when the ditch into which it fell was filled and replaced by new defenses. Firstly, one should note that the loss of an item of that size and material worth is difficult to imagine, especially in such a place as in the immediate vicinity of a gate, where dozens of people would pass every day. Additionally, one should compare the data on the context of the find. It was specifically noted that there were no other finds in that spot. This matches well our general knowledge on how the ditches of Roman camps functioned in normal conditions. Although the place where the mask was found would be most probably used for the disposal of rubbish, it is evident, that in the case of that fort the cleaning of ditches functioned properly. Indeed, one can find in a ditch the rich archaeological material which represents the rubbish³⁰ only in cases of abandonment of the fort in specific conditions, either in a hurry in between two cleanings of ditches or when the camp was being abandoned never to be garrisoned again, with nobody caring about the defensive ditch. In most other cases we get traces of regular upkeep of the ditches, including the sporadic use of the so-called “ankle breaker”, that is the shovel-wide channel on the bottom of a ditch used to facilitate cleaning and prevent the slow filling up. Still, even bearing in mind the fact that rubbish was frequently present in the ditches near the gates, it is extremely difficult to imagine that the only overlooked piece left after the upkeep of the ditch would be a bronze mask the size of a human face. Moreover, the published pictures of the discovery show the mask as standing vertically on one of the sides, not lying flat as we could expect from an item that accidentally fell into the ditch.

Altogether the archaeological context and our knowledge on the functioning of the cleaning of ditches in Roman military camps point against the interpretation that the mask was accidentally lost. However, the end part of a ditch near the gap in front of the gate is a very significant point in terms of the safety of a camp's defensive system. This makes the spot a perfect place for a votive offering, most probably placed there during the inauguration of the rebuilding of the fort's defenses into their next phase. Such a votive deposit would ensure the divine help in the construction process and protection of the new installations. The choice of the item used as the offering perfectly matches the garrison of the fort – a unit of cavalry, as it is firstly an element of equipment characteristic only for horsemen, secondly, due to its connection with cults of divinities that those soldiers found most important.

²⁹ Isac, 2009, p. 192.

³⁰ On the Roman rubbish cf. Thüry, 2001.

To sum up, the analogies from other parts of the Roman Empire and the information about the religious and ritual activities of units and soldiers of the Roman army allowed us to propose a re-interpretation of the finds of masks of helmets found in Dacia. Rather than stray finds washed away from sites near rivers or lost accidentally and dropped into a ditch, we should view them as deposits that were meant to attract the attention and help of divinities belonging to the military pantheon most closely connected with the horsemen. They served not only as mere expressions of faith or fulfillment of rituals, but also as cultural markers, clearly singling out the dedicants as firstly privileged members of the Roman military and secondly as belonging to the Roman world in terms of the media they chose to express their religious identity, regardless of whether we should consider the practicing of such offerings as Roman, indigenous or brought from any other part of the Empire.

BIBLIOGRAPHY

- Arrian, *Ars tactica* (32,3 – 44,3) *Der Reitertraktat des Arrian*, Kiechle, Franz (trad.), In: Garbsch, Jochen, **Römische Paraderüstungen**, Mit Beiträgen von Hans-Jörg Kellner, Franz Kiechle und Maria Kohlert, Katalog der Ausstellung: Germanisches Nationalmuseum Nürnberg, 15. Dezember 1978 - 4. Februar 1979, Prähistorische Staatssammlung München, Museum für Vor- und Frühgeschichte, 16. Februar 1979 - 16. April 1979, Münchner Beiträge zur Vor- und Frühgeschichte, Band 30, Verlag C. H. Beck, München, 1978, XII + 100 + 48 (Tafel 1–48) pg.; p. 38-43.
- Bartman, 2005 Bartman, Elizabeth, *The mock face of battle*, In: *Journal of Roman Archaeology*, 18.1, 2005, p. 99-119.
- Dixon-Southern, 1997 Dixon, Karen R.; Southern, Pat, **The Roman Cavalry: From the first to the third century AD**, new edition, Routledge, London, New York, 1997, 256 pg., ISBN 0415170397.
- Dragotă, 1987 Dragotă, Gheorghe, *Masca romană de bronz de la Cincșor (jud. Brașov)*, In: *Studii și cercetări de istorie veche*, 38. 3, 1987, p. 276-280.
- van Enskevort, 2007 van Enskevort, Harry, *Geopferte und verbogene römische Gesichtshelme aus Nijmegen*, In: Meijers, Ronny; Willer, Frank (eds), **Achter het zilveren masker / Hinter der silbernen Maske. Neue Untersuchungen zur Herstellungstechnik römischer Reiterhelme**, Museum Het Valkhof, Rheinisches Landesmuseum Bonn, Nijmegen, Bonn, 2007, 112 pg.; p. 9-16.
- Garbsch, 1978 Garbsch, Jochen, **Römische Paraderüstungen**, Mit Beiträgen von Hans-Jörg Kellner, Franz Kiechle und Maria Kohlert, Katalog der Ausstellung: Germanisches Nationalmuseum Nürnberg, 15. Dezember 1978 - 4. Februar 1979, Prähistorische Staatssammlung München, Museum für Vor- und Frühgeschichte, 16. Februar 1979 - 16. April 1979, Münchner Beiträge zur Vor- und Frühgeschichte, Band 30, Verlag C. H. Beck, München, 1978, XII + 100 + 48 (Tafel 1–48) pg.
- Isac, 2009 Isac, Dan, *The cavalry parade mask from Gilău*, In: *Ephemeris Napocensis*, XIX, 2009, p. 191-198.
- Irby-Massie, 1996 Irby-Massie, Georgia L., *The Roman Army and the Cult of the Campestris*, In: *Zeitschrift für Papyrologie und Epigraphik*, 113, 1996, p. 293-300.
- Junkelmann, 1996 Junkelmann, Marcus, **Reiter wie Statuen aus Erz**, Zaberns Bildbände zur Archäologie; Sonderhefte der Antiken Welt, Verlag Phillip von Zabern in Wissenschaftliche Buchgesellschaft, Mainz am Rhein, 1996, 128 pg., ISBN 3805318219.

- Keim,
Klumbach,
1976 Keim, Josef; Klumbach, Hans, *Der römische Schatzfund von Straubing*, Münchner Beiträge zur Vor- und Frühgeschichte, Band 3, Verlag C. H. Beck, München, 1976, VIII + 46 + 46 pg., ISBN 3-406-07277-1.
- Kellner, 1978 Kellner, Hans-Jörg, *Der römische Verwahrfund von Eining*, Münchner Beiträge zur Vor- und Frühgeschichte, Band 29, Verlag C. H. Beck, München, 1978, 44 pg., ISBN 3406004997.
- Kellner-
Zahlhaas, 1983 Kellner, Hans-Jörg, Zahlhaas, Gisela, *Der römische Schatzfund von Weißburg*, München, Zürich, 1983, ISBN 978-3795411046.
- Kohlert, 1978 Kohlert, Maria, *Typologie und Chronologie der Gesichtsmasken*, In: Garbsch, Jochen, *Römische Paraderüstungen*, Mit Beiträgen von Hans-Jörg Kellner, Franz Kiechle und Maria Kohlert, Katalog der Ausstellung: Germanisches Nationalmuseum Nürnberg, 15. Dezember 1978 - 4. Februar 1979, Prähistorische Staatssammlung München, Museum für Vor- und Frühgeschichte, 16. Februar 1979 - 16. April 1979, Münchner Beiträge zur Vor- und Frühgeschichte, Band 30, Verlag C. H. Beck, München, 1978, XII + 100 + 48 (Tafel 1–48) pg.; p. 19-28.
- Kolendo, 1980 Kolendo, Jerzy, *Le rôle du primus pilus dans la vie religieuse de la légion. En rapport avec quelques inscriptions des principia de Novae*, In: *Archeologia* (Warszawa), 31, p. 49-60.
- Kolendo, 1988 Kolendo, Jerzy, *Les nouvelles inscriptions des "primi pili" de Novae*, In: *Archeologia* (Warszawa), 39, p. 91-103.
- Narloch, 2012 Narloch, Krzysztof, *The Cold Face of Battle – Some Remarks on the Function of Roman Helmets with Face Masks*, In: *Archäologisches Korespondenzblatt*, 42.3, 2012, p. 377-386.
- Negin, 2013 Negin, Andrei, *К вопросу о боевом применении шлемов с масками в римской армии / On combat use of face-mask helmets in the Roman army*, In: *Вестник ННГУ им. Н.И. Лобачевского*, 1.5, 2013, p. 245-253.
- Meijers,
Schalles,
Willer, 2007 Meijers, Ronny; Schalles, Hans-Joachim; Willer, Frank, *Schuss-experimente mit einer rekonstruierten römischen Torsionswaffe auf definierte Metallbleche*, In: Meijers, Ronny; Willer, Frank (eds), *Achter het zilveren masker / Hinter der silbernen Maske. Neue Untersuchungen zur Herstellungstechnik römischer Reiterhelme*, Museum Het Valkhof, Rheinisches Landesmuseum Bonn, Nijmegen, Bonn, 2007, 112 pg.; p. 69-76.
- Rind, 1991 Rind, Michael M., *Ein Sammelfund der mittleren römischen Kaiserzeit aus Sittling, Gde. Neustadt, Lkr. Kelheim, Ndb.*, In: Prammer, Johannes (ed), *Ausgrabungen und Funde in Alt-bayern 1989-1991. Sonderausstellung*, Katalog des Gäubodenmuseums Straubing, Nr. 18, Straubing, 1991, 127 pg.; p. 91-92.

- Robinson, 1975 Robinson, Henry Russell, *The Armour of Imperial Rome*, Arms and Armour Press, London, 1975, 200 pg., ISBN 0853682194.
- Rose, 2000 Rose, Hannelore, *sum figuli lusus ... Die römischen Terrakottamasken in den Nordwestprovinzen. Herkunft – Herstellung – Verbreitung – Funktion*, Philosophischen Fakultät der Universität zu Köln, (diss. Phd.), 2000, 103 pg. (ms), on-line <http://kups.ub.uni-koeln.de/1491/> (consulted 15.10.2015).
- Thüry, 2001 Thüry, Günther E., *Müll und Marmorsäulen. Siedlungshygiene in der römischen Antike*, Verlag Phillip von Zabern in Wissenschaftliche Buchgesellschaft, Mainz am Rhein, 2001, 68 pg., ISBN 3805326750.
- Vlădescu, 1981 Vlădescu, Cristian M., *Masca de paradă de la Romula și încercarea de reconstituire a coifului de cavalerie romană*, In: *Studii și cercetări de istorie veche*, 32.2, 1981, p. 195-203.
- Willems, 1992 Willems, Willem J. H., *Roman face masks from the Kops Plateau, Nijmegen, The Netherlands*, In: *Journal of Roman Military Equipment Studies*, 3, 1992, p. 57-66.