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OLD AND NEW EVIDENCE ON THE EAST-ROMAN HELMETS FROM THE 9th TO THE 12th CENTURIES*

Abstract:

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The history of the helmet in the Roman medieval Empire of Byzantium, and the analysis of its typology on the battlefield, is the main purpose of this contribution. In detail, the author tries to shed more light on this kind of military object, analyzing the written, historical and iconographical sources of the period between the 9th and the 12th c., and comparing them to the scarce archaeological artefacts that have been published to date. The analysis will show as the types of the 4th-5th c. helmets were improved, developed and used besides new models, through the necessary adjustments derived from the continuous wars and confrontations of the Empire with its many enemies.

Key words: Roman, Byzantium, Helmet, Weaponry, archaeology

The East-Roman army was, at least until the end of the 12th c., the best trained, organized and equipped of the Middle Age. If led on war by expert generals and commanders, or even by soldier-Emperors, it was able to achieve great military successes, allowing to the Empire to survive until the fall of Constantinople in 1453 AD. The reasons for it, especially in the period of military revivals like those of the Macedonian and Comnenian dynasties, were a strong economy, an efficient state organization and the development of the ancient military legacy of the millenary Roman Empire. This aspect was reflected also in the production of weapons, often still prerogative of the State's factories ("fabricae"). The care in the production of the protective elements of the body, like armours and helmets, and their improvement notwithstanding the still strong attachment to the secular tradition of Rome, were undoubtedly result of the confrontation of the Romans with strong and new enemies and of the technical development of their secular tradition of weaponry. The history of the helmet in the Empire of Byzantium, and the analysis of its typology is a topic very little examined by the scholars, but it is worth to be further studied in detail, not only from the point of view of the

military history, but also under the aspect of the influence it had both on West and East military technologies. The types of the 4th-5th c. helmets were improved and developed, through the necessary adjustments born from the continuous wars and confrontations of the Empire with its many enemies. The main problem of this study is that very few archaeological specimens have been considered by the scholars, effectively realised inside the boundaries of the Roman Eastern Empire, or, better, published. The purpose of this contribution is to shed more light on these kind of military items, analysing the written, historical and iconographical sources of the period between the 9th and the 12th c., the last gold centuries of military splendour of Byzantium.

The helmet in Byzantium: denomination

In the sources of the 9th-12th c. the Romans, in a Greek speaking Empire, used mainly old Greek words to indicate the various part of the military equipment, and naturally also the helmet did not escape this rule. We find in the single authors the expressions "περικεφαλαία" ("perikefalía") (*Eustathii* 1960, 804,16-19, 335), "κράνος" ("krános") (*Leonis Imperatoris*, VI, 34¹), "κόρυς"

* Editorial Board doesn't agree with some thesis of the Author.

¹ Speaking about the old Macedonian helmet.



Fig. 1. *The death of Uriah*, “Chludov Psalter”, folio 50r, 829-837 AD (after Щенкина 1977).

Ryc. 1. *Śmierć Uriasza Hetyty*, „Psalterz Chłudowski”, folio 50r, l. 829-837 (wg Щенкина 1977).

(“kóryś”) (*Sylloge Tacticorum* 1938, XXXVII, XXXVIII,7). However the most employed technical term, at least in the 10th-11th c., was “κάσσις”, derived naturally from the Latin “cassis” and from the language of the Roman military technology (Zilliacus 1935-1965, 220; Mihăescu 1968, 487; Kolias 1988, 75). If sometimes these expressions were used by the different medieval authors according to their personal taste and style, with the simple intention to denote the helmet in general, on the contrary in many occasions they meant a specific kind of helmet, which varied depending upon shape, dimensions and utilization on the battlefield by the different troops. This is exactly visible in the development of the term



Fig. 2. *The twelve tribes of Israel*, “Codex Sinaiticus 1186”, folio 86v, 11th c. (after Weitzmann, Galavaris 1990).

Ryc. 2. *Dwanaście plemion Izraela*, „Codex Sinaiticus 1186”, folio 86v, XI w. (wg Weitzmann, Galavaris 1990).



Fig. 3. „Ms Studite Psalter”, „Ms. Add. 19352”, British Library London, 1066 AD: 1 – *The sleeping cavalrymen*, folio 98r; 2 – *Battle among cavalrymen*, folio 196r, detail; 3 – *The victory of a man over many*, folio 196r (courtesy of the British Library).

Ryc. 3. „Ms Studite Psalter”, „Ms. Add. 19352”, British Library, Londyn, 1066 r.: 1 – *Śpiący jeźdźcy*, folio 98r; 2 – *Potyczka konnych oddziałów*, folio 196r, szczegół; 3 – *Zwycięstwo jednego nad wieloma*, folio 196r (dzięki uprzejmości British Library).

“κάσ(σ)ιδα”², which – according to the meaning of the word in the Neo-Greek language – meant probably, mainly, a shining polished helmet with a bald surface (Drandakes n.y., XIII, 933)³. According to the “Praecepta Militaria” of the Emperor Nikêphoros Phokás (963-969 AD), who, quite reasonably, used contemporary technical terms of the 10th c., the “κάσσιδιον” is the helmet par excellence, and in one instance the word “κασίδα” is reserved to the helm of the heavy cataphracts (*Praecepta...* 1995, III, 34), while the diminutive form “κάσσιδιον” indicates the helmet of the light armoured warriors (“prokursatores”) or horse archers, the “τοξόται” (ibid., III, 68;



Fig. 4. *Siege of a city* (Bari?, Jerusalem?) – detail of the attackers, north door, Church of San Nicola, Bari, Italy, 4th quarter of 11th or 1st quarter of 12th c. Photo by R. D’Amato.

Ryc. 4. *Oblężenie miasta* (Bari?, Jerozolima?) – przedstawienie oblężających, północne odrzwia kościoła św. Mikołaja w Bari, Włochy, 4. ćwierć XI lub 1. ćwierć XII w. Fot. R. D’Amato.



² An evolution in the medieval Greek, with the same meaning, of the word “κασίδα”, used in the 7th c. by the “Strategikon” of Maurikios; in the “Tactica” of Leo VI, of the 9th c., the word in the correspondent passages is already “κασίδα” (see for instance Strategikon 1981, XII, B, 4, 3 = Leonis Imperatoris 1857-1866 /1917-1922/, 25; Strategikon 1981, XII, B, 20, 7 = Leonis Imperatoris 1857-1866 /1917-1922/, IX, 58; but in Constantinus Porphyrogenitus 1967, 53,19 again “κασσιδιον”).

³ The word changed grammatically variously among the different authors, but always with the meaning of helmet (for instance Constantinus Porphyrogenitus 1829, 505, 16 = “κασίδα”; Psaltes 1913, 184).



Fig. 5. "Cod. Ath. Esphigmenou", 11th c.: 1 – The attack by the eleven tribes of Israel against the tribe of Benjamin before Gibeah, folio 416v; 2 – Third day of the battle among the eleven tribes of Israel against the tribe of Benjamin before Gibeah, folio 417r; 3 – Second day of the battle among the eleven tribes of Israel against the tribe of Benjamin before Gibeah, folio 417v (after Pelekanidis et al. 1975).

Ryc. 5. „Cod. Ath. Esphigmenou”, XI w.: 1 – Atak jedenastu plemion Izraela na plemię Beniamina pod Gibeą, folio 416v; 2 – Trzeci dzień bitwy pomiędzy jedenastoma plemionami Izraela i plemieniem Beniamina pod Gibeą, folio 417r; 3 – Drugi dzień bitwy pomiędzy jedenastoma plemionami Izraela i plemieniem Beniamina pod Gibeą, folio 417v (wg Pelekanidis et al. 1975).



Fig. 6. *David fleeing from Absalom*, „Bristol Psalter”, 10th c., folio 410r, details, British Library, London (courtesy of the British Library, London).

Ryc. 6. *Dawid uciekający przed Absalomem*, „Bristol Psalter”, X w., folio 410r, szczegóły, British Library, Londyn (dzięki uprzejmości British Library).



Fig. 7. 1 – *Joab killing Absalom*, folio 196r, „Cod. Ath. Pantocrator 61”, 850-880 AD, Pantocrator Monastery Library, Athos Mountain; 2 – *The victory of Joab over the Edomites*, folio 74, detail, „Ms Studite Psalter”, „Ms.Add.19352”, 1066 AD, British Library, London (1 – after Pelekanidis et al. 1979; 2 – courtesy of the British Library).

Ryc. 7. 1 – *Joab zabijający Absaloma*, folio 196r, „Cod. Ath. Pantocrator 61”, l. 850-880, Biblioteka klasztoru Chrystusa Pantokratora na górze Athos; 2 – *Zwycięstwo Joaba nad Edomitami*, folio 74, szczegół, „Ms Studite Psalter”, „Ms.Add.19352”, 1066 r., British Library, Londyn (1 – wg Pelekanidis et al. 1979; 2 – dzięki uprzejmości British Library).

IV, 10). It is interesting to note, however, that while the word “cassis” was employed in the contemporary western medieval sources for the helmet, together with the word “galea” (Liutprand 1915-1977, II, 4, 38, X, 22, 167; Nicolle 1999a, 552, 560), in the Roman East the word “galea” was not employed. This is a clear consequence of the fact that in the same army – the Roman one

– the continuity of the language was, in the only surviving part of the Empire, a social element of state cohesion.

In the 12th c., especially in the “Alexias” of Anna Comnena, we find the mention of the helmets under the words “περικεφαλαία” (Anna Komnena 1946-1947, II, 141 /VIII, 5, 7/), “κράνος” (ibid., I, 20 /I, 5, 16/) and “κυνέη” (ibid., II, 224



Fig. 8. 1-2 – Scenes from the life of Saint Arethas, siege of the city of Najran, folio 136v, “Cod. Ath. Esphigmenou”, 11th c.; 3-4 – David in the wilderness of Judea and Victory of David and Joab over the Edomites, folio 60r and 58r, “Chludov Psalter”, 829-837 AD (1-2 – after Pelekanidis et al. 1979; 3-4 – after Щенкина 1977).

Ryc. 8. 1-2 – Sceny z życia św. Aretasa, oblężenie miasta Nadżran, folio 136v, „Cod. Ath. Esphigmenou”, XI w.; 3-4 – Dawid na Pustyni Judyckiej i Zwycięstwo Dawida oraz Joaba nad Edomitami, folio 60r i 58r, „Psałterz Chludowski”, l. 829-837 (1-2 – wg Pelekanidis et al. 1979; 3-4 – wg Щенкина 1977).

/X, 9, 30)⁴ but not “κάσσις”. The word “κυνήη” is indicated, according at least to the Iliad commentaries of Eustathios of Thessaloniki of

12th c., a leather helmet like in the ancient Greek language, distinguished by the metallic helmet made of bronze, with the same meaning of “κόρυς”:

⁴ She is speaking about the helmets of the Latins (the participants of the first Crusade), probably the typical leather helmets with iron bands of the Dark Ages.



Fig. 9. 1 – Leo escapes with the Roman Army at the battle of Adrianopolis, “Skylitzēs Matritensis”, 12th c., folio 12r; 2 – Victory of David over Goliath, “Chludov Psalter”, folio 148r, 829-837 AD; 3 – The Hekatontarchas at the Crucifixion, icon, Sinai Monastery, Church of Saint Catherina, 13th c. (1 – after Skilitzēs 2000; 2 – after Ilcenkua 1977; 3 – photo by R. D’Amato, permission of the local Abbot).

Ryc. 9. 1 – Ucieczka Leona i armii rzymskiej podczas bitwy pod Adrianopolem, „Skylitzēs Matritensis”, XII w., folio 12r; 2 – Zwycięstwo Dawida nad Goliatem, „Psałterz Chłudowski”, folio 148r, 1. 829-837; 3 – Ukrzyżowanie – centurionowie, ikona, klasztor pod górą Synaj, kościół św. Katarzyny, XIII w. (1 – wg Skilitzēs 2000; 2 – wg Ilcenkua 1977; 3 – fot. R. D’Amato, za zgodą miejscowego opata).

...Considering that, in the same way, a certain kind of helmet, i.e. the *κονέη*, is distinguished by its name from the one made of bronze, because it was instead made of dog skin... (Eustathii 1960, 803, 48ss.)⁵. But the word was used now not only more exclusively in relation to the organic head's protection, and probably indicated also metallic helmets or helmet of mixed composition (Hoffmeyer 1966, 71ss. and 80s.; Koliass 1988, 76 n. 5).

So, according to the written sources and the employed terminology, we can, for the 9th-12th c., distinguish with a certain precision the following kind of helmets or military headgears:

a) The “καμελαύκιον”, an enclosed hemispherical headdress made of felt (in this significance a military cap or, more generically, a cap) (D'Amato 2005, 12-14)⁶ or also of iron, and in this case sometimes considered like the helmet-crown of the Emperor (Piltz 1977, 27);

b) The “κάσσις”, “κάσσιδιον”, “κασίδιον”, “κασίδα”, the helmet par excellence, where “κασ(σ)ίδα”, meant mainly, according to the 10th c. treatises, a shining polished helmet with a bald surface “κασίδα” being reserved to the helm of the heavy cataphracts, “κασίδιον” indicating the helmet of the light armored warriors;

c) The “κόρυς” with a general meaning of metallic battle-helmet, without a specific reference to its shape (Nikephoros Bryennios 1836 /1975/, 273, 21ss.; Anna Komnena 1946-1947, I, 162, 9-12 /IV, 6, 8/; I, 23, 7ss.);

d) The “κονέη”, probably a battle cap made of leather or composed by leather and metallic parts;

e) The “περικεφαλαία”, with the general meaning of headgear for war, thus a metallic helmet, made of iron or bronze;

f) The “κράνος”, i.e. the simple “bowl helmet”, with reference to a simple round or hemispherical metallic helmet covering the head⁸.

Shape and typology

The problem of the reconstruction of the East-Roman helmet typology of the 9th-12th c., is made more pronounced due to the severe lack of

archaeological specimens, given especially by the circumstance that very few archaeological specimens of Roman helmets of these centuries have been until now published or even found. Moreover, differently from other parts of protective armour, the representation of the helmet is enough scarce in the iconography, especially in the representations of the military saints, in which the warrior is for the most part painted with uncovered head. To cover for the aforementioned lack of data evidence are however supplying the many images from miniatures and codes, and also the biblical scenes represented in manuscripts, frescoes, icons, sculpted in the ivory or embossed, where full armed fighters are represented with helmets on the heads. Thanks to the combination of iconographical, literary and archaeological elements we can therefore try to create a first nucleus of classification and typology of the so-called Byzantine helmet.

The most common type encountered in the artworks is a conical, pointed, hemispherical or rounded helmet, with or without a band around the rim, furnished with a protective curtain for the nape and sides of the neck (Hoffmeyer 1966, Figs. 12:11-20, 13:8-15; Koliass 1988, 76; Parani 2003, 124). According to the shapes shown in the manuscripts miniatures, few icons and other artworks, we can distinguish the following types and shapes (some of them also confirmed by the archaeology) for the helmets used in Byzantium and Balkans between the 9th and the 12th c.:

1) regular rounding off piece of hemispherical or conical shape, sometimes with slightly forwarded bowl, made of one piece of iron or with the skull' segments riveted to each other;

2) Phrygian shaped or “fluted” helmets;

3) simple hemispherical shape, made of one piece of metal;

4) two-piece ridge- helmet, continuing the Late Roman tradition;

5) conical helmets with pointed bowl, sometimes with bulbous shape, made of more segments (“Spangen-helmen”);

⁵ This seems to recall the old distinction between “Galea” and “Cassis” in the old Latin language which respectively distinguished the helmet made of leather from the helmet made of metal; however already in the early Imperial age this distinction did not exist anymore in the Roman military terminology, where “Galea” and “Cassis” were at maximum employed to distinguish a lighter helmet from a heavier one (D'Amato 2009, 32); in the Late Empire the distinction did not exist as well, it is enough consider the passage of SHA speaking of the gemmed helmets (“Galeae Gemmatae”) of Maximinus the Younger that were for sure in the category of the heavy cavalry helmets (*Scriptores Historiae Augustae* 1921-1932, XXIX, 8-9).

⁶ The word “kamelavkion” was the usual one to describe the normal headgear worn by civilians and soldiers (see for example Du Cange, Du Fresne 1688, col. 560-561; Achmet 1925, 168).

⁷ But in this last two passages, although it is not explained the general shape of the helmets, we are dealing with helmets fitted with a face cover.

⁸ The name itself in Greek means “skull”, so it cannot refer to a pointed helmet (Niketas Choniates 1975, 92, 38ss. – metallic “κράνοι”; Kinnamos 112, 1ss. /compact metallic helmet of the Emperor Manuel I, fitted with a face visor of mail/, 274, 16 /where in general refers to the helmets taken to the Hungarians/).



Fig. 10. "Skylitzès Matritensis", 12th c.: 1 – *The Romans defeated by the Bulgarians at the battle of Adrianopolis, folio 12v*; 2 – *Defeat of Vardanos, folio 16a* (after Skilitzès 2000).

Ryc. 10. „Skylitzès Matritensis”, XII w.: 1 – *Zwycięstwo Bułgarów nad Rzymianami w bitwie pod Adrianopolem, folio 12v*; 2 – *Porażka Vardanosia, folio 16a* (wg Skilitzès 2000).

6) simple conical helmets, sometimes pointed, made of one or two pieces of metal;

7) round off piece of segmented construction, directly coming from the rounded Baldenheim of Late Roman type;

8) brimmed helmet, “chapel de fer” made of one piece of iron, with a pointed or rounded bowl;

9) mask-visor helmets;

10) fabric helmets and other military headgears;



◁ Fig. 11. 1 – *Victory of the Emperor Leo V over the Arabs*, „Skylitzès Matritensis”, 12th c., folio 16v; 2 – *The Roman army pursuing the army of Khan Krum*, „Skylitzès Matritensis”, 12th c., folio 19v; 3 – *The Emperor Michail I Ranghabe and the Empress escape from Constantinople*, „Skylitzès Matritensis”, 12th c., folio 14v; 4 – *Welcome and killing of Sisera by Jael*, „Sacra Parallela”, „Cod. Gr. Parisinus 923”, folio 87r; 5 – *David armed before Saul*, „Sacra Parallela”, „Cod. Gr. Parisinus 923”, folio 107r; 6 – *Benaiah killing Adonija*, „Sacra Parallela”, „Cod. Gr. Parisinus 923”, folio 107r (1-3 – after Skilitzès 2000; 4-6 – after Weitzmann 1979).

◁ Ryc. 11. 1 – *Zwycięstwo cesarza Leona V nad Arabami*, „Skylitzès Matritensis”, XII w., folio 16v; 2 – *Armia rzymska ściga armię chana Kruma*, „Skylitzès Matritensis”, XII w., folio 19v; 3 – *Ucieczka cesarza Michała I Rangabe i cesarzowej z Konstantynopola*, „Skylitzès Matritensis”, XII w., folio 14v; 4 – *Powitanie i zabójstwo Sisery przez Jael*, „Sacra Parallela”, „Cod. Gr. Parisinus 923”, folio 87r; 5 – *David przed Saulem*, „Sacra Parallela”, „Cod. Gr. Parisinus 923”, folio 107r; 6 – *Benajasz zabija Adoniasza*, „Sacra Parallela”, „Cod. Gr. Parisinus 923”, folio 107r (1-3 – wg Skilitzès 2000; 4-6 – wg Weitzmann 1979).



Fig. 12. 1 – *The bribing of the Guards at the gates of Gethsemani*, „Cod. Ath. Pantocrator 61”, 843 AD, folio 14v, Pantocrator Monastery Library, Athos Mountain; 2 – *The siege of Constantinople in 1204*, mosaic of Church of Saint John Evangelist, Ravenna, 13th c.; 3-4 – *The sleeping guards at the Anastasis*, „Cod. Ath. Pantocrator 61”, 843 AD, folios 30v and 109r (1, 3-4 – after Pelekanidis et al. 1979; 2 – photo by R. D’Amato).

Ryc. 12. 1 – *Przekupienie strażników przy bramie Ogrójca*, „Cod. Ath. Pantocrator 61”, 843 r., folio 14v, Biblioteka klasztoru Chrystusa Pantokratora, góra Athos; 2 – *Oblężenie Konstantynopola w 1204 r.*, mozaika w kościele św. Jana Ewangelisty w Rawennie, XIII w.; 3-4 – *Śpiąca straż przy Grobie Pańskim w czasie Zmartwychwstania*, „Cod. Ath. Pantocrator 61”, 843 r., folios 30v i 109r (1, 3-4 – wg Pelekanidis et al. 1979; 2 – fot. R. D’Amato).



Before to analyse however the different typologies, it is necessary a general introduction to the helmet in Byzantium, with the purpose to clarify its origins, its main characteristics and its utilization on battlefield or in action.

The helmet: material, construction and employment

Originally the Eastern Roman helmet was the continuation and the further evolution of the Late Roman types, but the helmet's structure was heavily influenced by the contacts with other populations, like the Persians, the Franks and the Avars and in general the Steppe peoples.

The helmets, especially those of the heavy armoured cavalymen, were realised in iron (*Leonis Imperatoris* 1857-1866 /1917-1922/, VI, 2 = “κάσσιδα σιδηρά”⁹; *Sylloge Tacticorum* 1938, 39, 3¹⁰ = “κόρυτες σιδηραί τελείαι”; *Praecepta...* 1995, III, 4¹¹ = “κάσιδα σιδηρά”) or bronze (Hoffmeyer 1966, 71). However, the sources attest also the existence of leather, felt or other organic material for the construction of them. Documents prove that the production and distribution of the military equipment and therefore also of the helmet, in these centuries, was only partially a prerogative of the State (Haldon 1999, 141-142). Already the 8th c. evidence attests that some provincial soldiers were responsible for obtaining

Fig. 13. 1 – *St. George killing Diocletian*, Georgia, Parakheti Icon, 10th-11th c., detail; 2 – *The Betrayal*, “Second Tetraevangelion of Jruchi”, 12th c., folio 70v, detail (1-2 – courtesy of M. Tsursumia).

Ryc. 13. 1 – *Św. Jerzy zabija Dioklecjana*, Gruzja, ikona z Parakheti, X-XI w., szczegół; 2 – *Zdrajca*, „Druga Tetraewangelia z Jruchi”, XII w., folio 70v, szczegół (1-2 – dzięki uprzejmości M. Tsursumii).

⁹ Leo is here probably describing the equipment of the heavy cavalry: *Each man should be armed in such a way: complete suites of coats of mail arriving until the heels, supported by rings and straps, together with their leather cases; they should also wear shining iron helmets, all fitted on the top with a touphia, although small...* According to Leo the Wise the cavalymen wore the helmet besides the body-armor.

¹⁰ Again on the equipment of the heavy cavalry: *...at the same way on the head complete and distinguished iron helmets with plumes on the top...*

¹¹ Helmets of the “Kataphraktoi” forming the triangular formation: *...They must have iron helmets heavily reinforced so as to cover their faces with zabai two or three layers thick so that only their eyes appear...*



Fig. 14. „Skylitzēs Matritensis”, 12th c.: 1 – *The war of the Emperor Michail III against the Arabs*, folio 72v; 2 – *Liberation of Constantine and other prisoners*, folio 113v; 3 – *The Emperor Leo V the Armenian enters in Constantinople*, folio 14r (after Skilitzēs 2000).

Ryc. 14. „Skylitzēs Matritensis”, XII w.: 1 – *Wojna cesarza Michala III z Arabami*, folio 72v; 2 – *Uwolnienie Konstantyna i innych więźniów*, folio 113v; 3 – *Cesarz Leon V Armeńczyk wjeżdża do Konstantynopola*, folio 14r (wg Skilitzēs 2000).

and providing their own weapons and armours, what meant the slow decadence of the monopoly of State which had been typical of the Late Roman age and explain also the difference of styles in the helmet production. Since the 9th c. the provincial military officers and their officials were commissioned with raising the military extra weapons and equipment, which was done by applying compulsory levies on provincial craftsmen and artisans (Constantinus Porphyrogenitus 1829, 657, 12-14; 657, 15-17; Haldon 1993, 21-23), often according to their local tastes. However, at least for the elite troops of Constantinople, especially for Guardsmen and “Tághmata”, the Imperial

“Eidikon” and “Vestiarion” were major repositories and suppliers for the weapons of the army, alongside with the armouries established in the City herself (Constantinus Porphyrogenitus 1829, 672, 1ss.; 676, 18ss.; 1990, 131-135 = 1829, 490-494; Haldon 1984, 318-323). The manuscripts made in Constantinople attest in fact similar types of helmets (Figs. 1, 8:3-4). Among the various craftsmen who joined the army during the military campaigns there was a particular group, the “Samiarioi”, that attended the polishing and keeping of the weapons (*Leonis Imperatoris* 1857-1866 /1917-1922/, IV, 53; Zilliacus 1935-1965, 161.234; Kolias 1988, 83). The helmet in fact



Fig. 15. 1 – *Constantine the Great*, Ms Studite Psalter”, „Ms. Add. 19352”, 1066 AD, *folio 75r*, detail, British Library, London; 2 – *The Tyrant and his army*, „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 AD, *folio 95v*, detail, British Library, London; 3 – *Army of David*, „Cod. Ath. Vatopedi 760”, *folio 265v*, 12th c.; 4 – *The sleeping cavalrymen*, „Cod. Ath. Vatopedi 760”, *folio 265v*, 12th c. (1-2 – courtesy of the British Library; 3-4 – courtesy of the Abbot of Vatopedi Monastery).

Ryc. 15. 1 – *Konstantyn Wielki*, „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 r., *folio 75r*, szczegół, British Library, Londyn; 2 – *Tyran i jego armia*, „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 r., *folio 95v*, szczegół, British Library, Londyn; 3 – *Armia Dawida*, „Cod. Ath. Vatopedi 760”, *folio 265v*, XII w.; 4 – *Śpiący jeźdźcy*, „Cod. Ath. Vatopedi 760”, *folio 265v*, XII w. (1-2 – dzięki uprzejmości British Library; 3-4 – dzięki uprzejmości opata klasztoru Vatopedi).

should have had a clean and polished surface, mainly because its function and shape was concerning with the diverting of the enemy blows (*Ioannis Scylitzae* 1973, 290, 77ss.). It should have been polished and well cleaned, to shine and gleam at the sun, so conferring to the imperial army a particular and luxurious image, able to impress the enemies (Anna Komnena 1945-1967, I, 20,18 /I, V, 15-19/).

Based on the information of the 10th c. manuals, one may distinguish three main kind of helmets employed by the different army units:

- helmets with complete protection for the head (“κόρυτες τελείαι”), face included, prescribed for heavy cavalry and infantry (*Sylloge Tacticorum* 1938, 38, 39; Nikêphóros Ouranós 1995, 114; Parani 2003, 123);

- helmets which left the face uncovered (“κόρυτες άσκεπές έχουσαι τὸ πρόσωπον”) mainly destined to light armed infantrymen and archers acting on horseback (*Sylloge Tacticorum* 1938, 38, 39), as it is confirmed also by the iconography (Figs. 1-2);

- helmets which afforded not additional protection for nape or face (“κόρυτες άσκεπες τῶ κύκλῳ”), mainly for the mounted soldiers armed with javelins (*Sylloge Tacticorum* 1938, 38, 39; Figs. 3, 7:1, 17:2). The expression “τῶ κύκλῳ” means “around the circumference of the helmet”.

According to this distinction, the helmets of the all-iron clad cavalrymen, i.e. of the “pansíðheri íppóte”, were more compact and fitted with a protection for the face, although this is rarely visible in the iconography of the period (Fig. 4; Hoffmeyer 1966, 83; Koliás 1988, 76-77). In this sense the sources (*Leonis Imperatoris* 1857-1866 /1917-1922/, V, 3; *Sylloge Tacticorum* 1938, 30, 2; 31, 1; 38, 5; 39, 3 and 9) are speaking of “complete” helmets (“κόρυτες τελείαι”) – worn by both heavy infantrymen and “Katáphraktoi”, and “not complete” (“μη̄ τελείαι”) helmets protecting the light cavalrymen, according as they were fitted or not with a protection for the face.

Characteristic of the complete helmets (“κόρυτες τελείαι”) was the protection of the face and the whole head. Constantinus Porphyrogenitus, in his “De Administrando Imperio” (1967, 53, 207) describes the duel between Pharnakes, a Bosphorean leader, and Sauromatus, probably a “Sauromata” (Sarmatian) commander, well armored and well protected by his armour, having also a face

covering (“πέταλον του κασιδιού”, not simply an aventail as suggested by Grotowski – 2010, 158-159, n. 57). The prince Farnakes used an artifice to induce the Sarmatian to rotate the head. In such a way, thanks to this movement, a small opening was visible in the helmet plating – the only one between armor and helmet, presumably at the height of the throat – thorough which Farnakes could incur a deadly wound to the “Sauromata” with his spear.

According to the “Praecepta Militaria” (1995, III, 4) and Nikêphóros Ouranós (1995, 60, 4, 39-40) the helmets of the “Kataphraktoi” were of solid iron. They had their faces covered by two or three layers of “Zaba” (ring armor or kind of other protective fabric)¹² so that only the eyes remained visible¹³. The rings were sewn directly on to the basis of fabric, forming a hood with a cloth or chain mail armor attached and hanging from the edges of the helmet (Heath 1979, 36, Pl. D; D’Amato 2012a, 34, 53, Pl. D and G; 2012c, 25ss.). It is possible that sometimes this protection was done of protective scales (Fig. 53:2), as shown also in the 14th-c. sources (Heath 1995, 16; D’Amato 2011, 16). The helmets represented on the heads of the Cataphracts in the “Skilitzès manuscript” miniatures (the 12th c.), like that of the famous hero Anemas (*folios* 162r and 169v; see D’Amato 2011, Fig. 3:4-5), are of the usual compact and conical shape visible on a lot of other artistic works between the 10th and the 11th c. (Koliás 1988, 76ss.), in correspondence with the descriptions of the “Kataphraktoi” helmets done by Nikêphóros Phokás and also Nikêphóros Ouranós (McGeer 1995, VIII). The main helmets of the Cataphracts, in the iconographic sources, is mostly conical, but round specimens, sometimes embossed with rich decoration are visible as well (Hoffmeyer 1966, Fig. 12:15-16; *Skilitzès* 2000, *folio* 202v; see D’Amato 2011, Fig. 13:3). The compact and strong helmets could be of different shape. One rule, which we should never forget for ancient and medieval times, is that different part of equipment and different pieces of weaponry were worn inside the same unity. In the miniatures of the *Skilitzès* for instance the Cataphracts are wearing compact helmets, fitted with aventail, but their shape is often different, inside the same group of fighters, showing “Spangen-helmen” beside “chapelets de fer” and simple conical helmets (Figs. 9:1, 10:1,

¹² On the transformation of the word *zaba* from general expression indicating the chain mail armour (like in the “Strategikon” and still in the Leo’s “Tactical Constitutions”) to the technical expression of protective parts of armour made of iron rings, metallic scales or padded felt fabrics. Koliás (1988, 65-66) according to Haldon (1975, 37, n. 126) this protection consisted in leather fabric mail or scales faced.

¹³ This was a style long known in the west, and diffused inside the Roman Army by the Sassanians (Nicolle 1996a, 30; Dawson 2002, 84 – the author refers to the famous relief of Taq-i-Bostan).



Fig. 16. 1-2 – Joshua fresco in the Monastery of Hosios Loukas, Phocis, 10th c.; 3 – *The capture of David by the Philistines in Gath*, „Bristol Psalter”, „Add MS 40731”, folio 89r, detail, British Library, London, 10th c.; 4 – *Goliath*, folio 231v, detail, British Library, London, 10th c. (1-2 – photo by R. D'Amato; 3-4 – courtesy British Library).

Ryc. 16. 1-2 – Wizerunek Jozuego na fresku z klasztoru Osios Lukas, Phocis, X w.; 3 – *Schwytanie Dawida przez Filistynów w Gat*, „Bristol Psalter”, „Add MS 40731”, folio 89r, szczegół, British Library, Londyn, X w.; 4 – *Goliath*, „Bristol Psalter”, „Add MS 40731”, folio 231v, szczegół, British Library, Londyn, X w. (1-2 – fot. R. D'Amato; 3-4 – dzięki uprzejmości British Library).

11:1). Another aspect to remember is that the great variety of shape in the military equipment, in the Roman army of this period, was derived by the great amount of mercenaries fighting inside the imperial troops: often these Turks, Ouzes,

Normans, Germans, Serbians, Armenians, Georgians, Italians, Franks and so far kept a part of their own equipment also inside the Roman ranks, and this rule was applicable for the helmets too (Hoffmeyer 1966, 71; Heath 1995, 20ss.). For instance, conical



1



2



3



4



5

◁ Fig. 17. 1 – *Goliath*, “Chludov Psalter”, 829-837 AD, folio 141r; 2 – *The capture of David by the Philistines in Gath*, “Cod. Ath. Pantocrator 61”, 843 AD, folio 68v, Pantocrator Monastery Library, Athos Mountain; 3 – *David killing Goliath*, “Bristol Psalter”, “Add MS 40731”, folio 240r, detail, British Library, London, 10th c.; 4 – *Julian the Apostata marches against the Persian at the head of his army*, “Homélies de saint Grégoire de Nazianze”, “BNF MS Gr. 510”, folio 409v; 5 – *The death of Emperor Julian*, “Homélies de saint Grégoire de Nazianze”, “BNF MS Gr. 510”, folio 409v (1 – after *Иценкува 1977*; 2 – after *Pelekanidis 1979*; 3 – courtesy of the British Library; 4-5 – after *Byzance... 1958* and courtesy of the Bibliothèque Nationale de France).

◁ Ryc. 17. 1 – *Goliath*, „Psalterz Chłudowski”, l. 829-837, folio 141r; 2 – *Pochwycenie Dawida przez Filistynów w Gat*, „Cod. Ath. Pantocrator 61”, 843 AD, folio 68v, klasztor Chrystusa Pantokratora na górze Athos; 3 – *Dawid zabijający Goliata*, „Bristol Psalter”, „Add MS 40731”, folio 240r, szczegół, British Library, Londyn, X w.; 4 – *Julian Apostata na czele swej armii maszeruje na Persów*, „Homélies de saint Grégoire de Nazianze”, „BNF MS Gr. 510”, folio 409v; 5 – *Śmierć cesarza Juliana*, „Homélies de saint Grégoire de Nazianze”, „BNF MS Gr. 510”, folio 409v (1 – wg *Иценкува 1977*; 2 – wg *Pelekanidis 1979*; 3 – dzięki uprzejmości British Library; 4-5 – wg *Byzance... 1958* – dzięki uprzejmości Bibliothèque Nationale de France).



Fig. 18. *David crushing the Philistines at the head of his army*, “Cod. Vat. 333”, folio 45v (after *Lassus 1973*).

Ryc. 18. *Dawid na czele swej armii miażdży Filistynów*, „Cod. Vat. 333”, folio 45v (wg *Lassus 1973*).

helmets equipped with or without a nasal over the mail coif, of clear Norse inspiration, were widely used by the Varangian guards in the 10th-12th c. (Fig. 12:2), besides helmets from the imperial arsenals (D'Amato 2010, 33), and one of them has been found on the Drastar battlefield¹⁴. These helmets derived directly from those of Viking age, segmented or made of one piece, diffused in all the Western Europe (Harrison 1988, 61, Pl. J).

The “μη τελείαι κόρυτες” could have been identical to the “ἀσκεπές ἔχουσαι τὸ πρόσωπον” of the light infantrymen called “Peltastai” (*Sylloge Tacticorum* 1938, 38, 7; Koliás 1988, 77; Fig. 1, 3:2). Fitted with protections for ears and neck, they left visible only the face (Fig. 5:1-3). The iconography usually shows them as one piece helmets, conical or rounded, and in some instance also brimmed (Figs. 2, 3:1, 3). Also the helmets “opened around the circle” (*Sylloge Tacticorum* 1938, 39, 8) of the horse lancers should be linked to such kind of helmet (Figs. 6:1-2). It is probable that with these expressions the sources wanted to refer to the helmet framing the face, and in such

etymology the “ἀσκεπέες τῶ κύκλῳ” would be nothing different from the expression “ἀσκεπέες ἔχουσαι τὸ πρόσωπον”. But we can also support the hypothesis that such kind of helmet covered only the upper and circular part of the head, without any protection for face, neck and ears (Haldon 1975, footnote 128; Figs. 3:1-2, 7:1). Then some examples of such helmets should may be linked with the word “κράνος”, that we can simply translate like “bowl helmet” (Figs. 3:1, 3, 7:2). These helmets could be as well the one-piece helmets with hemispherical bowl visible in many iconographical sources (Figs. 5:1-3, 8:1-2); but also the banded helmets of “Spangen-helm” types (Pl. 13-16, 17, 19-20, 33-34), which can be complete or not depending upon the presence of a full protection for face, neck and checks.

Written evidence fully attests the existence of a compact head and neck-protection for the period from the 4th to the 12th c.¹⁵ The most typical Eastern-Roman helmet ends down with a straight brim over the eyes and the ears, around which is often mounted a protection for ears and neck, usually an aventail made of leather or fabric, interlocking scales or rings (Figs. 9:1-3). The latter is may be to identify with the “peritrachilion” mentioned in the sources (Constantinus Porphyrogenitus 1717; *Leonis Imperatoris* 1857-1866 /1917-1922/, V, 4; *Sylloge Tacticorum* 1938, 38, 5; Nikêphóros Ouranós 1995, 11), although this one refers more probably to the gorget. This protection, typical of the Roman helmets, is usually shown worn from both infantry and cavalrymen in a lot of miniatures, illuminated manuscripts and ivory icons of the middle period, since the 9th c.: the heavily armored and best warriors illustrated in the 9th-12th c. artworks are wearing helmets with aventails, made of leather, cotton or felt;

¹⁴ I know this information from the kindness of the colleague Boyan Totev; unfortunately no one knows where the helmet is now.

¹⁵ You can find it in Ammianus Marcellinus (1939-1950, XVI, 10, 8 – 4th c.), Procopius of Caesarea (1919-1993, VI, 5, 24-27 – 6th c.: the passage refers to description of a battle in front of Rome where the wound was received in the eye, meaning probably a complete face and head protection letting only the eyes visible), “Strategikon” (1981, I,2,12-21 – 7th c.), Nikêphóros Ouranós (1995, 114 /60, 4, 39-40/ – 10th c.); Anna Komnena (1945-1967, I, 23,7ss. /I, 5, 7/ – 11th c.); Niketas Choniates (1975, 92, 38ss., III,10-11 – 12th c.).



Fig. 19. “Skylitzēs Matritensis”, 12th c.: 1 – Thomas the Slav treats the peace with the Arabs, folio 31r; 2 – The army of Thomas the Slav sacks the cities of Syria and Asia Minor, folio 30v; 3 – The rebellion of Thomas the Slav, folio 30r (after Skilitzēs 2000).

Ryc. 19. „Skylitzēs Matritensis”, XII w.: 1 – Tomasz Słowianin pertraktuje i zawiera pokój z Arabami, folio 31r; 2 – Armia Tomasza Słowianina płądruje miasta w Syrii i Azji Mniejszej, folio 30v; 3 – Powstanie Tomasza Słowianina, folio 30r (wg Skilitzēs 2000).

in the “Skilitzès miniature” some helmets are fitted with various kind of these protective curtains, made of scales for neck and shoulders (Figs. 8:1-2, 4, 9:1-3, 10:1-2).

This characteristic, of Eastern and Iranian origin (Hoffmeyer 1966, 78) is a rule applicable to the most part of the helmets, independently from their belonging to the category of “complete” or not helmets (Fig. 11:1, 3). The miniatures and the frescoes are showing these curtains of lamellar protection for neck and shoulders, and, although sometimes a certain degree of stylization is evident in them, it is possible to distinguish these from the curtains made of strips of felt or leather (Fig. 11:2), the scales in leather (Fig. 9:2) or iron (Fig. 9:3) (Tsursumia 2011b, 85, Fig. 6). The use of mail curtains is confirmed also by the archaeological specimens (Pl. 9, 16, 19). The general rule is that the helmet bowl was in metal, with neck and chin protections in leather or felt, sometimes with scales or lamellae over stitched; these aventails were attached or to the lower edge of the helmet, like in the 1st c. Roman helmet of Karagatasch (scales attached to a leather background – D’Amato 2009, 162-164; 2012a, 16-17) or maybe part of the under-helmet garments.

The word “peritrachilion” could however be employed more effectively to denote another piece of equipment, originated in the ancient times, indicating the protection of the throat: the gorget (Haldon 1975, 37 ss. and footnote 127; Koliás 1988, 79; Parani 2003, 116; Grotowski, 2010, 157ss.). For the period under consideration this term is only mentioned in Leo’s “Tactica” (1857-1866 /1917-1922/, V, 4), who reconsiders the word and allows for to better understanding of the explanation already given three centuries before from the Maurice’s “Strategikon”: they are made of iron rings (“peritrachelia alusidotà”), and are circular in shape, with external fringes of linen and wool inside (Fig. 11:4-6). Linen and wool, according to Koliás, would be used only as lining (“ἐνδεδυμένα”) of the gorget that, on the external side, could be also covered by a ring mail or a scale armor: *...complete helmets; armguards and iron greaves, or of any other material, as said before; for those who do not have ring-mail peritrachilia, the ones lined outside with linen and inside of wool...* (1857-1866, V, 3 and V, 4)¹⁶. Also the “Tactica” of Constantine (Constantinus Porphyrogenitus 1717, 11), provides it of padded

material (“kéntouklon”) on the outside and of doubled felt inside: *...iron ring peritrachilia lined with felt outside, and inside of nevríkà, composed by a double kéntouklon...* These details allow to understand that the *peritrachilia* are represented as circular gorgets around the neck and throat, made of chain mail or padded material (Figs. 8:3-4, 11:4-6, 12:1, 3-4). As it is possible to see in the iconography of the 9th c. (contemporary to the Leo’s “Tactica”), they surround the throat coming down from the helmet, and they are also covering, forming a sort of pectoral, the upper part of the breast, ending with a fringed rim (Weitzmann 1979, Pl. XXII-XXIII, XXVI-XXVII, XXXI, XL; Fig. 11:4-6). The “Codex Ambrosianus 139” (B 119 sup.) which preserves for the 10th c. an edition of the “Strategikon”, inform us that, at that time, the “peritrachilia” were also designated “maniákia” (Vàri 1906, 49; Mihăescu 1974, 208ss.; Mazzucchi 1978). In the 10th c. sources the “maniákia” are very often mentioned, especially in “De Ceremoniis”, book of Constantine Porphyrogenitus (1829, 81, 9ss., 275, 11ss., 286, 20ss.). Here they refer mainly to the golden necklace of the Imperial Guards (ibid., 290, 19ss.; Koukoulés 1953, IV, 137; D’Amato 2012a, 13, 31), or the word wants to indicate the rigid and straight golden collar applied on the upper part of their tunics, often encrusted with precious stones (Constantinus Porphyrogenitus 1829, 469, 584; Achmet 1925, 258). They were signs of specific rank and belonged in particular to the “Spathárokandidatoi” and “Protospathárioi” (Constantinus Porphyrogenitus 1829, 302, 3.6.17, 574, 11, 13, 575, 9). Koliás had suggested that the military word “peritrachilion”/“maniákion” had lost by time its reference function to the gorget and was later used only to indicate a simple rank “insignia”, in particular the ornament of the neck (Koliás 1988, 81). It is true that after the Leo’s “Tactica” we find scarcely the word “peritrachilion” to indicate the military gorget, but it is also true that the gorget was used by the Eastern-Roman warriors until the end of the Empire as it is abundantly recorded in the iconography¹⁷. So I think more possible that the word “maniákia” originally referred also to gorgets or “peritrachilia”, and after (as before) passed again to indicate only the golden torques, the metal collars of gold and the gold embroidery around the neck of the Guardsmen ceremonial dresses.

The commanders and the aristocratic warriors were fitted with the best helmets that were available,

¹⁶ The passages are controversial, made also more difficult by the different editions of the work of Leo: according to Koliás (1988, 80, footnote 32) it should be translated *...collars made of interlocked iron rings, lined inside with wool and outside by linen*. According to Haldon the “peritrachilia” are *mail, leather or cotton aventails* but if made of iron gorgets, *lined with wool*.

¹⁷ Some examples of armoured gorgets in Babuin (2009, Figs. 214 – 13th c., 447 – 14th c. and 963 – 15th c.).



Fig. 20. 1 – Equestrian Statue of the Emperor Justinian I on horseback, at the Augusteion of Constantinople, 543 AD, from the 14th c. drawing preserved at the Serrail of Istanbul; 2 – *Scenes of siege*, “BNF MS Gr. Parisinus 74”, folio 95v, details; 3 – *Triumphant Emperor*, Silk Bamberg fragment, Diözesanmuseum Bamberg, detail (1 – after Piltz 1977; 2 – after *Byzance... 1958* – courtesy of the Bibliothèque Nationale de France; 3 – courtesy of B. Popovic).

Ryc. 20. 1 – Posąg konny cesarza Justyniana I na Augusteionie w Konstantynopolu, 543 r., wg XIV-wiecznego rysunku zachowanego w stambulskim Seraju; 2 – *Scena oblężenia*, „BNF MS Gr. Parisinus 74”, folio 95v, szczegóły; 3 – *Triumfujący cesarz*, fragment tkaniny z Bambergu, Muzeum Diecezjalne w Bambergu, szczegół (1 – wg Piltz 1977; 2 – wg *Byzance... 1958* – dzięki uprzejmości Bibliothèque Nationale de France; 3 – dzięki uprzejmości B. Popovic).



Fig. 21. "Codex Vatopedinus 602", end of 12th c., Monastery of Vatopedi, Mount Athos: 1 – *The Kings of the Amorreans at the feet of Joshua*, folio 366r; 2 – *The conquest of Jericho*, folio 353r; 3 – *Joshua preparing the conquest of Ai*, folio 353r (after Huber 1973).

Ryc. 21. „Codex Vatopedinus 602”, koniec XII w., klasztor Vatopedi na Górze Athos: 1 – *Królowie amoryccy u stóp Jozuego*, folio 366r; 2 – *Zdobycie Jerycha*, folio 353r; 3 – *Jozue przygotowuje się do zdobycia miasta Aj*, folio 353r (wg Huber 1973).

able to resist to the stronger blows. With reference to the strength of the helmet we can obtain interesting details from the sources. Leo the Diacon, speaking a propos of Vardas Phokas during the war of the Emperor Tzimiskès against the Rus', says: *It is said that here one of the Scythians, who boasted of his courage and the size of his body, drew apart from his unit, rode out and attacked Vardas, striking him with his sword on the helmet; but the sword blow was in vain since the blade was deflected by the helmet*¹⁸, *glancing off to the side as a result of its resistance* (*Leonis Diaconis...* 1828 /2005/, VI, 109-110; see also Kedhrenos 1839, 668C). The blow of the Rus' warrior had not effect and the violence of the hit was so big that the blade of the sword bent to the bump on the helmet, sliding off the hard metal. At the opposite, the quality of the Nordic helmet was by long lower and it could not resist to the reply of the Roman commander. Vardas, attacking another prominent Rus' warrior,

¹⁸ The used word is the generic "κόρυς", so do not allowing us to understand which kind of helmet was that of Vardas; Leo employs usually "κρανός", "κόρυς", and "κυνή". Koliass (1988, 75, n. 2) observes that this last term for a "leather helmet" seldom appears in the Byzantine period and is in both instances used by Leo as a synonym for "κόρυς" (see commentaries of Dennis in *Leonis Diaconis...* 2005, 40).



Fig. 22. 1 – *Joshua and his warriors win the Canaanites*, „Codex Vatopedinus 602”, folio 368r, end of 12th c., Monastery of Vatopedi, Mount Athos; 2 – *Warriors on horseback*, Pseudo-Oppian, „Cynagetica”, „Cod. Gr. 497”, folio 6v, 11th c., Biblioteca Marciana, Venice, Italy (1 – after Huber 1973; 2 – after Eleuteri, Marcon, Furlan 2002).

Ryc. 22. 1 – *Jozue i jego wojownicy zwyciężają Kananejczyków*, „Codex Vatopedinus 602”, folio 368r, koniec XII w., klasztor Vatopedi na górze Athos; 2 – *Konni wojownicy*, Pseudo-Oppian, „Cynagetica”, „Cod. Gr. 497”, folio 6v, XI w., Biblioteka Marciana, Wenecja, Włochy (1 – wg Huber 1973; 2 – wg Eleuteri, Marcon, Furlan 2002).

broke with his sword not only the helmet of the Rus but also – although perhaps this is an exaggeration – the armor of the latter together with the upper part of the body to the waist (*Leonis Diaconis...* 1828/2005/, VI, 110; Koliass 1988, 159, n. 159).

To destroy such strong helmets the cavalryman should use his war-mace, as remembered for

example by Leo Diacon telling us that Vardas Phokas grabbed his mace and struck on the helmet a man (an imperial soldier) who was pursuing him, crushing both skull and helmet (*Leonis Diaconis...* 1828/2005/, VII, 125)¹⁹. Other literary sources attest the employment of the battle club against the helmet. In the epic of the Digenis

¹⁹ *Indeed Vardas, having seized the mace which he held suspended around the hand, getting around suddenly hit the man upon the helmet; this one, with the helmet and the head broken, fell down without a word...* (*Leonis Diaconis...* 1828, 125, 12ff., VII, 8); see also the example of the noble Theodore Lalakon fighting the Tauroscythians (the Rus) *with an iron mace* (“σιδηρά κορύνη”) ... *shattered both the helmet and the head encased within it* (ibid., IX, 144-145). But in this case the word used is “κυνή”, “κυνή”, which refers probably to a leather cap, if the word is used with the same significance of the ancient Greek language (see above).



Fig. 23. 1 – Norman helmet of Spangenhelm type without frame, with the plates riveted directly to each other, France, 11th c., Metropolitan Museum, New York; 2 – so called Norman Helmet, but probably East-Roman – four-plate rivetted Spangenhelm type Helmet with the plates riveted directly to each other, 11th c., private collection; 3 – Detail of the Galerius' Arch representing Roman cavalymen with the helmet of Kipchak type, Thessaloniki; 4 – Helmet of Kipchak, Kabardino-Balkarie, 4th c. (1 – courtesy of the Metropolitan Museum; 2 – courtesy of Hermann Historica; 3 – photo by R. D'Amato; 4 – courtesy of I. Dzysa).

Ryc. 23. 1 – hełm normański typu Spangenhelm bez obręczy, ale ze znitowanymi segmentami, Francja, XI w., Metropolitan Museum, Nowy Jork; 2 – tzw. hełm normański, ale prawdopodobnie bizantyński – czterosegmentowy, nitowany Spangenhelm ze znitowanymi segmentami, XI w., kolekcja prywatna; 3 – szczegół z Łuku Galeriusa przedstawiający rzymskiego kawalerzystę w hełmie w typie kipczaackim, Saloniki; 4 – hełm kipczaacki, Kabardo-Bałkaria, IV w. (1 – dzięki uprzejmości Metropolitan Museum; 2 – dzięki uprzejmości Hermann Historica; 3 – fot. R. D'Amato; 4 – dzięki uprzejmości I. Dzysa).

Akritas²⁰ is described the kind of special mace-club which was called “ραβιιδιν κασιδολιτζιν”²¹, used against helmets and armours, which provoked deadly wounds to the head by penetration of the broken fragments of a helmet destroyed by a blow.

The real reason for the production and use of maces and clubs in battle was to smash the helmets, the shoulder pieces of the armor and the shields of the opponent. So if the helmet was often able to

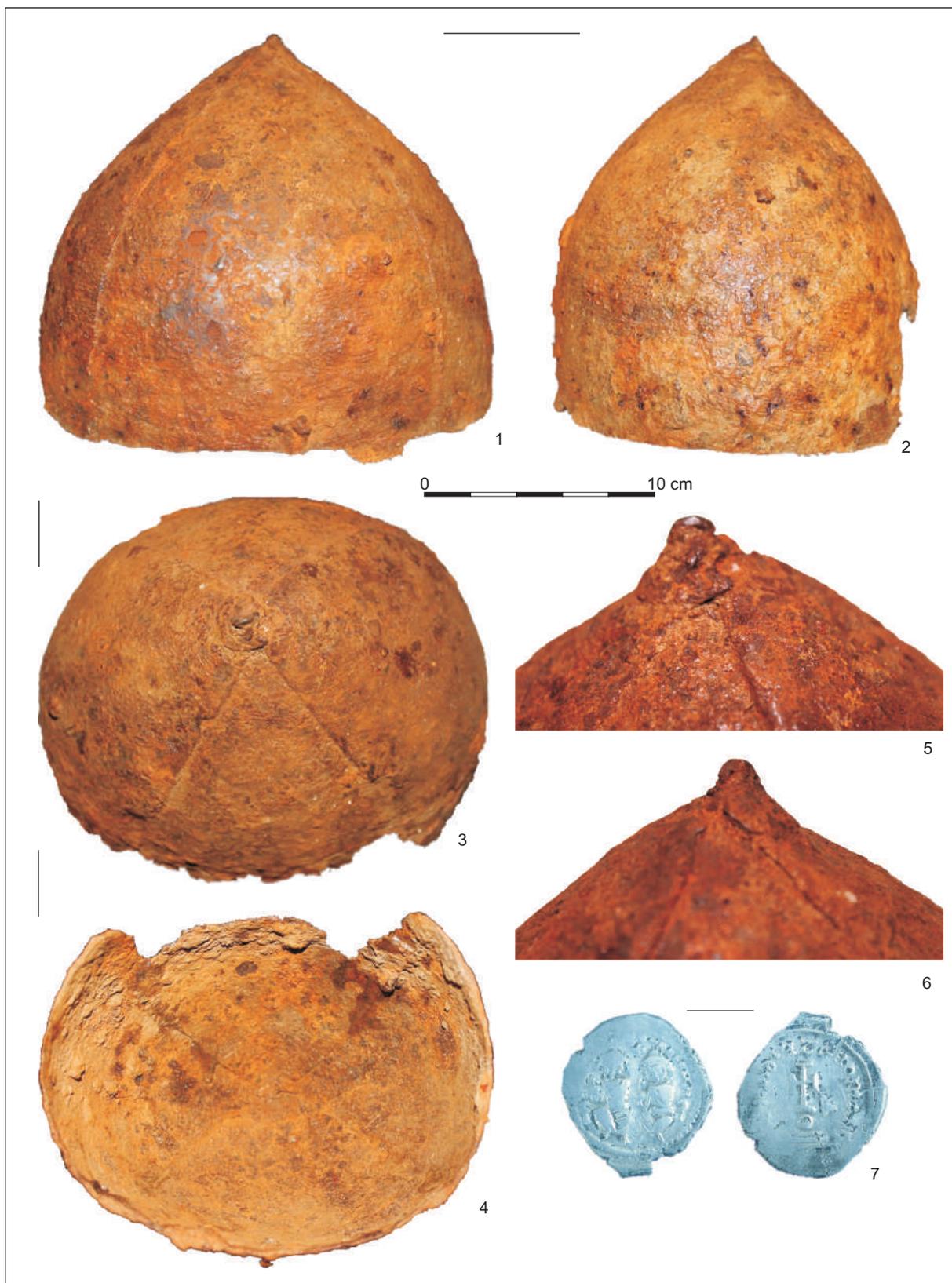
resist or deflect a sword or let bounce an arrow shot from a conventional bow, it was unlikely difficult that it could withstand the shock of a battle mace or club.

The wearing of the helmet

During the middle period of Byzantium the helmet, especially the iron or metallic one, was put on only for action. For most of the time it was worn

²⁰ The mace prescribed for the heavy cavalymen or “Kataphraktoi” was designed mainly for use in combat at close quarters, conceived as a weapon able to defeat helmets, armour and even horses (*Digenis Akritas...* 1995, VI, 260ff.).

²¹ He brandished also in his hand the mace-breaker of the helmets (*Digenis Akritas...* 1995, E 931; see Koliais 1988, 183, n. 57; Grotowski 2010, 368, n. 250).



Pl. 1. Four-plated, riveted conical hemispherical helmet from Eastern Balkans, 7th c., private collection: 1 – three quarter view from right side; 2 – back side view; 3 – view from the top; 4 – inner view; 5 – detail of the apex from the left side; 6 – detail of the apex from the right side; 7 – Hexagram of the Emperor Heraclius. *Photo by R. D'Amato* (courtesy of the Museum).

Tabl. 1. Czteroczęściowy, nitowany, półkolisty hełm ze wschodnich Bałkanów, VII w., kolekcja prywatna: 1 – prawy półprofil; 2 – widok od tyłu; 3 – widok z góry; 4 – widok wnętrza; 5 – zbliżenie wierzchołka z lewej strony; 6 – zbliżenie wierzchołka z prawej strony; 7 – heksagram cesarza Herakliusza. *Fot. R. D'Amato* (dzięki uprzejmości Muzeum).



Fig. 24. *Battle between David and Goliath*, Coptic carving, 7th c., Coptic Museum, Cairo. Photo by R. D'Amato (courtesy of Museum).

Ryc. 24. *Pojedynek Dawida z Goliatem*, płaskorzeźba koptyjska, VII w., Muzeum Koptyjskie, Kair. Fot. R. D'Amato (dzięki uprzejmości Muzeum).

hanging from the neck through a strap (Niketas Choniates 1975, 430, 18; Haldon 1975, 21), because the weight of it would have generated a strong headache to the wearer (Kolias 1988, 82). The helmet was usually fitted therefore with a chin strap, probably fastened under the throat and not always visible when worn, scarcely represented in the sources but well visible for instance in the Georgian 10th c. Parakheti icon (Tsursumia 2011b, Fig. 11)²². However, a number of examples in the sources mention as the employment of such expedient did not prevent the helmet from falling off the warrior's head²³.

The helmet could be held steady by the chin strap (Fig. 13:1), which not only acted as chin fastening, but it was also used for carrying it hanging behind the neck when the soldiers were

marching (Anna Komnena 1839, III, 208, 15-19 /XV, 6-4/; Kolias 1988, 82-83, n. 46).

The surface of the helmet on the inside was covered with leather, linen or other kind of soft material (Hoffmeyer 1966, 71)²⁴. Under the helmet was worn a padded cover, so that the hard outer material does not come in direct contact with the skull. Only in such a way was it possible to wear a heavy helmet and furthermore during the hottest days of the summer the specific cover offered protection against the heat produced by the iron surface and the reflection of the sun. In the case of a shot that was not so violent to crush the helmet, but that could result in its deformation, it was possible to prevent, by means of this padded cap, a deadly wound (Niketas Choniates 1975, 183, 71 /VII, 1, 22/; Anna Komnena 1945-1967, II, 218, 4-6

²² This very interesting conical helmet is fitted with nasal (rare feature in orthodox iconography), eye-slits, aventail and even straps! As suggested to me by Dr. M. Tsursumia the context of this icon is even more interesting: the warrior killed by the Saint is Diocletian, represented as enemy of Christian faith. Here Diocletian indeed represents the Roman enemy and this motive appears in numerous Georgian icons starting from the 10th c. when long confrontation between Georgia and Empire took place.

²³ Anna Komnena (1945-1967, I, 162, 11 /IV, 6, 10-12/) speaks about duel among Alexios Komnenos and Norman cavalryman and also (ibid., II, 99, 5ss. and 16ss. /VII, 3, 9/) a fight between a Roman commander and a Pecheneg warrior (see also Kolias, 1988, 81).

²⁴ The holes on the rim of the survived specimens were destined to the lining fastening (Pl. 8, 14).



Fig. 25. 1 – *Soldier at the Killing of the Innocents*, “Homélie de saint Grégoire de Nazianze”, “BNF MS Gr. 510”, folio 137; 2 – *David and Goliath*, “Psalter”, “Ms. Gr. 139”, folio 4v, 10th c., Bibliothèque Nationale de France, Paris; 3-4 – “Joshua Casket”, 10th c., ivory box work, Victoria and Albert Museum in London, details (1-2 – after *Byzance... 1958* – courtesy of the Bibliothèque Nationale de France; 3 – courtesy of the Victoria and Albert Museum; 4 – photo by R. D’Amato).

Ryc. 25. 1 – *Żołnierz przy Rzezi Niewiniątek*, „Homélie de saint Grégoire de Nazianze”, „BNF MS Gr. 510”, folio 137; 2 – *Dawid i Goliat*, „Psalterz”, „Ms. Gr. 139”, folio 4v, X w., Bibliothèque Nationale de France, Paryż; 3-4 – „Szkatułka Jozuego”, X w., kość słoniowa, Victoria and Albert Museum w Londynie, detale (1-2 – wg *Byzance... 1958* – dzięki uprzejmości Bibliothèque Nationale de France; 3 – dzięki uprzejmości Victoria and Albert Museum; 4 – fot. R. D’Amato).



Fig. 26. *The marching of the Arch of Alliance*, “Joshua Roll”, “Palat. Gr. 431”, the 10th c., Biblioteca Apostolica Vaticana, Roma (photo in author’s collection).

Ryc. 26. *Marsz z Arką Przymierza*, „Zwój Jozuego”, „Palat. Gr. 431”, X w., Biblioteca Apostolica Vaticana, Rzym (fot. w zbiorach autora).

/X, 8, 7/). The Western “Dhoméstikos” Marianos Argyros, was probably not wearing a helmet when in the course of the uprising that led to power Nikêphoros Phokás, had his skull shattered from a clay pot thrown by a woman, and died shortly afterwards (*Leonis Diaconis...* 1828 /2005/, III, 7)²⁵. The fabric of which these caps were made was

probably felt or upholstered or padded cloth. The lexicon of Suidas (1705 /1928-1938/, III, 115), of the 10th c., speaks expressly of “pilion kéntouklon” (“πῖλιον κέντουκλον”), removing any doubt about the kind of fabric (felt) and the conical shape of such under-helmet garment²⁶. This one is well visible on a sculpture of the 12th c. from Thessaloniki, representing the popular hero Digenis Akritas killing a lion (Λευκού Πύργου 1986, 65, IV.1; Nicolle 1999a, Fig. 43, 357). It is noteworthy not only the shape of the under-helmet garment, but also the circumstance that the chin strap of it is strongly fastened by a buckle on the right cheek-piece. Also Eustathios of Thessaloniki mention the felt-cover worn under the helmet, by saying that ...one must know that near the ancients a felt cap was found under every helmet... (*Eustathii* 1960, II, 804, 16-19, 335). The way in which Eustathios speaks seems to point to the circumstance that at his time this felt cap was no more in use, but because it is to exclude that the helmet was worn directly on the head without a certain distance between the human skull and the metal, it is probable that Eustathios refers to a certain form of under helmet not more in use at his days, while were probably in use the types of under-helmets visible on the Thessaloniki sculpture and on many other artworks, like the white quilted and padded cap visible on one of the soldiers arresting Our



Fig. 27. *Guards sleeping at the Sepulchre*, icon from Shemokmedi, Georgia, 2nd half of 11th c., detail (courtesy of M. Tsurtsumia).

Ryc. 27. *Strazhnicy spjacy przy Grobie Pańskim*, ikona z Shemokmedi, Gruzja, 2. połowa XI w., szczegół (dzięki uprzejmości M. Tsurtsumii).

²⁵ It is said that then a woman picked up in her hands a ceramic pot full of earth, like those suitable for plants, and hurled it from the roof at Marianos, and struck him on the forehead. And the blow proved fatal, so that it broke his skull and splattered his brain, and he died the next day. See Leo Diacon commentaries of Dennis (*Leonis Diaconis...* 2005, 46); on the version of “Theophanes Continuatus” (1838, 438.13-14), the woman threw a tile instead of a flowerpot.

²⁶ Obviously direct continuation of the *pilos kentouklon* worn by the legionaries of 4th c. AD and mentioned by Ammianus Marcellinus (1939-1950, XIX, 8, 8); the historian gives us a very precious information on the under-helmet protections when he tell us that he and other thirsty soldiers, to collect water from a well, ... tied the cap (*cento*) which one of us wore under his helmet (*galea*), and when this was let down by the rope and sucked up the water after the manner of a sponge, it readily quenched the thirst by which we were tormented.... This episode is particularly important because gives us evidence that the material employed for such headgears was probably felt or padded/quilted fabric. Useless to say that some kind of under-helmet garment was always used by the Roman Army, in its twenty centuries of history (see also Koliass, 1988, 82, n. 44).



Pl. 2. One-piece hemispherical helmet from Ozana, Bulgaria, 10th or 14th c., Iskra Historical Museum in Kazanlak: 1 – back view; 2 – side view from left side; 3 – front view; 4 – detail of the nose-guard rests. Photo by R. D'Amato and V. Jotov (courtesy of the Museum).

Tabl. 2. Jednoczęściowy, półkulisty hełm z Ozany w Bułgarii, X lub XIV w., Muzeum Historyczne „Iskra” w Kazanlak: 1 – widok z tyłu; 2 – widok z lewej strony; 3 – widok z przodu; 4 – szczegóły konstrukcji zachowanego fragmentu nosala. Fot. R. D'Amato i V. Jotov (dzięki uprzejmości Muzeum).

Lord in the 12th c. “Second Tetraevangelion of Jruchi”, from Georgia (*folio 70v*; Fig. 13:1).

The wearing of the helmet was in some way lightened through the employment of this padded cover, but it was always hard due to the weight and the not permeability of the iron to the air. This circumstance pushed the authors of the military treatises to fix certain rules which determined the weight of the helm, as well as of the rest of

the armament. During the march the helmets, especially for the heating, should be removed. In the Leo's “Taktika” (*Leonis Imperatoris 1857-1866 /1917-1922/, XIV, 38*), moreover we can find the prescription that soldiers should carry the helmet in hand when the sky was clear and the weather good, to avoid any reflection of the sun on the surface of the helmet that would probably have revealed the position of the soldiers to the enemy²⁷.

²⁷ *If there will be an open space and a clear sky, they should not wear the helmets on the heads, but with the hands, at least until the enemies are nearer; they should instead carry the small shields on the breast, and cover the helmets and the chain mail armor; or, if they have metallic and shining shields, they should wear them behind the shoulders; and also the iron of the spears should be hidden in the same way: so that the weapons should in no way shine from far, so that their intentions should not prematurely known, especially if the enemies would have be alerted from such signs, and they would not fall in fear before battle.*



Fig. 28. *Sleeping Guards at Sepulchre*, 14th c., Orthodox Church of Staro Nagoricino, Macedonia. Photo by R. D'Amato.

Ryc. 28. *Straż śpiąca przy Grobie Pańskim*, XIV w., cerkiew w Staro Nagoricino, Macedonia. Fot. R. D'Amato.

On the other side the shining and the gleaming of the helmets was a psychological weapon by showing, at the right moment, the military splendor and strength of the Imperial Army²⁸. The helmets, armour and steel swords of the Romans which are glistening in the sun are also mentioned by Al-Mutanabbi in a panegyric commemorating the retaking by his patron, Sayf al-Dawla, of the fortress of Al-Hadas in 954 (Vasiliev 1935-1950, 2/2:33317; Grotowski 2010, 148).

Decoration of the helmet, Guard helmets and Imperial helmets and headgear

If the helmets of the common infantrymen, cavalrymen and marines were usually plain and without a particular decoration, this rule was not applicable to the commanders (Emperors included) and the Imperial Guardsmen. Like in classical and late Roman times many of their helmets were

gilded, as attested by the yellow colour of many helmets represented in the miniatures, where gilded helmets are worn beside iron ones, and as attested also by the archaeological specimens (Figs. 10:1-2, 11:3). Two bronze helmet bands from Birka (Pl. 17-18) are completely gilded and highly decorated with birds and vegetal motifs. Also gilded is the fragment of helmet from Yenikapi (Pl. 20). Other helmets were worked with magnificent embossing: this is not only visible in the iconography²⁹ but also expressly mentioned by the sources (Parani 2003, 123, n. 106). The “De Ceremoniis” mention for instance Alexios Muselès, “Kaisar” of the Emperor Theophilos, wearing in the triumphal procession a polished helmet together with a metallic headgear – a gold circlet – both in gilded iron (Constantinus Porphyrogenitus 1829, 505, 16)³⁰. It is also possible that the costume of the later western knights, using

²⁸ Anna Komnena (1945-1967, I, 20 ff, 5, 16/), describing the army of Bryennios: *...all of them were mounting a Thessalian horse, their armours in iron and their helmets gleaming on their head...*

²⁹ See miniatures in “Skilitzès” (2000): *folio* 12r – (commander of the Bulgarians), who is wearing a ridge-helmet with a crown in the shape of an embossed flower on the front (Fig. 10:1); *folio* 72v – Roman commander with segmented helmet decorated by an embossed flower (Fig. 14:1); *folio* 113v – helmet splendidly embossed by flowers and vegetal designs of Konstantinos Doukas (Fig. 14:2).

³⁰ This was the “Kaisarikion” (“καίσαρικόν”) an Imperial crown-helmet encrusted with precious stones equivalent to the older “stephanos”, which had become at least from the 8th c. (*Theophanis* 1883, 444) the “insignia” of the “Caesar”. The great Emperor



Fig. 29. "Ms Studite Psalter", "Ms. Add. 19352", 1066 AD, British Library, London: 1 – Phineas on horseback, folio 144r; 2 – David praying in the desert of Judah, folio 77v; 3 – The Hebrews given in the hands of the enemies, folio 145r (1-3 – courtesy of British Library).

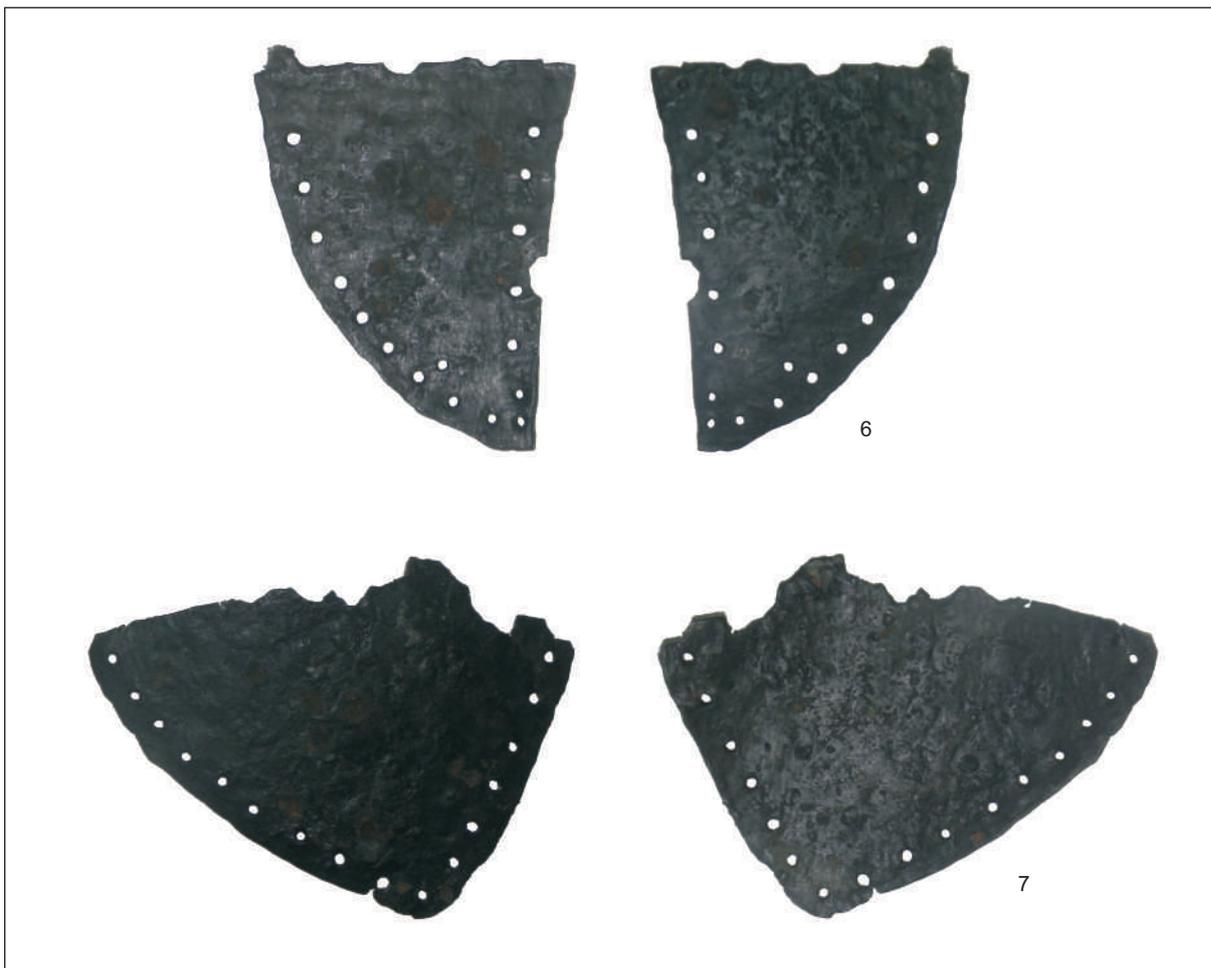
Ryc. 29. „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 r., British Library, Londyn: 1 – Fineasz na koniu, folio 144r; 2 – Dawid modli się na Pustyni Judzkiej, folio 77v; 3 – Żydzi oddają się w ręce swych nieprzyjaciół, folio 145r (1-3 – dzięki uprzejmości British Library).

a gold circlet on the top of their helmet or on the coif of the mail, as sign of rank, was the result of an influence from Constantinople's Court

(Funcken 1977, 21, Fig. 12:a,13,18, and 23, Fig. 34; Rothero 1983, 37, n. 25; Knight 1998, Pls. A:1, F:1). In the "Skilitzès manuscript" the helmets of

however still received one of it in occasion of its triumphal entrance in Constantinople (Constantinus Porphyrogenitus 1829, 501). This sort of diadem, shaped like a gold circlet, probably ornamented with precious stones correspondent to the four colours of the circus factions, was worn in the mentioned episode over a sort of military helmet ("περικεφαλαία καισαρική") (see Ebersolt 1951, 67-68 and 67, footnote 7; Wessel, Piltz, Nicolescu 1978, 373-397; Constantinus Porphyrogenitus 1990, 278, 289). For an image of it see "Skilitzès" (2000, folio 14; Fig. 14:3); very often the Emperor is shown in armour or in military costume, on horseback, wearing his crowns on the head (Kolias 1988, Pl. X – the Troyes casket, the 10th c.; XII – Basil II in military attire, from "Cod. Marc. Gr. 17", folio 3r). In many miniatures Kings and Emperors are often armoured on horseback with a crown helmet on the head (Figs. 15:1-2, 67:5). Although this circlets appear on the heads of the Warrior Military Saints since the 8th c., their shape was originally that of a single string of pearls, and then that of a bigger diadem. From the 12th c., they are more oft visible on the head of the military Saints. For the period under consideration, very indicative are the paintings of the monastery of the Virgin Kosmosoteira in Bera, Thrace (Merkourios, Prokopios, Theodore Stratelates), representing Emperors and Princes of the "Komnenoi". Here the plate above the saint's forehead is inset with a cabochon (Babuin 2009, Figs. 81-84).





Pl. 3. Hemispherical helmet from East Anatolia, Turkey, 11th c., Halûk Perk Müzesi, Istanbul: 1 – front view; 2 – three quarter view from right side; 3 – detail of the inner side; 4 – inner view; 5 – three quarter view from left side; 6 – cheek guards; 7 – neck guard. *Photo by R. D’Amato* (courtesy of the Museum).

Tabl. 3. Półkulisty hełm ze wschodniej Anatolii, XI w., Halûk Perk Müzesi w Istantbulu: 1 – widok z przodu; 2 – prawy półprofil; 3 – szczegół konstrukcji wnętrza; 4 – widok wnętrza; 5 – lewy półprofil; 6 – napoliczniki; 7 – nakarczek. *Fot. R. D’Amato* (dzięki uprzejmości Muzeum).

conical-hemispherical shape, mainly without protective curtains, as well as many simple spherical helmets, are often represented with the surface ornamented with scrollwork, dots and lilies (in gold colour upon red or in red colour upon gold background), evidently to represent precious metallic specimens with gold-incrustations (Figs. 10:1, 14:1-2). The helmet, following an old costume of ancient armies (Sekunda 1984, Pl. F-H), especially in East, was also painted on the outer surface or lacquered (Fig. 15:3-4), or maybe covered with coloured cloth. One of the most splendid examples is the specimen worn on the head by Joshua in the Hosios Loukas Monastery (Figs. 16:1-2), where the white painting or lacquering of the conical helmet is enriched with a possible (on the original) punched decoration with Kufic inscription (Kolias 1988, 87, n. 76; Nicolle 1992, 45-46). The conical pointed helmets

of the cavalrymen and defenders of the city in the Paris Evangels are painted in red and blue or green (Fig. 20:2; Gallotta 130-132), although they could be also covered by a felt helmet cover (Saxtorph 1972, 193, n. 228; Wise 1981, 35). The painting and lacquering of the helmets was a common characteristic of East and West during all the Middle Age (Hood et al. 2011, 77-79; D’Amato 2013b, 58).

The manuals are dealing with the decoration of the helmet. The most common decoration provided was the socket with plumes at the top. The “Taktiká” of Leo VI and the “Sylloge Tacticorum” mention tufts (“toughia”) on top of the helmets of cavalrymen and infantrymen (*Leonis Imperatoris* 1857-1866 /1917-1922/, VI, 25 – small tufts; *Sylloge Tacticorum* 1938, 38, 5 and 39, 3). This kind of tufts suggests the existence of a plume. The plumes are well



Pl. 4. Hemispherical helmet from East Anatolia, Turkey, 11th c., Halûk Perk Müzesi, Istanbul. View from right side and from the back. *Photo by R. D'Amato and archive of the Museum (courtesy of the Museum).*

Tabl. 4. Półkulisty hełm ze wschodniej Anatolii, XI w., Halûk Perk Müzesi w Istantbule. Widok z prawej strony i od tyłu. *Fot. R. D'Amato i archiwum Muzeum (dzięki uprzejmości Muzeum).*

attested in the artworks on the East-Roman helmets (Figs. 9:2, 16:3-4). Some of them are still following the old Greco-Roman style, like in the Joshua Roll (Heath 1979, 5 – one piece hemispherical-conical helmet) or in the Troyes casket (*ibid.*, 7 – two-piece ridge helmet), whose crest color (scarlet red) is well visible on one identical helmet worn by Minerva in the “Cynegetica” of Oppianus (*folio* 33r; Spatharakis 2004, Fig. 67). Others are just small tufts emerging from a hole inserted on the top (helmet of Goliath in the “Paris Psalter 139”; Heath 1979, 33 and see Fig. 16:3-4). It is not impossible still to find,

at least for the 9th c., the horse-tail (“juba equina”) mentioned for the 6th c. helmets from Corippus (Figs. 9:2, 17:1; Ravegnani 1988, 47). Indeed some high helmets of the “Katáphraktoi” from the miniatures, like those of the folio 54v of “Skilitzès” (Hoffmeyer 1966, Fig. 29), show the same system of the plume attachment visible in the famous *graffito* of Dura Europos, representing a charging “Clibanarius”, of the 2nd c. (*ibid.*, Fig. 6, 12:6, 12). The presence of rings on the top of some helmets (Fig. 17:2-3; Heath 1979, 34-35, Pl. A) was probably linked with the attachment of a plume.



Fig. 30. *The killing of King of Hazor*, „Codex Vatopedinus 602”, folio 370r, the end of 12th c., Monastery of Vatopedi, Mount Athos (after Huber 1973).

Ryc. 30. *Zabójstwo króla Chasor*, „Codex Vatopedinus 602”, folio 370r, koniec XII w., klasztor Vatopedi, góra Athos (wg Huber 1973).



1



2

Fig. 31. 1 – one piece low domed helmet of so-called Byzantine typology, Central Europe, 11th-13th c., private collection; 2 – one piece low domed helmet of so-called Byzantine typology, Central Europe, 10th-11th c., private collection (1-2 – courtesy of Hermann Historica).

Ryc. 31. 1 – jednoczęściowy, przysadzisty hełm tzw. typu bizantyńskiego, Europa Środkowa, XI-XIII w., kolekcja prywatna; 2 – jednoczęściowy, przysadzisty hełm tzw. typu bizantyńskiego, Europa Centralna, X-XI w., kolekcja prywatna (1-2 – dzięki uprzejmości Hermann Historica).



Fig. 32. “Skylitzès Matritensis”, 12th c.: 1-2 – *The death of the Emperor Leo V the Armenian*, folio 26v, detail (after Skilitzès 2000).

Ryc. 32. „Skylitzès Matritensis”, XII w.: 1-2 – *Śmierć cesarza Leona V Ormianina*, folio 26v, szczegół (wg Skilitzès 2000).

The evidence for the Imperial helmets and headgears is very rich. The battle helmet of the Emperor is represented in various miniatures³¹ and usually it show to be a helmet of segmented type (Pl. 32-33; “Band-Helmen”), although is invariably gilded (Fig. 21:1). In the sources this Imperial war helmet – probably for its round shape – was called “kamelavkion” (Piltz 1977, 27; Wessel, Piltz, Nicolescu 1978, 387-390; Koliass 1988, 85-86, n. 68). Under this helmet the Emperor could wear also a turban (“φακιολις”) of white embroidered with gold (Constantinus



Fig. 33. *Crucifixion*, Wall paintings from Pürenli Seki Kilise, Ihlara Valley, Niğde Province, Cappadocia, 10th-11th c., Turkey. Photo by R. D'Amato.

Ryc. 33. *Ukrzyżowanie*, malowidło ściennie z Pürenli Seki Kilise, Dolina Ihlary, prowincja Niğde, Kapadocja, X-XI w., Turcja. Fot. R. D'Amato.

Porphrogenitus 1829, 500), sometimes even used in preferential way as war headgear. Others headgears, called “φορέματα” (Codinus Curopalates 1839, 290), the “ὑπέρτερον” (*ibidem*, 291) and the victory crown or “τροπαιουχία”,

³¹ See folio 830 of “Cod. Par. Gr. 510” (the 9th c.; *Julian against the Persians and death of Julian*; Figs. 17:4-5). “Cod. Vat. 333”, folio 45v representing David in battle dressed like Roman Emperor (the 11th c., Fig. 18); and for the 12th c. see folio 30r, 30v, 31v in “Skilitzès” (2000; Fig. 19:1).



Pl. 5. Conical one-piece helmet from the village of Trnukni Njubinje, Bosnia and Herzegovina, 11th c., copy in the War Museum in Beograd: 1 – front view; 2 – back view; 3 – three quarter back view from left side. *Photo by R. D'Amato* (courtesy of the Museum).

Tabl. 5. Stożkowaty, jednoczęściowy hełm ze wsi Trnukni Njubinje w Bośni i Hercegowinie, XI w., kopia w Muzeum Wojskowym w Belgradzie: 1 – widok z przodu; 2 – widok od tyłu; 3 – lewy półprofil. *Fot. R. D'Amato* (dzięki uprzejmości Muzeum).

also called “Ιουστινιάνειον”³² or “toupha” (Wessel, Piltz, Nicolescu 1978, 386-387)³³, were the ornament of the triumphant Emperor. Basil II wore it to celebrate his triumph over the Bulgarians in 1017

or 1018, according to Kedhrenos (1839, II, 475): *...From there he went back to Constantinople, triumphing through the shutters of the Golden Gate, adorned from a golden crown crested on*

³² Because worn by Justinian the Great on his statue on horseback at the “Αυγουσταίον” in Constantinople (Fig. 20:1). Following Justinian’s rebuilding of the place, the main feature was a tall column erected in 543 in the western end of the square to commemorate the Justinian’s victories. It was topped by an equestrian statue of Justinian himself, dressed like a victorious general with the costume called “of Achilles” with muscled armour and the “toupha” crown, and reusing parts of Theodosius’ statue, complemented by a group of three barbarian kings kneeling before it and offering tribute. It survived until the 16th c., when it was demolished by the Turks.

³³ The word comes from the corruption of the Persian word *tug* from which the Latin “tufa”. Also the ancient Germans, the Angles and the Anglo-Saxons called “tufa” the Roman “*vexilla*” composed by bands of hairs or plumes (see Yorke 1990, 19: Bede describing King Edwin of Northumbria – *So great was his majesty in his realm that not only were banners /“vexilla”/ carried before him in battle, but even in time of peace, as he rode about among his cities, estates and kingdoms with his thegns, he always used to be preceded by a standard-bearer /“signifer”/. Further, when he walked anywhere along the roads, there used to be carried before him the type of standard which the Romans call a tufa and the English call a thuf*). Synonymous of “toupha” were the expressions “τογα” (from the Persian “tug”) and “τιάρα” (see Du Cange, Du Fresne 1688, col. 1592-1593 – s.v. “τουφα”; Piltz 1977, 56).



Fig. 34. 1 – *The Betrayal*, “Exultet Roll”, Nouv., Acq. Lat. 710, ca. 1136 AD, Bibliothèque Nationale de France; 2 – *The Protospatharios*, “Exultet Roll”, “Cas. 724 (BI 13)”, 12th c., Biblioteca Casanatense, Roma (1-2 – after *Exultet...* 1994).

Ryc. 34. 1 – *Zdrada*, „Oreǳie Paschalne”, “Nouv., Acq. Lat. 710”, ok. 1136 r., Bibliothèque Nationale de France; 2 – *Protospatharios*, „Oreǳie Paschalne”, „Cas. 724 (BI 13)”, XII w., Biblioteca Casanatense, Rzym (1-2 – wg *Exultet...* 1994).

its top, in front of Maria, wife of Svjatoslav, the Samuel's daughters and the other Bulgarians... and Zonaras (1864, XVII, 9, 227, 166-167): ...after having dedicated to Her temple (the Parthenon in Athens, at that time Church of the Virgin Mary) many precious gifts, he went back to the Imperial city and celebrated the Triumph ornamented by a straight tiara-crown, that the people calls Toupfa, from the glory and proudness that excites inside the souls of the wearers... (Codinus Curopalates 1839, 227-228, 291-292). The “toupfa” was a helmet-crown in gold or gilded (Kedhrenos 1838, 873), with high crest, because of the great “toughion” or “flamoulon” which surmounted it, called “λόφον” from Kedhrenos, reason for which the people stocked to such “Tiara” the name of “Toupfa”: for the period of time considered, it was a sort of rich “Band-helm”, the “kamelavkion” of



Pl. 6. Half deep ball-shaped hemispherical one-pieced helmet from the village of Vjelemidi, Bosnia and Herzegovina, 12th-14th c., copy in the War Museum in Beograd: 1 – three quarter back view from right side; 2 – right side view. *Photo by R. D'Amato* (courtesy of the Museum).

Tabl. 6. Półkulisty, jednoczęściowy hełm ze wsi Vjelemidi w Bośni i Hercegowinie, XII-XIV w., kopia w Muzeum Wojskowym w Belgradzie: 1 – prawy półprofil; 2 – widok z przodu. *Fot. R. D'Amato* (dzięki uprzejmości Muzeum).

hemispherical shape, decorated with precious stones and gems, direct descendent from the rich Imperial helmets of Late-Roman age³⁴ and surmounted by a high crest of peacock plumes, like visible in the miniature of *folio* 409v of “Gregorius Nazianzenus Parisinus” (Fig. 17:4)³⁵. Its shape is well visible in the Bamberg silk fragment, maybe part of a military standard, showing a triumphant Emperor (Basil II?, Tzimiskses?) on horseback while a woman is offering him such a helmet-crown (Fig. 20:3)³⁶. Between the two representations there is an interesting technical detail: in the miniature of “Ms.Gr. 510” the crest is worn through a high and metallic crest-holder, gilded as well as the helmet, in the Bamberg silk the peacock plume is directly inserted inside the skull of the imperial “kamelavkion” (Piltz 1977, Pl. 48:d). A further sculpture, from the fortress of Chalkis, representing a 12th c. Emperor as Alexander the Great, shows a very small helmet-crown decorated by three plumes (Fig. 69:1).

The “*ὑπέρτερον*” or “*ὑπέρπιρον*” would have been instead a headgear shaped like a flame (of the colour of a flame, see Codinus Curopalates 1839, 259), very often visible in the military miniatures beginning from the 11th c., especially on the head of Kings and Emperors (Fig. 21:1-2; Huber 1973, Figs. 75, 90, 99-100). Coresius of Chios writes on it: *The ὑπέρπιρον it that headgear,*

omen of the shed enemy blood, sign of imperial fury to bring against opponents, adorned with magnanimous purple, by which the Emperors were covered or in time of war or in the same conflict (Du Cange, Du Fresne 1688, col. 1840; Codinus Curopalates 1839, 291; Niketas Choniates 1994, IX, 13).

1. Helmet of conical-hemispherical shape, sometimes with slightly forwarded bowl, made of one piece of iron or of riveted plate construction

The analysis of the different types of helmets and their sub-types that occur in the iconography and their comparison with some archaeological elements will allow us to trace now the evolution of the helmet in Byzantium.

One of the most diffused types represented in the iconographical records shows the bowl of the helmet slightly hemispheric-conical in the shape (Figs. 15:2, 22:1-2). These helmets, which present an extension to protect the neck (Figs. 21:2-3, 25:3) or a curtains of leather (Figs. 22:2, 69:2) having the same function, seem to be forged from one piece of iron and are fitted, in the miniatures, to both cavalry and infantry. They were probably of two types: the ones with the bowl made of one piece of iron, the others with the skull made of plates directly riveted to each other.

³⁴ On the Late-Roman Imperial helmets and their decoration see Facchinetti (2003), Bianchi and Munzi (2006, 297ff.).

³⁵ Piltz (1977, 57) considers the miniature of “Ms.Gr. 510” the first representation of the battle helmet (“kamelavkion”) surmounted by a “*toupha*”: but in reality the crown-helmet is uninterruptedly represented on the imperial iconography since the age of Constantine, especially on coins.

³⁶ Reconstruction in D'Amato (2007b, 28-29; for the Bamberg Silk see Muthesius 1997, cat. 52b, M90, 153).

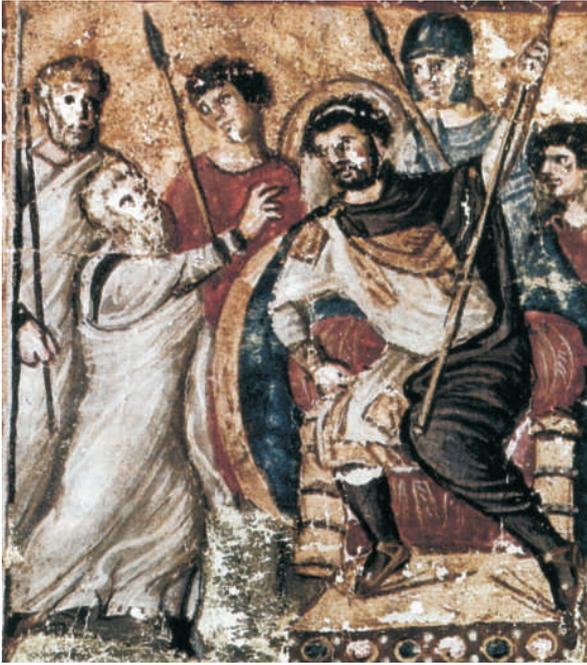


Fig. 35. 1 – *Moses before Pharaoh and his guards*, “Ms. Syr. 341”, Bibliothèque Nationale de France; 2 – Iron helmet, Eastern Europe, 5th-9th c. (1 – courtesy of D. Nicolle; 2– after *Hermann Historica* 2003).

Ryc. 35. 1 – *Mojżesz przed faraonem i jego strażnikami*, „Ms. Syr. 341”, Bibliothèque Nationale de France; 2 – żelazny hełm, Europa Wschodnia, V-IX w. (1 – dzięki uprzejmości D. Nicolle’a; 2– wg *Hermann Historica* 2003).



From the iconography it is however not always easy to understand when the bowl is forged in one piece or formed by segments riveted to each other, which is visible also in some presumptive 11th-c. Western specimens (Figs. 23:1-2; Lowe 1994a, 30, Fig. 1)³⁷. These or the latter are fabricated from four triangular iron plates skilfully made to accommodate the curvature of the human head and with a slight point at the apex, with the plates contoured so that the front and back plates overlap the side-plates (Menghin 2007, 326-327, I.34.4; *Coins...* 2010, 70, cat. 606; Pl. 1:1-6). The so called riveted-plate construction, known across Europe from the Migration Period through to the 12th c., appears on the heads of English and Norman warriors in the “Bayeux tapestry” (Nickel 2002, Pl. X-36; Nicolle 2002a, 308-309; 2002b, Pl. VIII:A-E). Helmets of this general profile and with some form of conical apex are a long-lived military

fashion in the Black Sea region and appear in designs on the bone facing of a Khazar saddle of the 7th-8th c. date from the Shilovski gravefield (Samara region – Gorelik 2002, Pl. XI-4:3-5; Советова, Мухарева 2005, Fig. 4:1; Фонякова 2013, 206, Fig. 1).

We do not know when this kind of helmet, of Central Asian origin (Nicolle 2002a, 308), was introduced in the Roman army, probably from Turco-Iranian models as a further simplification of Late-Roman models, like the helmet of Kipchek (Lebedynsky 2002, 136), well visible on the head of some Roman legionaries of the Galerius Arch in Thessaloniki (Fig. 23:3). An apparent lack of surviving examples from Byzantium made its use in regions of the Eastern Roman Empire less clear. We have however now a prototype, today preserved in a private collection in Eastern Europe, which was found in the Eastern Balkans³⁸ (Pl. 1:1-6)

³⁷ The helmet of fig. 23:2 is said as coming from East Europe in the catalogue of Hermann *historica*; his similitude with the helmet from Eastern Balkans (Pl. 1:1-6) is impressive; but only a direct analysis of it could allow to understand if it is a helmet coming from the Imperial territories.

³⁸ It is four-plate riveted helmet (height – 15.0 cm, diameter – 17.5 cm). Iron specimen of conical-spherical shape, with the top presenting a small protuberance. The bowl is composed by four segments skilfully riveted to each other to accommodate the curvature of the human head. Slightly fluted top (apex), on which originally it was attached a ring or some other element for the

and can be with certitude dated to the Heraclius Age (the 1st half of the 7th c.) through a coin found together³⁹ (Pl. 1:7). It is in fact from the age of Heraclius that the iconography begins to show such kind of helmets, as well as those of the helmets of the same shape made of one piece of iron (see Nicolle 1994, 9, 11, 64, 73; 2002a, Fig. 13; 2002c, Fig. 93) probably diffused in the army by the military innovations of the Emperor, aimed to realize a quicker production of iron helmets for his military campaigns. What it sure is that from the 9th to the 12th c. these categories of helmets were a constant characteristic of the East-Roman army (Figs. 17:3, 21:2-3, 25:1-2).

This type of helmets were common among both cavalry and infantry and seem to be the most used for the 9th-11th c.⁴⁰ Usually they are protected by scales, leather or felt curtains (Omont 1902, 8, Pl. 9), and some specimens show the nose-protection attached to the lower band of the helmet (Nicolle 1999a, Fig. 17:h), like the specimen show on the “Gregorius Nazianzenus”, *folio* 19v, representing one of the pursuers of Saint Elizabeth and Saint John the Baptist wearing a conical one-piece helm (Fig. 25:1)⁴¹. They are represented often fitted with the already mentioned ring on the top used for the crest attachment (Fig. 25:2; *ibid.*,

Figs. 12:a-b). These kind of helmets, during the 11th c., seem to accentuate the rounding of their shape (Fig. 5:1-2), but still preserve the conical form and the protection of the neck, as it is visible for instance on the sleeping guards from 11th c. Shemokmedi icon, in Georgia (Fig. 27). This can be seen as a step toward sphero-conical helmets which are more evident in the iconography towards the end of 11th c. and the beginning of the 12th c., and of which two specimens survive from the territory of Bosnia-Herzegovina. First of them (Шкриванић 1957, 150-151, fig. 93 /1/), dated to the 10th-11th c., was found in village of Trnukni Njubinje, at the borders of the territory of the Neretva⁴² (Pl. 5). The second one comes from village of Vjelemidi⁴³ (Pl. 6) and its chronology is considered to the 12th-14th c. (*ibid.* 153, Fig. 93 /3/).

The spherical-conical helmets are well represented in the miniatures of late 11th c., for example in the “Ath. Esphigmenou 14” (Fig. 5:1-2), the “Ms. Add.19352” of British Library (Fig. 68:6) and can be found in the 12th c. “Skylitzès manuscript” (Hoffmeyer 1966, Fig. 12:11,15-16). In these manuscripts many helmets of infantry and cavalry are just one-piece tight-fitting iron skulls (Figs. 29:1, 3), low-profile helmets like

attachment of plumes or crest, contoured so that front and back plates overlap the side-plates by 1-2 cm with iron rivets passing through the overlap to secure them in position. The rivets work flat into the surface of the helmet, and are almost invisible; the inverted lower rim, now severely damaged, was furnished probably with an additional series of rivets, probably to accommodate a lining; no rivet-holes visible at the base of the side-plates for the attachment of possible cheek-plates. A possible element for the attachment of a nose-protection is still on place. Close parallels: Goliath helmet, Coptic carved panel with the history of David and Goliath, Cairo, Coptic Museum, Inv. N. 17125-37797, the 6th-7th c. (Fig. 24; Nicolle 1998, 11).

³⁹ Hexagram of Heraclius: on left Heraclius and on the right Heraclius Constantine, seated facing on double-throne, each holding cross on globe in right hand, small cross above. On the verso the very damaged inscription *DEUS ADIUTA ROMANIS* (? sometimes *ROIMANIS* or *ROMANIAS*), Cross-potent on globe above three steps (no field marks).

⁴⁰ See examples in Heath (1978): “Joshua Roll”, cavalry and infantry (*ibid.*, 5, 28, 30), Armenian soldiers of the Vatican Casket (*ibid.*, 29), “Skoutatos”, 1110 AD (*ibid.*, 31), 10th-c. “Paris Psalter Grec 139”, *folio* 14v (*ibid.*, 33; Fig. 26), “Skoutatoi” of the ivory caskets from Victoria and Albert Museum and Metropolitan Museum of Art (*ibid.*, 34-36). See also helmet of Joshua, from “Menologion of Basil II”, *folio* 3, Fascimile of Pio Franchi de Cavalieri, Torino, Biblioteca Nazionale (D’Amato 2012a, 11) – this last is a shining helmet with conical pointed outline, silvered, and having blue reflexes in the miniature. It is fitted with a leather “peritrachelion”.

⁴¹ The helmet here represented is tall and slightly back forwarded, exactly as a bronze specimen that it is said to be preserved in the Instituto de Valencia in Madrid (Lowe 1994a, Fig. 15) where, however, I have been not able to find it. Maybe this helmet is the one that my colleague Metin Goçkai told me to have been stolen many years ago from the arsenal of Saint Irene in Istanbul, where it was found.

⁴² The specimen of so-called “German type” (height – 18 cm, width – 19 cm; depth (circumference) – 24 cm; collection of the Zemalinsky Museum in Sarajevo, Inv. No. 72; copy in the War Museum in Belgrade) was made from one piece of iron, of sphero-conical triangular shape. Partially preserved in front, a small brow plate riveted on it with three big iron rivets, to which was attached the nose-guard (today partially missing). All around the rim holes for the attachments of a chain mail curtain. The left side is severely damaged, as well as the top. On both sides, positioned over the rim, are fastened two rings, for the attachment of some decorative elements of organic material. Close parallel: “Smyrne Octateuch”, *folio* 189r and 471v (“Cod. Gr. 746”, Vatican Library), the 10th-11th c. (Nicolle 1999a, Fig. 17:k, r).

⁴³ This half deep ball-shaped iron helmet (height – 14 cm, depth (circumference) – 23,5 cm; collection of the Zemaljski Museum in Sarajevo, Inv. No. 60; copy in the War Museum in Belgrade) that fits with the eastern forms of helmets is similar to those on the heads of the warriors painted in Vogorodici Pevnškoj – Prizren and Ravanica churches. The sphero-conical helmet, composed by a single piece of iron, presents a cross reinforcement band on the skull, not riveted, but forged directly together with the bowl. All around the rim are regular holes for the attachments of a lining and, probably, a felt, mail or leather curtain, disposed at regular distance. The top left is severely damaged. On both sides, positioned over the rim, two small handles are fastened by two rivets, for the attachment of some decorative elements in organic material, related to the plumes or crest. Close parallel: “Sleeping Guards at Sepulchre”, the 14th c., Church of Staro Nagoricino (Fig. 28).



Pl. 7. Fluted one-piece helmet from the fortress Of Pernik, Bulgaria, 4th quarter of 12th c., Regional Museum in Pernik: 1 – front view; 2 – right side view; 3 – back view; 4 – inner view; 5 – detail of the nose guard's remains; 6 – detail of the rim. *Photo by R. D'Amato* (courtesy of the Museum).

Tabl. 7. Jednoczęściowy hełm z twierdzy Pernik w Bułgarii, 4. ćwierć XII w., Muzeum Regionalne w Pernik: 1 – widok z przodu; 2 – widok z prawej strony; 3 – widok od tyłu; 4 – wewnątrz; 5 – ujęcie konstrukcji resztek nosala; 6 – szczegół konstrukcji obręczy. *Fot. R. D'Amato* (dzięki uprzejmości Muzeum).



Fig. 36. 1 – *The passage of the Red Sea – the army of the Pharaoh*, “Exultet Roll 2”, 2nd half of 11th c., Museo Diocesano, Gaeta; 2 – *The passage of the Red Sea – the army of the Pharaoh*, “Exultet Roll 3”, before 1130 AD, Museo Diocesano, Gaeta; 3 – Roman helmet, Egypt, 6th-7th c. BC, Brooklyn Museum, inv. No. 37.1600E (1-2 – after *Exultet... 1994*; 3 – courtesy of Brooklyn Museum).

Ryc. 36. 1 – *Przejsie przez Morze Czerwone – armia faraona*, „Oredzie Paschalne 2”, 2. polowa XI w., Museo Diocesano, Gaeta; 2 – *Przejsie przez Morze Czerwone – armia faraona*, „Oredzie Paschalne 3”, przed 1130 r., Museo Diocesano, Gaeta; 3 – helm rzymski, Egipt, VI-VII w. p.n.e., Brooklyn Museum, nr inw. 37.1600E (1-2 – wg *Exultet... 1994*; 3 – dzięki uprzejmosci Brooklyn Museum).

the 11th c. specimen recently found in East Anatolia, Turkey⁴⁴ (Pl. 3-4), whose neck-guard, according to the late-Roman style, was still a separated piece

⁴⁴ The helmet with cheek-guard and neck-guard (height – 22.0 x 19.0 cm; width – 12.7 cm; thickness – 0.1-0.2 cm; cheek-piece: height – 16.0 cm, width – 2.6 cm, thickness – 0.1-



Pl. 8. One-piece, low-domed hemispherical helmet from Chamoson, Switzerland, 1st half of 10th c. or 12th c., Schweizerisches Landes Museum in Zurich. *Photo from archive of the Museum.*

Tabl. 8. Jednoczęściowy, półkulisty hełm z Chamoson, 1. połowa X lub XII w., Schweizerisches Landes Museum w Zurichu. *Fot. archiwum Muzeum.*

attached with a leather strap, as well as its anachronistic cheek-guards (Zeyrek 2005⁴⁵; D'Amato 2013b, 29). This low form, the so-called Byzantine type (*Hermann Historica* 2009, cat. 488) was also diffused also among the Slavs, mainly in Bohemia and Poland. Comparable elements are known in German private collections.

These helmets show a certain similitude with the famous examples of the so-called Norman type, found in the earth walls of Castle Hradsko near Melnik (Czech Republic) and in Lednica Lake in Poland (Fig. 31:1-2; Profantová 2011, 77).

Some of the one-piece helmets shown in the iconographic works are not fitted with a separate

0.2 cm; cheek-piece: height – 9.2 cm, width – 2.5 cm, thickness – 0.2 cm; neck-piece: 10.3 x 8.4 x 8.4 cm; thickness – 0.2 cm; collection of the Halûk Perk Müzesi, Istanbul, Turkey, Inv. No. M610). Made of iron plates, the skull is shaped for 3/4 like a “Kalathos”. The bowl is composed by two sheets combined together and fastened by riveting. The half round side pieces are curved. The two halves of the bowl are superimposed one on the other in the middle and attached with rivets. The combination of inner and outer side rivets help the resistance of the Kalathos shape, although the attachment of the two sheets is still visible. In the part corresponding to the nose-guard attachment the edges are reinforced inside by a band for receiving the fastening rivets. The visor piece forming the nose-guard is made from a flat sheet-shaped, with long and rounded tip (2.1 x 2.8 x 8.8 cm). This nose protection is made from one piece of iron with shaped eyebrows and nose root, curved from the very wide bow. The cheek guards are made of a flat strip of iron, slightly curved, presenting holes all around the edges for the lining fastening. The one attached to the helmet still present three fastening rivets on place. The second is also a flat-shaped iron plate identical to the previous one but broken. The small neck-guard has a flat edge at the top, the other two edges are slightly rounded cut. Slightly curved, the flat iron plate is made of iron with holes around the edges. It is shaped in a triangular form. Its line, perpendicular to the edge, is cut wide round. Close parallel: “Smyrne Octateuch”, *folio* 446r (“Cod. Gr. 746”, Vatican Library), the 10th-11th c. (Nicolle 1999a, Fig. 17:g).

⁴⁵ In the first analysis from Dr. Zeyrek the helmet was mistaken for a Chalcidian Greek helmet of the 4th c. BC (see Zeyrek 2005, 183, 187).



Fig. 37. „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 AD, British Library, London: 1 – *Soldier of the Emperor Maximianus*, folio 125v; 2 – *The wars of David – Joab*, folio 74v; 3 – *Saul and his officers*, folio 190v (1-3 – courtesy of British Library).

Ryc. 37. „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 r., British Library, Londyn: 1 – *Żołnierz cesarza Maksymiana*, folio 125v; 2 – *Wojny Dawida – Joab*, folio 74v; 3 – *Saul i jego oficerowie*, folio 190v (1-3 – dzięki uprzejmości British Library).

neck protection made of curtains, because their shape forms a compact protection covering also the neck (Figs. 29:2, 30), probably as it was originally for the Heracleian helmet (Pl. 1:1-4). The “Skilitzès” miniatures show various different shapes of the one-piece helmet, remembering the

shape of those represented in the various caskets and Octateuchs of the 11th-12th c.: the helmet slightly forwarded on the top, although its shape is conical-round (Fig. 32:1 – two last warriors on the left); the embossed helmet of complete circular shape, and the embossed helmet highly decorated



Fig. 38. 1 – Scenes from the martyrdom of Saint Arethas, King Elesbas and his prisoners of King Dounoubas, “Cod. Ath. Ephigenou”, folio 136v, 11th c., 2 – Guardsman of the Emperor Maximianus, “Ms Studite Psalter”, “Ms.Add.19352”, folio 167r, detail, 1066 AD, British Library, London; 3 – Angel of the Apocalypse, “Ms Studite Psalter”, “Ms.Add.19352”, folio 190v, detail, 1066 AD, British Library, London (1 – after Pelekanidis et al. 1975; 2-3 – courtesy of British Library).

Ryc. 38. 1 – Sceny z męczeństwa św. Aretasa – król Elesbas i więźniowie króla Dounoubasa, „Cod. Ath. Ephigenou”, folio 136v, XI w., 2 – Gwardzista cesarza Maksymiana, „Ms Studite Psalter”, „Ms.Add.19352”, folio 167r, szczegół, 1066 r., British Library, Londyn; 3 – Anioł Apokalipsy, „Ms Studite Psalter”, „Ms.Add.19352”, folio 190v, szczegół, 1066 r., British Library, Londyn (1 – wg Pelekanidis et al. 1975; 2-3 – dzięki uprzejmości British Library).

with lilies and dots (Fig. 14:2; Hoffmeyer 1966, Fig. 13:13). Judging from the miniatures, during the 12th c. the typology of the helmet with the skull slightly pronounced and with the neck protected by lamellar, scale or fabric curtains (ibid., Fig. 13:12-15) was further developed, at that age having a top sometimes separately attached with rivets, sometimes made of one piece with the skull but fitted with a knob (Figs. 14:1, 32:2).

In this category we should include also the helmets egg-shaped, of which the most known specimen is the artefact found in the castle of Ozana, Bulgaria⁴⁶ (Pl. 2:1-4) in 1945 or 1947. This helmet has often been discussed, because some scholars point to a “bascinet” of Italian type

modified to suit later Balkan tastes and dated to the 14th c. (Haldon 2002, Pl. VI-13:a-b), while some others (and me as well) support the thesis of an original 10th c. Roman helmet (Nicolle 2002a, 310, Fig. 9:d; D’Amato 2012a, 7), and even consider it a possible prototype of some later western European “bascinet” (Nicolle 1999b, 25). The scholars who are convinced of its 14th c. origin based their thesis on the circumstance that the Ozana helmet shows all the proportions of a late medieval “bascinet”. Moreover they say that it is equipped with the so called “verveilles” which are characteristic for late medieval pieces. First, we should remember that in general the dimensions of the helmets during the whole medieval period were not precise (helmets were not produced in

⁴⁶ This specimen (height – 25.5 cm., width – 17.0 cm., depth of the helmet – 20.0 cm; the collection of the Historical Museum in Kazanlik, Bulgaria, Inv. Nos. 25 or 199) was made from one piece of iron, of complex ovoid-spherical or half-ostrich shape, slightly cropped on the front, with, there partially preserved, a small brow plate riveted on in, to which it was attached the nose-guard. It shows above the edge nine rings for the attachment of a protective curtain of chain mail and under it holes through which probably passed or nails or a thread to attach the leather or felt lining. The front was protected by a visor, which is broken off. The stamp or marks on the front pushed Mavrodinov to point on the Pliska forgery as place of production of the helmet. Because iron workshops are documented for that time in Pliska, the theory of Mavrodinov is likely possible. But in this case there is no doubt that the model is an imitation of foreign shapes (Khazar? Magyar? Helmet of Manvelovka – see Gorelik 2002, Pl. XI-12:5) and not an autonomous independently created type. Close parallel: “Smyrne Octateuch”, folio 469v (“Cod. Gr. 746”, Vatican Library), the 10th-11th c. (Nicolle 1999a, Fig. 17:a).



Pl. 9. Two-piece, ridge helmet from Gnëzdovo, Russian Federation, 2nd half of 10th c., State Historical Museum in Moscow: 1 – front view; 2 – rim detail; 3 – three quarter front view from left side (courtesy of I. Dzys, A. Negin and M. Atroshenko).

Tabl. 9. Dwuczęściowy hełm z Gnëzdowa, Federacja Rosyjska, 2. połowa X w., Państwowe Muzeum Historyczne w Moskwie: 1 – widok z przodu; 2 – szczegół konstrukcji obręczy; 3 – lewy półprofil (dzięki uprzejmości I. Dzysa, A. Negin i M. Atroščenka).



Fig. 39. *Joshua and the Archangel Michael*, fresco, Cathedral of Saint Sophia, Kiev, 11th c., details. Photo by R. D'Amato (with kind permission of the Museum).

Ryc. 39. *Jozue i Archaniol Michal*, fresk w Katedrze Sofijskiej, Kijów, XI w., szczegóły. Fot. R. D'Amato (dzięki uprzejmej zgodzie Muzeum).

series but hand made and hammered) and that a size cannot be taken like an absolute element of typological classification. Moreover the precarious conditions of such helmet make very difficult a comparison about the size. No bascinet at all presents nose-protection or in any case a plate over the eyes like the Bulgarian helmet and in any case not in the shape of the Ozana helmet. Of course the presence of “verveilles” can attest the reemployment of this helmet in a later age, as it is attested for many helmets during all the historical periods. We have at least four specimens of classical Roman helmets reemployed during the 4th and the 6th c. Many helmets of the 17th c. were used by the Italian infantrymen during the First World War, because their wide nape piece allowed a more safe protection against the Austrian bullets.

The particular kind of nose-protection (Hejdova 1964a, 83, Fig. 21) and the comparison of its ovoid shape with helmets from the 10th-12th c. miniatures (Nicolle 1999b, Figs. 17:a, 160:b, and even in western regions: idem 2002b, Pl. VII:c) could support this earlier date. If this evidence can seem too schematic, we have to remember that until now that actual specimens of Roman helmets of the 11th c. are too few to allow a comparative study.

The helmet, originally fitted with a mail aventail, could be a development of an earlier Arabo-Islamic one piece helmet of the type known as a “baydah” or “egg” (Nicolle 1999a, 25, 507). Also the place of finding, nearby Pliska, can help

to identify it with a helmet of the Tzimiskès age: according to Mavrodinov (Мавродинов 1948, 166-168), it bears in fact on the frontal parts signs found also on vessels, pottery and other objects found in the Pliska smithy, active during the 9th-10th c. So it can have been produced in such forgery before of its destruction from the army of Johannes Tzimiskès, or have been produced there after that the Romans took again possession of the area.

2. Phrygian shaped or “fluted” helmets, or helmet with forward titled crown

The helmet with the bowl shaped slightly forward, resembling that of the old Phrygian caps of Antiquity, was the continuation of an old tradition in the Roman army since the Etruscan age (Dawson 2007, 21; Laguardia 2007, 130-139; D'Amato 2009, 10-11, Fig. 2). Hundreds iconographies (Laguardia 2004, 42, Pl. 4) and various archaeological specimens (D'Amato 2009, 186-187, 208, Figs. 273, 297) attest its continuous use in the army of the Imperial Age, deeply until the 5th c. In the Roman medieval army of Byzantium the helmet was simplified, forming a variant of the one piece helmets, and it is generally called by the scholars “fluted” helmet, because, apart from their Phrygian shapes, many helmets of this category show embossed lines convergent to the top (Fig. 4; Nicolle 1999a, Pl. 680:g-h; 2002c, Fig. 245). This style had probably a revival linked with the development of the close rank, couched-lance cavalry tactics associated with kite-shaped shields,



Pl. 10. Two-piece, ridge helmet from Central Tunisia, 10th-11th c., Local Museum of Islamic Art in Kairouan, Tunisia: 1 – front view; 2 – back view; 3 – view from right side; 4 – view from left side. *Photos from archive of the Museum.*

Tabl. 10. Dwuczęściowy hełm z centralnej Tunezji, X-XI w., Lokalne Muzeum Sztuki Islamskiej w Kairouan, Tunezja: 1 – widok z przodu; 2 – widok od tyłu; 3 – widok z prawej strony; 4 – widok z lewej strony. *Fot. archiwum Muzeum.*



Pl. 11. Two-piece, ridge helmet from Central Tunisia, 10th-11th c., Local Museum of Islamic Art in Kairouan, Tunisia: 1 – view from the top; 2 – inner view; 3 – detail of the apex. *Photos from archive of the Museum.*

Tabl. 11. Dwuczęściowy hełm z centralnej Tunezji, X-XI w., Lokalne Muzeum Sztuki Islamskiej w Kairouan, Tunezja: 1 – widok z góry; 2 – wnętrze; 3 – szczegół konstrukcji zwieńczenia hełmu. *Fot. archiwum Muzeum.*

under Nikêphóros Phokás (McGeer 1995, 301ss.; Nicolle 2002a, 10-11; 2002b, 11). Usually the helmet shows its pointed crown slightly tilted forwards, probably as a result of leaving the front portion of the bowl thicker than the sides and rear during the forging process (Nicolle 1999a, Fig. 733:e; 1999c, Figs. 5a-b, 6a-b; 2002a, Figs. 41:d and 42). The employment of this kind of helmet is firmly attested, for the 9th-12th c., in the iconographies of biblical scenes: codex miniatures, some important frescoes from Cappadocia (Fig. 33:1-3) but especially artworks from southern Italy. In this regional provinces of the Empire the fluted helmet is well attested on the head of regional soldiers and mercenaries of the Empire represented on ivory works, reliefs and miniature

rolls (Fig. 34:1-2; Nicolle 1999a, Figs. 700:a). Particularly noteworthy is the employment of these helmets by south Italian Norman cavalymen (ibid., Figs. 690:ax, af; 2002d, Figs. 4, 13), and also its further spread among the Muslim potentates (Nicolle 2002a, Fig. 31), as result of the interchange of the military experience between Byzantium, West and East. During the 12th c. this distinctive development of the true-one piece helmet became widespread in Western Europe, thanks to Byzantium's influence (ibid., 11; Dawson 2007, 21; D'Amato 2012c, 25).

The best preserved archaeological specimen of that typology is a piece found in 1962 at medieval fortress of Pernik, Bulgaria⁴⁷ (Pl. 7). The strong Roman garrison was defending the related citadel at least until the end of the 12th c., but the helmet comes probably from the last quarter of the 12th c. (Чангова 1992, 179s., 214-218, Figs. 163-164; D'Amato 2010, 46).

⁴⁷ The Phrygian shaped iron helmet (height – 29.5 cm, diameter – 27.5 cm; collection of the Pernik Regional Museum, Bulgaria, Inv. No. A3692), with forward titled crown. An iron band surround the edge, tapering in horizontal way until the nose guard attachment, still on place. Here, on the front, are still visible two metal fittings which held through a couple of rivets the upper



Fig. 40. “Skylitzès Matritensis”, 12th c.: 1-3 – *The death of the Emperor Leo V the Armenian*, folio 26v, details; 4 – *The army of Thomas the Slav beats the Imperial Army*, folio 31r (after Skilitzès 2000).

Ryc. 40. „Skylitzès Matritensis”, XII w.: 1-3 – *Śmierć cesarza Leona V Ormianina*, folio 26v, szczegóły; 4 – *Zwycięstwo armii Tomasza Słowianina nad armią cesarską*, folio 31r (wg Skilitzès 2000).

3. Helmet of simple hemispherical shape, smoothly and low-domed, made of one piece of metal

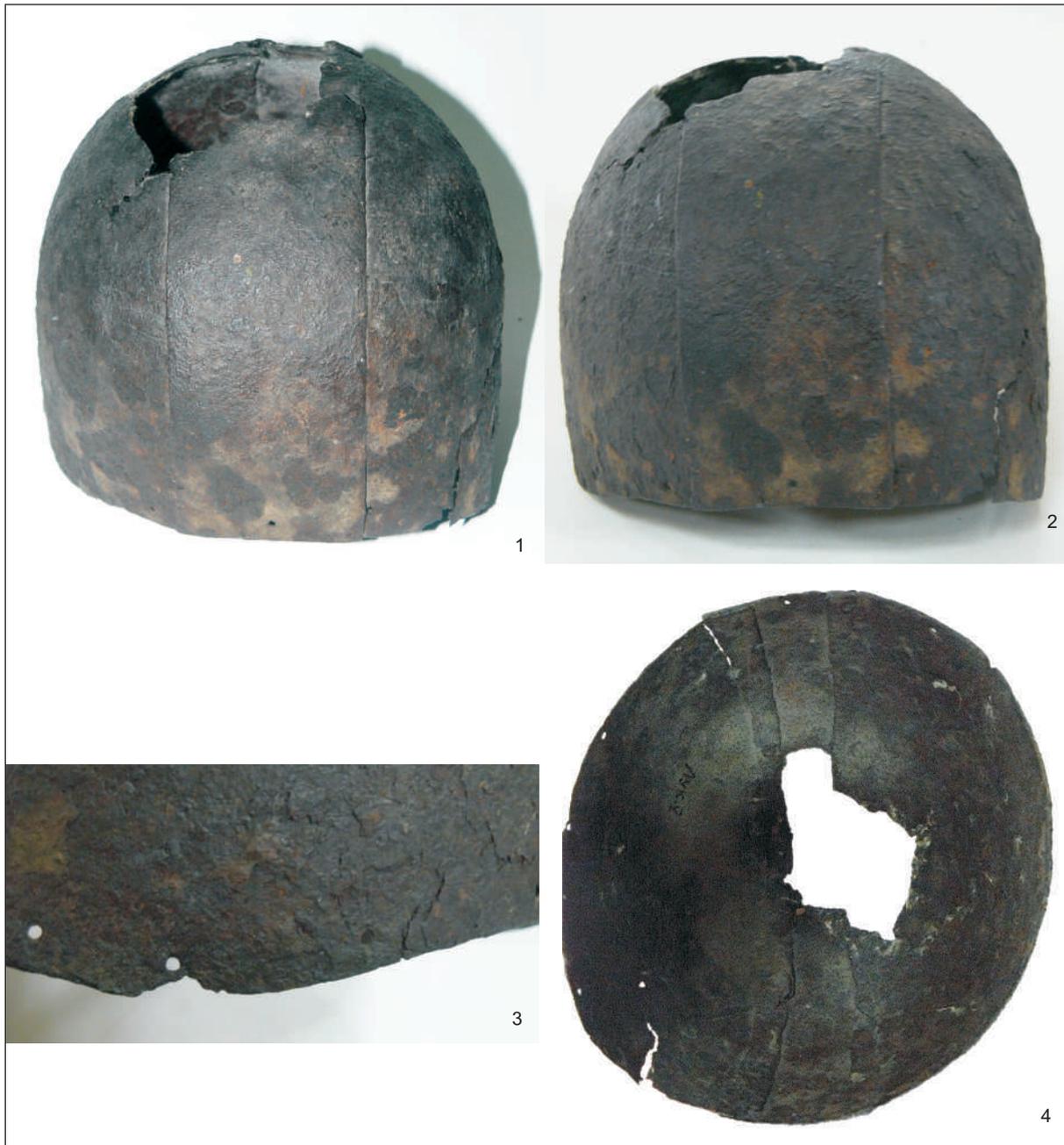
The large-scale production of iron helmets made of a single piece of metal was a kind of revival in the Late Dark Ages military technology (the 9th-12th c.), although the Roman helmets in the classical age were mainly made of one piece (Robinson 1975, 42-61; D’Amato 2009, 32ss.,

Fig. 41. *The martyrdom and glorification of Saint James*, Panel of Andrea di Jacopo d’Ognabene, Pistoia Cathedral, Italy, late 13th c., detail. Photo by R. D’Amato.

Ryc. 41. *Męczeństwo i apoteoza św. Jakuba*, panel w Andrea di Jacopo d’Ognabene, katedra w Pistoii, Włochy, koniec XIII w., szczegół. Fot. R. D’Amato.

part of the today lost nose-protection. On the iron band are disposed at regular intervals holes for the fastening of the leather lining, onto which was presumably sewn or attached the chain mail covering neck and face. Restored on the upper frontal part. Close parallels: “Crucifixion”, wall paintings from Pürenli Seki Kilise, Ihlara, Nigde Province, Cappadocia, Turkey, the 10th-11th c. (Fig. 33:1-3).





Pl. 12. Two-pieced, ridge helmet from the fortress of Lukashovka V, Moldavia, 12th-13th c., National Museum of Archaeology and History of Moldova: 1 – front view; 2 – back view; 3 – detail of the rim; 4 – view from inner side. *Photos from archive of the Museum.*

Tabl. 12. Dwuczęściowy hełm z twierdzy Lukašovka V w Moldawii, XI-XIII w., Muzeum Narodowe Archeologii i Historii Moldowy: 1 – widok z przodu; 2 – widok od tyłu; 3 – szczegół konstrukcji obręczy; 4 – wewnątrz hełmu. *Fot. archiwum Muzeum.*

109ss.; Nicolle 2002a, 309), so that the presence of one piece helmets in Byzantium is not unusual. The simple low-domed spherical helmet came maybe from a simplification of the ridge-helmets and “Baldenheim” type helmets of the same shape, according to Nicolle under the influence of Islamic models (Nicolle 1994, 41, Pl. C; 1999a,

123; 2002a, 309)⁴⁸. However simple spherical Late Roman helmets made from one piece are confirmed by archaeology (Negin 2010a, 354, Fig. 12, 6), and this kind of helmets are well visible in the 7th c. Roman iconography (Fig. 35:1; Nicolle 1994, 57ss.): it is indeed very difficult to believe that the technique of working a helmet with a single

⁴⁸ I believe instead that the influence of Persians and Slavs and the invasions of the 4th-7th c. could have pushed the Romans to produce again *en masse* one-piece helmets, while elaborated specimens were made of more parts.

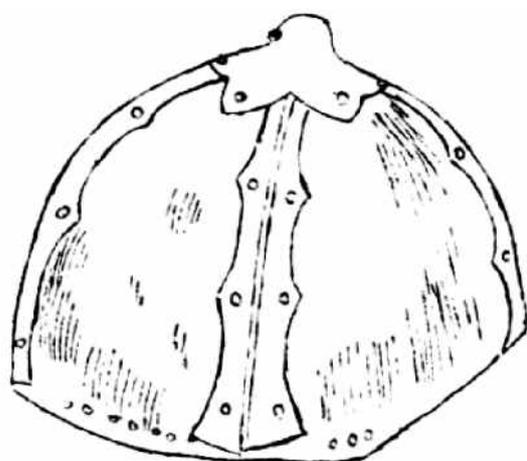


Fig. 42. 1 – *The passage of the Red Sea – the army of the Pharaoh*, fresco, late 12th or early 13th c., Sanctuary of the Madonna di Ceri, Ceri; 2 – Carolingian helmet, 8th-9th c., Verden, Germany, present location unknown; 3 – *Burning of Arian books at Nicaea*, “Compendium of canon law”, “MS Capitular Library CLXV”, ca. 825 AD, Vercelli (1 – photo by R. D’Amato; 2 – after Wilbrand 1912-1914; 3 – author’s collection).

Ryc. 42. 1 – *Przejście przez Morze Czerwone – armia faraona*, fresk, późny XII – wczesny XIII w., sanktuarium Madonna di Ceri, Ceri; 2 – hełm karoliński, VIII-IX w., Verden, Niemcy, obecne miejsce przechowywania nieznane; 3 – *Palenie ksiąg ariańskich w Nicei*, „Kompendium prawa kanonicznego”, „MS Capitular Library CLXV”, ok. 825 r., Vercelli (1 – fot. R. D’Amato; 2 – wg Wilbrand 1912-1914; 3 – zbiory autora).



Fig. 43. 1 – *Sea attack of Thomas the Slav on Constantinople*, “Skylitzès Matritensis”, folio 33v, 12th c.; 2 – *Joshua and the Archangel Michael* – detail of helmet of the kneeling Joshua, fresco, Cathedral of Saint Sophia, Kiev, the 11th c.; 3 – *Eros attacking the Olympian Gods*, Pseudo-Oppian, “Cynegetica”, “Cod. Gr. 497”, folio 33r, Biblioteca Marciana, Venice, Italy (1 – after Skilitzès 2000; 2 – photo by R. D’Amato, with kind permission of the Museum; 3 – after Spatharakis 2004).

Ryc. 43. 1 – *Atak z morza Tomasza Słowianina na Konstantynopol*, „Skylitzès Matritensis”, folio 33v, XII w.; 2 – *Jozue i Archanioł Michał* – zbliżenie helmu kłęczącego Jozuego, fresk, Katedra Sofijska, Kijów, XI w.; 3 – *Eros atakujący olimpijskich bogów*, Pseudo-Oppian, „Cynegetica”, „Cod. Gr. 497”, folio 33r, Biblioteca Marciana, Wenecja, Włochy (1 – wg Skilitzès 2000; 2 – fot. R. D’Amato, za uprzejmą zgodą Muzeum; 3 – wg Spatharakis 2004).

piece of metal has been abandoned in the Late Antiquity to reappear only during the 9th-10th c. A specimen of possible south-European origin has been recently proposed in public auction with a wide range date (the 5th-9th c. – *Hermann Historica* 2003, Cat. 108; Fig. 35:2): although

this helmet is not necessarily thought to have been manufactured in Byzantium, proves that this military technology was not lost at all; moreover, the so called Lombard treasure, before dismissed as a fake of the 19th or 20th c., has been recently reconsidered as authentic, and contains sophisticated



Fig. 44. 1 – Pevensey Helmet, early 13th c., present location unknown; 2 – detail of the helmet of Saint Merkourios, Faras Cathedral, Nubia, fresco on the outer wall on the south entrance to the Church, tempera and plaster, 10th-12th c., National Museum in Warsaw, inv. 149672 MN (1 – after Кулешов, Абызова 2011; 2 – photo by R. D’Amato, with kind permission of Museum).

Ryc. 44. 1 – hełm z Pevensey, początek XIII w., obecne miejsce przechowywania nieznane; 2 – hełm św. Merkuriusza, katedra w Faras, Nubia, fresk na zewnętrznej ścianie przy południowym wejściu do kościoła, tempera na tynku, X-XII w., Muzeum Narodowe w Warszawie, nr inw. 149672 MN (1 – wg Кулешов, Абызова 2011; 2 – fot. D’Amato, za uprzejmą zgodą Muzeum).

forms of one-piece iron helmets⁴⁹. Of course the new diffusion of this category of helmets was not the result of a gradual development from segmented helmets to one-piece specimens, but it was rather a kind of revolutionary moment in time – a moment of relatively stable and prosperous conditions – when technical level and means of production of some strong European nation (Byzantium under the Macedonian Dynasty? The Ottonian Empire? The Muslim western Principates?) enabled to produce bowl of the helmets in one piece instead of the ones composed from many parts (Hejdova 1964a, 82; 1964b, 104-105; Nicolle 2002a, 309).

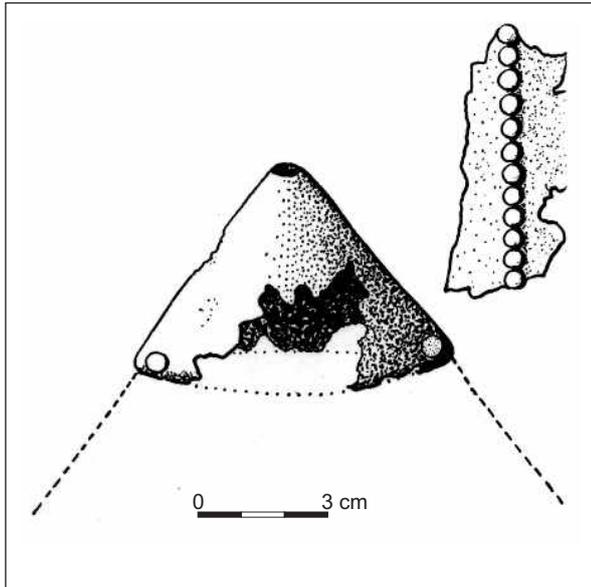
From the iconography is clear that since the 9th c. this kind of helmet was diffused in Byzantium, especially among the light infantry and cavalry (helmet of Goliath in the “Pantocrator 61”, *folio* 197v – Dufrenne 1966, Pl. 11:29; Fig. 17:1-2). Similar forms of one-piece helmets were also popular, at least from the 10th c., in other milieus, like the Carolingian one, and in Spanish regions under the Christian control⁵⁰. The most striking archaeological example of this category is the helmet found in 1928 in lower Wallis near Chamoson, Switzerland⁵¹ (Pl. 8; Gessler 1929-1931, 121-127), considered of Islamic (Nicolle 1999a, 123)⁵² or North-Italic production (Holmquist

⁴⁹ More recently studies had supported the theory that this kind of helmet was used as interchange influence element between Franks, Lombards, Abbasids and East-Romans (see Nicolle 2008, 29).

⁵⁰ See for instance the depiction from the 13th c. illuminated manuscript “Beatus of Liebana”, a Mozarabic manuscript kept in the Pierpont Morgan Library of New York, where in one scene riders wear fluted and hemispherical helmets of “cervelliere” type over mail coifs (Nicolle 2002b, Pl. VI:F).

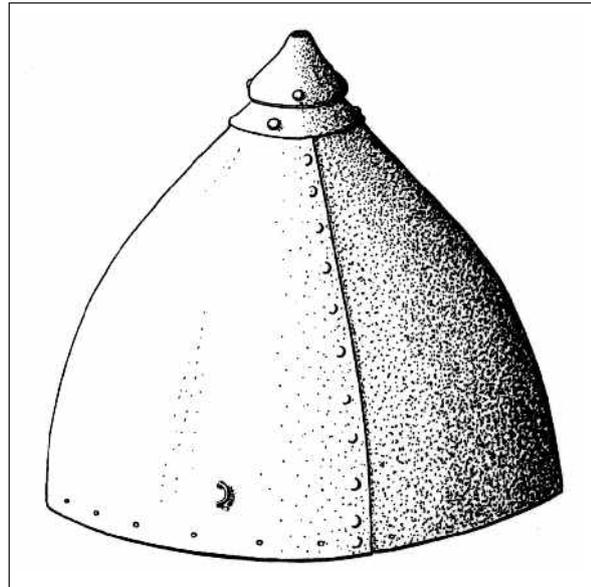
⁵¹ The helmet (height – 17.5 cm; length – 20 cm; width – 18 cm; weight – 1465 g; collection of the Schweizerisches Landes Museum, Zurich, Inv. No. LM-17483) was hammered out from a single piece of metal. The one piece of iron plate is forged into half-rounded shape, decorated with an ornamental brow band made of brass. The brass band extends from the front to the back, flanked by further two brass bands. All the bands are sharing the same decoration. Brass frontal band and additional bands (strips) are put in place by two lines of densely arranged rivets with half-rounded small heads. The brow band is riveted along its lower end with three attached narrow cross-shaped helmet mounts (“helmspangen”) of yellow brass. The wide brow band presents two parallel rows of conical rivets (“zapfenförmige”) and has punched foliage trail decoration. The upper row of rivets fastens the brow band to the helmet, while the lower row is just decorative. The lower edge of the brow band presents a row of holes running around the whole helmet, probably for the attachment of the internal lining. Close parallels: “The passage of Red Sea”, Exultet Rolls 2-3, Gaeta, Museo Diocesano, the 12th c. (Fig. 35:1-2).

⁵² The Islamic origin of the helmet was already proposed by Gessler (1929, p. 48). He compared the decor of the Chamoson helmet with the adornment of an apple on the hand protector of the Hiltiprecht sword (Morave 1929, 292-298), which was, on the other hand, very different from the decoration in silver damascening of the additional helmet bands. Tendrils on the helmet and sword could have both derived from usual Carolingian ornamentation which itself originated from the reduction of the half palmettes combined with tendril and which was in use throughout the 9th c. illuminations of Carolingian manuscripts. Because of this similarity in decor Gessler dated the helmet to the 9th-10th c. While the problem of the circumstance that suddenly in the 9th c. appear helmets forged from one piece is still debated, Gessler attributed the technical skill of forgery to Saracens supposing that Chamoson helmet was rather directly a product of Saracens or home product made under the Saracen influence. Also the place of discovery could be directly linked at the



Pl. 13. Segmented helmet finial from Gelendjik, Russian Federation, Kuban Area, 8th c., collection of State Historical Museum in Moscow (after *Arendt 1935*).

Tabl. 13. Zwieńczenie hełmu segmentowego z Gelendżik, Federacja Rosyjska, obwód kubański, VIII w., zbiory Państwowego Muzeum Historycznego w Moskwie (wg *Arendt 1935*).



Pl. 14. Segmented helmet from Novorosijsk, Russian Federation, Kuban Area, 2nd half of 9th c. or 950-1025, formerly in the collection of Novorosijsk State Museum, present location unknown (after *Arendt 1935*).

Tabl. 14. Hełm segmentowy z Novorosijska, Federacja Rosyjska, obwód kubański, 2. połowa IX w., dawniej w kolekcji Państwowego Muzeum w Novorosijsku, obecne miejsce przechowywania nieznane (wg *Arendt 1935*).

Olausson 2007, 236, Fig. 8:c) but virtually impossible to be distinguished from the helmets worn by the warriors of the Italic subjects and vassals of the Roman Empire, like proved by the “Exultet Rolls” of Gaeta of the 12th c. (Figs. 36:1-2). In 1961 a further helmet of the same type was found in Niederralta (Kt. Graubünden; Schneider 1967, 77s.; Meyer 1979, 90-99; *Protokoll...* 2004, 5), showing that this form of helmet was especially diffused among the German and Italic warriors. The date of the second specimen was extended by Schneider to the 12th c., and so also the one of the Chamoson helmet. The main difference between the two

helmets is in the decoration: the brass mounts of the Chamoson helmet are decorated with foliage, whose style is Mediterranean and identical to those of the Roman helmet of the Brooklyn Museum, coming from the Egypt (Prisse D’Avennes 1846, 735-736; 1847, Pl. XLVI:3 – no drawing of helmet only of the armour found together) and dated to the 5th-7th c. (Fig. 36:3). Like in the Brooklyn *spangenhelm* a band is running from one to the other side of the bowl, presenting a very detailed and incised decoration with tendrils and scrolls⁵³. But the brass strips on the Chamoson helmet are used clearly for decorative purposes

Fig. 45. “Homélie de saint Grégoire de Nazianze”, “BNF MS Gr. 510”: 1 – *Joshua and the Archangel Michael*, folio 226v; 2 – *The victory of Israelites over their enemies*, folio 424v (1-2 – *Byzance... 1958* – courtesy of Bibliothèque Nationale de France).

Ryc. 45. „Homélie de saint Grégoire de Nazianze”, „BNF MS Gr. 510”: 1 – *Jozue i Archanioł Michał*, folio 226v; 2 – *Zwycięstwo Izraelitów nad wrogami*, folio 424v (1-2 – wg *Byzance... 1958* – dzięki uprzejmości Bibliothèque Nationale de France).

place where Saracens temporarily settled when they penetrated through Southern France into Switzerland at the close of the 9th c. Gessler quoted written Arabic sources to confirm that in the 6th-9th and the 11th c. the Arabs made helmets in the shape of half ostrich egg riveted from four parts, as well as helmets forged from one piece. Hejdova (1964a, 82, Pl. A) also argued that the helmet found at Chamoson dated from the 9th c. because she deemed its decoration to be Carolingian plant ornament. Not so convincingly, on the other hand, was the Gessler’s opinion that Chamoson helmet represented an intermediate passage between the segmented helmets (“Spangen-helmen”) and the helmets made from one piece, realised through the exclusion of the frontal band. Evolution of the segmental helmet to one piece helmet would have required very significant changes in the whole construction structure.

⁵³ It is interesting to recall as such scrolling tendrils are visible on the scabbard of the Essen Cathedral’s sword, which has been correctly identified by Kolias as a specimen of “Chrysokanon Spathion” made in Byzantium (see Kolias, 1988, 158-159, footnote 153, following Human).



1



2

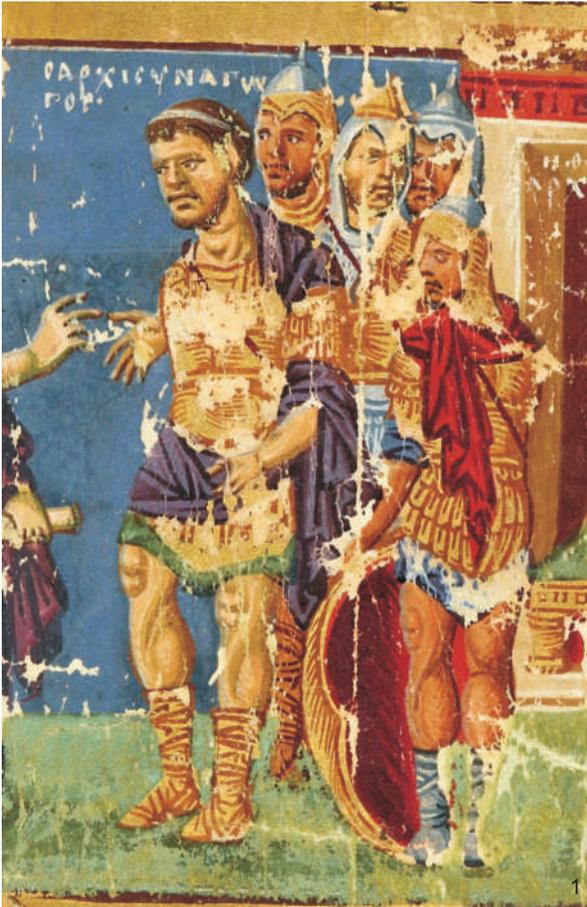


Fig. 46. “Homélies de saint Grégoire de Nazianze”, “BNF MS Gr. 510”: 1 – *Health of the daughter of Jairus, Jairus and his followers*, folio 170; 2 – *The passage of Red Sea, the Army of the Pharaoh*, folio 264v (1-2 – courtesy of Bibliothèque Nationale de France).

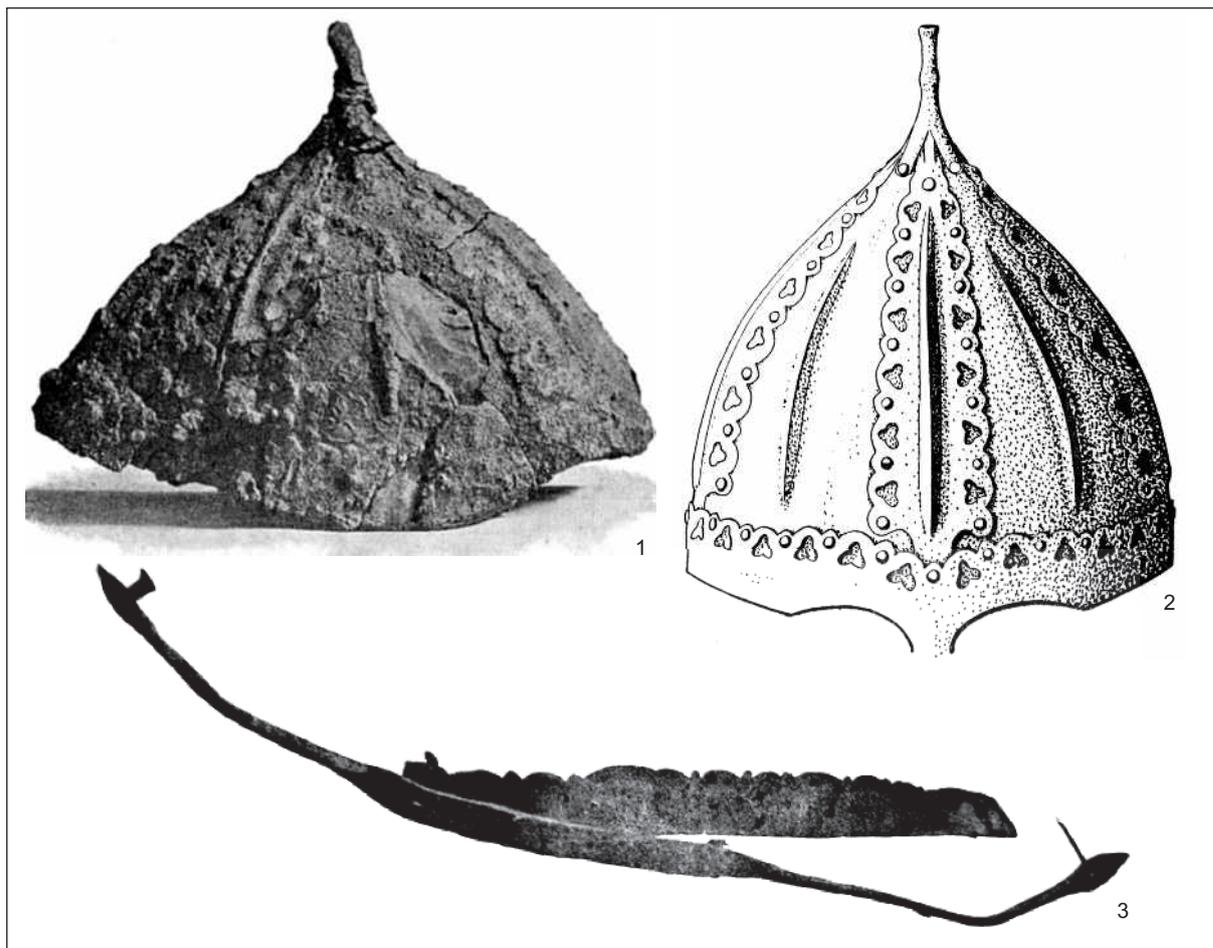
Ryc. 46. „Homélies de saint Grégoire de Nazianze”, „BNF MS Gr. 510”: 1 – *Uzdrowienie córki Jaira – Jair i jego towarzysze*, folio 170; 2 – *Przejście przez Morze Czerwone – armia faraona*, folio 264v (1-2 – dzięki uprzejmości Bibliothèque Nationale de France).

only, lacking any constructive function and reminds parts that once had their reason and purpose, in the previous segmented helmets of Late Roman Age⁵⁴.

According to this view, it seems quite plausible to me that the sudden appearance of a kind of military equipment which is very demanding in terms of craftsmanship and not only in the western but in the eastern Europe as well is to link with the renewal of the East-Roman power under the Macedonian Dynasty. My impression is that the Chamoson helmet could be an East-Roman production of south Italy, to date between the 9th (Nicolle 2001, 16, n. 1) and 12th c., realized

with a very advanced technology by the Italic craftsmen of the Empire, according to a very diffused model employed also by the warriors of the Holy Roman Empire and the Muslim Potentates. It is true that this shape of helmet fits into the Western European tradition of the 12th and the 13th c.: but if the helmet of Chamoson can be dated at the 9th-10th c., it could have been a prototype for the further development of such shape in the western countries. A further specimen from Tunisia (Nicolle 1996a, 76f; 1999a, 412, Cat. 380; 2001, 16, n. 2) has been dated to later period (Hafsid Dynasty), but according to Nicolle there are not reasons for this attribution,

⁵⁴ Decorative usage of the bands (strips) on Chamoson helmet might have been caused even by indirect sources like for example the Leiden university library manuscript (“Cod. Perizoni 17”; see Merton 1912, 65-66) where are visible helmets built according the late antiquity models, i.e. the “Bandenhelmen” of Late Roman fabrication passed to the Carolingian successors. Differently from Hejdova and Gessler, I’m convinced that those illuminations represent actual types of helmets used in the 9th c. and it is not because the literary transcription of the Roman pattern models are in these examples by far too much obvious, but because late antiquity helmets models were still in use and known during Carolingian era through the influence of Byzantium or simply uninterruptedly used in West; the Mediterranean influence caused the decorative applications of the bands on the Chamoson helmet.



Pl. 15. Segmented pointed helmet from Gnëzdovo, Russian Federation, 4th quarter of 9th – early 10th c., collection of the State Historical Museum, Moscow: 1 – helmet skull; 2 – reconstruction of W. Arendt; 3 – segments of the helmets (after *Cusov 1902* and *Arendt 1935*).

Tabl. 15. Hełm segmentowy z Gnëzdova, Federacja Rosyjska, 4. ćwierć IX – początek X w., zbiory Państwowego Muzeum Historycznego w Moskwie: 1 – czasza hełmu; 2 – rekonstrukcja W. Arendta; 3 – części hełmu (wg *Cusov 1902* i *Arendt 1935*).

considering that the helmet is very similar to the Chamoson one (although without the decorative straps of the Swiss specimen) and its shape corresponds to the low-domed one piece helmets of the early Islamic or East Roman provinces. Another possibility is however that only the decoration of the helmet, a product of some Western craftsmanship, was added by some East-Roman laboratory of South Italy, in Napoli, Amalfi or Gaeta. What it is sure, is that the kind of helmet was used in all the South-Mediterranean area throughout the 10th and the 12th c., and its use continued also in later time.

This kind of helmet was very easy to produce, and belonged to the category of the single bowl helmet, i.e. the “κράνος”. Single bowl helmets could be highly decorated. One of the most beautiful 10th c. depictions of such category of helmet in Byzantium is the one illustrated in the painting of Hosios Loukas Monastery, in Phokis, representing Joshua in front of the Angel (Fig.

16:1-2; Koliaş 1988, 87, n. 76). Here we have the sample of the helmet of a high military officer, probably the “Stratêgós” of the Hellas, lacquered, decorated with Kufic inscriptions (Parani 2003, 149) and worn together with the turban (“phakiólion”) emerging from under the helmet. The low-dome shape is well attested in the miniatures of the 11th c., for instance of the “Ms.Gr. Add. 19352”, where is one of the main helmet on the head of infantrymen (Fig. 67:2, 4) trumpeters (Fig. 36:3) and cavalymen (Figs. 37:1-3, 67:3, 68:2-3), and where it is clear that also such helmets could be fitted with aventails and curtains, especially of felt. Like in the Hosios Loukas painting, also the miniatures from the 10th to 11th c. show a pointed knob on the top of such protections for the head (Figs. 22:2, 25:3, 38:2). Some warriors wore it with a cap or “skaplion” (Figs. 8:1-2, 38:1). In the “Skilitzès” the simple spherical helmet is visible on the head of the marines (Fig. 11:3; *Skilitzès 2000, folio 14v*)



Fig. 47. Khazar helmet from grave 161 of Djurso, 10th c., State Museum Noworosijsk (courtesy of A. Kolpakova).

Ryc. 47. Helm chazarski z grobu 161 w Djurso, X w., Muzeum Państwowe w Noworosijsku (dzięki uprzejmości A. Kolpakovej).

and cavalrymen, sometimes with an added rim (ibid., *folios* 162v, 202v). This helmet is often represented highly decorated with embossed vegetal ornamentation or with a sort of reticulated pattern (Fig. 14:2; *Skilitzès* 2000, *folio* 213r; see D'Amato

2011, Fig. 14:1). It is also mainly worn by artillerymen and other types of infantrymen (Hoffmeyer 1966, Fig. 42; Koliass 1988, Pl. XXX:1, *folio* 212v; *Skilitzès* 2000, *folios* 151v).

4. The two-piece or ridge helmet of late Roman typology

The round bowl of the one-piece helmets was probably derived by the Romano-Sassanian typologies of helmets, which began to be used by the Roman Army in the 3rd c.⁵⁵ Such helmets, made of two halves connected by a central longitudinal “ridge” or “comb”, sometimes high, and securely fastened on the lower riveted rim, were the prototypes of many helmets of the Middle Ages (Nicolle 1984a, 35; 1999c, 45, Pl. B2; 2002a, 307). They were sometimes fitted with a attaching nose-protection, and cheek-guards and neck protections attached to the bowl's lining by sewing (Kocsis 2000, 37-40; Coulston 2002, 9-10; Lusuardi Siena et al. 2002, 42ss., 50ss.). The tradition of this helmet was never abandoned in Byzantium and the Balkans, at least until the 14th c. (Nicolle 1999a, 59, Fig. 94; Dawson 2002, 87; 2007, 20)⁵⁶.

It was mainly produced in heavier and lighter specimens. One of the most beautiful specimens of the first type, the helmet from Concesti (today in the Hermitage collections), dated at the 5th c. (Hejdova 1964a, 44, Fig. 6:6; Klumbach 1973, 91ss., Pls. 32-37; Negin 2010a, Pl. XV:3) was the prototype of various helmets of the 6th-8th c. (specimens of Praha-Stromovka – Hejdova 1964a, Pl. XI, XII:a-b; Nicolle 2002a, 319, Fig. 7:c-d) and of one of the most important specimen of the Roman helmets of the 10th c., found in 1901 by Sergeev in the Rus'-Varangian mound (No. 18) in Gnëzdovo near Smolensk, Russian Federation⁵⁷ (Pl. 9:1-3; Спицын 1905, Pls. 61ss.; *Путь из варяг...* 1996, 52-53). The lighter and simpler category evolved since the 4th-5th c. in 7th c. helmets like that of El-Haditha (Haldon 2002, Pl. VI-1; Nicolle 2002a, 319, Fig. 7:a)⁵⁸, arriving until the 10th-12th c., with the helmet preserved in Kairouan

⁵⁵ On the late Roman ridge helmets, their diffusion and production and especially their origins see in particular Klumbach (1973), James (1986) and Negin (2010a).

⁵⁶ But some samples are still visible in the iconography of the 15th c. (see Babuin 2002, Pl. IX-42).

⁵⁷ The helmet was made of two parts, connected by a double row of closely positioned rivets (height – 18.0 cm, diameter – 21.0 cm, width at the maximum point – 17.5 cm; the collection of the State Historical Museum in Moscow, Inv. No. 42536 /Gnëzdovo 1/). A wide band from the brow to the neck, and a reinforcement band around the lower rim, made of copper-alloy, are both nailed on the main iron conical skull through hemispherical rivets. The helmet ends at the lower edges with a straight line over ears and eyes. The bottom edge is circled by a metal binding with loops for aventail attachment, to which it was attached the still partially surviving ring mail protection for the neck (and for the face?). The helmet is quite simple and does not have any ornamental embellishments; Type 1 of the classification of Kirpchnikov (helmets of conical form without a nasal – Кирпичников 1971, 24, Pl. 10:1; Kirpčnikov 1986, Pl. XIV:1). Close parallel: “Burning of Arian books at Nicaea”, illustration from a compendium of canon law, ca. 825, MS. in the Capitular Library, Vercelli (Fig. 42:3).

⁵⁸ But of the 5th c. according to Negin (2010a, Pl. XIII:6); also Nicolle in any case proposes a date for the helmet of El-Haditha between the 4th and the 7th c. (see Nicolle 2002a, 307, 313).



Pl. 16. Segmented pointed helmet from Gulbische barrow near Chernigov, Ukraine, 10th c., collection of the State Historical Museum Moscow (courtesy of A. Negin).

Tabl. 16. Helm segmentowy z kurhanu Gulbišče, Ukraina, X w., zbiory Państwowego Muzeum Historycznego w Moskwie (dzięki uprzejmości A. Negin).

and the helmets of the Imperial Guardsmen illustrated in the Troyes casket (Nicolle 1999a, Fig. 28:a, c-d), in the frescoes of Saint Sofia in Kiev (Figs. 39:1-2) and in many miniatures of the “Skilitzès” (Fig. 31:1, 3)⁵⁹ where infantry, cavalry and even the Varangian Guardsmen are fitted with such category of helmets having curtains protection made of leather, felt or other padded material, in some instance also visible under the frontal part of the helmet (Fig. 40:1-4).

The iconography shows such kind of helmets on the head of the most part of the warriors in the code “Parisinus Gr. 923” already in the 9th c. (Fig. 11:4-6; Weitzmann 1979, Pl. XXI:80; XXVI:97). The models used here are a clear evolution of a kind of Late-Roman Pseudo-Attic helmet, where the neck was broadening so to envelope all around the head (McDowell 1994, 56; 1995, 29), and the central ridge was nailed upon it (Nicolle 1991, 46, Pl. G1). They were in some way the ancestors of some Italian helmets of the 13th-14th c. (Figs. 41, 42:1; *Scramasax* 1989, 41) and, in later age, of the Spanish Morion. This

kind of helmet, although not always of two-piece construction, is well visible on the head of the “Auxilia Palatini Cornuti” on the Constantine arch (D’Amato 2007b, 4-5): it is the most represented Attic shaped helmet of the Justinian’s Age (Ravegnani 1988, Pl. IV), and the ivory carvings of Aachen, together with the frescoes of Saint Maria Antiqua in Rome (Nicolle 2002a, 311, Fig. 12), show it in use at Byzantium also in the 8th c. The helmet is of the type seen in the western manuscripts of Carolingian age (like the “Bible of Saint Callistus” and the “Codex Aureus”), showing its importance as transitional form between the Late-Roman *cassis* and the 11th c. two piece south-Mediterranean helmet (ibid., Pl. X-51:a)⁶⁰. It is noteworthy that, when in the 9th c. western manuscripts of Carolingian age are represented scenes related to Imperial Guardsmen of Constantine the great, this is the most represented helmet, and, not casually, its representation corresponds to the helmets of “Parisinus Gr.923” (Fig. 42:3; Nicolle 2002a, Fig. 38). The evolution, passing through the 6th-8th c. spread in the West (Nicolle

⁵⁹ See “Johannis Scylitzae facsimile” (2000; Hoffmeyer 1966, fig. 13:9): *folio* 11v (archer cataphract clad in lamellar armour); *folio* 169v (Roman champion Anemas Kouropas killing the Rus Icmor); *folio* 171r (Roman champion Anemas Kouropas biting the Prince Svjatoslav of Kiev).

⁶⁰ One of the few known archaeological specimens of Carolingian helmets of the 8th-9th c., the one of Verden (Fig. 42:2), confirms such typology (see Willbrand 1912-1914, 48-50).



Fig. 48. 1 – *Killing of Abimelech by his armour-bearer*, „Sacra Parallela”, Cod. Parisinus Ms. Gr. Barberini 923”, *folio*107v; 2 – *David setting fire to a city in Mesopotamia*, „Bristol Psalter”, „Add MS 40731”, *folio* 95r, detail, 10th c., British Library, London; 3 – *Two Ziphites before Saul*, „Bristol Psalter”, „Add MS 40731”, *folio* 86r, detail, 10th c., British Library, London; 4 – *Cesarz Michał i św. Cyryl* – detail of the left guard of the Emperor, fresco from Derevo, 12th c., Museum of the Cathedral of Saint Sofia, Kiev (1 – courtesy of D. Nicolle; 2-3 – courtesy of British Library; 4 – photo by R. D'Amato, with kind permission of the Museum).

Ryc. 48. 1 – *Giermek mordujący Abimelecha*, „Sacra Parallela”, „Cod. Parisinus Ms. Gr. Barberini 923”, *folio*107v; 2 – *Dawid podkłada ogień pod Mezopotamię*, „Bristol Psalter”, „Add MS 40731”, *folio* 95r, szczegół, X w., British Library, Londyn; 3 – *Dwóch Zyfistów przed Saulem*, „Bristol Psalter”, „Add MS 40731”, *folio* 86r, szczegół, X w., British Library, Londyn; 4 – *Cesarz Michał i św. Cyryl* – zbliżenie na strażnika po lewej stronie cesarza, fresk z miejscowości Derevo, XII w., Muzeum Katedry Sofijskiej, Kijów (1 – dzięki uprzejmości D. Nicolle’a; 2-3 – dzięki uprzejmości British Library; 4 – fot R. D'Amato, za uprzejmą zgodą Muzeum).

2002c, Figs. 234-235), Byzantium and Balkans (Nicolle 1999a, Figs. 75:g, 98:a), where this kind of headgear was kept until the 15th c.

The Gnëzdovo helmet, dated to the 2nd half of the 10th c., belongs to the heavier type, and it

can be originally used by a heavy infantryman or cavalryman, considering the high military equipment found in the same grave (Спицын 1905, Pl. 61ss.; *Путь из варяг* 1996, 52-53). It was found in Russia, near Smolensk, but its shape is clearly



Pl. 17. Helmet mounts and finial from Birka Garrison, Sweden, 2nd half of 10th c., collection of the Institute of Archaeology in Stockholm (courtesy photo of L. Holmquist Olausson and G. Trozig).

Tabl. 17. Okucia i zwieńczenie helmu z Birki, Szwecja, 2. połowa X w., zbiory Instytutu Archeologii w Sztokholmie (fot. dzięki uprzejmości L. Holmquist Olausson i G. Troziga).

Roman in origin and belongs to the evolution of the category of the ridge helmets. It was probably either purchased or acquired as war booty or as commercial transaction in the territories of “Romania” by one of the famous Varangians. The helmet, without cheek-guards, seems to be forged of a single piece of iron, upon which, however, was nailed a reinforced copper-alloy band running from the neck to the brow. This aspect recalls the typical Roman tradition in the fabrication of the ridge-helmets. The bowl, even though conical, is slightly rounded, as it is visible on the helmets of many warriors in miniatures made in Constantinople (Fig. 11:4-6; Pio Franchi de Cavalieri 1907, 4, n. 3 – “Menologium” of Basil II, representation

of Joshua and the “Archistratégos” Michail; see also Kolia 1988, Pl. XVI).

The helmet presents small holes along the edges for the attachment of a leather stripe, from which is hanging the still partially preserved mail aventail (Кирпичников 1971, Pl. X:1; Nicolle 1999c, Pl. B2). On the back this protection probably covered the neck, going down to the shoulders. We have seen as, according to the Emperor Phokás, a visor made of three layers of “Zaba” (chain mail or scale armour, attached to a leather backing) was worn down on the front of the “Katáphraktoi” helmets, only leaving the eyes of the warrior uncovered. So the helmet of Gnězdovo could probably be a helmet belonging to this category,



Pl. 18. Helmet mounts from Birka Garrison, Sweden, 2nd half of 10th c., collection of the Institute of Archaeology in Stockholm (courtesy of L. Holmquist Olausson and G. Trotzig).

Tabl. 18. Okucia hełmu z Birki, Szwecja, 2. połowa X w., zbiory Instytutu Archeologii w Sztokholmie (dzięki uprzejmości L. Holmquist Olausson i G. Trotziga).

having at its edges a chain mail visor in eastern style, a Sassanian Persian legacy passed inside the Roman weaponry (Nicolle 1996a, 16, 30; Nickel 2002, Pl. X-30a; D'Amato 2007a, 60).

The miniature 26v A of the “Skiltzès” shows, on the head of some Varangian Guardsmen (Figs. 32:1, 40:1-3), a kind of helmet typical of the two-piece Late Roman construction, whose



Fig. 49. Detail of folio 748v of “Ms. Gr. 510”, 879-882 AD, *Arians beating the philosopher Heron*, Bibliothèque Nationale de Paris. Photo by R. D’Amato (courtesy of the Bibliothèque Nationale).

Ryc. 49. Fragment folio 748v “Ms. Gr. 510”, l. 879-882, *Arianie prześladowają filozofa Herona*, Bibliothèque Nationale de Paris. Fot. R. D’Amato (dzięki uprzejmości Bibliothèque Nationale).

employment by the Guards is also attested by the frescoes of the Cathedral of Saint Sophia in Kiev representing Vladimir and his retinue (Fig. 39:1-2), while a lot of miniatures in the “Skilitzès” are showing the same kind of helmet on the head of regular Roman cavalrymen (Fig. 19:1, 3). So we can say with a probable certitude that this was one type of military headgears amongst the many different helmets used between the 11th and the 12th c.

The helmet presents itself in two different versions. The first, visible on the “Skylitzès miniatures”, is basically a simple rounded cone, and appears to be made of concentric arcs of steel riveted side by side (Fig. 43:1; Lowe 1994b, 7-10; Dawson 2009, 38-39). The second, visible on the Kiev frescoes and on the “Skilitzès miniatures”,

is made of the bowl surmounted by a ridge intersection band (following the evolution of the Late-Roman helmets) and sometimes extends downwards at the back to protect the neck (Figs. 39:1-2, 43:2). In some specimens is visible a brow-band, shaped like a continuous strip (Figs. 19:1, 32:1, 43:2). An original specimen of this helmet dated to the 10th-11th c. was found in central Tunisia (Nicolle 1999a, 152-153, Fig. 369; 2002a, 313, Fig. 7:f), probably a Roman helmet booty of war re-employed by the Fatimid Arabs, and it is today preserved in the Museum of Islamic Art and Architecture in Kairouan (Pl. 10-11)⁶¹. The helmet⁶² is virtually identical to the specimens represented in the “Skilitzès” (Figs. 32:1, 40:1-4) and is clearly of Roman shape (D’Amato 2010, 33): the only difference between the models represented

⁶¹ Originating from North Africa and stored in Tunisia, at the Museum-Palace Rakkada (Musée Nationale des Arts Islamiques de Raqqada), near Kayrouan, the helmet is dated to the 10th-12th c. (Nicolle 1999a, 152).

⁶² The helmet (diameter – 54 cm, total height – 29 cm; height of the apex – 3 cm; height of the lower band around the neck – 13.5 and 14.2 cm; width of the central riveted iron bands – 19 cm; width of the internal side – 17.5 cm; length of the riveted narrow strip on the top – 25.5 cm) is composed by four elements in iron and one in bronze. A central iron band, to which are riveted the other two parts of the bowl, divides the helmet into two halves. An iron band, like an extended neck-guard, surrounds the edges of the upper parts, and it is fastened to them through rivets. On the front of the central band are still visible holes which held through a couple of rivets the upper part of the today lost nose-protection. On the top there is a riveted narrow bronze strip, whose extremities are decorated with a trefoil. This middle pyramidal thickening pad is fitted with a hole. It can be assumed that the hole was used to fix the rolling ring, which crowned a certain number of Eastern European and Middle Eastern helmets and which served for hanging cloth curtains or plumes destined to adorn the helmets. Damages are visible on the right side, at the height of the intersection of the iron lower band and the other parts of the bowl. All the rivets are in bronze, except some of the rivets attaching to the bowl the extended neck-guard, which could be a Islamic later adding. Reconstructions in Dawson (2002, Pl. VII-8-9; 2007, 26, Pls. A-B, D; 2009, Pls. E-D, 35, 39).



Pl. 19. Horizontal two piece construction helmet from Yasenovo in Bulgaria, 10th-11th c., collection of the "Iskra" Historical Museum in Kazanlak: 1 – front side view; 2 – left side view; 3 – back view; 4 – right side view; 5 – inner view; 6 – inner rim detail. *Photo by R. D'Amato and V. Yotov (courtesy of the Museum).*

Tabl. 19. Dwuczęściowa konstrukcja hełmu z Jasenowo w Bułgarii, X-XI w., zbiory Muzeum Historycznego „Iskra” w Kazanlyk: 1 – widok z przodu; 2 – widok z lewej strony; 3 – widok z tyłu; 4 – widok z prawej strony; 5 – widok wnętrza; 6 – widok wewnętrznej części obręczy. *Fot. R. D'Amato i V. Yotov (dzięki uprzejmości Muzeum).*



Pl. 20. Iron nose-guard of helmet from Yeniciapi, Istanbul (Constantinople) in Turkey, 11th c., collection of Istanbul Archaeological Museum (photo courtesy of Z. Kiziltan).

Tabl. 20. Żelazny nosal hełmu z Yeniciapi, Stambuł (Konstantynopol) w Turcji, XI w., zbiory Muzeum Archeologicznego w Stambule (fot. dzięki uprzejmości Z. Kiziltan).

in the quoted artworks and this original is the adding of a metallic neck-guard, instead of the rings for the attachment of the protective curtain: this could be a successive Muslim modification, allowing the helmet to show on its neck protection similarity with other Islamic war headgears⁶³. A U-shaped form is cut-out on the front, which makes the helmet deep, like the correspondent Roman helmets widely represented on the artworks (Figs. 39:1-2; see Hoffmeyer 1966, Fig. 13:8-9).

Even more evident is the Roman influence and construction in the helmet preserved in the National Museum of Archaeology and History of Moldova, Inv. No. AYK (Pl. 12:1-4)⁶⁴, considered as of Mamluk origin (Кулешов, Абызова 2011,

96ss., Figs. 5-7). The helmet was found on the stronghold of Golden Horde at Stara Orhei (Lukashovka V), and undoubtedly was used by some warrior serving in this army. But this does not exclude the possibility that the helmet was a booty of war from Moldovan Principates armies or Eastern Roman Empire, or it was used by some Moldavian soldier serving in the Mongol Army. In general, today about 150 and more helmets of the Golden Horde are known by the Russian archaeologists but none of them is similar in shape and design to the helmet found in the Old Orhei. The closest helmet, in terms of design and appearance, is the one of Tunisia (Pl. 10-11). Like this specimen, also two-piece helmet from Moldavia is composed by two halves connected to a broad band, but here supplemented by a rim wide enough that goes from temple to temple. Both the helmets are akin to a third helmet of the same typology, found in Pevensey (England) and probably the 13th c. booty of the Crusades from Levant or Byzantium (Fig. 44:1). The archaeological find of England, showing a helmet not typical for the Western Europe at the beginning of the 13th c., could confirm the statement that the Old Orhei helmet share its military technology with the Kairouan helmet, and therefore both have a Middle Eastern or East-Roman origin. It could be dated to the 12th-13th c.

It is interesting to note that this kind of late Roman two-piece helmet was still in use, until the 12th c., among the Christian Orthodox states allied of the Empire, as attested by the frescoes of Faras, in Nubia, today at the National Museum of Warsaw (Nicolle 2002a, Fig. 14). I would suggest, for instance, the possibility of an Eastern Roman prototype for the helmet of Saint Merkourios, a two-piece helmet decorated with painting and precious stones, reinforced with scales (Fig. 44:2).

5. Conical pointed composite helmets, sometimes of bulbous shape (“Spangen-helmen”)

The “Spangen-Helm” (segmented helmet) appears in the Roman armies during the Dacian Wars, in the early 2nd c. (Piletić 1966, 12-13, Pl. XV; D’Amato 2009, 121; 2012b, 16ss.). It consists

⁶³ For example with the helmet visible on the early 13th c. Moroccan manuscript (Nicolle 1999a, fig. 381:C); but in the Troyes casket and in the Oppianus Cynetica also the Roman samples had this extension, without protective curtains (Fig. 43:3; Heath 1979, 7).

⁶⁴ Iron helm (height – 15.5 cm; diameter – 16.5 x 21 cm) provided of a strong depth with a smooth arched front, the neckline presenting a maximum height of 6.6 cm. The dome is utterly made of two halves connected by a band 6 cm wide, which is divided in two parts at the top. There are still on place upon the strip a couple of planted rivets “in countersunk chip”. On the central upper part of the connecting band was probably imposed an additional pad, now difficult to understand considering the wide damage on the top of the skull. Set its final size is not possible, because the top is strongly corroded. It is possible only to say that its width was equal on both sides. Holes all around the lower rim for the fastening of the lining and of the possible mail curtain. Close parallel: “Skiltizēs Matritensis”, *folios* 26v, 30r, 30v, 31r (Figs. 31:1-3, 32:1, 40:1-4); “Emperor Michail and Saint Cyril”, fresco from Derevo, Museum of the Cathedral of Saint Sofia, Kiev, the 12th c. (Fig. 48:4).

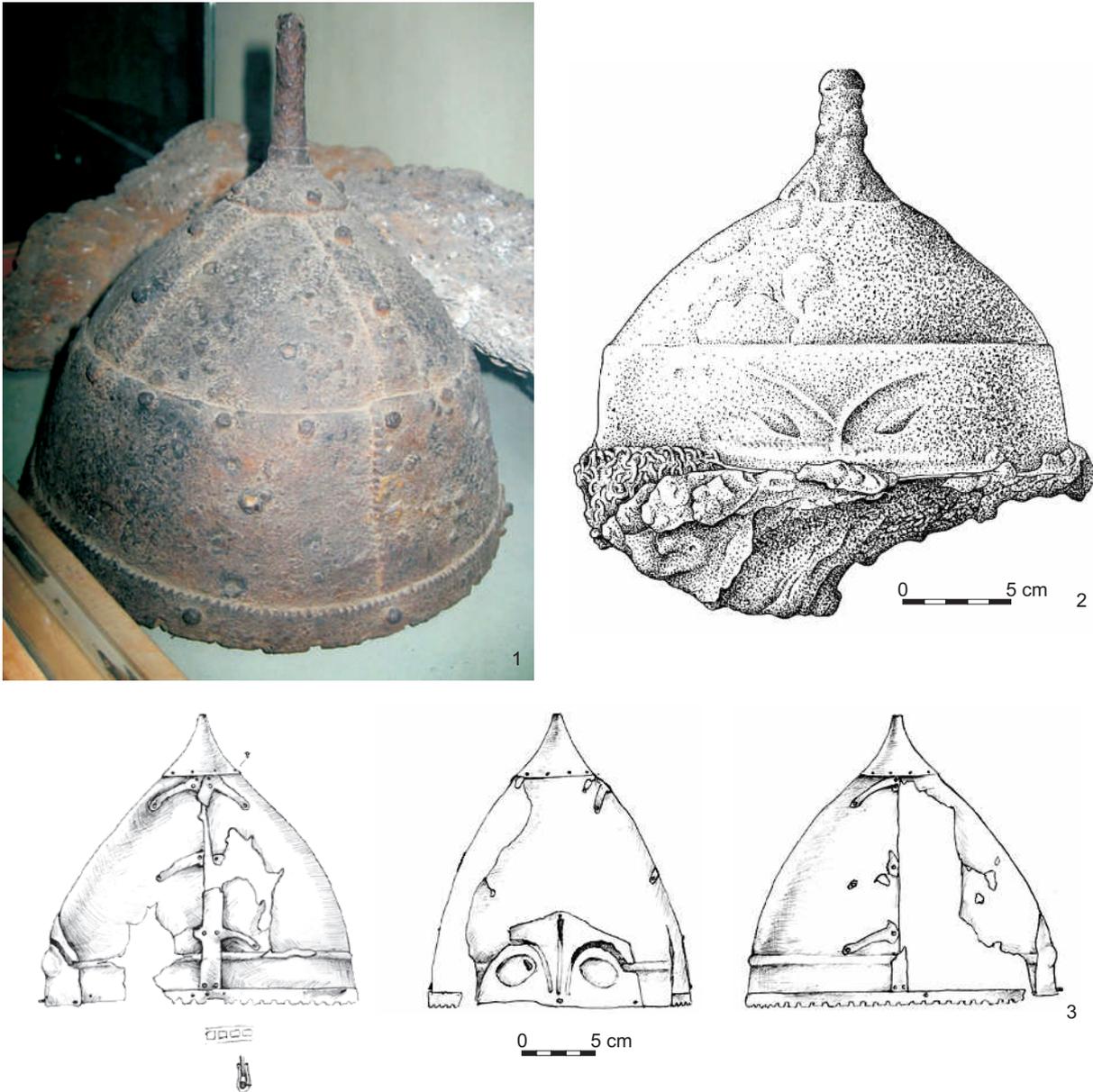
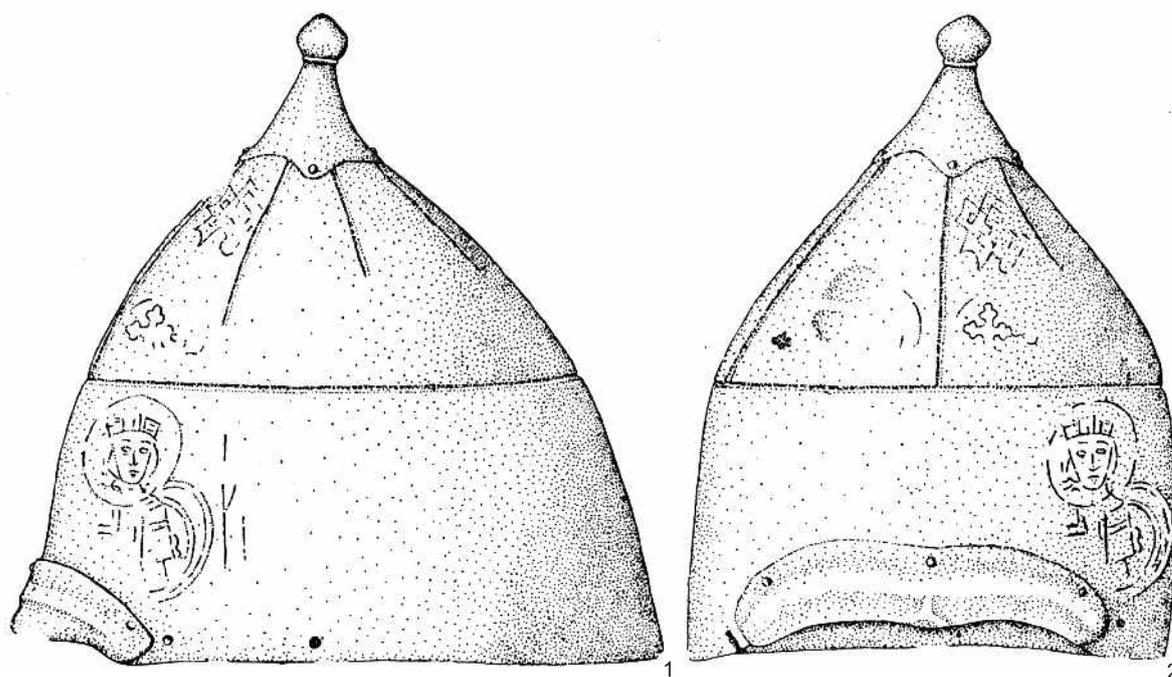


Fig. 50. 1 – unpublished helmet of Ploskoe type, Southern Russia, late 12th c.; 2 – helmet of Cuman chieftain, found in a grave near Csengele, Hungary, early 13th c.; 3 – Golden Horde Helmet, 13th c., Dnipropetrovsk Historical Museum (1 – courtesy of V. Yotov; 2-3 – courtesy of I. Dzys).

Ryc. 50. 1 – niepublikowany hełm typu Ploskoe, południowa Rosja, późny XII w.; 2 – hełm wodza połowieckiego odkryty w grobie w pobliżu miejscowości Csengele, Węgry, wczesny XIII w.; 3 – hełm złotoordyjski, XIII w., Muzeum Historyczne w Dniepropetrovsku (1 – dzięki uprzejmości V. Jotova; 2-3 – dzięki uprzejmości I. Dzysa).

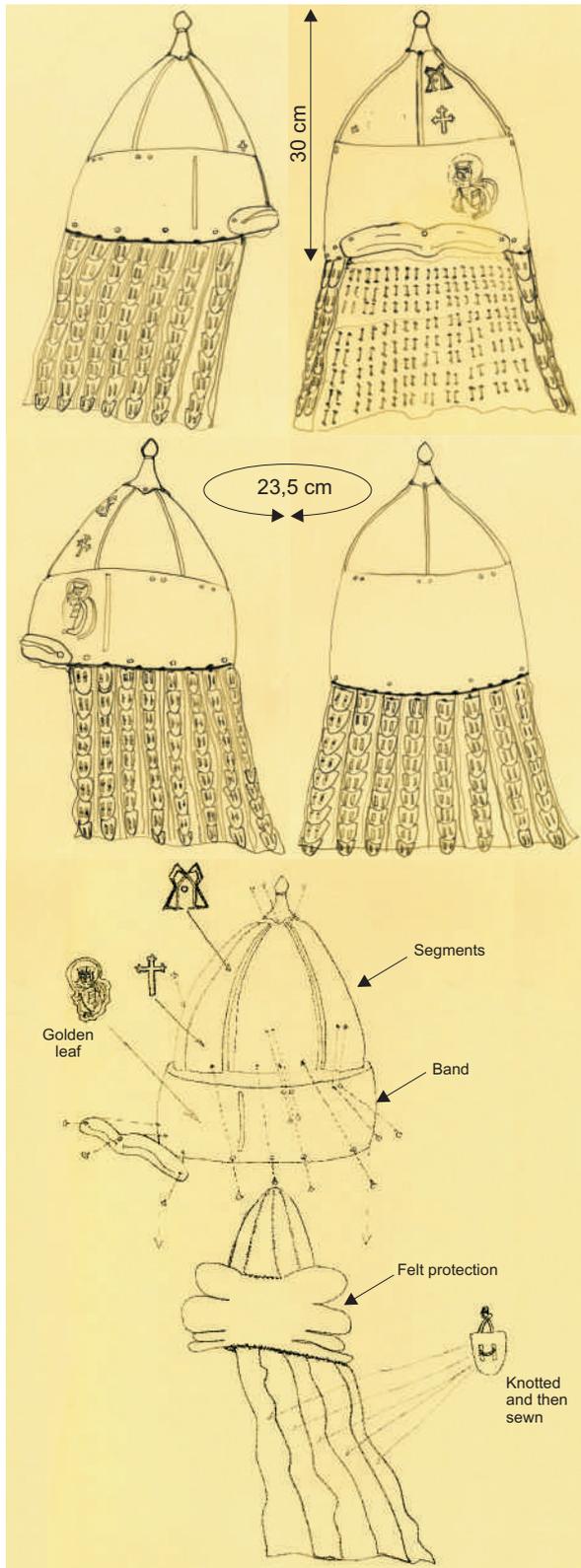
of sheaths of metals strips fastened together by bands, the so called “spangen” (with modern word) and above these T-shaped mounts in bronze or copper-alloy with edging borders. As proved by the Adamklisi “metopae” it was not only reserved to the Auxiliaries (Feugère 1994, 147), as visible on the Trajan column, but also fitted to the Legionaries (D’Amato 2009, Fig. 142:a-b). It was a helmet of Near Eastern origin, widely adopted by the Sarmatians and Alans and introduced by

them and the Iranians (especially the Sassanians) inside the Roman army (Hoffmeyer 1966, 76; Vogt 2006, 96ss.; Glad 2012, 350-351). The Roman army, especially in East, adopted this type of helmet giving to it a strong implementation especially during the 3rd-4th c., and then spreading it to Central and Western Europe through trade relations with the Germanic elites: in the Late Empire and especially during the 4th-5th c. it became one of the most employed helmets, and splendid gilt specimens



Pl. 21. Segmented helmet from Vatra Moldoviței in Romania, 4th quarter of 12th – early 13th c, collection of the Suceava Museum (1-2 – after *Spinei* 1986; 3-5 – courtesy of V. Spinei).

Tabl. 21. Hełm segmentowy z Vatra Moldoviței w Rumunii, 4. ćwierć XII – początek XIII w., zbiory Muzeum w Suczawie (1-2 – wg *Spinei* 1986; 3-5 – dzięki uprzejmości V. Spinei).



Pl. 22. Reconstruction of Vatra Moldovitei helmet. Drawing by R. D'Amato.

Tabl. 22. Rekonstrukcja helmu z Vatra Moldovitei. Rys. R. D'Amato.



Fig. 51. *David and Saul*, "Barberini Psalter", folio 84v, 11th c., Vatican Library (after Dufrenne 1966).

Ryc. 51. *Dawid i Saul*, „Psalterz Barberini”, folio 84v, XI w., Biblioteka Watykańska (wg Dufrenne 1966).

produced by the Imperial "Fabricae" (so called "Baldenheim" type)⁶⁵ have been found in the graves of the Barbarian chieftains allied but also enemies of the Empire (Vogt 2006, 182ss.; Glad 2012, 356). Iconography and archaeology support the thesis that such helmets were still produced in Byzantium and widely employed also in the successive centuries⁶⁶.

Especially during the Early Middle Age certain helmets of this category were imported in the Roman Empire directly from the Nomadic peoples and the Iranians (Arendt 1935-1936, 28ss.; Nicolle 2002a, 308-309; Dawson 2007, 40): the taller, more pointed form of "Spangenhelm", known as "Caucasian", and the directly riveted frameless pointed "Spangenhelm", sometimes bulbous shaped. The origin of these variants is Turco-Sassanian, as we can see clearly from the Sassanian rock-reliefs of the 3rd c. (Hoffmeyer 1966, Fig. 12:8) and from the Piandjikent paintings (Nicolle 1996a, 60-61; 2002b, Pl. V:B-C). Helmets of these types received strong impulse, inside the Roman Army, especially from the Khazars who were strong allied of the

⁶⁵ Bavant has demonstrated that main four arm factories identified by M. Vogt are from the territories of the Eastern Roman Empires. Three of them could have been located in Constantinople or in area around the Sea of Marmara, in Nicomedia or Cyzicus. As for the fourth "fabrica", the western group of M. Vogt, B. Bavant has suggested localizing it in Thessaloniki. The author explains the stability of the Baldenheim type by the centralized control of production exercised by the *comes sacrarum largitionum* (see Bavant 2008, 327ss.).

⁶⁶ On the argument see the works of Vinsky (1982), Steuer (1987) and the marvellous compendium of Vogt (2006).



Fig. 52. “Skylitzēs Matritensis”, 12th c.: 1 – The first phase of the battle of Adrianopolis between Bulgarians and Romans, folio 11v; 2 – The victory of the Magister Petronas over the Arabs, folio 73v (after Skilitzēs 2000).

Ryc. 52. „Skylitzēs Matritensis”, XII w.: 1 – Pierwsza faza bitwy pod Adrianopolem pomiędzy Bułgarami i Rzymianami, folio 11v; 2 – Zwycięstwo magistra Petronasa nad Arabami, folio 73v (wg Skilitzēs 2000).

Empire during the 7th and 8th c., and militated often like mercenaries and guardsmen in the Roman army (Constantinus Porphyrogenitus 1829, 576; Brook 2002; D’Amato 2012a, 18-19, 32). In the Steppe areas and in the East the conical helmet

seems to have been in fact dominant. We find, in the Byzantine iconography, the first specimens of these helmets illustrated on the head of the Imperial soldiers in the 9th c. “Chludov Psalter” (Fig. 8:3-4), “Pantocrator cod. 61” (Fig. 12:3-4), “Bib. Nat. Ms.



Pl. 23. Ogival shaped, one-pieced helmet from Nemiya, Ukraine, 11th c., collection of Deri Debrecen Museum in Hungary. Photos by Museum of Debrecen (courtesy of J. Dani).

Tabl. 23. Ostrołukowy, jednoczęściowy hełm z miejscowości Nemiya, Ukraina, XI w., zbiory Muzeum Deri w Debreczynie, Węgry. Fot. Muzeum w Debreczynie (dzięki uprzejmości J. Dani).



Pl. 24. Details of the helmet from Nemiya, Ukraine, 11th c., collection of Deri Debrecen Museum in Hungary. Photos by Museum of Debrecen (courtesy of J. Dani).

Tabl. 24. Szczegóły budowy hełmu z miejscowości Nemija, Ukraina, XI w., zbiory Muzeum Deri w Debreczynie, Węgry. Fot. Muzeum w Debreczynie (dzięki uprzejmości J. Dani).

Gr. 510” of Paris (Figs. 45-46) where these helmets are worn by infantry and cavalry. The helmets illustrated in the miniatures correspond in impressive way to the find of Gelendjik, in Kuban Area, Russian Federation (Pl. 13; Arendt 1935-1936,

Fig. 10:a-b; Hoffmeyer 1966, Fig. 12:7)⁶⁷; to the specimens from Novorosijsk⁶⁸, Kuban Area, Russian Federation, discovered in the burial emerged during the excavations in 1927 coordinated by Tchaikovsky, the first director of Novorosijsk Archaeological

⁶⁷ Helmet founded in 1911 at the excavations of Sohanev; is preserved only the iron finial with still on place two copper-alloy rivets (finial height – 2.5 cm, width – 4.3 cm, diameter – 8.6 cm, band length – 3.3 cm; collection of the State Historical Museum, Moscow), and a part of the band of the bowl decorated by a similar row of copper-alloy rivets. On the helm the survived nailed segments were, according to Arendt, remains of two vertical “spangen”. The “spangen” were held together at the apex by the conical finial-plate. Very likely the fragments of the helmet from Gelendjik from about the 8th c. represents the same type of helmet of the Dura Europos “clibanarius” (Hoffmeyer 1966, 78; Nickel 2002, Pl. X-8a). This helmet probably was also fitted with the same kind of tube for flatter bands like the same “clibanarius” shows on the graffito and some of the Scylitzes-helmets (Hoffmeyer 1966, Fig. 12:6-7). Close parallels: “Chludov Psalter”, folio 58r (Fig. 8:4); “Skilitzès Matritensis”, folios 12r, 54v (Figs. 9:1, 53:1).

⁶⁸ This helmet (earlier preserved in Novorosijsk State Museum, Inv. No. (?), present location unknown, lost or stolen during the Second World War – information kindly given to me by Alisa Kolpakova, conservator of the Noworosijsk museum) is composed by a conical bowl made of two parts directly riveted one on the other. On the lower rim holes are disposed in regular way for the usual fastening of the lining. The segments are held by a bulbous apex at the top. The rivets of the finial are in copper-alloy, as for the helmet of Gelendjik, and the hole at the top of the apex was destined to wear some plumes. The helmet was found with a chain mail probably part of the protective curtain. In the same grave were found also a pair of greaves, a spear, arrow points and a sabre of the same type of the famous Charlemagne sabre in the Wien treasure, that could postpone the date of the helmet (the 11th c.?),



Fig. 53. "Skylitzēs Matritensis", 12th c.: 1 – The victory of the Emperor Teophilos over the Arabs at Charsianos, folio 54v; 2 – The victory of the Magister Petronas over the Arabs, folio 73v; 3 – The troops of Leo Tornikios besiege Constantinople, folio 230r (after Skilitzēs 2000).

Ryc. 53. „Skylitzēs Matritensis”, XII w.: 1 – Zwycięstwo cesarza Teofila nad Arabami pod Charsianos, folio 54v; 2 – Zwycięstwo magistra Petronasa nad Arabami, folio 73v; 3 – Wojska Leona Tornikiosa oblegające Konstantynopol, folio 230r (wg Skilitzēs 2000).

museum⁶⁹ (Pl. 14; Arendt 1935-1936, Fig. 11; Nicolle 1992, 11, Fig. H; Горелик 1993, Fig. 32; Gorelik 2002, Pl. XI-5:2) and from Djurso (Fig. 47). They are dated to the 8th (Gelendjik)

and 9th c. (Novorosijsk and Djurso) (Arendt 1935-1936, 29-31; Nicolle 1999c, 35, Fig. B; Gorelik 2002, Pl. XI-5:2-3)⁷⁰. Some artefacts of the Kuban area, especially those around Novorosijsk and

as suggested to me also by J. A. Kulešov, basing his personal observation on the method of bowl construction. Close parallels: "Ms. Gr. Barberini 23", folio 107v, Bibliothèque Nationale de Paris (Fig. 48:1).

⁶⁹ Information kindly given to me from dr Jurij A. Kulešov; the helmet is dated to the 2nd half of the 9th c. or 950-1025.

⁷⁰ Dr Kuleshov, in private discussion, told me to consider the helmet of Djurso of the 10th c. (what can be supported also by the other military items of the grave) and that of Novorossijsk of the 11th c.



Pl. 25. One-piece conical helmet from the hoard of Ada Cinganlija in Serbia, 10th-11th c., collection of National Museum in Beograd. *Photo by R. D'Amato* (courtesy photos of the Museum).

Tabl. 25. Jednoczęściowy, stożkowy hełm ze skarbu odkrytego w miejscowości Ada Cinganlija w Serbii, X-XI w., zbiory Muzeum Narodowego w Belgradzie. *Fot. R. D'Amato* (fot. dzięki uprzejmości Muzeum).



Fig. 54. Comparison between a detail of “*Skylitzès Matritensis*” (*folio 73v*) and the helmet of Nikolskoe, Russia, 2nd half of 13th c., Hermitage, Moscow (1 – after *Skilitzès 2000*; 2 – courtesy of I. Dzysa).

Ryc. 54. Porównanie fragmentu z manuskryptu Skylitzèsa (*folio 73v*) z hełmem z Nikolskoe, Rosja, 2. połowa XIII w., Ermitaż, Moskwa (1 – wg *Skilitzès 2000*; 2 – dzięki uprzejmości I. Dzysa).

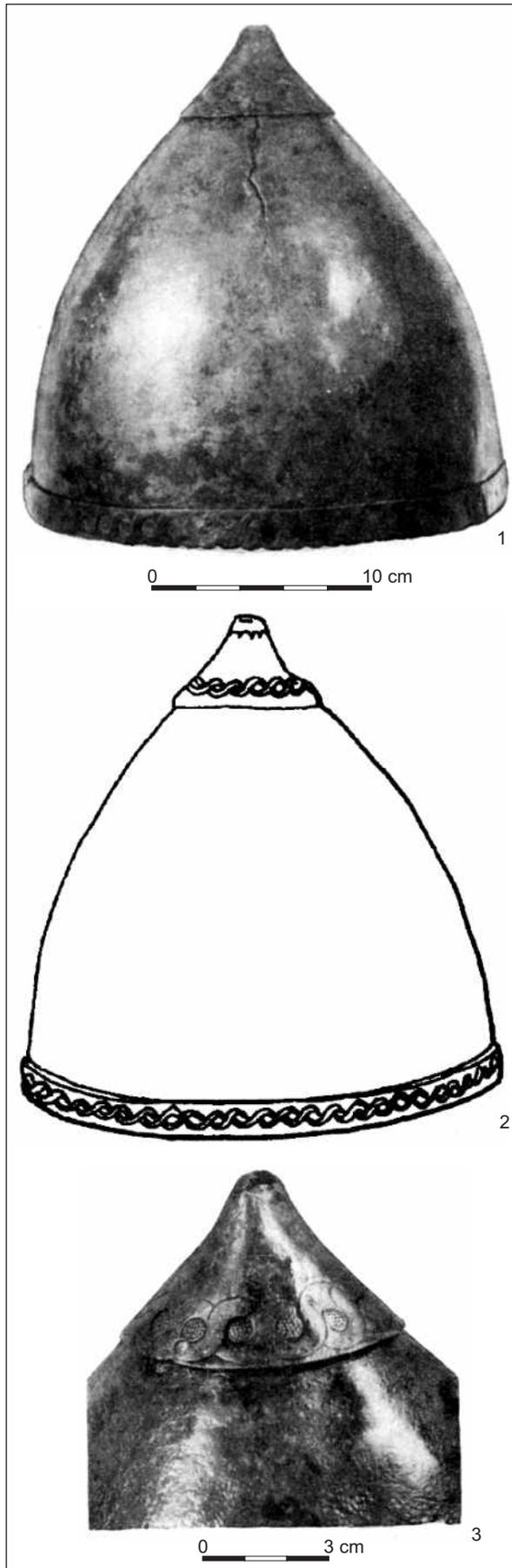
therefore also the helmet (Pl. 14) have been considered by D. Nicolle (1992, 11, Fig. G-H, 45; 1999c, 35), of possible Byzantine production and it is not a case that very similar helmets appear on the head of the Imperial soldiers in the mentioned manuscripts, all realised in Constantinople (Dufrenne 1966, 19, 42)⁷¹. Many of the miniatures show a well done “peritrachelion” made of scales or ring mail, surrounding also the throat of the men and, in some instance, forming a kind of protection similar to those described by Leon the wise in his “*Tactica*”, contemporary to the miniatures (*Leonis Imperatoris 1857-1866 /1917-1922/*, VI, 31; Figs. 9:2, 12:1).

Many helmets illustrated in the three manuscripts show similar characters to a kind of helmet, which is the most represented on the head of cavalrymen and heavy infantry: market eyebrows, sometimes gilded in opposition to the iron skull, sometimes fitted with a well marked lower band in copper alloy, and the bowl made of one piece of iron (Figs. 8:3, 12:1, 46:2). Some of these elements are perfectly visible on the beautiful although fragmentary helmet from the Kurgan 9 of

Mourakaevskiye, from Southern Urals, of Khazar origin (Nicolle 1999a, 275-276, Fig. 701; 2002a, 313, Fig. 9:b; see also Иванов 1984, Fig. 4:6): this specimen, forged of a single piece of iron, betrays a high level of technological achievements⁷². Its outline, which rises to a point, indicates the continuation in the 10th c. of the fashion originating with the traditional segmented construction. The helmet of Mourakaevskiye was not produced in Byzantium, neither was used by Roman warriors, but it can be the fruit of the cooperating high-advanced Khazar-Roman metallurgy of the 9th c., of which the helmets represented in the Constantinopolitan manuscripts are clear evidence. Also the helmet worn by Abimelech in the miniature of *folio 107v* of the “*Parisinus 923*”, of Palestinian origin (Fig. 48:1; Weitzmann 1979, Pl. XXV, Fig. 92) is identical to the conical specimens of Noworosijsk (Pl. 14) and Gnëzdovo (Pl. 15:1-3). The latter, firmly dated at the 10th c. (Кирпичников 1971, Pl. X:2; *Путь из варяг 1996*, 79, Cat. 684), presents itself with a sphero-conical feature and the plates directly riveted, with a finial for the crest attachment whose trilobite shape

⁷¹ If the date, proposed by Dufrenne, of the Pantocrator 61 to the first patriarchate of Photius (858-867) is correct, the soldiers represented in it could have been copied by the Guardsmen and “*Tagmatikoi*” of the Emperor Michail III.

⁷² Reconstruction in Nicolle (1990, Pl. H2).



remembers that of the contemporary mount from Birka (Pl. 17). This can open the problem if many Slavic helmets found in Poland, Russian countries and Moravia – the so called “Caucasian” helmets of sphaeroconical construction can have been produced under the influence of Byzantium. One of them is a specimen from the cremation burial in Gulbishce near Chernigov⁷³ (Ukraine), excavated in 1872 by Samokvasov (Pl. 16; Arendt 1935-1936, Fig. 9; Кирпичников 1971, Pl. X:2; Горелик 1993, Fig. 31; *Путь из варяг...* 1996, 79, Cat. 684; Gorelik 2002, Pl. XI-14:97⁴) of type II of Kirpchnikov classification (Кирпичников 1971, Pl. 24; Gorelik 2002, Pl. XI-14; Горелик 2008, Fig. 4), dated to the 10th c. It could be an original East-Roman provincial production, copied by the Steppe peoples and then adopted by the Slavs: but there are not sufficient elements to prove it. What seems clear is that, during the early middle Ages, the pointed segmented helmets of central Asiatic types replaced or, better, flanked the evolution of the Late-Roman helmets of “Spangenhelm” type, inside the army of the Roman Eastern Empire⁷⁵.

Pl. 26. One-piece conical helmet from Verkhne Ychenkov in Rostov distr., Russian Federation, 12th-13th c., collection of History Museum in Rostov on Don (1, 3 – after Кирпичников 1971; 2 – after Nicolle 1999a).

Tabl. 26. Jednoczęściowy, stożkowy hełm z miejscowości Verhne Jačenkow w obwodzie rostowskim, Federacja Rosyjska, XII-XIII w., zbiory Muzeum Historycznego w Rostowie nad Donem (1, 3 – wg Кирпичников 1971; 2 – wg Nicolle 1999a).

⁷³ The corpus of this (height – 23 cm, width – 21 cm; diameter – 20 x 25 cm – according to Kirpchnikov, or 24 cm – according to *Путь из варяг...* 1996; the collection of the Historical Museum in Moscow, Inv. No. 1540 (1) severely damaged sphero-conical helmet consists more precisely of four sub-triangular plates, interconnected by means of rivets. The edges of the decorated front and back plates are positioned in a way to overlap the two side plates. The helmet bell is crowned by a massive crest-holder, attached on the top with four rivets. It presents also bronze gilded plates. On the forehead of the helmet are still nailed the fragments of a sort of ornamented plate-crown in copper, forming a semicircle, for the attachment of the semicircular protruding nose guard to which was fastened the chain-mail or the visor for the face covering. Along the bottom edge of the helmet there are holes, regularly arranged, for the hanging of the chain mail. Also with this helmet were indeed found the remains of the chain-mail curtain, which formed the protection of the neck, together with a Scandinavian sword of great dimensions, a chain mail, spear and arrowheads. Close parallel: “Studite Psalter”, folio 32v, 1066, Ms. Add. 19352, British Library in London (Fig. 58:1).

⁷⁴ According to Gorelik (2002, 145) the *Golden helmet from the tumulus Gulbistshe* is a Kabarian workmanship.

⁷⁵ According to Nicolle (1996a, 76), the Asiatic typologies replaced the old ones, while the working construction of the one-piece helmet reappeared only in the 10th c.; I disagree, because the iconography and archaeology still show the uninterrupted presence of a Roman autonomy in the military technology beside the Asiatic one.

The tradition of the segmented “Spangenhelm” continued in the 10th c. until the 12th c., and today the archaeology offers us some genuine fragments from Byzantine or in any case provincial Eastern-Roman ateliers. In the recent excavations of Birka Garrison (2000-2002), Sweden, two gilt-bronze bands shaped mounts of helmets, dated to the 2nd half of the 10th c., were found together with a helmet finial⁷⁶ (Pl. 17-18; Holmquist Olausson 2007, 231). The first bronze mount was found in the Garrison hall, the second nearby a smithy place and the third conical was discovered in the eastern part of the hall building. The helmet parts were found in the same area where it was found also a lamellar armour of Eastern design (Nicolle 1984b, 38, Pl. G1; Gorelik 2002, 145; Pedersen 2002, 32-33; Hedenstierna-Jonson 2006, 58), probably another import from Byzantium (Holmquist Olausson 2007, 232, 236) together with important mounts and elements of belt and military accoutrement (Hedenstierna-Jonson, Holmquist Olausson 2006). The men of the Birka Garrison were well trained and well armed, and probably some of them have been served as Varangians in the service of

Byzantium (Hedenstierna-Jonson 2006, 84ss.). The study of the decoration and manufacture of these objects from the Swedish team has suggested their origin in East-Roman ateliers⁷⁷: the use of pure gilt-copper, with a gold coating almost in pure alloy, the rivets in pure silver, the manufacturing of the two mounts with metal taken from one area, but especially the employment of Christian decorative motives as the bird and the plants (Holmquist Olausson 2007, 234)⁷⁸, are elements more than sufficient to suppose an Eastern-Roman origin of the mounts. The East-Roman influence and the Christian symbolism in their decoration are more than evident. The two mounts were realised from hammered metal plates, and the silver rivets were hammered on to the underlying, while the conical helmet finial and its linear decoration was cast, like the helmet finial of Gelendjik (Pl. 13). The finial of Birka is without parallels in Scandinavian metalworks, apart from other two similar finials recently (2005) found in Sweden, but it recalls some finial of Russian helmets and those of the low domed East Roman helmets of the period (Figs. 16:2, 48:2-3).

⁷⁶ The first bronze mount (Pl. 17:2; length – 7.3 cm; height – 1.9 cm; thickness – less than 1 mm; weight – 4.2 g; height of the round arches – 0.5-0.8 cm; collection of the Institute of Archaeology in Stockholm, Inv. No. F5247) is a flat bronze strip, gilt on the front face, gently arched, probably to follow the curvature of the helmet's bowl. It is decorated by punching with six complete and two fragmentary birds, of variable dimensions, and a plant. The decoration is built up around the central motif consisting of two facing birds with the plant between them. Seven birds are placed with beaks to the right facing the plant. One bird is placed at the opposite site, the other birds of this side are lost because the mount is broken up although the original decoration continued. The plant is formed as a stylised palmette formed by three pairs of leaves with a single central pointed leaf extending upwards. A line of punched (microscopic inspection show that two different punches were used – see Holmquist Olausson 2007, 232) dots runs along the lower straight edge of the mount and along the upper scalloped edge. The scallops form round arches, like the ones of the lower band of Gnëzdovo helmet. Eight are intact and two damaged. The edge dots are slightly larger. A rivet hole (0.3 cm) for the fastening of the mount to the bowl lies at the lower edge. The second mount (Pl. 17:3; length – 4.9 cm; height – 1.8-1.9 cm; thickness – less than 1 mm; weight – 4.5 g; height of the round arches – 0.2-0.3 cm; collection of the Institute of Archaeology in Stockholm, Inv. No. F12177) is a rigid flat strip, once gilt on the front face. The short rigid side of the strip has a 0.2 cm wide edging plate made from a 0.4 cm wide strip bent double and applied around the end. Two silver rivets with hemispherical heads (0.5 of diameter) are placed close together. On the back they were secured by hammering the rivet shank to the 0.4 cm of diameter. The short left side of the strip has a softly rounded contour. Also here the round edge is scalloped forming a row of round arches, whose outer contour seems to be worn, as it is possibly the edge of the short left side. Engraved lines on the upper and lower edges show how the mount was highly decorated with vegetal ornaments. At the centre of the strip it is represented a bird in profile (*ibid.*, 233 – where the author explains how has been possible to read it only thanks to a strong side lighting), in engraved decoration, so showing a higher technology of workmanship than the first mount. The craftsman who realised the mount, according to Holmquist Olausson (*ibid.*, 233), tried to imitate by punching the better engraved decoration of birds and vegetables (Pl. 17:2). The third conical mount (Pl. 17:1; base diameter – 2,0 cm; height – 2.2 cm; weight – 10 g; collection of the Institute of Archaeology in Stockholm, Inv. No. F1241) consists simply of a cylindrical cone, made of a copper alloy coated with tin, having a flattened top (0.8 cm of diameter) which bears a hemispherical ball (0.3 cm of diameter). The piece is decorated with three horizontal lines, 0.4 cm below the top. The cone presents on the sides three extension with rivet holes (0.3 cm of diameter), protruding from the base indicating that the cone was attached to the bowl. Two of these holes still contain fragments of iron rivets. Close parallels: “Ms. Gr. 510”, *folios* 170, 226v, 264v, 367v, 409v, Bibliothèque Nationale de Paris (Fig. 17:4, 45:1, 46:1-2, 49).

⁷⁷ According to Holmquist Olausson their quality is not so high to suppose a Constantinopolitan atelier, but most probably they were made around or beyond the border of the Empire, in a region familiar with the imperial iconography; I think Bulgaria is probably the most possible candidate, but I would like to point to a real East-Roman atelier at least for the one of mounts (Pl. 17:2); the mounts can be associated with the other Eastern style military equipment of the Birka warriors find in the Garrison, i.e. the lamellar armour and the belts, probably all parts of the accoutrement of warriors of same rank (Stjerna 2004; Hedenstierna-Jonson 2006, 55).

⁷⁸ Both mounts contain such motives, but disposed into two different ornamental fields; on specimen with the representation of birds (Pl. 17:2) the punched area is limited to the field within and directly below one round arch; on the second (Pl. 17:3) such fields are taken up by the one bird image; the same decoration with similar bird appears on a belt plaque from Bulgaria dated to the 10th c. (see Inkova 2003, Pl. I).



Fig. 55. 1 – *The capture of the Amorite Kings*, “Codex Vatopedinus 602”, folio 365v, end of 12th c., Monastery of Vatopedi, Mount Athos; 2 – *Joshua and the Archangel Michael*, fresco, 2nd half of 10th c., Church of the Forty Martyrs, Çavusin; 3 – *David fleeing Absalom*, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 2v, detail, 1066 AD, London, British Library (1 – after Huber 1973; 2 – photo by R. D’Amato; 3 – courtesy of British Library).

Ryc. 55. 1 – *Pochwycenie królów amoryckich*, „Codex Vatopedinus 602”, folio 365v, koniec XII w., klasztor Vatopedi, góra Athos; 2 – *Jozue i Archanioł Michał*, fresk, 2. połowa X w., kościół Czterdziestu Męczenników, Çavusin; 3 – *Dawid ucieka przed Absalomem*, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 2v, szczegół, 1066 r., British Library, Londyn (1 – wg Huber 1973; 2 – fot. R. D’Amato; 3 – dzięki uprzejmości British Library).

Examples of helmets with decorative mounts like those of Birka can be found in a large geographical area, in time and space, and also the pointed fitting adorned one-piece and segmented helmets throughout the whole Eurasian continent. The immediate parallels to the Birka’s mounts

are the mounts and the bands of the late Roman “Spangen-helmen”. Especially the band-crown of the Birka elements reflect the ideology that the tradition of the antique wreaths (the hero-wreath symbolism) had its meaning transferred to the metal helmets (*ibid.*, 235). The purpose – already

visible on the “Spangen-helmen” of the 5th-6th c. – was to provide the warrior with a mark of honour by acknowledging him his heroic duties with a wreath decorating his helmet (Vogt 2006, 112-118). Moreover the incised symbolic Christian elements (even more diffused among the 6th-7th c. helmets – *ibid.*, 118-134) conferred to the helmet a meaning of protection on the battlefield and in action, and were symbols of what awaited the warrior after death as reward for his heroism in defending the Christian faith⁷⁹. The decoration of the Birka’s mount harks back to a tradition of head-borne symbols of rank and dignity of the Roman Christian Empire, since the 4th c., like ideal successors of the laurel wreaths worn on the helmet by the Roman Pagan soldiers, sign of their heroic status (Robinson 1975, 137, Pl. 413-416; D’Amato 2009, 182-183, 185). The Birka’s birds are the 10th c. counterpart of the incised and punched decoration of Christian motifs on the mount of the Roman “Spangen-helmen” of “Baldenheim” type of previous age.

However, the whole structure can recall also the fittings on the pointed composed conical helmets of the Kievan Rus (Arendt 1935-1936, Figs. 7-9; Nicolle 1999a, 182; Gorelik 2002, Pl. XI-14:8-17). The pointed composed helmet was the most employed in the Kievan area around the 10th-11th c., and one of the most decorated and important was the one reported from the archaeologist Sizov and found in very fragmentary state in the 1882 (1885 according to Кирпичников 1971, 85) in the mound 41 on the cemetery of Gnëzdovo near Smolensk, Russian Federation, dated to the 4th quarter of the 9th – early 10th c. (found together with two Viking swords, which give a precise chronological date)⁸⁰ (Pl. 15:1-3; Sizov 1902, 315, 355, Pl. 141; Arendt 1935-1936, Fig. 7; Hejdova 1964a, 78-79, Fig. 20:4; Кирпичников 1971, 26, 85, Fig. 9:1; Горелик 1993, Fig. 30; 2008, Fig. 4:3-4a/b; Gorelik 2002,

Pl. XI-14:17⁸¹; Holmquist Olausson 2007, 235, Fig. 8:e), on the site of a Scandinavian colony from the 8th to 10th c. This helmet was interpreted like a “Spangen-Helm” from Arendt and it has been reconstructed several times like a composite helmet (Gorelik 1995, 23; 2002, Pl. XI-14:17). Also this helmet presented decorated mounts reconstructed both among its lower edge and crossing over the crown (Nicolle 1999b, 45, Pl. C1; Gorelik 2002, Pl. XI-16:1; Горелик 2008, Figs. 3, 4:a-b, 5:3). It should be noted that the edges of the metal mounts are scalloped as round arches, exactly like those of Birka. The only difference is that they are decorated only with simple dots. Also this helmet is crowned with a pointed tip for the plumes (Gorelik 1995, 23, Pl. 10:C; Nicolle 1999b, Fig. 35:d; D’Amato 2010, 44, Pl. A:3).

If the reconstruction of the Gnëzdovo helmet proposed by Arendt and kept until today also by Gorelik can be accepted for the lower band which surrounds the segmented bowl, we are in presence, for what concerns the Birka finds, of fragments of a helmet of similar shape (or more than one⁸²). But it is not impossible that the helmet (s) of Birka were manufactured as those represented on the “Ms. Gr. 510” miniatures, probably based on the helmets of the Imperial Guards of Basil I. The finial of the helmet, the large mount which was possibly the lower one of the helmet, the wide use of the copper alloy induce to consider these pieces very akin to some of the typologies represented on the Nazianzenus (Figs. 25:1, 45:1, 46:2). From the miniatures of “Ms. Gr. 510” it is possible to understand a conical pointed helmet made of three parts: a top finial, a main bowl usually in iron or silver covered (Fig. 17:4, 46:1), and a mount around the brow, in some occasion fitted with a nose-guard (Fig. 45:1).

The fragment of gilded nose-guard found in the recent (2009) great excavations of the

⁷⁹ The decoration of the birds with the three of the life reminded the warrior his heavenly recompense after death (see Vogt 2006, 134ss.; Holmquist Olausson 2007, 236).

⁸⁰ Possible “spangen-helm” (height of the bowl – 16 cm, diameter – 20 cm; the collection of the Historical Museum in Moscow) divided in four bands nailed to the bowl. The bands, cut in heart-shaped form, show a central groove. The panels divided by the bands show also a shorter central groove. A bending on the front part of the helmet has been interpreted as the bad preservation of a kind of nose-protection. A very long finial for the plumes insertion, unusual for a “spangen-helm”, seats on the top among four long metallic paws nailed on the helmet’s skull. Decorated brass metal mounts (Сизов 1902, Fig. 18), found with the helmet, have been reconstructed along its lower edge as they were crossing over the crown. The remains of a big and rusted helmet chain mail curtain are made by an ensemble of bronze rings. Close parallel: “Ms. Gr. 510”, Bibliothèque Nationale de Paris, *folio* 226v. (Fig. 45:1, see one of the fleeing cavalymen on the left).

⁸¹ According to Gorelik (2002, 145) the helmet is a Kabarian workmanship, showing the interaction of Steppe and Scandinavian culture; but I suppose that at that time Gorelik did not know still the finds of Birka.

⁸² According to Holmquist Olausson, it is impossible to say if the mounts belong to the same helmet or to two helmets: it is possible that a part of the original helmet was damaged and it was substituted in a rougher way; or that the helmets were effectively two; also, considering that the one of rivet holes damaged the decoration, when it was made, she suggests that two different craftsmen were involved: the goldsmith who made the strip mountings and the weapon-smith who secured them to the helmet.



Pl. 27. One-pieced conical helmet from Babiči, Ukraine, 12th c., collection of Hermitage Museum in Saint Petersburg, Russian Federation. *Photos by Museum in Saint Petersburg* (courtesy of Z. Etsina).

Tabl. 27. Jednoczęściowy, stożkowy hełm z miejscowości Babiči, Ukraina, XII w., zbiory Ermitażu w Sankt Petersburgu, Federacja Rosyjska. *Fot. Muzeum w Sankt Petersburgu* (dzięki uprzejmości Z. Etsiny).



Pl. 28. Details of helmet from Babiči, Ukraine, 12th c., collection of Hermitage Museum in Saint Petersburg, Russian Federation. *Photos by Museum in Saint Petersburg* (courtesy of Z. Etsina).

Tabl. 28. Szczegóły budowy hełmu z miejscowości Babiči, Ukraina, XII w., zbiory Ermitażu w Sankt Petersburgu, Federacja Rosyjska. *Fot. Muzeum w Sankt Petersburgu* (dzięki uprzejmości Z. Etsiny).

Theodosius Harbour in Yenikapi in Istanbul, Turkey⁸³ (Pl. 20), dated to the turn of the 10th-11th c. (D'Amato 2012a, 52), extends the chronological table of the archaeological specimens of this category. At the first sight the Yenikapi fragment seems to be the inverted band of a "Spangen-helm": but the holes all around the edge – stylistically similar to the decoration of the Birka mounts – and the side rounded parts of its terminals are clearly impossible to be part of a band segment around the brow. The embossed holes all around the long segment are clearly for the attachment of the chain mail so forming a possible mask visor combining together nose-guard and hanging "zaba". This helmet's

fragment belongs probably to a kind of helmet of the type of Eastern Caucasian tradition, like the one represented on the Parakheti icon (Fig. 13:1), and it is probably part of a pointed composed helmet like the one to which the Birka's mounts belonged. A fresco of the 12th c. from Derevo, representing Saint Cyril and the Emperor surrounded by the bodyguards, whose copy is preserved inside the Gallery of Santa Sofia Museum in Kiev, shows green-lacquered helmet on the head of the Varangian Guardsmen having a gilded nose-protection, recalling the specimen of Yenikapi (Fig. 48:4).

The form of Caucasian "Spangenhelm" can be seen also in the often debated helmet from

⁸³ Iron nose-guard (length – 19.2 cm, width – 15.3 cm, narrowest width point – 3 cm; collection of the Istanbul Archaeological Museum depot, excavation Inv. No. 0Je1) with about 42 holes disposed at regular intervals around the rim, for the attachment of the chain mail visor. It recalls the system of attachment of the chain mail visible on the half-mask helmets found in the Nomad graves of Russia and Ukraine (see Pl. 36). Trace of gilding on its surface, which still need a proper cleaning and a restoration of the two broken parts. The possibility that can be a segment of "Spangen-helm" should be excluded by the arched extremities of both sides, although a real answer could be given only when the other numerous fragments of pieces of armament found in the excavations will be properly published. Close parallels: "Ms. Gr. 510", *folio* 226v, Bibliothèque Nationale de Paris (Fig. 45:1); Parakheti icon, representing "Saint George killing Diocletian", Georgia, the 11th c. (Tsurtsunia 2011a, 90, Fig. 11; Fig. 13:1); "Emperor Michail and Saint Cyril", the 12th c. fresco from Derevo, Museum of the Cathedral of Saint Sofia, Kiev (Fig. 48:4).



Fig. 56. “Ms. Codex Vatopedinus 602”, *Folio 366v*, Vatopedi Monastery Library, Athos Mountain (photo courtesy of the local Abbot).

Рис. 56. „Ms. Codex Vatopedinus 602”, *Folio 366v*, Biblioteka klasztoru Vatopedi, góra Athos (fot. dzięki uprzejmości miejscowego opata).

Yasenovo, Bulgaria⁸⁴ (Мавродинов 1948, 164-166, Figs. 2-3; Nicolle 1996b, 76-77; 1999a, Cat. 2, 25, 346; Йотов 2004, 119, Cat. 692, Fig. 69; Babuin 2009, Fig. 1378; D’Amato 2012a, 52). This helmet (Pl. 19) is often debated between the 9th/10th and 11th c. date (Haldon 2002, Pl. VI-12:a-b; Nicolle 2002a, 309-310, Fig. 9:a) and the 13th-14th c. date (Горелик 2010, 35, Figs. 3:1, 6:4)⁸⁵. It inserts itself on the tradition of the four banded “Spangenhelm”, introduced in the migration period, but the construction and decoration suggests a variety of influences. The place where it was found, near Stara Zagora, seems however to point towards a Roman origin, supported, also on the base of technical reasons, by Dawson (2009, 34, 40, 61) and Nicolle (1999a, 25), as well as myself (D’Amato 2012a, 50-52). Nicolle highlights the importance of the helmet, if correctly dated to this

period, in filling the gap in the archaeological records. The helmet consists mainly of a single-piece bowl with decorative cross-piece, all fastened to a very wide brow-band. The large reinforcement band around the lower part of the brow is typically a nomad influence, still survived in the two imperial Turkish helmets of the early 14th c. from the Topkapi Museum (Nicolle 1999a, Fig. 534; Parani 2003, 139), but also it resembles the large band of the Anglo-Saxon helmet from York (Nicolle 1984b, 18), an Anglo-Scandinavian crested helmet derived by Late-Roman prototypes. The eyes and eyebrows, together with the stylised mouth on the Yasenovo specimen are, according to Nicolle, a last reminiscence of the mask helmet of Pseudo-Corinthian typology, represented, for the Roman age, by the Brigetio typology (Robinson 1975, 128, Pls. 379, 381; Garbsch 1978, Pl. 28; Негин 2010b,

⁸⁴ Iron helmet (height – 23.5 cm, width – 20.5 cm; depth of the helmet – 20.5 cm; height of the wide brow band – 10 cm; collection of the Historical Museum in Kazanlik, Bulgaria, Inv. No. 293) of so-called “horizontal two pieces construction”, presenting a single piece bowl of advanced one-piece forgery with riveted, decorative and reinforcing cross-pieces (strips) on the top, all fastened to a wide broad band. The strips are decorated by punching on the edges. Each strip is riveted with a nail to the bowl, and through a second nail to the broad band. One part of the bowl (back right) is damaged by a serious hole. A finial, now lost, was probably fixed on the top like crest holder (Горелик 2010, Fig. 6:4; D’Amato 2012a, Pl. G2). The wide broad band is not formed by a single piece, but from two parts riveted on the sides. On the forehead of the brow band are embossed in rough way a pair of eyebrows whose shape forms a sort of nose and a pair of eyes. The low rim is nailed to the edge of the broad band. Series of three holes are disposed at regular intervals around the rim, for the attachment of the chain mail visor and aventail. Some rings are still attached and visible, as well as the internal rings for the attachment of the lining. The suspension system employed is visible also on some Caucasian helmets, whereby the rings were supported by a wire running through a slotted channel in the brim (Dawson 2009, 61). Close parallels: “Barberini Psalter”, *folio 84v*, Vatican Library (Fig. 51); “Skilitzès Matritensis”, *folios 11v, 54v, 73v* (Figs. 52:1-2, 53:1-2).

⁸⁵ Gorelik suggests a Nomad origin of the helmet and considers it as belonging to the category of Mongolian-Tatar mask helmets, because he believes that the broad brow band type of helmet dates to the late 13th – early 14th c. and displays Mongol influence; as element of comparison he brings the helmet of Ploskoe, dated to 1290-1312 (Fig. 48:4).



Fig. 57. 1 – *The victory of Gedeon over the Madianites*, “Codex Vatopedinus 602”, folio 421v, end of 12th c., Monastery of Vatopedi, Mount Athos; 2 – *Phineas*, “Cod. Ath. Pantocrator 61”, folio (?), 843 AD, Pantocrator Monastery Library, Athos Mountain; 3 – *The Hebrews delivered in the hands of the enemies*, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 105v, detail, 1066 AD, British Library, London; 4 – *Siege of a city* (Bari? Jerusalem?) – detail of the defenders, North Door of Church of Saint Nicholas, 4th quarter of 11th or 1st quarter of 12th c., Bari, Italy; 5 – stone funerary statues of Kiptchaq leaders, 11th-12th c. (1 – after Huber 1973; 2 – after Pelekanidis et al. 1979, courtesy of the National Library of Torino; 3 – courtesy of British Library; 4 – photo by R. D’Amato; 5 – after Becełowckui 1915).

Ryc. 57. 1 – *Zwycięstwo Gedeona nad Madianitami*, „Codex Vatopedinus 602”, folio 421v, koniec XII w., klasztor Vatopedi, góra Athos; 2 – *Fineasz*, „Cod. Ath. Pantocrator 61”, folio (?), 843 r., Biblioteka klasztoru Chrystusa Pantokratora, góra Athos; 3 – *Hebrajczycy oddani w ręce wrogów*, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 105v, szczegół, 1066 r., British Library, Londyn; 4 – *Oblężenie miasta* (Bari? Jerozolima?) – detal z obrońcami, północne odrzwia kościoła św. Mikołaja, 4. ćwierć XI lub 1. ćwierć XII w., Bari, Włochy; 5 – kamienne posągi nagrobne połowieckich wodzów, XI-XII w. (1 – wg Huber 1973; 2 – wg Pelekanidis et al. 1979, dzięki uprzejmości Biblioteki Narodowej w Turynie; 3 – dzięki uprzejmości British Library; 4 – fot. R. D’Amato; 5 – wg Becełowckui 1915).

Figs. 203-204). But they could be linked also to the decoration of some north Balkans and Southern Russia helmets of the 14th c. (Fig. 50:1-3; Горелик 2010, 35, Figs. 1-3). But the fact that the helmet of Yasenovo has been found in a region under the Roman control, or at least under a firmly Christian ruler, that the helmet was not found in a warrior steppe grave, the stamps similar to that of the Pliska foundry, are all elements suggesting the hypothesis that it was lost in battle. Nicolle suggests that the wearer lays unburied in an unfrequented area, Dawson underlines that this typology of helmet should have been widespread as well as the ridge helmet among East-Roman infantry and cavalry (Dawson 2007, 20).

The iconographic parallels in the art of Byzantium are also noteworthy. A helmet represented in the *folio* 84v of the 11th c. “Barberini Psalter” of Constantinople, today in the Vatican Library (Fig. 51), gives us evidence that this kind of helmet was already used by the Roman Guardsmen at that time. Its horizontally segmented construction is well illustrated in the “Skilitzès Matritensis” (Figs. 52:1-2, 53:1). Among the helmets of the 12th c. represented in the “Skilitzès”, at least one typology shows undoubtedly a helmet with wide nailed lower band, surmounted by a round bowl over which a conical segment is implanted; it is fitted with a scale aventail, and its general shape remember that of the Yasenovo helmet (Fig. 53:2). A second type is even more convincing similar to the Yasenovo helmet, with a wide lower band around the circle and segments dividing the skull in three parts (Fig. 52:1; Hoffmeyer 1966, Fig. 13:18)⁸⁶. In the “Skilitzès” manuscript, on the head of the heavy cavalrymen, are visible helmets with bowls similar to those of some 12th c. nomad or Russian specimens (Fig. 54, missing however of the half-mask instead present on the Russian specimens), and a variant of the low profile “Spangen-helmen” on the head of mining specialists and archers (Fig. 53:3; *folio* 230r, the army of Leo Tornikios besieging the City).

A further category of segmented helmet is a simple conical one, having a very high shape. Its origin is very far and it was brought inside the Roman army by the contact with Parthians and Sassanians. The Roman (?)⁸⁷ “clibanarius” of Dura Europos, of the 2nd-3rd c., is already equipped with such helmet, of straight and segmented typology (see detail in Hoffmeyer 1966, Fig. 12:6). The use of such helmets continued in the Middle Age in Iran, also after the Muslim conquest, as we can see for instance from a Persian silver dish of the 8th c. (Arendt 1935-1936, Fig. 5; Hoffmeyer 1966, Fig. 12:5; Nicolle 1990, 26, Fig. C). The same typology of helmet is clearly visible on the head of a Imperial cavalry officer in the “Chludov Psalter” of the 9th c. (Fig. 8:4) and on the “Pharganoi” mercenaries represented in the “Nazianzenus” of Paris (folio 170r; Fig. 46:1)⁸⁸, where this helmet is worn, by one of the warriors, with a gilded mail curtain. A fragment (finial) of this kind of helmet has been found in the Gelendjik excavations (Pl. 13; Arendt 1935-1936, 30, Fig. 10; Hoffmeyer 1966, Fig. 12:7). The helmet is various times represented on the miniatures of the “Skilitzès” (Figs. 9:1, 52:1) on the head of the Roman cavalrymen, and as well as on the miniatures of the “Cod. Ath. Vat. 760” (Figs. 15:3-4), as worn by both infantry and cavalry. The pottery from Athens representing the hero Digenis Akritas, dated to the late 12th c. (Heath 1979, 16; Koliass 1988, Pl. V:2; Nicolle 1999a, 58), is representing this typology of helmet as well.

The warriors iconography from the late 12th c. (Figs. 21:3, 29, 55:1)⁸⁹ but shows the already well developed, high, segmented and one-piece sphero-conical helmet, which mixed the type of bulbous segmented construction with the one piece sphero-conical skulls, introducing inside the Roman Army specimens like the helmet of Vatra-Moldovitei, Romania (Pl. 21-22), found in the grave of a Nomad chieftain perhaps, maybe a Kipčak converted to Christian faith⁹⁰ (Emandi 1981, Fig. 8:1; Spinei 1982, Fig. 36; 1986, Fig. 21:1; Nicolle

⁸⁶ *Folio* 11v, but here the represented helmets are those of the Bulgarians; anyway in the “Skilitzès” the Romans and the Bulgarians had a very similar, if not identical – sometimes – equipment; it is interesting to note that in the same miniature the heavy Bulgarian cavalrymen are wearing, inside the same unity, a “Spangenhelm”, a simple round helmet and a conical pointed helm.

⁸⁷ Some authors consider the armoured man of the famous graffito like Roman, other like a Parthian or Sassanid heavy cavalryman, a third and most possible interpretation is that this is the representation of a Palmyrene auxiliary *clibanarius* inside the Roman army (see Nicolle 1996a, 15, Fig. 8:A – Late Parthian or Sassanian; Nickel 2002, Pl. X-8a – Roman; James 2004, 92-93).

⁸⁸ Precisely dated to 880-886 (see Omont 1902, 10).

⁸⁹ See “Second Tetraevangelion of Jruchi”, *folio* 186v (see Tsursumia 2011b, 85, Fig. 6).

⁹⁰ The iron helmet (height – 30 cm, diameter – 23.5 cm; collection of the Suceava Museum, Romania) is composed of inlaid eye-brows, fastened to the main body by three rivets; they were the upper part of a nose-guard protection, today lost; a large iron band all around the skull which presents a golden inlaid decoration showing the stylized image of an Emperor with a shield; the band is riveted to the skull too, but internally; the bowl is “Spangen-helm” segmented construction, made of six triangular pieces closed by a golden apex decorated with a little knob on the top; all the divisions between the bands are externally marked by a gold line; two inlaid decorations show, respectively, a golden cross and an imperial monogram. At the lower rim of the helmet holes for the attachment of a possible leather aventail. The separated apex, ending with a knob, is attached to the bowl through



Pl. 29. Upper part of a conical helmet from Felsőpálos-Budai in Hungary, late 12th – early 13th c., collection of National Museum in Budapest (courtesy photo of D. Nicolle).

Tabl. 29. Górna część konicznego hełmu z Felsőpálos-Budai na Węgrzech, koniec XII – początek XIII w., zbiory Muzeum Narodowego w Budapeszcie (fot. dzięki uprzejmości D. Nicolle'a).

1988a, 10, Fig. A; 1999a, 96, Fig. 205; Горелик 2002, 77, Fig. 10; Babuin 2009, Cat. 1383; D'Amato 2010, 11). The exceptional specimen of late 12th or early 13th c., with decoration in gilded brass, presents a striking similitude with the helmets of the Vatopedi code, dated at the same age (Figs. 21:1, 22:1), but already finds its prototypes in the helmets of the cavalymen of the “Gregorius Nazianzenus” (Fig. 45:2). Such kind of helmets, also represented on the “Skilitzès” (Hoffmeyer 1966, Fig. 13:12,15) were surely in dotation to the defenders of the “Polis” during the siege-defence of Constantinople in 1203-1204 (Nicolle 1988b, 58, Pl. G2; D'Amato 2010, 46, Pl. F4).

6. Simple conical helmets, sometimes pointed, made of one piece

Also the simple conical helmet is highly represented in the iconography on the head of the Roman soldiers, since the 9th until the 12th c. Some noteworthy examples are the frescoes of Cavusin

(Fig. 55:2), where Joshua is represented with such a helmet, and the hundreds specimens represented in the miniatures (Figs. 55:3, 67:1). Some archaeological find is also well preserved.

The most simple specimen is of triangular shape, sometimes surmounted by a knob or ring (Fig. 7:1) or simple and straight, which seems be, for the 11th c., a regional variants of Italy (D'Amato 2005, 46, Fig. 14) but appears also in the Constantinople miniatures, like in the “Smyrne and Constantinople Octateuchs” (Fig. 57:1; Nicolle 1999a, Fig. 17:a). It is interesting to note, on the “Pantocrator 61”, a helmet of the first type worn like a crown and letting visible the head inside (Fig. 57:2), like the famous Wilton crown (*Guides...* 1971, 62, Pl. XXV) and some helmets of Nordic or Caucasian auxiliaries in the Trajan's army (D'Amato 2009, 157, 166, Fig. 216:b). This helmet, in a shorter form and sometimes surmounted by a knob, appears also on the head of Roman soldiers from various ivory works of the 10th-11th c. (Heath

four rivets. The apex without crest or plumed feathers allow to establish a correct comparison with the miniatures of Vatopedi Octateuch in Athos (the 12th-13th c.) showing helmets either with a knob either with a crest. Close parallels: “Ms. Codex Vatopedinus 602”, *folios* 359v, Vatopedi Monastery Library, Athos Mountain (Huber 1973, Fig. 82), 365v, 366r, 367r, 368r, 370r (Figs. 21:1, 22:1, 30, 55:1), 376v (*ibid.*, Fig. 101), 412r (*ibid.*, Fig. 130); 366v (Fig. 56).



Fig. 58. „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 AD, British Library, London: 1 – *Sleeping soldiers at the Sepulchre*, detail, folio 7r; 2 – *Sleeping soldiers at the Anastasis*, detail, folio 32v (1-2 – courtesy of British Library).

Ryc. 58. „Ms Studite Psalter”, „Ms. Add. 19352”, 1066 r., British Library, Londyn: 1 – *Śpiący żołnierze przy Grobie Pańskim*, szczegół, folio 7r; 2 – *Śpiący żołnierze przy Grobie Pańskim*, szczegół, folio 32v (1-2 – dzięki uprzejmości British Library).

1979, 35), but it very often worn by warriors of the Southern Italy, both Lombards or people formally inside the territories directly or indirectly controlled by the Eastern Roman Empire (Nicolle 1999a, 673; Dawson 2007, 59). The tradition of this helmet continued also in the 12th c., like shown

in the miniatures of “Cod. Vatopedi 760” (12th c.), used from both infantry and cavalry (Kolias 1988, Pl. XX:2-3; Fig. 15:3-4) and in the “Skilitzès”, folio 99v (Hoffmeyer 1966, Fig. 36).

A very interesting specimen of conical triangular helmet⁹¹, found in a precisely dated

⁹¹ Conical fluted triangular helmet (height – 30 cm, diameter – 21.3 cm; collection of the National Museum, Beograd, Serbia, inv. No. 1546), forged from a single piece of iron. It presents a fluted bowl divided in 13 sections, embossed on the surface. On one

archaeological context, is the helmet from Ada Ciganlija hoard (Pl. 25), Serbia, found in 1946⁹² (Бугарски, Иванишевић 2013, 142; Бугарски, Иванишевић 2013, 142, Fig. 8). The hoard, recovered from the bed of the lower basin of the Sava river, comprised, among the other items, also some agricultural instruments, a pair of stirrups, a knife and a battle-axe. The helm (Djordjević, Kondić 1974, cat. No. 155) found alone in a first moment, was immediately dated to the 10th-12th c. The presence of the stirrups has now allowed the Serbian archaeologists to date also the other objects of the hoard to the period of the 10th-11th c., against the old dating which considered these finds to come from a Slavic settlement of the 7th-9th c. (Бугарски, Иванишевић 2013, 142). The whole hoard (consisting of the total of 27 finds – *ibid.*, 142-143) found at Ada Ciganlija is now chiefly dated to the 10th and 11th c. The prevailing agricultural character of this hoard is closely related to population growth in Byzantium at that time, and with the renewal of the thematic structure of the Serbian territory, operated by the Basil II after the destruction of the Samuel's Kingdom (Ćircović 1992, 29). The hoard testify also to the renewal of life and metallurgical activities in the 10th and 11th c. in the southern part of the Roman Balkans. This means, in other terms, that the fluted helmet of Ada Ciganlija can be a Eastern Roman production of this age, obviously derived from previous Kabirian-Khazar prototypes (Gorelik 2002, Pl. XI:5, Figs. 6-7, 8-10). From the iconographical point of view fluted conical helmets similar to that of Ada Ciganlija are visible for example in the miniatures of "Ms.Gr. Add. 19352", *folio 7r* (Fig. 58), in the helmet of Goliath in the late 10th c. ivory panel of the cathedral of Sens (Nicolle 2013, 36) and in the "Skilitzès", *folios*

72v, 73v, 230r (fig. 14:1, 52:2, 53:2), so in a range of time going from the 10th to the 12th c.

The presence inside the hoard of stirrups points towards its employment as cavalry helmet. The hoard could be connected with the settlement of some Thematic "stratiotes" in the area, what could justify also the presence of agricultural instruments.

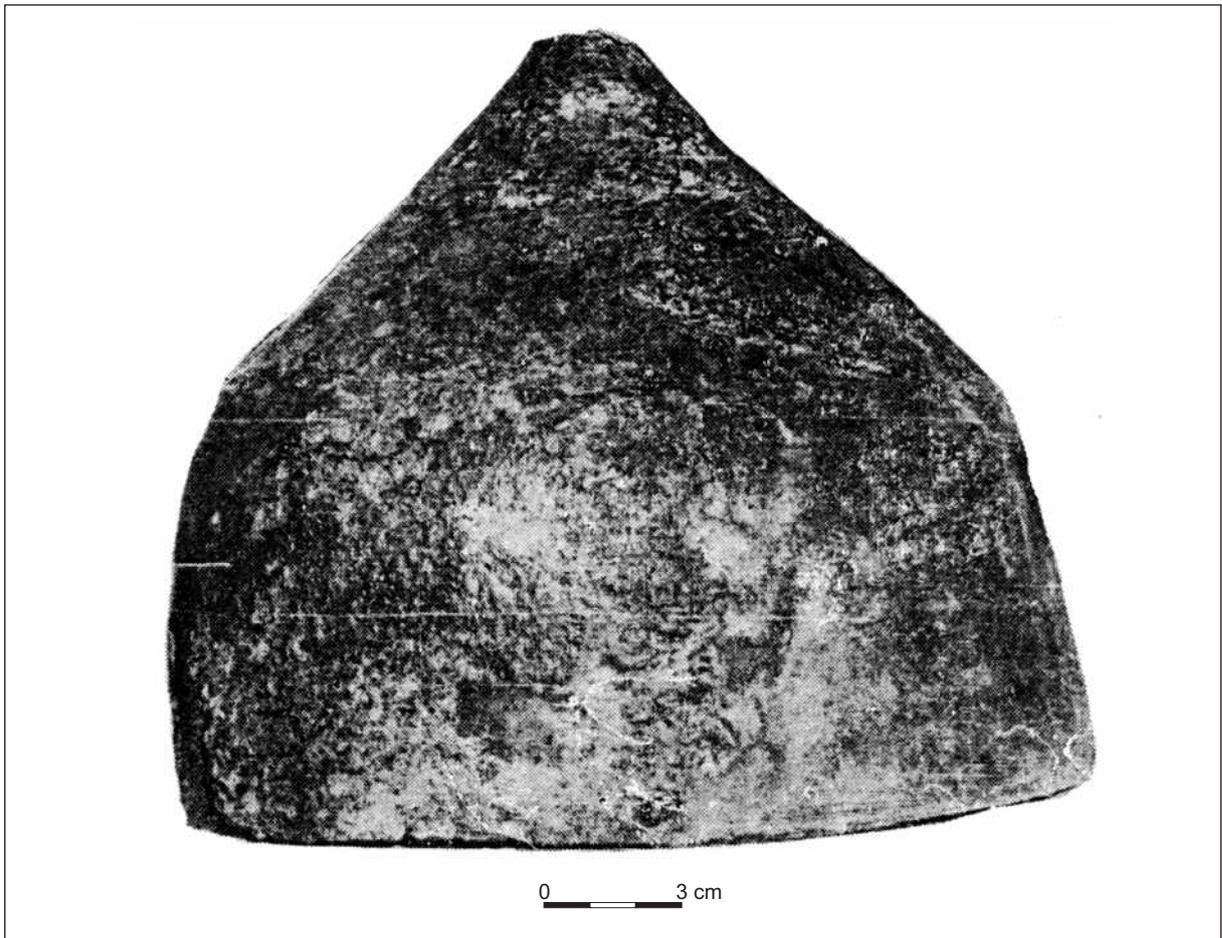
The conical Nordic or Norman helmet, made of one piece, appear also in the iconography of the Roman soldiers. Conical helmets, frequently called 'Norman helms', are well known from the Bayeux Tapestry (1066-1082) and were spread all over Europe (Lowe 1994a, 30-32; Nicolle 1999a, Figs. 97, 953; 2002e, Fig. 9). The most typical example of such kind of helmets worn by warriors of Byzantium are visible on chess pieces from South Italy, variously dated between the 11th and the 12th c., and representing, according to Koliaş, heavy Roman infantrymen and cavalrymen of the Italic Katepanatos (Nicolle 1987, 48-49; 2002c, Fig. 221; Koliaş 1988, 105, footnote 101). The "Studite Psalter" shows some warriors wearing such helmet (Figs. 29:3, 56:3, 67:6, 68:1), although mainly without nose-guard: what it is not astonishing, considering the great number of Italic and Norman mercenaries fighting in the Imperial Army at that time (1066 AD; Haldon 2000, 115ss.). It is noteworthy that the helmets of the chess pieces and other ivory works and sculptures (Fig. 57:4) from South Italy, like those of the miniatures of the "Studite", are extended with a nape protection (Nicolle 1999a, Pl. 667:d-e, 691; 1999, 33:i,o), sometimes formed by the lengthening of the skull sometimes made of protective curtains.

One of the best examples of this category is the helmet from Nemiya, Ukraine⁹³ (Pl. 23-24), found in 1892 near the village (Hejdova 1964a,

side a small iron loop, possible to be connected with the attachment of the strap underchin or for the fastening of a protection for the face, is attached through two rivets to the rim; the lower edge shows a series of holes for the fastening of the lining, arranged in regular intervals, except on both sides, where a pair of holes is flanked at a shorter distance. The apex of the bowl ends with a small closed knob, with no signs of openings for the attachment of a crest. Signs of damage are visible on the lower part of the bowl. Several parts of the lower rim are broken. Close parallels: "Ms.Gr. Add. 19352", *folio 7r* (fig. 58); "Skilitzès", *folios 72v, 73v, 230r* (fig. 14:1, 52:2, 53:2).

⁹² The part of the objects is kept in the National Museum in Belgrade, and the other parts are in the Belgrade City Museum.

⁹³ Egg-conical shaped helmet (height – 22.5 cm, diameter – 23 cm; collection of the Deri Debrecen Museum, Hungary) forged from a single piece of iron. It presents a metal band riveted around its brow, highly decorated with interlaced design of Scandinavian style. The decoration, in detail, is composed by a strip of gilded bronze plate with dotted and vegetal pattern on a silvered background; to it was attached through six rivets the front plate with the same ornament combining vegetal patterns and at the top the schematized shape of a human face pressed into it. A part of the decorative rim is lost in the right back side. The helmet's rim is strongly damaged, mainly on the back, but in some parts still presents traces of the attachment for a possible curtain of mail (Gorelik 2002, Pl. XI-16). Around the rim of the helmet there can be seen two little tabs, and the traces of some others broken, probably mounting parts for the hauberk/corselet of the neck. The helmet could have a nose protection, now lost. The thickness of the iron body is the biggest on that part, and it is visible that something was cut off. A row of holes is in fact still visible all around the rim, and a small protruding ring is visible on the lower part of the forehead plate. On the base of the comparison of the foliage elements with other artworks Kirpichnikov dated it to the 11th c. Type 1 of the Kirpichnikov classification, it seems be the precursor of the helmet of Type Olomouch (Hejdova 1964a, 86). Close parallel: carved relief of Saint Nestor and Dimitri, Mikhaylovskaya-Dimitrskaya Monastery, Kiev (Nicolle 1999a, Fig. 195).



Pl. 30. Conical helmet from Ostra in Romania, late 12th c., collection of Suceava Museum (after *Spinei 1986*).

Tabl. 30. Stożkowaty hełm z miejscowości Ostra w Rumunii, koniec XII w., zbiory Muzeum w Suczawie (wg *Spinei 1986*).

86-87, Fig. 23:2-3; Кирпичников 1971, 24, 84, Pl. IX; Nicolle 1988a, 11, Fig. A; 1995, 85; 1999a, 469, Cat. 710; Gorelik, 2002, 146, Pls. XI-14:18 and XI-16; Holmquist Olausson 2007, 235, Fig. 8:g). There are strong debates between a number of scholar on this topic. Nicolle – contra Gorelik, who considers it a Kabarian work of the 10th c. with Scandinavian decoration⁹⁴ – is of the belief that the helmet is of Roman or central European origin, and to have later received Pecheneg/Turkish decoration (Nicolle 1988a, 11, Fig. A; 1999a, 710). He dates the helmet to 11th-12th c. (Nicolle 1995, 85; 1999a, 278). The helmet in fact shows a typical conical form, but its lower edge is decorated by a silver metal mount highly decorated with fictitious eyes and mouth. According to Kirpchnikov (1971, 24, Pl. IX) it was made with extreme artistry, and is much more perfect in its design than

previous helmets, representing a new phase in the development of conical helmets. Looking for iconographical parallels, the helmet of Nemiya is well visible, in its shape, on the head of a warrior carved in a panel of the Mikhaylovskaya-Dimitriskaya Monastery of Kiev (Schreiner 1981, 227, Fig. 14; Nicolle, 1999a, 195; reconstruction in D'Amato 2010, Pl. A2). This engraving of the 11th c. shows a Varangian warrior armed in a pure East-Roman accoutrement, so probably copied by the equipment of a Varangian Guard. Again the same helmet is visible on the head of the statue of a Petcheneg or Cuman chieftain whose statue is preserved in the Historical Museum of Moscow (Веселовский 1915, Pl. I; Robinson 1967, 54; Nicolle 1990, 58), completely equipped in East-Roman military accoutrement (Fig. 57:5). The helmet can be East-Roman, like his equipment:

⁹⁴ Gorelik (1995, 18-19; 2002, 146, Pl. XI-14-18): *...helmet found near the village of Nemiya in Transcarpathia... decorated ...with silver engraved decoration which combine Hungarian-Magyar ornamentation on the face with Scandinavian ornamentation around the border....* The helmet is reported to be found in a Pecheneg site. According to Nicolle, Pechenegs and Hungarians were, at that time, contending the control of the Southern Carpathian Mountains (see also Горелик 2010, Fig. 3:8, 5).



Fig. 59. 1 – *David surrounded by the enemies*, “Ms Studite Psalter”, “Ms. Add. 19352”, *folio* 12r, detail, 1066 AD, British Library, London; 2 – *Israelites in captivity*, “Bristol Psalter”, “Add MS 40731”, *folio* 180v, detail, 10th c., British Library, London (1-2 – courtesy of British Library).

Ryc. 59. 1 – *Dawid okrążony przez wrogów*, „Ms Studite Psalter”, „Ms. Add. 19352”, *folio* 12r, szczegół, 1066 r., British Library, Londyn; 2 – *Izraelici w niewoli*, „Bristol Psalter”, „Add MS 40731”, *folio* 180v, szczegół, X w., British Library, Londyn (1-2 – dzięki uprzejmości British Library).

and it is more probable to accept an East-Roman origin for the Nemiya helmet, decorated by some Varangian craftsman on the plate with typical Scandinavian ornamentation, but showing stylised eyes and nose on the front. The use of eyes as decoration of the helmet dates back for many centuries to the Late Roman period (Nicolle 1995, 85), as we already have seen for the helmet of

Yasenovo (Pl. 19) and its parallels (Fig. 50:2-3). The decorative mount can have been realized by a Roman forgery and then decorated by some Varangian who purchased it or took it from the Imperial Arsenal.

Western researchers express no doubts about the nomadic origins of conical helmets, which appeared not later than the 900 AD and flanked

the half egg-like or spherical helmets of the Merovingian and Carolingian period, derived by Late-Roman prototypes (Arendt 1935-1936, 28ss.; Hejdova 1964a, 83ss.; Кирпичников 1971, 25). In fact, conical helmets are known in the south and east of Russia according to findings and depictions from the last quarter of the 1st millennium, and are of Nomad-Iranian origin, developed from Semitic and Near Eastern models like the "Spangenhelm" (Arendt 1935-1936, 28; Горелик 2003, Pls. LXI-LXII; Glad 2012, 350). Some of the most striking examples of these prototypes are the Sassanian conical helmets, like those found in Nineveh and dated to 6th-7th c. (Nicolle 1996, 66, Fig. 34:D, F-G). The type of conical helmets used by the East Roman "Prokoursatores" (McGeer 1995, 23-25, 99) in the iconography of the 11th-12th c. is extremely well known from Caucasian graves of the 10th-11th c. (Dawson 2002, 87; quoting the helmet of Gnëzdovo with reference to Кирпичников 1971, Pl. X). Rich pictorial sources indicate that these and other eastern types were increasingly coming in Roman use from the same period (Figs. 10:1, 58:1-2). In the light of this evidence, the conical helmets used in Byzantium in this period are possibly evidence of the nomad migration, a marker on the way to how conical helmets spread again into Europe (Glad 2009, 66).

In regard to the Nemiya helmet, even in comparison to a number of European counterparts it looks like an ultimate expression of the armourer's workmanship: it is most likely the product of a south European master although it can be closely compared to Prague's famous helm of St. Wenceslas (Hejdova 1964b, Pls. I-IV; Nicolle 1984a, 30, 1999a, Fig. 546). The hypothesis of an eastern origin of the Nemiya helmet does not exclude influences on its manufacture (especially on the skull) from the Western Europe, like the Norman piece traditionally associated with St. Wenceslas. This was natural, Byzantium being in the middle of Eastern and Western influences.

The conical helmet passed also to the Slavic people, probably due to trading links and influences between Byzantium, Persia and

migratory movements of the 4th-7th c. The fact that Byzantine (if produced in Constantinople) or in general Eastern Roman helmet are present in Nomad graves, especially in Crimea or Southern Russia, can be easily explained with the activity of mercenaries performed by the Nomad (Patzinaks, Polovtsy, Cumans) inside the imperial army, especially under the Comnenians (Heath 1978, 27-28; Kozak 1995, 206; Lebedynsky 2003, 222-223). Moreover many helmets could have been purchased by the Nomad Chieftains or received in gift from Imperial ambassadors. Archaeological evidence from the South Russian region and the Northern Caucasus has revealed helmets wrought from a single sheet, with a knob, a spike or a fitting for a plume (Кирпичников 1971, Pl. XI; Nicolle, 1999a, Figs. 698-699, 709; Haldon 2002, 76-77). These conical helmets found in the nomad graves, belonging to the 11th-12th c., are made of one piece (Hejdova 1966a, 86ss.; Świątosławski 1999, 37-38), and show vegetal decoration on the decorative band around their rim, as well as on the top finial (Kozak 1995, 208). They find a perfect correspondence with the helmets represented in the miniatures made in Byzantium in the same arch of time (Figs. 48:2-3, 59:2). A typical example is the 11th c. helmet from Verkhne Ychenkov⁹⁵, Rostov distr., Russian Federation, found in 1960, in Pecheneg barrow No. 11⁹⁶ (Pl. 26; Кирпичников 1962, 138-139, Fig. 2:III; 1971, 28, Pl. XI:2a-b; Nicolle 1990, 51, Fig. F) but probably of East-Roman origin, as shown also by the vegetal decoration of its top and rim (Nicolle 1999a, 278, Fig. 709). The helmet originated from South of the Black Sea, a region where helmets of comparable shape appear in the pictorial sources of Byzantium (Figs. 17:3, 48:3).

A more complex specimen is the typical bulbous shape (Figs. 48:2-3), probably of Eastern origin, similar to some helmets already in use inside the Roman army since the 1st c. AD (D'Amato 2009, Figs. 228 and 230). A helmet of this category was found in 1887, in the Nomad grave of Babiči, Ukraine⁹⁷ (Pl. 27-28), dated to the 12th c. (Смену... 1981, 260; Nicolle 1999a, 279, Fig. 717). It is

⁹⁵ The sphero-conical helmet is made of one piece of iron (height of the bowl – 24 cm, diameter – 21.2 cm.; length of the finial – 4.8 cm; collection of the History Museum in Rostov on Don). It presents a metal band around its lower edge and a flat metal mount covering the crown. The mount and the band are decorated with inlaid spiral motif. The decoration of band and finial is entirely realised with gilded copper leafing. There are no traces of nose-guard. The helm was found with the remains of chain mail aventail (lying on its side near the head). Close parallels: "MS Add. 40731" ("Bristol code"), *folios* 86r, 240r, London, British Library (Figs. 17:3, 48:3).

⁹⁶ Along the right hand of the man, together with the helmet, were found iron debris (fragments of a sabre?), two loops, bone parts and studs of a bow quiver's case, few fragments of bone plates, among which were identified the median trim and other parts of the bow.

⁹⁷ The helmet is made of one piece of iron (height of the bowl – 18 cm, diameter – 22 cm; collection of the Hermitage Museum in Saint Petersburg, Russia, Inv. No. 912). It presents a metal band around its lower edge and a flat metal mount covering the crown. The mounts are decorated with foliage trails. It is entirely covered with gilded copper leafing, but is different to the earlier



Pl. 31. Upper part of pointed conical helmet from the fortress of Pernik in Bulgaria, late 12th c., present location unknown (after Чангова 1992).

Tabl. 31. Górna część konicznego hełmu z fortecy w miejscowości Pernik w Bułgarii, koniec XII w., miejsce przechowywania nieznane (wg Чангова 1992).

a single-piece helmet (Hejdova 1966a, 87, Fig. 23:1; Кирпичников 1971, 28, 85, Pl. XI:1a-1b;

Holmquist Olausson 2007, 235, Fig. 8:f), with foliage ornaments very similar to those from Chamoson, but especially to silver works of Byzantium related to the same period, like the decoration of the very famous bowl from the former collection of A. P. Bazilevsky, or the one of the cup from Beryozovo (Petrovich 1975, Figs. 83-162)⁹⁸. If we compare the rich ornaments of the Babiči helmet with such decoration, the Byzantine origin of the helmet is very possible, in the meaning of a helmet which was with all probability realized in a Constantinopolitan workshop. Instead of the narrow brass band of the Chamoson Helmet that of Babiči was crowned by a circular decorative band.

Sometimes the miniatures show, for this typology of helmets, the presence of an extra band around the lower edge, to which it was probably nailed. Simple conical helmets made of one piece of iron or bronze are well represented in the “Skilitzès” (Hoffmeyer 1966, Fig. 12:13), on the head of light and heavy cavalymen (*Skilitzès* 2000, folio 12r⁹⁹). They correspond very well to the archaeological records. Especially specimens like the helmet preserved in Budapest, but probably found in grave 277 at cemetery in Felsőpálos-Budai, Hungary¹⁰⁰ (Pl. 29; Kalmár 1971, 255, 265, Figs. 1, 22; Nicolle 1996a, 113; 1999a, Fig. 831; Горелик 2010, Fig. 2:1), a Cuman helmet in mixed steppe and Iranian style, although already dated to the 13th c. (Nicolle 1988a, 11, Fig. C), are among the most represented (Figs. 40:4, 68:4; *Skilitzès* 2000, folio 15v¹⁰¹). This is not strange, considering the great reciprocal influence between Hungary and Byzantium in war and peace during the 12th-13th c.

gilded examples. The interior construction is hidden behind the copper-gilt decoration. The existing seam on the surface of the helmet is a result of modern damage. The gilded edging at the bottom of the helmet still has a vegetative ornament that looks like a twisting branch with leaves. The background is embellished with tiny impressions. The dome is crowned by a low standing spike that is decorated in a similar way to the bottom edge band. Its ornament is divided into four sections (according to the sections of the helmet). The vegetative ornament here is supplemented by rhombuses that appear to grow out of the vegetative ornament. The spike and the metal rim are decorated with zig-zag pattern on the edges. At the top of the crown there is a hole for a small rod that was not preserved. At the bottom part of the helmet there are many evenly spaced fine holes, for the attachment of the mail curtain, that were damaged most likely as the aventail was ripped out. The face part is most likely marked by a small rectangular cut out (?). There are no traces of a nasal. Close parallel: “Skylitzès Matritensis”, folio 19r, the 12th c. (Fig. 11:2).

⁹⁸ See also the vegetal decoration of the Monomach crown (*Everyday life* 2002, 244, Fig. 7) and the vegetal decoration of the 12th c. ceramic bowl decorated with a warrior (ibid., 330, Cat. 365).

⁹⁹ Here, behind the cavalymen of the first row, on both the battle scenes, the warriors on the background are all wearing iron conical pointed helmets (Figs. 9:1, 10:1).

¹⁰⁰ This bowl's fragment of a sphero-conical one-piece low-domed iron helmet (collection of the National Museum in Budapest, Hungary) was originally composed by three parts. On the top of the helmet is riveted a finial attached by three nails, onto which is superimposed a tube for the insertion of the plumes. To the lower part of the helmet is nailed a wide band or deep reinforcing rim, today surviving only in fragments, decorated on the front part by an embossed flower or vegetal ornament typical of the Nomad cultures. The narrow band forms a sort of cylindrical-spherical crown. The upper and lower edge of the band is crenelated, in the characteristic manner of the Golden Horde: small nicks on the edge are visible from the end of the metal piece. The forehead is seriously damaged. The helmet was found in a grave together with fragments of armour, stirrups, gilded belt, arrow points and other riding equipment, among them fastening boot clasps Y shaped. Close parallels: “Skylitzès Matritensis”, folios 11v, 12r, 16r, 16v, 30v, 31r, 72v, 73v, the 12th c. (Figs. 9:1, 10:1-2, 11:1, 14:1, 31:2-3, 40:4, 52:1-2, 54, 68:4).

¹⁰¹ The most part of warriors have this conical pointed helmet, with lower skull, like the Budapest specimen; only one is wearing a segmented helmet, always with a low profile skull.



Fig. 60. 1 – *People, genders and languages*, fresco, 1180 AD, Church of Aghioi Anaragyroi, Kastoriá; 2 – *Goliath*, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 182r, 1066 AD, British Library, London; 3 – *Arrest of Jesus*, detail, wall-painting from subterranean Church of Kokar Kilise, 9th-11th c., Ihlara, Niğde Province, Turkey; 4-5 – *Crucifixion*, detail, wall-painting from subterranean Church of Kokar Kilise, 9th-11th c., Ihlara, Niğde Province, Turkey (1, 3-5 – photo by R. D’Amato; 2 – courtesy of British Library).

Ryc. 60. 1 – *Ludzie, rody, języki*, fresk, 1180, kościół Aghioi Anaragyroi, Kastoriá; 2 – *Goliat*, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 182r, 1066 r., British Library, Londyn; 3 – *Aresztowanie Jezusa*, malowidło ściennie z podziemnego kościoła Kokar Kilise, szczegół, IX-XI w., Ihlara, prowincja Niğde, Turcja; 4-5 – *Ukrzyżowanie*, malowidło ściennie z podziemnego kościoła Kokar Kilise, szczegół, IX-XI w., Ihlara, prowincja Niğde, Turcja (1, 3-5 – fot. R. D’Amato; 2 – dzięki uprzejmości British Library).

and the great number of Hungarians and Cumans serving as mercenaries in the Roman army (Heath 1979, 102-103; Nicolle 1988a, 16). Another simple

specimen from Ostra, Romania¹⁰² (Pl. 30), dated to the 12th c. (Spinei 1982, Fig. 35; 1986, Fig. 19:3; Nicolle 1999a, 57, Fig. 85) finds a very good

¹⁰² Simple iron, sphero-conical pointed helmet (height – 17.5 cm, diameter – 20 cm; collection of the Suceava Museum, Romania), whose somewhat angled outline suggests an origin further East rather than west. Small holes visible on the rim for the possible attachment of a lining or felt curtain. Close parallel: “Ms Studite Psalter”, folio 2v, 1066, “Ms. Add. 19352” British Library in London (Fig. 55:3).

parallel in the helmet of one of the Christ mockers in the Church of the Anargyroi at Kastorià (Fig. 60:1) and represents probably a simple infantry helmet. Last but not less important, a fragment of a tall pointed iron helmet¹⁰³ has been found in 1962, in the Pernik fortress, Bulgaria (Pl. 31; Чангова 1992, 179-180, 217, Fig. 165): probably it was a local 12th c. East-Roman specimen forerunner of the tall and conical helmets of the 13th c., like of Tagantscha and Kovalı (Кирпичников 1971, Pls. XII:1, XIV:1; Nicolle 1999a, 95, Cat. 200).

7. Round off piece of banded construction

These helmets descended from the simpler types of Late-Roman "Baldenheim" (Glad 2009, 31ss.; 2012, 355ss.; Quast 2012, 352ss.). They belonged to the category classified today as "Bandhelmen" (Saint Vid-Narona III, Bretzenheim) and were a sort of mix between the two piece ridge helmets and the ones of segmented construction: two crossed bands divided the helmet skulls in four parts, nailed to a rim band (Pl. 32-33; Vagalinsky 1998, 102-103; Vogt 2006, 280ss.). They had, because of easier and quicker realization, great fortune and diffusion especially in the 5th-7th c., and their production and employment in Byzantium's army never stopped, at least until the 14th c. (Nicolle 1999a, Fig. 102:a-b; Glad 2009, 66; D'Amato 2010, Pl. H4; Quast 2012, Fig. 4:4-5).

The easy way in which such kind of helmets could be produced can explain as the "ex Parakoimomenos" Vasilios could supply, in 963, with "kranoi" (probably helmets of this typology), "thorakes", felt caps, small round shields, javelins and swords, 3000 of his servants to attack the home of Josiph Bringas and his followers (*Leonis Diaconis...* 2005, III, 97 /47/; D'Amato 2013b, 52).

For the middle Byzantine period they are well documented in the iconography: apart from the Imperial helmet, of which we have already

spoken, one of the most striking examples is the helmet represented on the head of Goliath in the miniature of *folio* 182r of "London Ms. Add. 19352" (Fig. 60:2), painted in the *Stoudion* Monastery of Constantinople in 1066 (Nicolle 1999a, 35) and showing, with all probability, the equipment of the elite troops of the army of Romanos IV Diogenes (1068-1071).

I have recently analyzed two specimens of such helmets in the private collection of Haluk Perk, in Istanbul, probably found in the Iconium (Konya) region, Turkey. They were dated in an initial but rather hasty report to the Celtic age (Zeyrek 2005, 183, 185-186, 190-191, Fig. 2:A-B; Quast 2012, Fig. 3)¹⁰⁴! These helmets¹⁰⁵ (Pl. 32-33), correctly classified as East Roman by the German archaeologists of RGZM (Quast 2012, Fig. 3:354-355; D'Amato 2013a, 58), can be dated in a temporal range varying between the 7th and the 11th c. They are iron banded helmets having the skull worked in three pieces and fastened with rivets arranged in irregular way. One of them presents holes on the sides for the missing chin straps or cheek pieces.

Although the construction is similar to the 6th c. specimens (Fig. 60:3), the Anatolian exemplars present a strong widening of the bands width and a less pronounced spherical dome, which allow me to attempt a later date (10th-11th c.?) for comparison with the low domed bowl of the other Anatolian specimen fitted with nose-guard (Pl. 3-4). The comparison is even stronger with a real similar specimen of the 11th c., certified as authentic and found in a River bed, in south Germany (Casa d'Asta Czerny 1997, 46, Cat. 737). Unlike the German helmet, divided by four bands, the Anatolian specimens have a composition of only one band riveted to the rim wide band, which surrounds the lower edge, crossing the helmet and dividing it in two parts, like a two-piece helmet.

¹⁰³ The fragment represents the top part of a sphero-conical helm (height – ca. 31 cm, diameter – 27.5 cm; collection of the Pernik Regional Museum), similar to those classified as type II by Fedorov-Davidov; the helmet was left in the fortress and stolen shortly after be photographed. Close parallel: "Ms Studite Psalter", *folio* 2v, 1066, "Ms.Add.19352", British Library in London (Fig. 55:3).

¹⁰⁴ One of the helmet has been recently restored.

¹⁰⁵ The first helmet (Pl. 32; height – 17.0 cm, width – 22.0 x 17.0 cm, thickness – 0.1-0.2 cm; collection of the Haluk Perk Müzesi in Istanbul, Turkey, Inv. No. M612) has been subject to heavy interventions of restoration. It was originally very rusty and broken. The bowl was missing for 1/2 on the left side. Right next to it there was a large hole. The bowl is made of three pieces riveted together: the two side parts are united by a central running iron plate. The bowl has a shape rounded for 3/4. The side pieces have a half-round shape. The lower rim of the bowl is surrounded by a band-shaped edge's strip (width – 5.3 cm). Small studded rivets were used for the fastening. In the inner edge of the bowl could be seen as the pieces of iron plates were secured in place by rivets, being indicative in such direction the ring-shaped inner surface of the tape. Close parallel: "Ms Studite Psalter", *folio* 182r, 1066, "Ms.Add.19352", British Library in London (Fig. 60:2). The second specimen (Pl. 33; height – 16.8 cm, width – 21.5 x 19.5 cm, thickness – 0.3 cm) is similar. When the helmet arrived to the Museum (collection of the Haluk Perk Müzesi in Istanbul, Turkey, Inv. No. M611) was in very good condition, although was undergone to small restoration as well. It is made of iron plates. The bowl has a close resemblance in terms of previous form. System of fastening like at the first of helmets, but the rim band is fastened on the back through two rivets. Holes on the sides for the attachment of the helmet lining or of possible leather thong for the underchin strap. Close parallel: "Cod. Vat. 333", *folio* 45v (Fig. 18).



Pl. 32. Round-off helmet of banded construction, Konya Region in Turkey, 7th or 11th c., collection of Halük Perk Müzesi in Istanbul. Photo by R. D'Amato and Museum (courtesy of the Museum).

Tabl. 32. Zaokrąglony hełm obęczowy, prowincja Konya w Turcji, VII lub XI w., zbiory Halük Perk Müzesi w Stambule. Fot. R. D'Amato i Muzeum (dzięki uprzejmości Muzeum).

But, as in the German specimen, the central band is very wide and enlarge itself on the front and on the back before of the intersection with the brow band, following the principle of construction of the central band of the Bretzenheim helmet, but without the side bands. The rough composition of the Anatolian specimens suggests they were quickly made to be used by infantry or retainers of noblemen, like the 3000 men of Bringas quoted by Leo Diaconus.



Fig. 61. 1 – *Goliath*, “Cod. Marc. Gr. 17”, *folio 3v*, 11th c., Biblioteca Marciana, Venezia; 2 – *Goliath*, Works of Saint John the Chrysostom, “BNF Ms. Gr. 806”, *folio 94v*, 12th c., Bibliothèque Nationale de France (1 – author’s collection; 2 – courtesy of D. Nicolle).

Ryc. 61. 1 – *Goliath*, „Cod. Marc. Gr. 17”, *folio 3v*, XI w., Biblioteka Marcjana, Wenecja; 2 – *Goliath*, dzieło św. Jana Chryzostoma, „BNF Ms. Gr. 806”, *folio 94v*, XII w., Bibliothèque Nationale de France (1 – zbiory autora; 2 – dzięki uprzejmości D. Nicolle’a).

8. Brimmed helmet, “chapel de fer” made of one piece of iron, with a pointed or rounded bowl

In the 11th c. began in Byzantium the introduction of early forms of kettle-hats, one-piece helmets with slight brim (Dawson 2009, 40; Figs. 2, 3:2). Inside the armies of the Empire this kind of helmet is already iconographically attested from the 8th c., as shown in a fresco from Khirbat Al Majfar, at the Rockefeller Museum in Jerusalem, where a Roman armoured archer in action wears on the head a brimmed helmet of spangen-helm type (Nicolle 1993, 36). Apart from this source, representations of such category of helmets disappear from the iconographical records representing Roman soldiers for three centuries to reappear at the beginning of the 11th c. The manifest long-term collective memory of the Roman army could mean that this was a revival based upon remembered forms, or – what is most probable – that brimmed

form had never fallen completely out of use. In this direction seems to speak a fresco from the Cappadocian Church of Kokar Kilise, in the Ihlara Valley, where, in the scene of the Crucifixion, a warrior wearing a tall pointed helmet, with a wide brim (Nicolle 1999a, Fig. 5:a), is shown beside other warriors with one-piece helmets of two-piece construction (*Betrayal* scene – Fig. 60:3) and a possible Phrygian helmet (ibid., Fig. 5:b). The scene is very damaged (Fig. 60:4-5); however if the frescoes could be dated in the temporal arch of the 9th-11th c. they could attest the continuative employment of the brimmed helmet inside the Roman army.

The iconography of the brimmed “chapel de fer” is instead certain for the 11th c.: beside the most celebrated folio IIIv of the “Cod. Marc. Gr.17”, representing light and heavy infantrymen of Basil II with such helmet (Fig. 61:1-2), the “Codex Sinaiticus” (Fig. 2) and the “Studite



Pl. 33. Round-off helmet of banded construction, Konya Region in Turkey, 7th or 11th c., collection of Halük Perk Müzesi in Istanbul. *Photo by R. D'Amato and Museum (courtesy of the Museum).*

Tabl. 33. Zaokrąglony hełm obręczowy, prowincja Konya w Turcji, VII lub XI w., zbiory Halük Perk Müzesi w Stambule. *Fot. R. D'Amato i Muzeum (dzięki uprzejmości Muzeum).*

Psalter” (Fig. 3:2) are showing warriors with this kind of helmet, protected by lamellar curtain on the neck. The helmet seems to have even a more strong diffusion in the 12th and the early 13th c., where a marvelous miniature representing Goliath, in the “Ms. Gr. 806” of the Bibliothèque Nationale de Paris, provides an accurate representation of a Roman infantryman of late 12th c., with the brimmed chapel de fer on his head (Fig. 61:2). Similar helmets, made of two segments riveted



to a central comb, reinforced with bronze scales according to the old Sarmatian manner (Glad 2009, 66) and having brims, are visible on the Varangian guardsmen¹⁰⁶ represented at the Hermitage of Saint Neophytos Monastery, in Ktima, Cyprus (Fig. 62:1-3). This helmet is clearly visible also on an icon of the Crucifixion at the Sinai Monastery, which brings us directly to the early 13th c. (Fig. 9:3). These war-hats would remain common in Byzantium up to late 14th c. and almost reflect standard East-Roman equipment (Nicolle 1999a, 41, Fig. 52:D).

A particularly brimmed pointed helmet¹⁰⁷ (Pl. 34), identical to the specimens represented on the head of heavy and light imperial infantrymen on the “Psalter of Basil II”, has been found in South-Western Russia (probably in the area of Chersonesus) and has been classified as a Roman specimen of the 11th or 13th c. by the scholars (Прохоров 1883, табл. VIII:1; Кирпичников 1971, Fig. 9:3; Heath 1979, 37; Nicolle 1988a, 10, Fig. B; 1999a, 93, Fig. 192), anticipating the shape of the well known Kremlin specimen, dated to the 13th c. (Pissarskaya 1969, Figs. 36-37; Nicolle 1999a, 46, 362, Fig. 71; Γουρβιζ 1999, Fig. 2).

The miniatures of “Skilitzès” attest the brimmed helmet as very diffused inside the Roman army of the late 12th c.: there are segmented brimmed types (Fig. 14:1), simple “chapels de fer” with pointed top (similar to that of Budapest helmet), brimmed helmets surmounted by a conical bowl whose top is made of a separated piece nailed upon the skull (Hoffmeyer 1966, Figs. 12:14, 17-18, 13:11). Apart from the brimmed “chapels de fer”, the other two types are usually fitted with scale curtains, or with aventails made of felt or leather, but sometimes also metallic (*folio* 16r.; Fig. 10:2). It is interesting to note that in the same manuscript all the helmets of this kind are painted with the iron colour. Some of these iron hats had a very fine parallel with the iron helmet from south Russia and with its descendant today at the Kremlin armoury, forming a bridge of continuity between the 11th and 13th c.

9. Mask-visor helmets

A complete protection for head and face – mask-visors – was already used by the Sassanian and Late Roman “Clibanarii” (Ammianus Marcellinus 1939-1950, XV, 1, 12; Kolia 1988, 78; Lebedinsky 2002, 237). The tradition should have been continued in Byzantium, but there are very scarce documents on it. There is however a very interesting source that represents one of the few quotations of the use of mask helmets at Byzantium. Some of the fighters of the “Dhrómon”, the main Roman warship of the period, were heavily armoured: treatises on naval warfare are full of information on arms and armour of marines. For example the work of Leo VI recommends as the fight from the wooden tower (“xylokastron”) of the ship’s mast should be managed by “kataphraktoi” armed with shields (“skoutaria”), heavy pikes or javelins (“menaulia”), bows with additional arrows (“toxa, sagittas ek perissou”), swords (“spathia”), javelins (“rhiptaria”), “lorikia” and “klibania” (mail armours and armours fitted with scales at the front if not at the back), helmets (“kassida”) and arm-guards (“cheiropsella”; *Naumachica* 1943, 21 /I 14/; Grotowski 2010, 39-40, n. 84). Always with reference to the naval equipment, in the “Liber de Ceremoniis” (Constantinus Porphyrogenitus 1829, 669, 17ss.) are mentioned, beside the 80 “Kassidia” of the armament of the “Dhrómon” also 10 “Kassidia Avtoprósopa” (literally “helmets with their own faces”) probably destined to “Protokarávoi” and “Proréis” of the warship.

On their shape very little is known, but a very interesting discovery near the North-West corner of the Peristyle of the mosaics of the Great Palace of the Byzantine Emperors (Constantinople, now Istanbul, Turkey) during the excavations in 1930s made from the Scottish archaeologists can maybe give an answer to the question. On the marble floor paving among the remains of a burnt roof, probably linked with the sack of Byzantium by the Crusades and Venetians in 1204, nine iron masks¹⁰⁸ were found (Pl. 35; Martiny, Brett,

¹⁰⁶ On the interpretation of the guards at the betrayal scene as representation of Varangians see now D'Amato (2012b, 71ss.) and with reference to Cyprus (*ibid.*, 82).

¹⁰⁷ Simple iron kettle-helmet, with bell-shape and pointed bowl. It presented strong damages on one side. From the image published by Prohorov a “Chi-Ro” (Christian Monogram, the “Chrismon”) seems to be incised on the bowl. Nothing is known about it, except it was published from Prohorov and then Kirpichnikov but already in his book there was no information on the technical characteristics of the helmet. Probably lost or stolen during the Second World War. Close parallel: “Cod. Marc. Gr.17”, *folio* 3v, Biblioteca Marciana in Venezia (Fig. 61:1).

¹⁰⁸ Nine masks (visors) (length – 18 cm – the longer mask measures 23 cm, the smallest fragment 9 cm, width – 14 cm; collection of the Archaeological Museum of Istanbul (?)) with holes for the eyes but not for the mouth (at least according to the finders), and fitted with small pairs of holes, on the top and in the middle of each side, probably for the fastening to the other parts of the helmet. The holes on the edge of the central upper border suggest that they were attached to the helmet by means of a hook or a curved bronze hook welded or riveted in the center of the edge of the bowl. This hook, passing through the openings in the mask and adapted in the front of the helmet’s skull, would act as a pivot, allowing the mask to be raised or closed.



Fig. 62. Wall painting from Hermitage of St. Neophitos Monastery, late 12th c., Ktima, Cyprus: 1-2 – *The Betrayal* – detail of the soldiers; 3 – *Christ before Pilatus* – detail of the soldiers. Photo by R. D'Amato.

Ryc. 62. Malowidła ścienne z Ermitażu w klasztorze św. Neofita, koniec XII w., Ktima, Cypr: 1-2 – *Zdrayca* – detal z żołnierzami; 3 – *Chrystus przed Pilatem* – detal z żołnierzami. Fot. R. D'Amato.

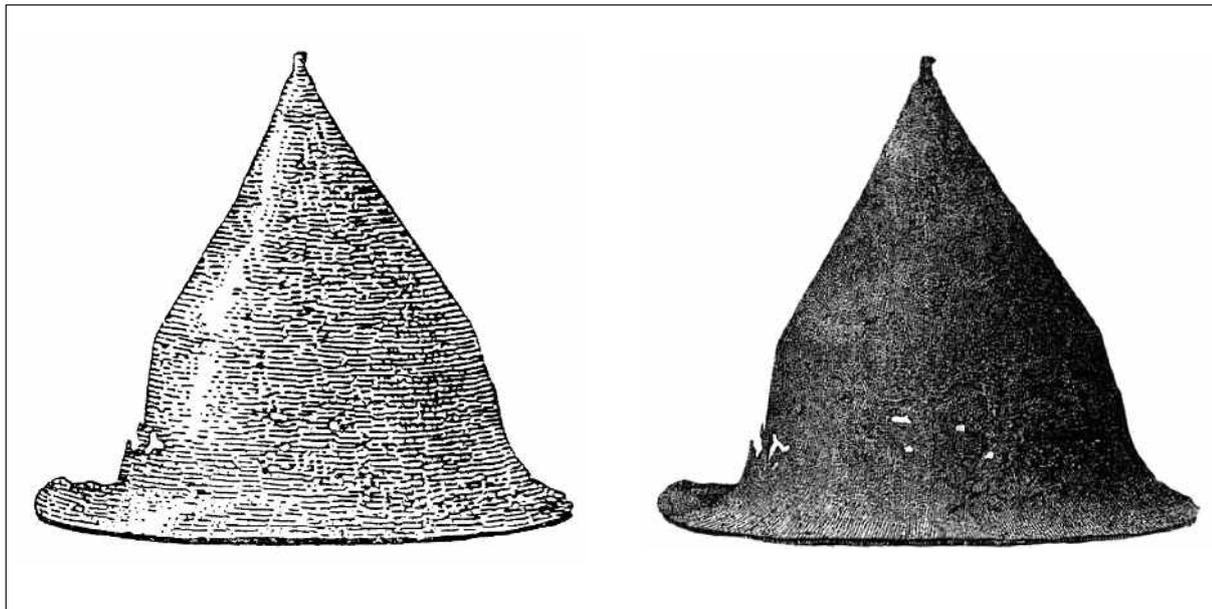
Stephenson 1947, 98, no. 6 /with notes/, Pl. 58:1; see also Nicolle 1992, 11, Fig. I)¹⁰⁹.

The peculiarity that the masks were of iron, all in the same place, that they did not present (it seems)

mouth holes, that they were not bearded¹¹⁰ and that they were in a very similar number to that indicated in “De Cerimoniis” for the dotation of the “Dhrómon” officers, could induce to consider them like fighting masks, and not theatric masks like proposed by the finders and by other authors, linked with the so-called Gothic games (Constantinus Porphyrogenitus 1829, I, 83; Martiny, Brett, Stephenson 1947, 15; Bolognesi Recchi Franceschini 1995, 117, 130-131, 133, Fig. 1), considering also that these latter, according to the Greco-Roman tradition, were probably bearded and realized with not metallic material.

¹⁰⁹ The masks were photographed at the time they were discovered but have since disappeared; only D. Nicolle and the present author tried to understand where they still could be. Nicolle mentioned in the captions of his book on Romano-Byzantine armies (1992, 11, Fig. I) the possible presence of them inside the Archaeological Museum of Istanbul; in fact he tried to locate these visors. According to what he has been told, the British archaeological team left their discoveries in Istanbul when the Second World War started. The material was assumed to have been in the care of the Archaeological Museum but was mislaid or lost or never catalogued. When I came first time in Constantinople in 2006 I asked about it, but no one in the Archaeological Museum had knowledge of their existence; the only hope in future is to visit the depots of the museum to see if there is still some traces of them; I owe to Mr. Nicolle's courtesy the extra and never published original photo held in the Photographic Collection of St. Andrews University, in Scotland (Pl. 35:2).

¹¹⁰ Like usual for theatre masks (see Martiny, Brett, Stephenson 1947, 98-99, No. 6).



Pl. 34. Kettle-helmet, South-Western Russia Or Ukraine, 11th c., present location unknown (1 – after *Кирпичников 1971*; 2 – after *Прохоров 1883*).

Tabl. 34. Kapalin, południowo-zachodnia Rosja lub Ukraina, XI w., miejsce przechowywania nieznane (1 – wg *Кирпичников 1971*; 2 – wg *Прохоров 1883*).

The shape of the masks goes back to the mask visors of some classical Roman masked helmets (like the mask from Vechten, of the 2nd c. AD, with a simple visor – Glad 2009, 57; Negin 2010b, 90, Fig. 84), and to the helmets still visible in the fragments of the Theodosius and Arcadius columns, dated at the 5th c., but especially to the visor of the Anglo-Saxon Sutton Hoo Helmet of the 7th c., which, although belonging to a Germanic King, is of clear late-Roman matrix¹¹¹. The visors of the Great Palace are therefore the prosecution of the Greek-Roman tradition of the mask helmets, under the influence of eastern elements. This is a clear testimony of an uninterrupted military tradition that Rome and Byzantium had kept in live for centuries, and it could also explain why the Steppe Peoples and then the Rus, which entered in contact with Byzantium, showed in the following centuries splendid military equipment with masked helmets although, under this point of view, we should not forget on the other side the uninterrupted Turco-Iranian and Caucasian tradition of complete helmets fitted with a face-protection.

The masks have been considered pertinent to the 12th c. by some authors (Nicolle 1999a, 37,

Fig. 41:A-D), because they were linked with the discovery – also done by the Talbot Rice' team in such a circumstance – of a complete suite of lamellar armor (Parani 2003, Pl. 112; Dawson 2007, 62) together which was found a coin of Manuel I (1143-1180). From the report of the excavations it is possible also that they belong to a previous period (without excluding the 12th c. date). The masks were found near the North-West corner of the Peristyle of the mosaics, lying on the marble paving among the remains of a burnt roof. This fact is important because the fire which destroyed the roof was probably that of the sack of Constantinople in 1204, and the area was never rebuilt, the debris of roof and masks being left where they were. At that time (the end of the 12th c.) the northern corner of the Peristyle was already located outside the area of the Palace. After the end of the 10th c. the area of the Palace complex has been strongly reduced (one-third of its previous larger size) and was concentrated around the Bukoleon Harbour. The Apsed hall, focus of the Peristyle, has been subdivided by flimsy walls as early as the 11th c. (Talbot Rice 1958, 34), so the place (its North-West corner) could have been used as arsenal or military depot since that time.

¹¹¹ Was the late ex-conservator of the Army collection of the Historical Museum of Wien, O. Gamber, who has suggested first the possibility of the late Roman matrix of the Sutton Hoo helmet, i.e. a helmet of late Roman construction although enriched with Germanic elements: so the “kassídon avtroprósopon” mentioned in “De Cerimoniis” was probably a helmet similar to the Sutton Hoo one (with a protection composed by a rigid mask acting like visor (see Gamber 1966, 285).



Fig. 63. 1 – Council, “Virgilius Vaticanus Ms.,” “Ms. Lat. 3225”, folio 73v, early 5th c., Biblioteca Apostolica Vaticana, Roma; 2 – Johannes Tzimiskès as *Megas Dhoméstikos*, fresco, 2nd half of 10th c., Church of the Forty Martyrs, Çavusin (1 – author’s collection; 2 – photo by R. D’Amato).

Ryc. 63. 1 – Narada, „Virgilius Vaticanus Ms.,” „Ms. Lat. 3225”, folio 73v, wczesny V w., Biblioteca Apostolica Vaticana, Rzym; 2 – Jan Tzimiskès jako *Megas Dhoméstikos*, fresk, 2. połowa X w., kościół Czerdziestu Męczenników, Çavusin (1 – zbiory autora; 2 – fot. R. D’Amato).

curved and of bronze like the ancient prototypes) welded or riveted in the center of the edge of the bowl. This hook, passing through the openings in the mask and adapted in the front of the helmet’s skull, would act as a pivot, allowing the mask to be raised or closed depending on the circumstance: this is a characteristic that we find already present in some specimens of Roman mask helmets, like the example of Pfrondorf, at the Stuttgart Museum (Negin 2010b, 238-239, Fig.187-188), as well as in the British Sutton Hoo helmet mask of the 7th c. (Nicolle 1984a, 13). The holes on the sides presupposed the presence of a helmet’s bowl closed on the sides, like that of Kairouan.

The “*Kassidia Avtoprósopa*” were, according to the passage of Constantine Porphyrogenitus (1829, 669,18), also supplied to the “*Siphonatores*”, i.e. the specialized personal using the machines for the Greek Fire. The holes of the Great Palace specimens can therefore also suggest the possibility that protective material against the heat and fire of

The holes that the masks have on the edge of the central upper border suggest that they were attached to the helmet by means of a hook (maybe

the “Katakoraх”, i.e. the main Greek Fire throwing machine, was applied to their masks. This is a further confirmation that the source refers to visor or face-helmets – “helmet with its own face” which is the literal translation of the Greek words “kassidion avtroprósopon” – or at least to helmets protected by plates through which face, nares, mouth and eyes were covered and protected, i.e. composite helmets but also helmets made of a single piece of iron or steel with an applied visor. There were in fact composite helmets whose cheek-guards, chin-guards and all the part covering nares and eyes could be raised up on the brow or lowered down under the chin. The expression used by Constantine Porphyrogenitus refers to rigid visors, not mobile around the circle, and not particularly decorated. We should in fact remember that in the Eastern Roman Empire the symbols of the Paganism, that once ornamented in a splendid way the masked helmets of the 1st-3rd c., have been yet abandoned and the helmet visors had only the practical function of the protection on the battlefield. However, although the visors of the Great Palace are very simple ones and destined to the practical use of the sea battle, we can maybe hypothesize that those in dotation of the Officers were silvered¹¹², like some classical Roman specimens, and used also for parades.

A second important reference to the use of different mask helmets or visor could be found in Anna Comnena (1945-1967, I, 23 /I, 5, 7/), linked with the definition of “ἀσκεπες τῷ κύκλῳ”, interpreted as a visor or a mail curtain covering the face (Parani 2003, 124, n. 107). Anna uses the word “κύκλῳ” when, speaking about his father’s (the future Emperor Alexius 1st Komnenos) helmet, says us that Alexius covered the face with a small protective piece (“θωρακιδίον”), which hung down from all around the helmet. Alexius, localised the insignia of the enemy, the usurper Nikephoros Bryennios ...*put down the protection which was hanging all around the helmet...* This literary

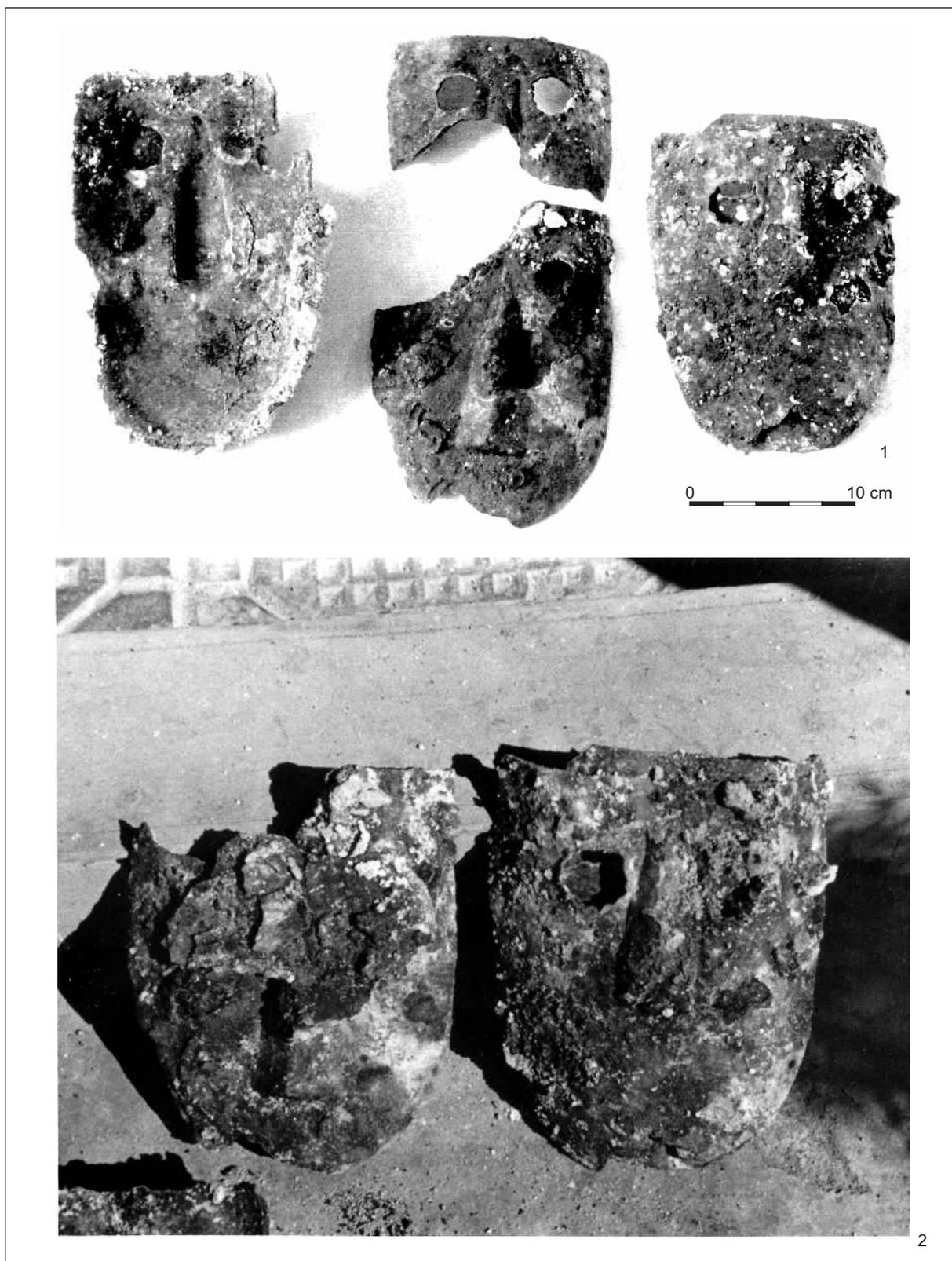
reference could be well linked with a mail curtain positioned all around the helmet and hanging down from the bowl, like that, seen before, described for the cataphracts of Macedonian Dynasty tactical treatises. This is typical for instance of the Nomad helmet of Čingul’skij Kurgan near Zamožnoe, Ukraine¹¹³, found during the excavations of Otroščenko in 1981, together with other items, like a knife and precious parts of cloths, all adscribed to Byzantine manufacture, dated to the late 12th – early 13th c. (Pl. 36; *Gold...* 1993, 254-257, Cat. 85; Nicolle 1996a, 112; 1999a, 279, Fig. 718; 1999c, 31; Негин 2001, 7, 26; 2013, 47; Горелик 2002, 77, Fig. 3). On the top of this specimen is preserved the typical ring, visible in many East-Roman artworks (Fig. 22:2,4). The helmet belongs to a Cuman chieftain who could well have taken the helmet from the Imperial Arsenals or purchased it like dignity insignia. The tradition of the half-masked helmet is typically nomad and inserted inside the well-known Russo-Varangian or Nomad type found in Russia (Негин 2001, 25): but the nose-guard interestingly presents the same attachment system of the Yenicapi helmet, with holes all around the edges for the chain mail attachment. The bowl is simple and conical, one-piece, not fluted, in gilded iron. This is typical of many helmets visible in the Roman miniatures of this age (Figs. 40:4, 58:1). The helmet of Čingul’skij Kurgan presents some characteristics (the knob feature, the complete gilding) which could adscribe to it a production inside the imperial workshops according to the Nomadic tradition strongly present in Byzantium at the end of the 13th c.

Even if it is like this, in the case of the quotation of Anna Comnena we cannot absolutely exclude a mobile visor, considering that, according to the style of the Great Palace visors, we should mention two further mask helmets linked to the territories under Roman control. One is a mask visor¹¹⁴ found in 1958 (or 1960 according to the bibliography) during excavations of Karger in the

¹¹² See reconstruction in D’Amato (2012a, 46-47, Pl. F).

¹¹³ Helmet of forged iron (height – 23 cm, thickness – 0.2 cm; collection of the Museum of Historical Treasures in Kiev, Inv. No. AZS-3687); the upper part of the bowl has a spherico-conical shape, the lower part is formed by a half-mask visor; as decorative element of the helmet an iron ring is positioned on the top, for the attachment of the crest. Ring on the pommel has been explained like a clear sign of Mongolian hat, because, judging by the iconographic data, as a rule, the Mongolian appended specifically an ornament for the hat – two leather or cloth ribbons, painted in bright colours, sometimes with painted patterns, and later (with the Islamization of the Golden Horde), verses from the Koran. On the lower edges of the helmet is attached the protective curtain of iron rings (“barmica”) for face and neck, fastened to the nose-guard of the half-mask. On the mask the eyebrows are firmly marked, and under it the almond-shaped eyes. The helmet does not show signs of any ornamental decoration, but all the surface of helmet and half-mask are gilded. Shape and size are similar to various models of the same typology, but especially to the Gorodetskyi helmet, though their tops are different. Close parallel: Golden Horde Miniatures ex collection Demotta, the 14th c. (Горелик 2002, 77, Figs. 12-14).

¹¹⁴ The condition of iron mask (visor) is very fragmentary (measures according to A. Negin: the greatest width of the surviving fragments – 15.5 cm, height of preserved fragment – 10 cm, length of eye slits about – 3.5 cm, width of eye slits – ca. 1.5 cm; nose length – 7.0 cm, width of the nose at the bottom – 3.2 cm; collection of the Hermitage Museum, Saint Petersburg). Both the edges of the slits for the eyes are destroyed, the length of the mouth is about 3 cm (but the left corner is destroyed). Beardless, it is expertly worked with a human face with a straight nose, small mouth and tightly compressed and well-developed lips.



Pl. 35. Nine face iron masks from the Great Palace Of Constantinople, 11th or 12th c., present location unknown (after *Martiny, Brett, Stephenson 1947* and the archive photo of Saint Andrew University, kindness of Dr. David Nicolle).

Tabl. 35. Dziewięć żelaznych masek z Wielkiego Pałacu w Konstantynopolu, XI lub XII w., miejsce przechowywania nieznane (wg *Martiny, Brett, Stephenson 1947* i fot. archiwalna ze zbiorów Saint Andrew University, dzięki uprzejmości D. Nicolle'a).



◁ Fig. 64. 1 – *Scenes from the lives of Saint Eustratius, Auxentius, Eugenius, Mardarius and Orestes – the apology of Eustratius*, “Cod. Ath. Esphigmenou”, folio 343r; 11th c., 2 – *The guardians of the Sepulchre of the Virgin*, fresco, 1050 AD, Cappadocia, Göreme, Karanlik Kilise, Turkey; 3 – *People, genders and languages*, detail, fresco, 1180 AD, Church of Aghioi Anaragyroi, Kastoriá; 4 – *Joshua and the Archangel Michael*, fresco, 2nd half of 10th c., Church of the Forty Martyrs, Çavusin; 5 – Felt cap silk covered, 12th-13th c., Caucasus, Hermitage Museum, Moscow; 6 – Man’s cap in linen, wool and leather, Moshchevaja Balka burial, 8th-9th c., Hermitage Museum, Moscow, inv. No. KA6752 (1 – after Pelekanidis et al. 1975; 2-6 – photo by R. D’Amato).

◁ Ryc. 64. 1 – *Sceny z życia św. Eustratiusa, Auksencjusza, Eugeniusza, Mardariusza i Orestesa – apologia Eustratiusa*, „Cod. Ath. Esphigmenou”, folio 343r; XI w., 2 – *Strażnicy grobu Marii*, fresk, 1050 r., Kapadocja, Göreme, Karanlik Kilise, Turcja; 3 – *Ludzie, rody i języki*, fresk, szczególnie, 1180 r., kościół Aghioi Anaragyroi, Kastoriá; 4 – *Jozue i Archanioł Michał*, fresk, 2. połowa X w., kościół Czterdziestu Męczenników, Çavusin; 5 – filcowa czapka pokryta jedwabiem, XII-XIII w, Kaukaz, Ermitaż, Moskwa; 6 – czapka męska z lnu, wełny i skóry, pochówek w miejscowości Moščevaâ Balka, VIII-IX w., Ermitaż, Moskwa, nr inw. KA6752 (1 – wg Pelekanidis et al. 1975; 2-6 – fot. R. D’Amato).

Black Sea Area (Pl. 37), near Gorodishi village (early medieval Izyaslavl), in the Shepirovsky region of Khmel'nitskaya, dated to the late 12th c.¹¹⁵ (Миролюбов 1983; Negin 1998, 74). The second¹¹⁶ (Pl. 38) found in 1889 in Chersonesus, of early 13th or 14th c. (Пятышева 1964). The mask from Chersonesus has the ears and moustaches like the most part of the contemporary Cuman masks, and it is of clear nomad derivation (Кирпичников 1971, Pl. XIV; Nicolle 1999a, Figs. 720, 733, 735; Świątosławski 1999, Fig. 122). It has been dated by Pjatyshva to the 14th c., but I would like to propose an earlier date for comparison with Nomad visors of the 12th c. (visor from Kovali; Nicolle 1990, 63, Pl. L). The medieval masked helmets from the territory of Russia were found mainly in nomad burial mounds but it is possible that these examples were made under Byzantium’s influence. On other hand, moustached masks are more attached to the old nomadic iconographic tradition (Кирпичников 1971, Fig. 26 and pl. III), although there are exceptions (ibid., Fig. 27; Никольская, 1981, Fig. 97) so my attribution of the helmet from Chersonesus to the Eastern Roman Empire can be just a hypothesis, linked to the circumstance that the territory of Chersonesus was still under Roman control during the 13th c. But the mask from Gorodischi is just a shave visor face, like that of the Great Palace (of which the Ukrainian piece seems to be a more elegant evolution), and seems a continuation of a long century tradition inside the Roman army. In any case both of them attest

the continuative use of the mask helmets in the Byzantium’s areas at least until the late 12th or the beginning of the 13th c., or even 14th c. if we accept for the Chersonesus Helm the dating of Pjatyshva.

10. The “skaplion”, the fabric helmet, helmet covers and other protections for the head

In Byzantium, according to the “Strategikon”, the use of mail coif was already a prerogative of the Roman cavalryman in the 7th c.¹¹⁷ The hauberk, known in East-Roman sources as “skaplion” (Du Cange, du Fresne 1688, col. 1382; *Strategikon* 1981, I, 2, 10ss.), was a part of the chain-mail or coat of mail armour usually called “lorikion” or “zaba”, a term that until the age of Nikêphoros Phokás probably designated all the parts of the armour made with iron rings (Kolias 1988, 38ss.). In the Leo’s work the “skaplion” is implied as well, although not expressly mentioned: to the armour’s neck were attached the “skaplion” and/or the hauberk, i.e. a chain mail hood (*Leonis VI* 1935, X, 2). They guaranteed the protection of this delicate passage point from the armour to the helmet. The word “skaplion” was still employed in the 10th c. with such a significance in the Leo the Wise “Problemata” (Kolias 1988, 43, n. 52), and especially was used in the military language of the “Akritai”, whose wide employment beside the regular troops found his way exactly at the time of the victorious campaigns of the Macedonian Dynasty (Alexiu 1979, 16). You can see a perfect example of the 10th c. “skaplion” in the equipment

¹¹⁵ The mask mentioned in the article was considered a late-Roman one, but after A. Negin realized that it was a medieval mask. M. K. Karger thought it was Roman mask. Following the publication of the preliminary article of excavations, Negin saw the reports on the excavations at the Institute of Archaeology, and was convinced about the 12th c. data. Materials from these excavations are, unfortunately, still unpublished.

¹¹⁶ Iron mask (visor) (measures according to A. Negin: maximum width of the preserved part – 18 cm, height – 18 cm, length of eye slits – 3 cm, width – 1.7 cm; collection of the State Historical Museum in Moscow), seriously damaged. One eye slit is preserved, together with fragments of the nose and moustaches, as well as bronze ear, which was attached to the mask with two rivets (height – 4.5 cm, width – 2.9 cm, diameter of the hole in the lobe – 0.7 cm). The preserved fragments allow with sufficient certainty to say that the mask was similar to the masks from Kovali and Lipovets (Горелик 2002, 78, Figs. 2, 4). The “upper date” for this mask (according to Pjatyshva) is the middle of the 14th c. The mask is dated to those found in the same room with silver patina. However, it should be noted that this is not the date of manufacture of the mask, but the date of the destruction of the house in which it was kept, maybe some time after its manufacture. So the date can be earlier. Close parallel: Golden Horde Miniatures ex collection Demotta, the 14th c. (ibid., 78, Fig. 7).

¹¹⁷ But already in the 3rd and 4th c. we have the representation of Roman warriors with a mail coif: Dura Europos and the Vergilius Vaticanus are the most striking examples (see James 2004, Pl. IV, Fig. 60:1).



Pl. 36. Helmet with mask from the Čingulski Kurgan near Zamozne, Zaporoz'je distr. in Ukraine, 12th c., collection of Museum of Historical Treasures (Museum of Institute of Historical Sciences? or Ukraine State Historical Museum?) in Kiev (after *Gold... 1993* and courtesy photo I. Dzys).

Tabl. 36. Hełm z maską z kurhanu Czingułskiego Chana koło miejscowości Zamożne, obwód zaporoski na Ukrainie, XII w, zbiory Muzeum Historycznych Skarbów (Muzeum Instytutu Nauk Historycznych? lub Państwowe Ukraińskie Muzeum Historyczne?) w Kijowie (wg *Gold... 1993* i dzięki uprzejmości I. Dzysa).



Fig. 65. 1 – *Goliath*, relief carving from the Gagik Church, early 10th c., island of Aght' Amar, Lake Van, Turkey; 2 – *Killers of Zacharias*, wall painting in the subterranean Church of Bahattin Samanlıđı, Niđe, Cappadocia, mid/late 10th c.; 3 – *The horse and the deer*, Pseudo-Oppian, “*Cynegetica*”, “*Cod. Gr. 497*”, folio 11r, Biblioteca Marciana, Venice, Italy; 4 – *Centurion at the Crucifixion*, detail, fresco, 1050 AD, Cappadocia, Göreme, Karanlık Kilise; 5 – *Centurion at the Crucifixion* – detail of the “*Phakiolion*”, fresco, 11th c., Göreme, Tokali Kilise, Cappadocia (1 – courtesy of D. Nicolle; 2, 4–5 – photo by R. D'Amato; 3 – after Eleuteri, Marcon, Furlan 2002).

Ryc. 65. 1 – *Goliat*, płaskorzeźba z kościoła Gagika, początek X w., wyspa Aght' Amar, jezioro Van, Turcja; 2 – *Zabójcy Zachariasza*, malowidło ścienne w podziemnym kościele Bahattina Samanlıđı, prowincja Niđe, Kapadocja, połowa/koniec X w.; 3 – *Koń i jelenń*, Pseudo-Oppian, „*Cynegetica*”, „*Cod. Gr. 497*”, folio 11r, Biblioteca Marciana, Wenecja, Włochy; 4 – *Ukrzyżowanie*, fresk, szczegół, 1050 r., Göreme, Karanlık Kilise, Kapadocja; 5 – *Ukrzyżowanie* – nakrycie głowy centuriona („*Phakiolion*”), fresk, XI w., Göreme, Karanlık Kilise, Kapadocja (1 – dzięki uprzejmości D. Nicolle'a; 2, 4–5 – fot. R. D'Amato; 3 – wg Eleuteri, Marcon, Furlan 2002).



of Iohannes Tskimiskès illustrated in the Church of Çavusin, at Goreme (Fig. 63:2). Here the cavalryman seems to be covered, on the head and on the shoulders, by a mail hauberk not completely visible on its lower part because covered, in the painting, by the red mantle (D'Amato 2006, 15). As it is shown by the iconography such “skaplía” were also worn without helmet (Fig. 8:3). Examples of separated coifs worn by Roman soldiers still in the 11th c. are visible also in the Cappadocian paintings (Fig. 64:2; Yenipinar, Sahin 2005, 87; see also the “Second Tetraevangelion of Jruchi”, *folio* 70v – Fig. 13:2), in illuminated manuscripts (“Cod. Athos Esphigmenou 14”, *folio* 136v; Pelekanidis et al. 1975, 333) and in other artworks. A complete Roman chain-mail hauberk has been found in Bulgaria¹¹⁸, and was published together with a pair of mail “chausses” found in Bracigovo and dated at the 2nd half of the 12th c. (Pl. 39; Gheorghieva 1952, 388, Fig. 394, 396). The piece is interesting also because it shows and confirms the military reforms of the Emperor Manuel Komnenos, according to the Frankish style. One of them was the greater use of mail (Dawson 2002, 90). The mail hood or coif, which never has fallen completely out of use, now was very widely employed. The historians Kinnamos (1836, III, 9) and Choniatiês (1975, 92, 39) wrote about full mail aventails on cavalry helms, and especially mentioned that of the Emperor: during his duel with the Zupan of Serbia, the Emperor receives a blow of sword on the face, and the rings (κρίκοι) of his mail face covering press into his face, but without damage.

In the East Roman army were also widely employed headgears made of thick fabric, especially felt, but also leather (Haldon 2002, 77). These supply helmets present themselves in the written sources under the denomination of “Kamelavkia”, or more rarely under that of “πίλος, σκιάδιον”, or other expressions with the general meaning of headgear (Du Cange, Du Fresne 1688, col. 1168-1169, 1389). These “Kamelavkia” served as a protection against the weather conditions but could also be used in combat or other dangerous situations to replace the helmet, especially for the lightly armed soldiers (Kolias 1988, 85). The

reasons for the employment of these headgears in place of the helmets can be various. For instance the difficulty to put at disposal in adequate way a huge quantity of iron helmets, in case of levy of a big army, and also the noteworthy cost of them or also the not indifferent element of the body weight that an iron helmet constituted, especially for the light armed soldiers (Anna Komnena 1945-1967, II, 141, VIII, 5, 4).

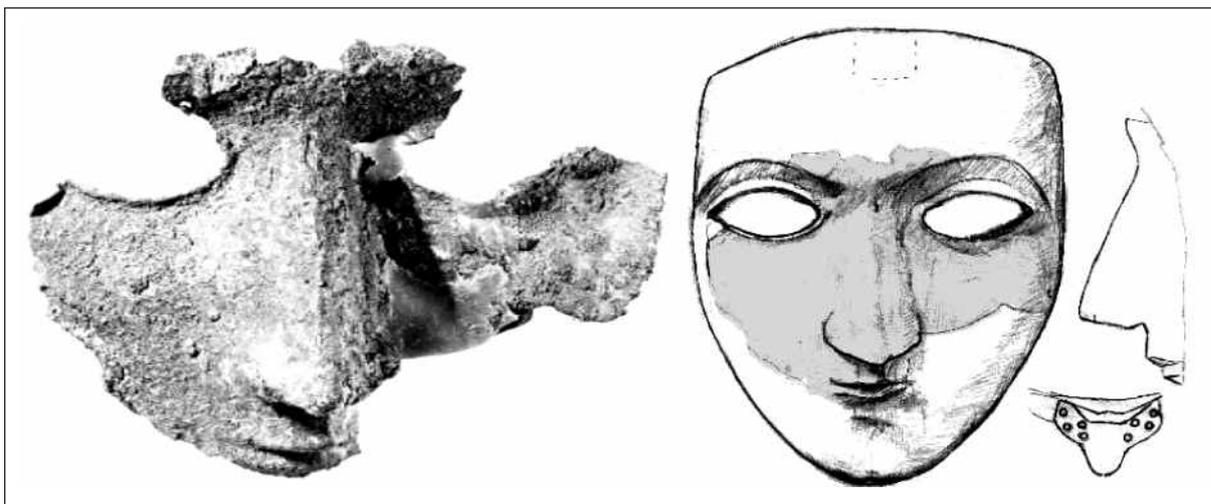
Although the word “Kamelavkion” is sometimes employed to indicate the imperial headgear – or more probably the imperial helmet – it means in general headgear and therefore it could be used to design either the precious cap of the Emperors either the more common cap belonging to anyone, so also to the soldiers¹¹⁹. We should in any case do not forget that the costume to cover the head with a cap has passed from the Scythians and other Iranian peoples to the Macedonians and to the Greeks (Head 1992, 18, Fig. 8). Already in the first imperial age the Legions and the Eastern troops used similar headgears, and the employment of the cap under helmet or in the place of the helmet is attested in the Roman Army since the 3rd c. BC, in the artistic and literary sources¹²⁰.

In the “Liber de Cerimoniis” are quoted – as pertinence for the soldiers of a warship for the expedition against the Arabs of Creta in 949 – ca. 50 “epilórika” (garments worn over cuirasses made of chain mail) and 50 “Kamelavkia” (Constantinus Porphyrogenitus 1829, 670, 3). Always according to the same book the chariot drivers of the Hippodrome wear *pointed headgear in the place of the helmets* (ibid., 353,16). Last but not least also the “Praecepta Militaria”, by quoting “kamelavkia” of thick cloth, suggest these caps like substitutes of metallic helmets: *thick caps of felts* (“καμελαύκια από κενδόυκλων παχέα”; *Praecepta...* I, 23; McGeer 1995, 12-13). They were strong and concrete protective headgears, made of felt or other padded material, used by infantry and cavalry, considering the impossibility to supply all the soldiers with metallic helmets. The Anonymus “De Obsidione” (*Anonymus...* 1947, 48,5ss.), written about in the time of the Emperor Constantine VII Porphyrogenitus, considers necessary

¹¹⁸ Complete iron coif of chain mail (34 x 26 cm), with the rings having a diameter of about 1 cm. It was originally preserved at the Faculty of Agronomy of Sofia (now in Archaeological Museum in Sofia ??), probably because fruit of a casual find during some works. The form is slightly egg-shaped, holes were conducted in the chain mail hood to leave just openings for the eyes, being otherwise the head completely covered. A (today) thin strip of mail covers the nose separating the eyes, but of course originally the structure was more compact and closed.

¹¹⁹ The word “kamelavkion” was the usual one to describe the normal headgear worn by civilians and soldiers (see for example Du Cange, Du Fresne 1688, Col. 560-561; Achmet, *Oneyrocriticon* 1925, 168). In Digenis Akritas (IV, 117) the diminutive “καμηλάκιτζιν” is employed to describe the headgear worn by the young greek nobleman while hunting (*Digenis Akritas* 1995, 69, n. 3).

¹²⁰ The cylindrical cap was the normal *pileus* for the soldiers (Vegetius 1984, I, 20; it was made “ex pellibus”, i.e. of leather – see Hottenroth 1887-1892, Pl. 74 /I/ and 20 /II/; Kolias 1988, Pl. II:1).



Pl. 37. Mask of helmet from Gorodishi (Iziaslavl) in Ukraine, late 12th c., collection of Hermitage Museum in Saint Petersburg (courtesy A. Negin).

Tabl. 37. Maska z miejscowości Gorodišče (Iziaslavl) na Ukrainie, XII w., zbiory Ermitażu w Sankt Petersburgu (dzięki uprzejmości A. Negin).

the presence of tailors in the armies during the expeditions so that they would deal with the “epilórika” and with the thick *Kamelavkia*, if you may need in place of the helmets (ibid., 48, 5 ss.). It is however not impossible that, from the point of view of the military meanings, in its generic sense of headgear, the word was also used to indicate simple bowl helmets: in fact the Medieval Latins, for instance, classifying among the weapons the “purpuntum”, indicated it like synonymous of “cappellus ferreus”, i.e. the helmet.

These cap helmets, made of felt, are well represented in the iconographic sources, which show various kind of “kamelavkia”: they could have a Phrygian shape (Hoffmeyer 1966, Fig. 12:19-20), or fashioned like an elaborated form of padded turban (ibid., Fig. 13:1-5,10) worn sometimes under the helmet or sometimes alone (the “Amazon caps” quoted by Hoffmeyer; see Fig. 10:1). Other types included a perfectly round cap, sometimes arched on the front, well fitted to the head exactly like a helmet¹²¹, in some example surmounted by a cross. Some shapes are typical of the Near East, and show a strong Islamic influence (ibid., Fig. 13:17-20).

Another kind of “καμελαύκιον” was the so-called “εσφενδόνισμενον”, so called because of

the extreme edge which covered the brow, and, extending in a wider circular shape, terminated in a conical apex. This apex could remain straight and high, in the shape of the Phrygian hat, or declined on one side (Fig. 64:3), to which sometimes were added tufts or hanging laces. There was finally a further kind of “kamelavkion”, cup shaped, narrower in the lower part which pressed upon the brow, wider and flat at the top (D’Amato 2005, Fig. 1), and it is the most employed by the soldiers in the iconography, probably directly descendant from the Late Roman “pileus pannonicus”. These typologies of “kamelavkia” were called “stémmata”.

Many of these hoods or headgears, in the iconographic sources, are fitted with a neck aventail made of the same material. The felt aventail is the same which is visible emerging from under the metallic helmets, often divided in horizontal or vertical rows (meaning the sewn segments of the surface, which were probably arranged in decorative way). According to Hoffmeyer and Nicolle these representations could also mean a fabric cover, in leather or felt, for the metallic helmets, what it can be true¹²², especially when the shape of such fabrics is not only round or conical, but when the headgears are represented

¹²¹ This hat was called *pilos ákonon*, i.e. hat-helmet. The expression was used by Flavius Josephus (*Antiquitates*, III, 7, 3): Ὑπὲρ δὲ τῆς κεφαλῆς φορεῖ πῖλον ἄκωνον, i.e. *Upon his head he wears a cap without a cone-shaped top* then translated by Justinus Aquileiensis: ...super caput autem gestat pileum in modum parvuli camelaci (calamaci) aut cassidis... i.e. ...over the cap he wears a hat like a small helmet... This expression seems to indicate exactly the kind of “kamelaukion” worn by many officers in the “Skilitzès miniature” (see comments of Goar to the work of Kedhrenos, 1839, 907).

¹²² See the front line Roman cavalryman of *folio 11v* (Fig. 52:1): the helmet did not look entirely metallic, but it is painted yellow and seems to be of composite construction, i.e. of copper alloy or bronze covered by a fabric of the same colour which form a sort of bulbous shape; Hoffmeyer (1966, 71) gives us the possibility that many illustrated headgears may represent leather or other fabric, but the miniature does not allow to give a definitive answer; in anycase the cover of the helmet with a fabric was a well consolidated Roman tradition since, at least, the 7th c. (see Nicolle 2002a, 311).



Fig. 66. 1-2 – *Centurion at the Crucifixion*, wall painting from Hermitage of St. Neophitos Monastery, late 12th c., Ktima, Cyprus; 3 – *Guard of King Joasaph*, “Baarlam and Joasaph manuscript. Ms. 436”, folio 114, late 12th – early 13th c., Iviron Monastery, Mount Athos (1-2 – photo by R. D’Amato; 3 – courtesy of the Iviron Abbot).

Ryc. 66. 1-2 – *Ukrzyżowanie*, malowidło ściennie z Ermitażu klasztoru św. Neofita, koniec XII w., Ktima, Cypr; 3 – *Straż króla Joazafa*, „Manuskrypt Baarlama i Joazafa. Ms. 436”, folio 114, koniec XII – początek XIII w., klasztor Iviron, góra Athos (1-2 – fot. R. D’Amato; 3 – dzięki uprzejmości opata klasztoru Iviron).



Pl. 38. Mask of helmet from Chersonesus in Ukraine, late 12th c. or 14th c., Hermitage Museum in Saint Petersburg (courtesy A. Negin).

Tabl. 38. Maska hełmu z Chersonezu na Ukrainie, koniec XII lub XIV w., zbiory Ermitażu w Sankt Petersburgu (dzięki uprzejmości A. Negin).

bulbous or discontinuous in their external form. The wearing of a cap or hood over the helmet was a fashion that certainly show eastern (probably Iranian)¹²³ influence upon Roman military style, which seems to begin at least in the 7th c. (Goliath Cyprus silver dish – see Nicolle 2002a, Fig. 50). Certain officer or guardsman helmets are shown in the artworks as covered by eastern embroideries, in a way not different from a silk woven headgear (Figs. 55:2, 64:5). It is probable that such helmets were effectively covered by a hooded layer which lined them from outside, composed by precious and damasked silk. Nicolle suggested the strong possibility that some peculiarly elaborate neck-covering or helmets visible in the art of Byzantium

are based on caps and headcloths which were worn over the helmet or even alone, or on the head (Fig. 65:1-2) under the helmet (Fig. 46:1), and stressed upon the derivation of these kind of “Kamelavkia” from Iranian and Alan-Caucasian prototypes. From the other side, we should not forget that existed also helmets (“περικεφαλαία”) made of thick silk (“ἐκ σηρικῶν πεπλῶν”) like those that Alexios Komnenos gave to many of his soldiers, having the same color of the iron ones, in the battle against the Pechenegs at Levunium in 1091 (Anna Komnena 1945-1967, II,141 /VIII, 5, 7/). Apart from the tactical reasons of such a stratagem, it is obvious that these helmets had a certain protective effectiveness, although not that of the metallic

¹²³ We should remember the “bashliq” cap of felt and leather of the Scythian and Achemenid armies; this aristocratic form of headgear survived well in Sassanian times and comparable Alan caps were found in a Caucasus grave of the 8th-9th c., decorated in brocade (Fig. 64:5-6; Nicolle 2001, 21 Pl. A2).

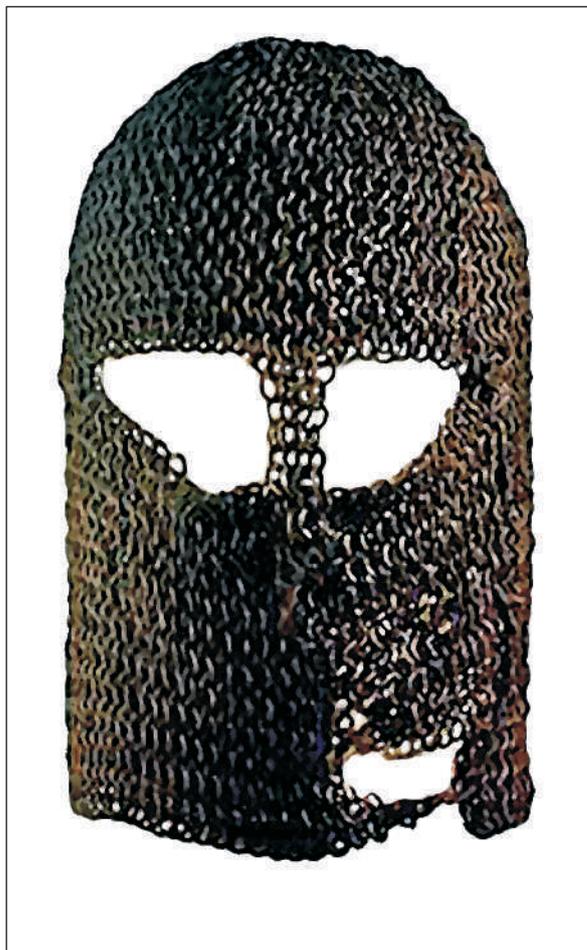


◁ Fig. 67. 1 – *Leo escapes with the Roman Army at the battle of Adrianopolis*, detail, “Skylitzès Matritensis”, folio 12r, 12th c.; 2 – *Fleeing Philistines*, detail, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 191r, 1066 AD, British Library, London; 3 – *The death of Uriah*, detail, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 63v, 1066 AD, British Library, London; 4 – *The wars of David – the King on the throne*, detail, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 74v, 1066 AD, British Library, London; 5 – *David fleeing Absalom – King Absalom*, detail, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 10r, 1066 AD, British Library, London; 6 – *David’s wife, Michal, letting David down from a window*, detail, “Ms Studite Psalter”, “Ms. Add. 19352”, folio 93r, 1066 AD, British Library, London (1 – after Skilitzès 2000; 2-6 – courtesy of British Library).

◁ Ryc. 67. 1 – *Leon wraz z armią rzymską ucieka z pola bitwy pod Adrianopolem*, szczegół, „Skylitzès Matritensis”, folio 12r, XII w.; 2 – *Uciekający Filistynowie*, szczegół, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 191r, 1066 r., British Library, Londyn; 3 – *Śmierć Uriasza*, szczegół, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 63v, 1066 r., British Library, Londyn; 4 – *Wojny Dawida – król na tronie*, szczegół, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 74v, 1066 r., British Library, Londyn; 5 – *Dawid ucieka przed Absalomem – król Absalom*, szczegół, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 10r, 1066 r., British Library, Londyn; 6 – *Żona Dawida, Mikal pomaga Dawidowi w ucieczce przez okno*, szczegół, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 93r, 1066 r., British Library, Londyn (1 – wg Skilitzès 2000; 2-6 – dzięki uprzejmości British Library).

ones. Moreover, they were fitted to light infantry, who needed to be quick and mobile on the battlefield, not encumbered by heavy armour.

Silk headgears, covering or not a proper helmet, are visible in some important sources. This is the case for instance of the 9th c. helmets of the (possibly) *Pharganoi* mercenaries represented in the folio 170r of “Manuscript of Saint Gregory of Nazianus” of Paris, “Ms. Gr. 510” (Fig. 46:1 – covers worn under the helmet, probably on the mail coif); of the cover of the Joshua helmet in the Church of Cavusin, Göreme (Figs. 55:2, 64:4, helmet cover); of some helmet cover in various manuscripts and codes (Fig. 20:2). Among this category was the Imperial “Hyperperon”, shaped like a flame, visible for instance in the “Vatopedi code” (Fig. 21:1-2). Metallic variants of it are already visible on two miniatures of the “Ms. Gr. Par. 923” (Weizmann 1979, Pls. XXXII:119 /folio 91r – David and Goliath/ and CLIV:716 /folio 227r – woman offering his cooked baby as food to the soldiers/; the helmets are shaped like a metallic crown made of flanked segments). A possible cap cover for helmet was the brocade silk covered coif, used for instance by the Arab Banu Habib (Nicolle 1982, 16) (who converted to Christianity in 963 AD passing on the Roman sides with all their arms and armours) which is visible in contemporary works, like the cap of the Aght’mar warrior¹²⁴ (Fig. 65:1; Nicolle 1982, 20; 1996b, 57). This last wears a mail coif or tipped and apparently a hood¹²⁵ like the Alan one found in Moshchevaya Balka, Northern Caucasus, Karachai-Cherkess Republic, dated to the 8th-9th c. (Pl. 40; Nicolle 1982, 27, Fig. A; 1996a, 77; 1998, 21; 2002a, 313, Fig. 10;



Pl. 39. Iron coif of chain mail from Bulgaria, late 12th c., collection of Faculty of Agronomy or Archaeological Museum in Sofia (photo courtesy of A. Negin).

Tabl. 39. Kaptur kolczy z Bułgarii, koniec XII w., zbiory Fakultetu Rolnictwa lub Muzeum Archeologicznego w Sofii (fot. dzięki uprzejmości A. Negin).

¹²⁴ The sculpture is representing the duel between David and Goliath, dressed like a heavy infantryman of Arab-Armenian-Roman borders.

¹²⁵ Material: silk (samite), leather, wood and gilding. This Alan-Saltovian silk covered leather hood (height – 50 cm), called “the chieftain’s helmet” presents an iron finial. It is designed like a helmet, covered with Sogdian silk. The pattern is however completely East-Roman, with Sassanian influence. In the lower part the cap is divided in blue indigo strips, while three big “orbiculi” (round decorative patches) ornamented with geometric patterns are filling up the main bowl. The cap, collected in 1905 by N. B. Vorobyev, was transferred to Hermitage Museum in Saint Petersburg (Inv. No. K3 4576) in 1935 from the Museum of Anthropology and Ethnography, Russian Academy of Science. Close parallels: “Goliath”, Church of Aght’mar, in situ, Lake Van, Turkey, the 10th c. (Fig. 65:1).

Karasulas 2004, 31). A possible similar cap is worn over the helmet by a Roman general (representing Joshua) and his soldiers painted in the on the walls of the Church of Saint George Diasorites, at Naxos (Fig. 70:1-2). The side flaps seems to indicate a felt cap, decorated with silk and, in the case of Joshua, also ornamented with precious stones. From the other side we cannot exclude that here we are in front of a conical round helmet with extension to protect the neck, gilded and precious chiselled in the case of the helmet of Joshua and simpler for the other soldiers.

In the "Skilitzès" some helmets (of conical or bulbous shape) are instead worn with a sort of turban or hood (Figs. 9:1, 10:1, 11:1), wrapped around the bowl, visible only on the top, according to the near Eastern costume. The turban continues also with the aventail of fabric, a clear Islamic influence on the Roman armament. Maybe these kinds of helmets/headgears are to be identified with the "κυνέη" of the overmentioned passages of Anna Komnena and Eustathios.

Many of the felt caps wore by the Roman soldiers in the miniatures and frescoes recall the Phrygian shape, legacy of the Greco-Roman tradition and descendant from the ancient Scythian and Anatolian huts of the same typology, so often represented in the ancient Greek paintings, widely employed in the Roman world and used therefore in Byzantium until the end of the Empire. Others are caps of new origin, attached to the Slavic and Russo-Varangian tradition, like high pointed or conical caps made probably of furs (Fig. 59:1, 64:3, 65:1). It is interesting to link the representation of one of these huts, in the Church of the Anargyroi in Kastorià, on the head of a soldier, with a passage from Niketas Choniates (Niketas Choniates 1984, 177 and 135)¹²⁶.

Usually the "kamelavkion" was worn also as a padded protection of the cap under helmet, in conjunction with the turban or "phakeolis"/"phakiólion" (Kolias 1988, 85-87). In fact the

"φακέωλιος" (as the etymology of the name tells us), was a particular headgear, similar to the turban, composed by a complex linen wrapping, i.e. a long bandage mainly of linen, which was wrapped around the head beginning from the front (Constantinus Porphyrogenitus 1829, 584; Haldon on Constantine Porphyrogenitus 1990, 279). Adamanthos Korais (Coresius) of Chios wrote in fact (Codinus Curopalates 1839, 240-241) that the "φακέωλιος" was a kind of "tiara" or typical military hut, from which the head was wrapped in the same way in which a belt is wrapped around the body. It was lower and narrowest of a usual turban, and wrapped the head with its complex linen dressing. In such a way we can understand also from a passage of Achmet, "Oneirochritikon" (1925, 226): *...If someone will see a "φακέωλιος", he will receive a high military rank, proportionally to the length of the circumference of the "φακέωλιος"...*

The "Praecepta Militaria" (1995, I, 23) contain interesting additional information on it, saying that the "kamelavkion" was fixed on the head of the soldiers by means of this handkerchief for the head, made of linen and wrapped around the head like a band. This is widely visible on the iconography of 11th c. (D'Amato 2012a, 16, 18, 33)¹²⁷ and 12th c. (Hoffmeyer 1966, Fig. 13:6-7)¹²⁸. A similar way to fix the "kamelavkion" can be found in the "Parekbolai" (1949, 18, 4), when it refers without any doubt to the "Tiara", i.e. the Persian "kamelavkion". This one was fixed behind the neck by a band ("τὸ δέσμα"), which turned frontally on the brow. The imperial one was probably of purple or gold: a band made of pure purple silk was fastened around the head of the dead Emperor, representing a sort of "καμελαύκιον" or "στέμμα" made of segments, i.e. long and wide bands of thick silk wrapped around his head (Constantinus Porphyrogenitus 1829, II, 60). This was obviously a reminder of the Imperial crown or "διαδήμα", a band of silk ornamented of precious stones that was worn on the front and fastened

¹²⁶ *...At that time an Hungarian, still wearing his native hat and dress, was being led away captive. A certain Roman fell upon him, struck a blow with his knife, and killed him; he put the Hungarian's hat on his own head...but...from among the troops in the rear, another even more violent Roman came upon the scene with sword in hand and, believing him to be a Hungarian captive, smote him a mortal blow upon the neck and dispatched him forthwith...*

¹²⁷ Representation of light infantry from folio 316 of Basil II's "Menologion" ("The Holy Fathers of Sinai slaughtered"), in Pio Franchi de Cavalieri (1907, 86); Iohannes, "Proximos" of the "Skhólai", of Armenian origin, with a white "phakiólion" on the head, from Armenian Adrianople Gospel, Mechitarist Library of Saint Lazzaro, Venice, Ms. 887/116 (see also Adontz 1965, 170); martyrism of Saint Porphyrius, from folio 316 of Basil II's "Menologion".

¹²⁸ In my opinion the fashion remembered by "Praecepta Militaria" (1995, I, 24), about wearing of "kamelavkion" by means of the "phakiólion", should be interpreted as putting on the turban over the "kamelavkion", in a way that the hat was more firmly fixed on the cap. In fact, at least for the 10th-11th c., the "phakiólion" is really a turban worn by leaders and soldiers under the helmet (or instead of the helmet): see for example Constantinus Porphyrogenitus (1829, 500), where the small Emperor is triumphing in Constantinople in military costume with a white-gold decorated turban worn on the cap; also the armed warrior of the late 10th c. representing Joshua painted on the walls of the Hosios Loukas Monastery shows the lower part of a "phakiólion" visible under his one-piece lacquered white helmet (Figs. 16:1-2; Kolias 1988, Pl. XIII).



Fig. 68. 1 – *David and Saul*, detail, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 65v, 1066 AD, British Library, London; 2 – *Joab slaughtering Absalom*, detail, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 181r, 1066 AD, British Library, London; 3 – *The victory of a man over many*, detail, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 196r, 1066 AD, British Library, London; 4 – *The monk Philomiliotos predicts to Vardanos that he will be Emperor*, detail, „Skylitzès Matritensis”, folio 15v, 12th c.; 5 – *The wicked man hunting*, „Chludov Psalter”, folio 10r, 829-837 AD; 6 – *The army of Absalom pursuing David*, detail, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 2v, 1066 AD, British Library, London (1-3, 6 – courtesy of British Library; 4 – after Skilitzès 2000; 5 – after Щенкина 1977).

Ryc. 68. 1 – *Dawid i Saul*, szczegół, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 65v, 1066 r., British Library w Londynie; 2 – *Joab zabijający Absaloma*, fragment, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 181r, 1066 r., British Library w Londynie; 3 – *Zwycięstwo jednego nad wieloma*, fragment, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 196r, 1066 r., British Library, Londyn; 4 – *Mnich Philomiliotos przepowiada Bardanesowi, że ten będzie cesarzem*, szczegół, „Skylitzès Matritensis”, folio 15v, XII w.; 5 – *Polujący niegodziwiec*, „Psalterz Chłudowski”, folio 10r, l. 829-837; 6 – *Armia Absaloma ściga Dawida*, fragment, „Ms Studite Psalter”, „Ms. Add. 19352”, folio 2v, 1066 r., British Library w Londynie (1-3, 6 – dzięki uprzejmości British Library; 4 – wg Skilitzès 2000; 5 – wg Щенкина 1977).



Pl. 40. Leather and silk cap from Moshchevaya Balka, Northern Caucasus, Karachai-Cherkess Republic, 8th or 9th c., collection of Hermitage Museum in Saint Petersburg. *Photos by R. D'Amato* (courtesy of the Museum).

Tabl. 40. Skórzano-wełniana czapka z miejscowości Moševaâ Balka, północny Kaukaz, Karaczajo-Czerkiesja, VIII lub IX w., zbiory Ermitażu w Sankt Petersburgu. *Fot. R. D'Amato* (dzięki uprzejmości Muzeum).

behind the neck. Probably the “phakiólion” was wrapped as a band, maybe around the head, maybe around the whole “kamelavkion”, to further protect the head from the sunrays. Sometimes it was embroidered with interwoven gold thread: the Ethiopian royal turban or “phakiólion” was in gold, as attested by Theopanes (1883, 7, p. 244) who, speaking about Aretes, King of Ethiopia, says: *...having on his head a golden linen phakiólion, with on both sides of the bandage 4 laces, and a gold maniakion around the neck....* Also if this source refers to the end of 6th c., it can be considered of value also for the successive centuries, giving us precious informations on the turban fastening system.

The hood or the padded cap (“κουκούλιον”; Kolias 1988, 56) which enveloped the head was usually linked with the monk dress, but padded Levantine caps are represented on the head of the executioners of Zaharias in the Cappadocian church of Peristrema (the 9th c.; Fig. 65:2)¹²⁹ and especially as the main characteristic cap of the Roman “Hekatontarchas” (Centurion) Longinus at the “Stavrosia” (D’Amato 2012a; see also Fig. 65:4-5). This was for sure a military headgear worn under the helmet, and reserved to the officers, probably with this rank. It was, in some instance (Fig. 65:4), a Levantine variant of the “phakiólion”, nothing more than a scarf linked around the head. According to Theopanes it was worn closed with four knots; in the case of the “hekatontarchos” it seems to be fastened with a single knot on the back, forming two short hanging stripes. Other images of “Hekatontarchai” in Cappadocian Frescoes of the 11th c. are showing instead the most usual shape of the “Phakeolis” (Fig. 65:5), and more simplified or articulated forms are visible in the 12th and early 13th c. iconographies (Fig. 65:1-3). It has been proposed by Revel-Neve (see Grotowski 2010, 285-286) that such headgear would characterize the owner like an enemy of the Christians, recalling the “tallit” of the Jews, and therefore such representation should be considered just an artistic way without adherence with an actual headgear worn by the soldiers. It is not like this. The man who is usually wearing it, the Centurio Longinus, is a Saint for both Western and Eastern Church: and in fact in the Cappadocian Paintings like in many church paintings he is represented with the nimbus. So it is exactly the opposite: this kind of head is worn, in the iconography, by a champion of Christianity, Saint Longinus. And it reflects a real headgear of the Roman officers with the rank of “Hekatontarchos”. Also Grotowski did not exclude that the head-scarf

of the Centurion is a kind of actual oriental headgear adopted from the Roman Eastern world.

Conclusions

In this contribute my attempt was to create a first necessary database of the possible typologies of East-Roman helmets in the so-called middle Byzantine period of the Roman history. I also tried to identify as “Byzantine” 34 specimens of Middle Age helmets. While I can say with a certain overconfidence that most of presented specimens (Pl. 1:1-6, 2-7, 9-12, 17-18, 20-22, 25, 31-35 and 39) are for sure Roman medieval helmets and some of them used by Roman soldiers or guardsmen, some caution should be used for the other helmets here listed and described.

I am enough sure about the Roman pertinence of the five helmets (Pl. 13-14, 23-24, 26-28), and of the mask (Pl. 37). The fact that the conical helmets appear so frequently in the Nomad graves, but are not known from the territory of “Romania” and therefore they could not be considered of Roman origin, it is an old concept which I would like to dismiss. First of all Romans were not buried with weapons and the most part of the helmets from Byzantium are not published or not excavated, or they are secretly kept in private collections where the access is not so easy. Secondly, these typologies of helmets are clearly depicted in the art of Byzantium as widely employed by Roman warriors and the miniatures or the artworks depicting them are contemporary to the helmets themselves. Thousand of miniatures show these helmets on the head of Roman warriors of the 11th and 12th c.

Because of the simplicity of the form, these kinds of helmets were very broadly used in South-Eastern Europe and in Byzantium as well. Also if it is not possible to establish their origin, I think Byzantium is a good candidate for it, developing a form of helmet already used by the auxiliaries of the classical Roman army in the East. These helmets appear already in the oldest miniatures of 10th c. And the fact that they were found in Nomad Graves mainly of chieftains it is the proof they were purchased from a superior culture. In the case of the Babici helmet this hypothesis is also supported by the vegetal decoration of the rim and of the top. The helmet of Ostra (Pl. 30) was found in the same area in which was found the helmet of Pl. 22 which is, according to me and various other scholars, coming from Byzantium. And until the 13th c. the Region of Vatra Moldovitei was under direct or indirect control of Byzantium, the objects of material culture being identical to

¹²⁹ Representing maybe priests killing Zaharias in the version of Apocriph Gospels; so these figures are not necessarily military men.



Fig. 69. 1 – Marble plaque with the ascension of Alexander the Great, 12th c., collection of sculpture in Karababa Fortress, Chalkis; 2 – *Joshua of Navi's army destroys the army of Ay*, ivory casket, 10th c., Byzantium, collection of Metropolitan Museum in New York (1-2 – photo by R. D'Amato; 2 – courtesy of the Metropolitan Museum).

Ryc. 69. 1 – Marmurowa tablica ze sceną wyniesienia Aleksandra Wielkiego, XII w., zbiory rzeźby w twierdzy Karababa, Chalkida; 2 – *Jozue na czele armii niszczy wojska miasta Aj*, szkatułka z kości słoniowej, X w., Bizancjum, zbiory Metropolitan Museum w Nowym Jorku (1-2 – fot. R. D'Amato; 2 – dzięki uprzejmości Metropolitan Museum).



Fig. 70. Church of Saint George Diasorites, Naxos, late 11th c.: 1 – *Joshua*; 2 – *Soldiers of Joshua* (1-2 – courtesy of G. Theotokis).

Ryc. 70. Kościół św. Jerzego Diasoritesa, Naksos, koniec XI w.: 1 – *Jozue*; 2 – *Żołnierze Jozuego* (1-2 – dzięki uprzejmości G. Theotokisa).

those from Greece, Bulgaria, Balcanic countries and Turkey.

The helmet from Ozana has been recognized by various scholars as East-Roman. Its main problem is the datation. I do not exclude even the possibility of the 10th c. origin and its re-employment during the 14th c. But is in anycase a East-Roman helmet. In my reconstruction of this helmet in a previous job the final outcome fitted very well with the 10th and 11th c. iconography. Iconography that i consider completely reliable, because it was not reasons for the authors of paintings, miniatures and other artworks represent fantastic helmets with no attinence with the reality, when they represent with a photographic precision even the chapes or the hilts of the swords. The same consideration have to be taken on account for the helmet of Yasenovo (Pl. 19) considered East-Roman by the most part of the scholars, except Gorelik.

More problems are concerning four helmets (Pl. 8, 16, 36 and 38). The helmet of Chamoson is probably not East-Roman but is a kind of helmet

widely used in the territories under the control of East-Romans or their vassals in Italy. It stays inside the typology of helmets used by East-Romans, although not necessary of East-Roman construction. Its derivation is in anycase from Roman prototypes.

The helmet of Gulbische is a Varangian one (of the family of the Great Moravian helmets) and its Slavic origin is not discussed: but it belongs to a kind of helmets widely represented in Byzantine art. The helmets under Pl. 30 and 32, as well, are of Nomad-Iranian-Turanian origin. But I do not exclude a possible Roman influence in the creation of such mask helmets, worn by chieftains of peoples who fought widely as mercenaries inside the Roman army of the 11th-13th c. So if we would like to have an idea of how the mask helmets looked in Byzantium in these centuries, we should take in consideration the Russian and Cumans ones, beside a more genuine Roman tradition of continuity (Pl. 35 and 37). In anycase, all these categories of helmets are visible in the iconography of the

period representing soldiers of the Empire. It is an argument enough sufficient, by my side, to consider this typological attempt a first step in the analysis of the development of the Roman helmet in the middle age, with the identification of three main different roots of evolution:

1. from the old Roman tradition;
2. from the influence of the Iranian and Steppe peoples;
3. from the Western models.

These three categories mixed in a magnificent result, giving us products of high military technology and of beautiful facture. Iconography is at the moment the main source. A source very important and for me absolutely reliable, but always with the difficulty to locate in the actual archaeological panorama the effective specimens of represented "Byzantine" helmets. Only future excavations in the territories which were inside the boundaries of the Empire, in the Russian regions of the Black Sea and especially in the old capital City, where thousand of elements related to the military equipment of Byzantium are waiting for a proper excavation and/or publication, will put more light on this extremely difficult but fascinating topic.

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Library; the Victoria & Albert Museum, London; the National Library of Torino; the Bibliothèque Nationale de Paris; the Biblioteca Marciana of Venezia; the Metropolitan Museum of New York; the Hermann Historica; the Russian Caucasian Archives; the Biblioteca Apostolica Vaticana; the Brooklyn Museum; the Museum of the Cathedral of Saint Sophia in Kiev; the Biblioteca Capitolare di Vercelli, Italy; the Polish National Museum in Warszawa; the Hermitage Museum, the Historical museum of Kazanlik, Bulgaria; the Halûk Perk Müzesi, Istanbul; the Military Museum in Belgrade; the Pernik regional museum; the Schweizerisches Landes Museum, Zurich; the State Historical Museum in Moscow; the Local museum of Islamic Art, Kairouan, Tunisia; the Archaeological Museum in Istanbul; the History Museum of Suceava Museum; the National Museum of Archaeology and History of Moldova; the Institut of Archaeology in Stockholm;

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Raffaele D'Amato

STARE I NOWE ŹRÓDŁA DO DZIEJÓW WSCHODNIORZYMSKICH HEŁMÓW Z IX-XII WIEKU

Streszczenie

Historia hełmów bizantyńskich, jak i analiza ich form, jest tematem mało rozpoznany przez badaczy, jednak wartym bardziej dogłębnych studiów, nie tylko z punktu widzenia historii wojskowości, ale również wpływu, jaki wywierały na wschodnią i zachodnią sztukę wojenną. Formy IV-V-wiecznych hełmów były udoskonalane z uwagi na pojawiające się nowe zagrożenia wynikłe z nieustannych wojen i konfrontacji Imperium z jego wieloma sąsiadami. Główny problem w badaniach stanowi jednak mała liczba znalezionych zabytków, jak i brak satysfakcjonującej dokumentacji egzemplarzy z interesującego okresu (IX-XII w.) pochodzących z granic Cesarstwa Wschodniorzymskiego, właściwie wyeksplorowanych i publikowanych. Celem tego przyczynku jest lepsze oświetlenie tego militarnego ekwipunku, poprzez analizę źródeł pisanych i ikonograficznych z okresu między IX a XII w. – ostatnich złotych stuleci militarnej chwały Bizancjum.

Analizie poddano również wzmianki o hełmach, jak i użyte do ich opisu terminy, pochodzące z greckich źródeł pisanych z IX-XII w. Wykazała ona, że wielu autorów posługiwało się subiektywnie i nieświadomie różnymi terminami, by mówić ogólnie o hełmach, duża część natomiast świadomie używała specyficznych terminów, wskazujących na posługiwanie się przez wojskowe jednostki różnymi konkretnymi rodzajami hełmów.

Druga część omawia kształty dzwonów osłon głowy, jak i użyte do ich wykonania technologie. Na tej podstawie przedstawiono próbę możliwej typologii form hełmów używanych w Bizancjum i na Bałkanach między IX a XII w. n.e.

Trzecią część poświęcono ogólnie hełmom bizantyńskim: ich konstrukcji, zastosowaniu, materiałowi z których je wykonywano, jak i ewolucji. Uwidoczniono, jak hełmy wschodniorzymskie, będące kontynuacją i formami rozwojowymi egzemplarzy

późnorzymskich, poprzez kontakty Bizantyńczyków z innymi ludami, jak Persowie, Frankowie i Awarowie oraz ludy stepowe, przeszły poważne przekształcenia. Kolejne ustępy poświęcono sposobom noszenia hełmów oraz dekoracji występującej na ich powierzchni.

W analizie uwzględniono 34 publikowane hełmy, prezentujące różne formy wyróżnione przez autora:

a) regularnie zaokrąglone hełmy kuliste lub koniczne, niekiedy z nieznacznie przesuniętym dzwonem, wykonane z jednej płyty żelaza bądź znitowanych ze sobą segmentów;

b) kształtu frygijki lub hełmy żłobkowane;

c) proste hełmu półkuliste, wykonane z jednego kawałka metalu;

d) dwuczęściowe hełmy z granią;

e) hełmy koniczne ze spiczastym dzwonem, niekiedy cebulowatego kształtu, wykonane z wielu segmentów (spangen-helmen);

f) proste hełmy koniczne, niekiedy spiczaste, wykonane z jednego lub dwóch połaci metalu;

g) zaokrąglone o konstrukcji segmentowej, pochodzące bezpośrednio z kulistych hełmów typu *Bandenhelmen* z okresu późnorzymskiego;

h) hełmy z rondem, kapaliny, wykonane z jednego kawałka blachy ze spiczastym lub zaokrąglonym dzwonem;

i) hełmy z maskami;

j) hełmy tekstylne i inne osłony głowy.

Obok fotografii oryginalnych zabytków uwzględnionych w artykule ilustruje go duża ilość wyobrażeń z dzieł sztuki: manuskryptów, malowideł, ikon.

Tłumaczył Arkadiusz Michalak

