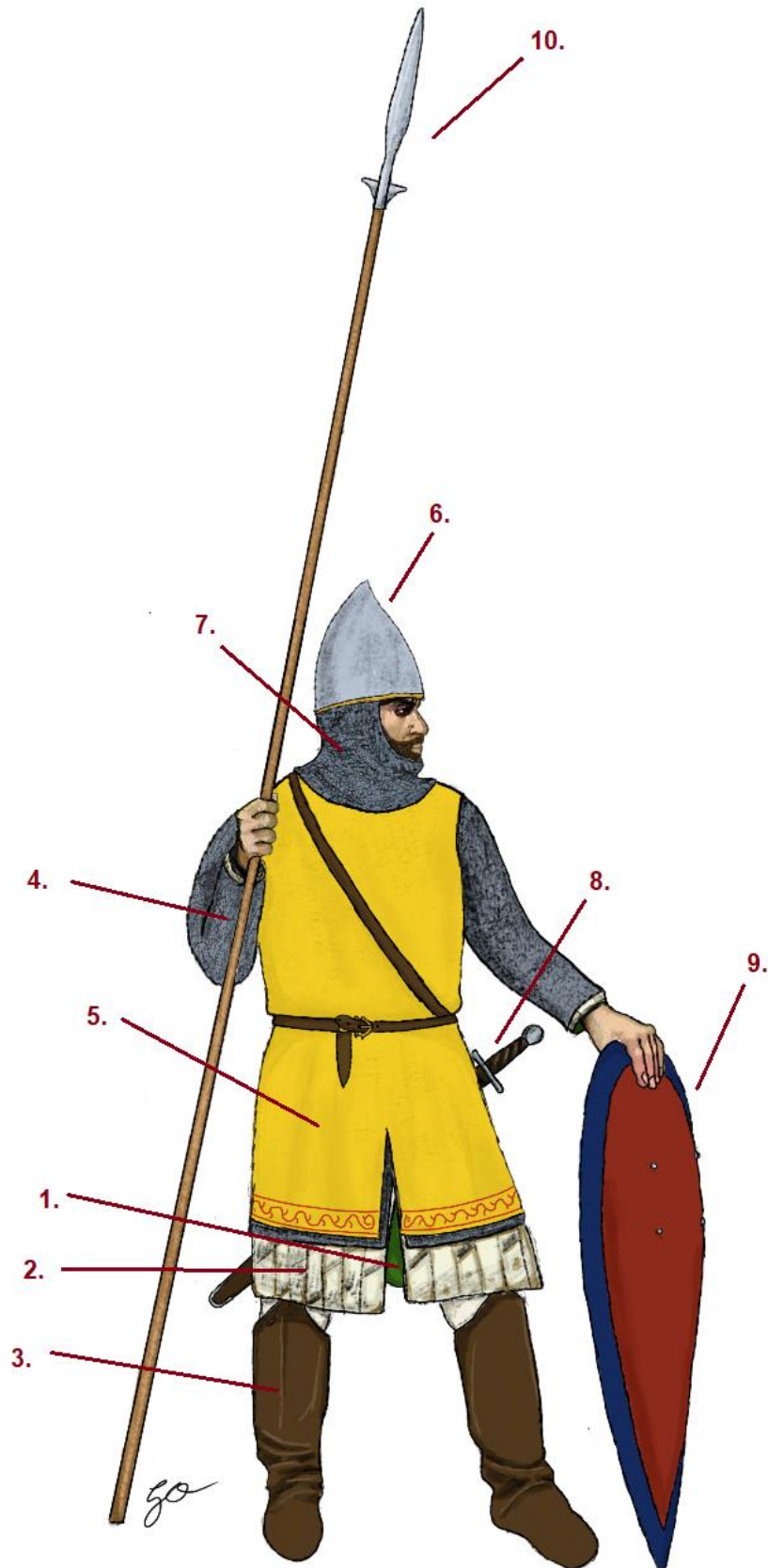


Byzantine Army: The Concise 10th-11th century AD Imperial Infantry and Cavalry Soldier (edited and updated) - by John Dandoulakis (BA War Studies, MA European and International Politics)

(Illustration by: Greg Owen)

After almost two decades of research on the subject of byzantine arms and armour, and military history, as well as experience with re-enactment and experimental archeology, this presentation marks the culmination and fulfilment of a long-due obligation. The thesis of this presentation aims to provide an archeology-based, evidence-based and profoundness-based answer to the ever-troubling question of what a 10th-11th century (the high byzantine era) imperial soldier most probably appeared like. For the sake of this research, any reliance on iconographical sources (byzantine hagiography, miniature manuscripts and religious ivory carvings) was eliminated completely, and it is only cited and linked to when there exist one or more elements that can allude, even vaguely, to archeological evidence and/or written source descriptions. The latter have been treated as the main and primary gauge of this research, as well as the careful reading and translation of primary medieval Greek textual sources.

PICTURE 1:



In “Picture 1” the most standard and common panoply of a 10th-11th century AD byzantine medium-to-heavy infantry and cavalry soldier is presented. The “basicness” of this panoply is defined by the prescription, by Leo VI Wise’s Taktika (diataxis V-VI), that every soldier should - at the least - wear a chainmaille (lorikion alysideton). Sporting a gambeson (nevrikon) is only allowed for when the soldier could not afford a chainmaille, so it is not considered a standard practice or image for a byzantine soldier.

1. The **chiton** (χιτών) meaning a tunic. A basic low-class to middle-class tunic to the length of the knee as a standard undergarment for the soldier of the medieval period.

2. The **kavvadiion/nevrikon/bambakion** (καββάδιον/νευρικόν/βαμβάκιον). A thick padded armour made by coarse linen and stuffed with raw wool and cotton. It was literally the byzantine version of a gambeson and very likely developed upon and from the roman subarmalis. In Leo VI Wise’s “Taktika” it is clearly defined that the nevrikon (or *kavvadiion* in Nikephoros Phokas’ and Nikephoros Ouranos’ texts) could be worn either together with a lorikion or - if a lorikion was not available - the nevrikon could serve as the next best protection. In case of the former, however, when the lorikion and the nevrikon were worn at the same time, contextual research, the knowledge of general practice in medieval times and modern re-enactment experience indicate that the padded linen piece of armour, would be worn below (and not above) the metallic lorikion. This would serve both as an extra layer of protection and as a shock absorber. This is further supported by modern-day re-enactment experiments which have demonstrated that any type of padded armour, worn above the metallic armour, loses its protective function against heavy penetration attacks (i.e., a flying arrow or a heavy spear), while it has significantly higher chances to absorb some part of the penetration force, when worn below metallic armour parts. Moreover, primary written accounts from the byzantine era allude to the fact that the lorikion (chainmaille) was worn above any other protective gear and proved astonishingly effective, even against arrow fire.

3. Leather boots. Knee-length leather boots are widely attested, both by Leo VI Wise and the later Nikephoros Phokas treatise as pedila (πέδιλα = a greek word that literally means “footwear” so it could in fact apply to any kind and size of leather shoe or boot), mouzakia (μουζάκια) or tzervoulia (τζερβούλια), but they also appear largely in miniatures and ivory carvings from the period (images 4, 5, 10, 11).

4. The **lorikion alysideton** (λωρίκιον αλυσιδέτων). Lorikion was the medieval Greek version of the latin word for body armour: lorica, and it was the chainmaille. The chainmaille is the most widely attested by archeological findings piece of byzantine armour and, as prescribed in “Taktika”, it was the most basic element of metallic protection for the imperial and thematic troops. It was worn above the kavvadiion. However, unlike the kavvadiion/bambakion, the lorikion is not mentioned in Nikephoros Phokas’ “Strategiki Ekthesis/Praecepta Militaria” and this has baffled researchers for a long time. Some scholars have suggested that Nikephoros’ treatise has to be taken plainly literally, however while the single use of the nevrikon/kavvadiion is also mentioned and allowed by Leo’s “Taktika” as a last resort, the presence of the chainmaille is stressed upon as mandatory. Hence, it makes for a direct and unwarranted contradiction between the two works, which were written only a few decades apart. Besides, “Strategiki Ekthesis” also omits the mention of use of metallic helmets. That is also very problematic to be taken in literal terms, and should trigger any serious researcher to realise that something else is at hand with Nikephoros’ treatise. Because, while it is true that - in some cases - a large infantry scutum shield could substitute the role of metallic torso armour, how can anyone suggest that the infantry of the strongest and most advanced army of its time went to battle without any metallic headgear? This is certainly a very far stretched claim and by no means plausible or logical for a pre-gunpowder era army. The Macedonian era byzantine army was not large in numbers, far from it; however, it was perhaps the richest of its time and the richest the Byzantine Empire ever fielded. Soldiers without helmets can make for light reserve infantry; not for the cream of

the crop of medieval warfare. It is therefore far more possible that the “Strategiki Ekthesis” which was written only a few decades later than “Taktika”, and is much shorter in length, is simply a supplementary and updated work, meant to emphasise on selected aspects, which were considered worth of highlight and clarification based on the increased military experience the byzantine army had acquired in the 10th century AD. Hence, such basic and fundamental armour elements as the chainmaille, that were already mentioned in Leo’s treatise, which must have already been a common read for every general of the period, was considered a standard and common knowledge and thus omitted for the sake of brevity.

5. The **epilorikon imation (επιλωρικών ιμάτιον)** meaning “over-the-lorikion cloth”. The epilorikon is mentioned very briefly in Leo’s Taktika (diataxis V-VI) and within one very specific context only: as a simple fabric cloth worn above the lorikion (hence why it’s called “epi-lorikon”, meaning “over the lorikion”). It is highly likely that the epilorikon was in fact very rarely used in real practice, as it is certainly not considered mandatory in the treatises and it is completely absent from any surviving iconographical source. However, the epilorikon was definitely just a fabric surcoat; not a padded gambeson.

6. The byzantine **"phrygian" helmet**. Based on 11th-12th c. findings at Branicevo and Pernik castles, but researchers soundly claim it must have existed since as early as 10th c. It also matches with pictorial evidence from the same period.

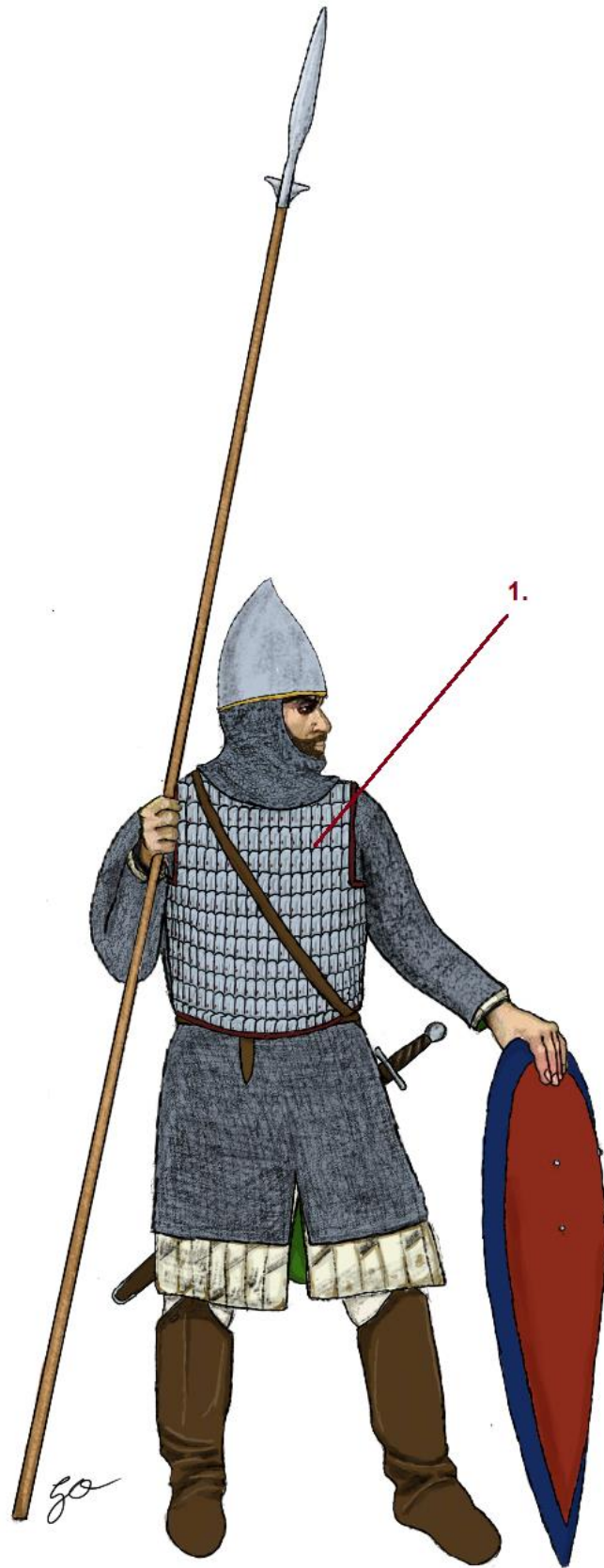
7. The **peritrachelion alysideton (περιτραχήλιον αλισύδετον)**, which accounts for a chainmaille aventail, is also mentioned in the treatises described to have inner padding of linen and wool (Taktika, diataxis V).

8. The **spathion (σπαθίον)**. The standard and most common byzantine sword, developed from the late roman spatha, with a typical globe-shaped pommel and short cross-guard. The design follows pictorial evidence from ivory carvings and iconography as well as archeological evidence, which confirm the former. Sylloge Tacticorum (diataxis XXXVIII) prescribes the length of the spathion at four *spithamai*. With one *spithami* being literally the span of an extended human hand from the thumb to the little finger, one *spithami* equals approx. 21-22cm. For reference, the Galovo sword is exactly 89cm long ($89/4 = 22,25$), hence the Sylloge text is also backed up by archeological evidence.

9. The shield: **aspis (ασπίς)** also **skoutarion (σκουτάριον)**. The design is based on manuscript miniatures and ivory carvings from the period. Therefore, the ratio of the shield’s size to the soldier’s body is not attempted to be realistic, due to the fact that the debate on the size of the byzantine teardrop shield has not been possible to settle. More specifically, Sylloge Tacticorum (diataxis XXXVIII) talks about “rectangular” or “triangular” shields, that have a “narrow corner” end at the bottom. It is assumed that this is an imprecise but close enough description of a kite or teardrop shield, which appears in imagery sources from the period. The anonymous author provides the length of those shields at 6 spithamai (= approx. 1,33 meters). Considering that 1,33 meters would essentially cover up 2/3 of an average adult male person’s body, this measurement is in fact double the size of shields that are found on ivory carvings and manuscript miniatures, where shields have a ratio of no more than 1/3 of the person’s body. Finally, Sylloge provides no measurements for the width of those shields, but one can safely assume that it had to - at least - cover the width of a soldier’s torso.

10. Spear and spear-head. “Winged” type of spear-heads were found at the Serce Limani site dated in 11th century. Sylloge Tacticorum (diataxis XXXVIII) gives the length of the spear between eight and ten pechai (πήχαι) with one peches (πήχης) counting 46cm, meaning that a spear could be up to four-and-a-half meters long.

PICTURE 2:



In “Picture 2” we have the heavier version of the byzantine infantry and cavalry soldier, which also matches that of the mounted “kataphraktoi”. The element that makes for this heavier armour is non-other than the inclusion of the klivanion (κλιβάνιον), which unlike the lorikion is prescribed as an additional and non-necessary part of armour for the main bulk of the byzantine army (but necessary and of course defining for the “kataphraktoi” cavalry).

1. The **klivanion** (κλιβάνιον). Based on reconstructions of lamellar armour found at Veliki Preslav and other byzantine sites dating from 10th up to 12th centuries. This particular binding of the lamellar torso is deemed to be the most historically accurate conjecture about the high byzantine period lamellar armour; for two main reasons. A) The lames are based on archeological evidence and the binding matches with pictorial sources from the period (iconography and ivory carvings) and b) it is, practically and realistically, the most viable possibility for this type of armour to allow its wearer to survive a fight, as modern experience from private experiments and the practice of re-enactment sparring has proven. According to Leo VI Wise’s “Taktika” the klivanion was worn on top of both the kavvadion and the lorikion, as an extra and ultimate protection. Meaning it was not a necessary or mandatory part of the imperial or thematic soldier’s defensive gear, but it could be worn by the heaviest or elite troops and of course by higher officers.

- Other byzantine armour elements not included in this presentation:

It is well sourced and known that the byzantine offensive weaponry also included maces and axes, non-included in this illustration. Moreover, the treatises mention other intricate armour details such as iron protection for the lower arms (χειρόπελλα) and the legs (ποδόπελλα) as well as a very intriguing mention of “iron sandals with hobnails” (πέδιλα σιδηρά μετὰ καρφίων αυτών) by Leo’s “Taktika”. However, we have no surviving archeological evidence for any of the above, and since iconographical sources provide us with anything but further proof for those armour elements, it was decided to omit them from this basic but concise presentation, which opted instead to present what we know that, for certain, existed and was in use during the period of interest.

The **kendouklon** (κένδουκλον): The kendouklon is another element of equipment mentioned in the treatises that we opted to leave aside from our presentation. However, we can safely state that its description matches with that of a thick cloak made by raw wool, which was worn above the whole armour as an overcoat during marches or simply when the army was on standby for a battle. It is described as being wide (φαρδύ), worn above the whole armour and it was from the same material as the nevricon, hence thick raw wool (Taktika, diataxis V). This description matches with the typical shepherd’s cloak that was widespread in the Balkans from medieval up to later modern times (images 1, 2, 3).

Sources:

- 1) Λέοντος Αυτοκράτορος Τακτικά - Emperor Leo's Taktika (written in 895-908 AD).
- 2) Νικηφόρου Δεσπότης Έκθεσις Στρατηγική – Despot Nikephoros's Ekthesis Strategiki (latin: Praecepta Militaria) (written in ca. 965)
- 3) Sylloge Tacticorum additions to Taktika (written sometime in 10th century AD)

Bibliography:

- 4) Piotr L. Grotowski, (2010), *“Arms and Armour of the Warrior Saints – tradition and innovation in byzantine Iconography (843-1261)”*, (Leiden/Boston, Brill)
- 5) Deyan Rabovyanov, *“Early Medieval Sword Guards from Bulgaria”*, Archeologia Bulgarica, XV, 2 (2011), 73-86
- 6) Eric McGeer, (2008), *“Sowing the Dragon’s Teeth - Byzantine Warfare in the Tenth Century”*, (Dumbarton Oaks Research Library and Collection)
- 7) Raffaele D’Amato, Dragana Lj. Spasić-Đurić, *“The Phrygian helmet in Byzantium: archaeology and iconography in the light of recent finds from Braničevo”*, AMM, 2018, XIV: 29-67

Images:



1) Miniature of the Nativity of Christ from the Menologion of Basil II, Vat. gr. 1613 (c. 1000 AD)



Source gallica.bnf.fr / Bibliothèque nationale de France. Département des manuscrits. Grec 135

2) Grec 135 manuscript, made in Despotate of Moreas (14th c AD)



3) Modern Greek Sarakatsani wearing the traditional Sarakatsani cloak made of felt wool (latin: centuculus). Note the slit open sleeves.



4) The Joshua ivory panel. mid-10th century (Metropolitan M, New York)



5) St. Theodore Stratelates. 12th cent. Steatite



6) St. George. 11th cent. Steatite Icon. Vatopedi monastery, Athos, Greece



7) Left-top of the Rome or David Casket (898-900 AD)



8) Skylitzes manuscript (12th c) - Arabs besieging a Byzantine/Roman fortified city



9) Skylitzes manuscript (12th c) - Leo the Elder's army surrenders to Romanos Lekapenos



10) Skylitzes manuscript (12th c) - Byzantine troops under Nikephoros Phokas capture Amantia in Italy



11) Byzantine Bible (11th – 12th c)