Men-at-Arms



Roman Military Clothing (3)

AD 400-640



Raffaele D'Amato • Illustrated by Graham Sumner



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Dedication

To Nikos Orphanodakis: his soul will live among us forever.

Author's Note

The contents of this book follow those of the companion titles MAA 374 & 390, written and illustrated by Graham Sumner. Despite the basic chronological divisions there are inevitable cross-references among the sources.

A note on transliteration: Greek was the language of Roman culture and government from the late 6th and 7th centuries, but both Greek and Latin words were used before and after that time. Even after the collapse of the West, the Empire included at various times considerable areas where Latin was the main or only language, e.g. parts of Italy, the northern Balkans, and central and western North Africa. In this text many technical terms are therefore presented both in their Latin and Greek forms, and Greek medieval words are transliterated as literally as possible.

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Artist's Note

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OPPOSITE Fragment of Imperial Diptych, Constantinople, AD 469-472, showing guardsman and consul. The soldier shows round *orbiculi* on the shoulders of his tunic, and *torques* decorated with bosses and a central gem. Note the magnificent overall decorative pattern of the consul's toga-like *trabea triumphalis*. Museo Civico, Bologna. (Drawing by Graham Sumner)

ROMAN MILITARY CLOTHING (3) FROM HONORIUS TO HERACLIUS, AD 400-640

INTRODUCTION

...Already present [were] the formation of white-dressed guardsmen together with the Palatine Tribunes, the Protectores under their Magister, the whole force of the Palatine personnel with their own decorations, uniforms and distinctive signs. The huge formation of the Excubitores, who look after the Holy Palace, were massed along the arcades... like a wall, with their joined golden shields under their raised javelins. (Corippus, In laudem Justini, III, 159–168)

N AD 395 THE ROMAN EMPIRE was divided into two halves under the sons of the Emperor Theodosius: Honorius (AD 395–423) ruled the West from his capital at Ravenna, and Arcadius (AD 395–402) the East from Constantinople.

Since the 3rd century the Roman army had become a multi-ethnic force, and soldiers of the Western army adopted Germanic fashions of clothing. Even though a law of AD 416 forbade the wearing in Rome of 'barbarian and skin garments' and long hair (*Cod. Theod.*, IV, 10, 4), the habit was too deeply entrenched to be eradicated. Conversely, Roman fashion also influenced the costume of the Germanic warrior, so a colourful mixture of dress characterized the Western military world for centuries.

In the Eastern Empire, too, costume saw a fusion of classical and foreign, chiefly Persian influences. In the simplest terms, the 'long and loose' classical style gave way to 'short and tight'; the draped effect of the former was replaced by ready-made and sewn garments. The Sassanian Persian influence was actually visible from the 3rd century, and such new fashions were seen first in the military, due to campaigns in Eastern territory or enlistment of Easterners in the Roman army.

The peoples of the Steppe and the Goths of the Black Sea region also influenced Eastern Roman costume, especially at the turn of the 5th–6th centuries. The members of the Circus faction which in the 6th century formed a militia to defend the walls of Constantinople grew their beards and moustaches like the Persians; they also cut the hair at the front of their temples and let it grow long and disordered at the back, 'like the Massagetae', i.e. following the 'Hunnic' fashion. Their tunic sleeves were tightly gathered at the cuff, and they wore Hun-style cloaks, trousers and footwear. At the beginning of the 6th century Johannes Lydus wrote, 'Today the soldiers copy the barbarians, who in their turn try to copy them; the only exception are the Palace guardsmen, called in Latin *Excubitores'* (*De Mag.*, I, 12).



GLOSSARY

Albus = off-white colour *Alhetinos* = true purple colour Anaxyrides = hose, 'tights' Armelausion = type of short tunic Blati, Blation = purple or red-purple colour Bracae = trousers Campagi raeticulati = shoes laced in place with thongs *Calceus* = low military boot *Calceus equestres* = cavalryman's low boot *Candidus* = pure white colour Chiton = tunic Chiton cheiridotos = long-sleeved tunic Chitoniskos = long-sleeved under-tunic Chlamys = military cloak *Cingulum militiae* = military belt Clavus, clavi = vertical decorative stripes Colobium = long tunic with short or no sleeves *Cothurni* = calf-length boots with open lacing *Cucullus* = hood *Dalmatica* = sleeved tunic Divitision = Imperial military tunic Epilorikon = garment worn over mail armour Epomis, scapulare = cloak or other garment covering shoulders Fasciae, fasceolae = cloth leg-bindings, puttees *Femoralia*, *skeleai* = short trousers *Feminalia, fiminalia* = see *anaxyrides* above Gausape = heavy fabric proofed against weather Gounoberonikion = large cavalry cloak or hooded mantle Himation, himatia = tunic, or generically, military garment *Hypodemata* = military footwear *Kamision* = under-tunic or light linen tunic Kalikia armenika = Armenian high boots *Campagus, kampagion* = low shoe leaving instep uncovered Kamelaukion = cap Kentouklon = padded material, felt *Linea* = linen under-tunic *Lineum* = linen *sticharion* (see below) Lorum, loros = military sash; sometimes worn shawlfashion Mantion = military cloak secured by brooch on the breast

Orbiculi, calliculae, sphera = circular terminal embroidery of clavus; circular embroidered segmenta Opus phrygium = 'Phrygian work' embroidery Paenula = travelling cloak, often hooded Pallium = cloak for senior officers and other elites Paludamentum = military cloak Paragauda, paragaudis = silk- and gold-embroidered tunic; or, the silk embroidery of these Patagium = central vertical strip of tunic embroidery *Pectoraris* = protective leather garment worn over shoulders and upper torso *Perizoma* = belt of trousers *Phakeolis* = low turban Peristithidion = felt or leather garment worn under cuirass Pteryges = protective hanging strips at shoulders and waist *Pileus pannonicus* = pillbox-shaped military cap Pilos = felt cap of cylindrical or conical shape Sagulum = cavalryman's cloak Sagum, sagion, sagia = rectangular military cloak Sarabara, saraballa = wide trousers of Persian origin Sarafan, sciarvari = embroidered Persian costume Scutlata, strictoria = tight linen under-tunic Segmenta, praesagmina, semeia = terms for embroidered elements of tunic Skaramangion = Asiatic long-sleeved cavalry tunic Sticharion = short tunic, irrespective of sleeve length Subligaculum = pants or underpants *Superhumerale* = richly decorative collar Tabula, tablion = squared embroidered panels on cloak Tibialia = leggings Thoracomacus = garment worn under cuirass Toubia = leggings, trousers; sometimes boots Tunica militaris = military tunic *Tunica manicata* = long-sleeved tunic *Tzaggia*, *tzanca* = high boots Vestis militaris = military clothing; or, taxation to pay for it Virronikion, byrrus = travelling garment, probably shaggy and hooded Zona militaris = scarf/sash knotted at breast, mark of senior officer Zoni = military belt Zostarion, zostaria = long-sleeved tunic of Germanic origin

Abbreviations for sources used in this text:

AMG = Annales	du	Musée	Guimet
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- BG = Bellum Gothicum
- BP = Bellum Persicum BV
- = Bellum Vandalicum
- DAI = Deutsches Archaeologisches Institut De Mag = De Magistratibus
- Just = In laudem Justini

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- MKB
- = Museum für Byzantinische Kunst
- MIFAO = Mémoires de l'Institut Français d'archéologie du Caire

OPPOSITE A mosaic from Kissoufim, Israel, dating from AD 576–578, depicts a cavalryman and this infantryman. Both have long-sleeved tunics with T-shaped decorative trim, 'composite' belts with pendants, long trousers and boots. The main differences are the trim - chequered for the rider, lozenge-pattern for this soldier; and the length of the tunics - thigh-length for the cavalryman, and below the knees for this infantryman. We may be seeing confirmation of the prescriptions in the Strategikon for cavalry and infantry tunics. (Drawing by Graham Sumner)



ABOVE Note the similarity between the lozenge-pattern trim shown in the Kissoufim mosaic below, and this part of a 4th-6th century specimen. Such bands were about 4in wide. (Museo Egizio, Florence, inv.12602)

THE SOLDIER ON CAMPAIGN

'Uniform' in the modern sense was a concept unknown to ancient armies. Regulations might designate certain items as part of the soldier's kit, but not that these items should be identical. Roman military dress varied regionally, in production, acquisition and appearance. However, clothing did distinguish soldiers from civilians. Procopius mentions sailors and Libyan volunteers 'clad in the tunics that Roman soldiers are accustomed to wear' in order to deceive the Moors at Hadrumetum (BV, IV, 23).

A certain degree of similarity was nevertheless attempted. Procopius comments (BV IV, 17) that in the battle of Scalae Veteres the mutineers of the tyrant Stotzas and the soldiers of the general Germanus 'differed neither... in dress (*schema*) nor in any other thing'. Corippus (*Johannidos*, VIII, 189–195) writes that Roman soldiers could be distinguished from the Moors by their '*habitus*'. Degrees of uniformity are implied in a passage in *Scientia Politica* (IV, 58), to the effect that officers dressed in a more free and elaborate way than simple soldiers. Johannes Lydus wrote that in peacetime all soldiers wore skin garments (*saraka*) from the shoulders to the calves; this may refer to garments made of leather, imitating armour.

Procopius, describing the soldiers of Belisarius camped at Europum in AD 542 (BP, II, 21), writes that they did not wear 'cloaks (*chlamydes*)



or any other garment to cover the shoulders *(epomides)*', but 'linen tunics *(chitones)* and close-fitting trousers *(anaxyrides)*'.

In the 5th-6th centuries, irrespective of rank, the milites wore (when not in battle) a cap, a longsleeved tunic, a belt, a cloak, trousers and boots, sometimes with leggings. Their hair was probably worn long, although the quoted passage in Scientia Politica recommends short haircuts. One of Belisarius' doriphoroi, Rufinus, is described with very long hair (BV, IV, 10); and the Great Palace mosaics and Consular Diptychs show hair curling freely all over the head, gathered on the neck and leaving the ears uncovered. Normally the soldiers were unbearded, unlike their officers (BV, II, 8, 17); but the latter was not invariable, since young Imperial guardsmen were often close-shaven due to their symbolic similarity to angels of the court of Heaven.

The general costume of the 6th–7th century soldier was a fairly short, long-sleeved tunic (*chiton*), often decorated with embroidery or appliqué work, and gathered at the waist by a military belt or sash (*cingulum militiae* or *zone*); a cloak fastened by a *fibula* brooch at the right shoulder; more or less tight-fitting trousers, boots, and leggings. In many of the figurative sources the tunic is thigh-length, but may be tucked up for freedom of movement; the cloak is also arranged so as to leave the right The beard and hairstyles, longsleeved tunic with T-shaped trim, loose 'elephant's feet' trousers also decorated with lozenge-pattern trim, and short boots, suggest that these are Germanic troops in Roman service – although this type of costume was adopted by the entire army in the late 6th and 7th centuries. Carvings from the 6th century Cathedra of Maximianus, now in the Museo Arcivescovile, Ravenna. (Drawings by Graham Sumner) arm free. Horses were expensive, and were associated with high-ranking officers and a military elite, whose dress reflected their high status.

Roman soldiers of foreign origin – *Symmacharii* – are described by Corippus and Procopius as retaining their traditional gear. In some cases such fashions were gradually adopted by Roman troops, particularly the colourful clothing of the Sassanian Persians. 'Soft armour' and/or padded jackets seem to have been inherited from the Steppe peoples; in the form of a *kaftan*, cut on the slant to overlap at the breast, this became widespread in the Eastern army in both protective and ceremonial versions. Sometimes Slav warriors wore neither tunics nor cloaks, but 'gathering their trousers up as far as their private parts, they enter into the battle' (BG, VII, 14). Nevertheless, from Sidonius' *Epistulae* about the twilight of the Western Empire, we learn that tunics remained the usual garment among the Gallo-Romans.

CLOTHING DISTRIBUTION

Taxation specifically for the purchase of military garments – the *vestis militaris* – was only one example of state provision for the army's clothing.



Factories (*fabricae*) are recorded in the West; the *Notitia Dignitatum* (*Pars Occidentis*, X, 12) mentions Tournai for the manufacture of the *sagum*. Other state factories (*gynaecea*), under the official termed the *Comes Sacrarum Largitionum*, made and dyed the cloth to dress troops and court officials; in Italy they were located near the Imperial seats or in traditional textile centres like Milan, Ravenna, Rome and Syracuse (ND *Occ.* XI, 49–52, 63, 65, 67–68). Each factory was entrusted to a *procurator* and defended by guards.

During the collapse of the West, followers of clerics and local *duces* were equipped at the expense of these leaders of Gallo-Roman society, like the aristocratic bishop Sidonius Apollinaris (died c.480), who pointed out to his retainers (I, 6) 'You are well supplied with horses, armour, clothing'. However, tradition remained strong in the army. In Gaul, at the end of the 5th century, local troops *(laeti)*, even though of Germanic origin, preserved their 'Roman' identity, carrying their own standards in battle, and retaining Roman dress in every particular, 'even as regards their shoes' (BG, V, 12).

The revenues of the Eastern Empire were almost double those of the West, and a considerable proportion was spent on the army, producing better training, discipline, efficiency, and especially equipment. Military garments were produced at textile centres such as Antinoopolis (Antinoe), Arsinoe, Panopolis and Alexandria in Egypt. Laodicea, the main collecting point for the Eastern caravans, was famous for the manufacture of richly decorated fabric (*paragaudis Ladikhenou*).

Procopius (BV, IV, 16, 13) wrote that rural recruits (*tirones*) arrived in Constantinople with only a small tunic (*chitoniskos*). Recruits and serving soldiers received gratis the clothing produced by state factories. Others received a routine allowance to buy clothes from civilian sources; in AD 396 (*Cod. Theod.* VII, 6, 4 = Cod.Just. XII, 39–3) the soldiers of Illyricum each received a *solidus* to buy their cloak. A second law, of 423 (*Cod. Theod.* VII, 6, 2-5 = Cod.Just.XII, 39, 1–4) records a tax collected in the provinces for the *Comes Sacrarum Largitionum*; five-sixths of this revenue was distributed among the soldiers for the purchase of uniforms, and the rest went to the *gynaecea* for state production.

In AD 594 the Emperor Maurice planned to reduce cash payments by off-setting against wages the cost of state provision of clothing and equipment, cutting the yearly allowance of the *Comitatenses* troops (Theoph.Sim. 7, 1, 2; Theophanes p.274). This provoked a mutiny, settled only by generous concessions to demobilized soldiers and war orphans.

Local populations, under Church administration, were expected to contribute in kind. In AD 588 the Bishop of Antioch organized the distribution of food, clothing and money to soldiers enrolled locally and those passing through the city (Evagrius, 6,11). Allied Arab clans on the Eastern borders were also subsidized with Roman clothing and weapons as well as food and cash. The Emperor Tiberius II sent gifts for the Ghassanid *Phylarcha* Mondir, including weapons, gold, silver, silver horse harness and bits, and 'splendid garments'.

Material and clothing were often acquired as war booty. Theophanes (p.179) describes a victory over Arabs: 'having occupied their camp they captured a large number of Saracens, men, women and children, and a lot of Roman prisoners... herds... silk and clothing'. The allied Ghassanian troops who sacked Haurin captured linen and wool garments (John of Ephesus, III, 42). War booty may account for the large number of Sassanian silk garments found in 6th and 7th century Egyptian graves. Clothing was also looted during internal Roman disputes. John of Ephesus mentions, among others, *Excubitores*, Romans (i.e. soldiers) and *Scholastici* taking clothing and shoes from the common people during ecclesiastical disputes. Spare army clothing (*himatia*) was stored in the military baggage train, together with weapons and supplies (BG, VII, 11).

TUNICS

The long-sleeved *tunica manicata/chiton cheiridotos* is often mentioned by Procopius (BP, II, 21,6; BV, II, 23, 22; 26, 26; 28, 10). Usually of wool (or linen for summer), it was confined by the *cingulum militiae* or *zoni*. Corippus distinguishes Moorish tunics from the Roman sleeved type (*Johannidos*, II, 130). The tunic (in the West, *tunica militaris*, in the East *chiton*) was essentially a simple T-shaped garment of wool, linen, silk or occasionally Egyptian cotton, with tight sleeves and usually reaching to the knees. It was woven in standard sizes, for adjustment to fit 4th-5th century linen *tunica manicata* from Egypt, decorated in purple with *opus Phrygium* embroidery; it measures 45½ in long by 32½ in wide. The archaeological evidence from the dry desert cemeteries of Egypt offers striking confirmation of pictorial sources from all over the Empire. (ex Vollbach, Berlin Museum, inv.2881, courtesy DAI)



individuals. It was not constructed of cut and sewn sections like modern garments, but woven entire in a single piece like a giant cross, folded in half and sewn up the sides, with a neck slit cut in the centre. This required a very large loom, but allowed the passage of the weft threads for decorations woven into the material (when these were not appliqué), i.e. the narrow vertical bands (*clavi*) running from the top to the bottom of the tunic.

The tunic was worn over trousers; and in cold weather a second was worn. This inner tunic was called *linea* ('of linen') or *kamision* (St Jeronymus, *Ep.* 64,11,2: 'the soldiers are accustomed to wearing *lineae* that they call *camisia*, fitted to the limbs and very tight to their bodies'). This garment was also called *scutlata* in the Justinian period (Lydus, *De Mag.*, I, 10), as well as *strictoria* or *stichoi*. If the inner tunic had long sleeves it was called *chitoniskos* (idem, I, 17). The 5th century sources mention other tunics specifically for soldiers: the *dalmatica*, and a tight, richly embroidered tunic characteristic of senior officers, called either



Representation of early 5th century Palatini soldiers (?) of the time of Honorius, wearing the short off-white dalmatica or linea decorated with vertical clavi, and orbiculi at shoulder and thigh. Their sagia cloaks are orange-yellow and dark brown, their tight anaxyrides off-white, their campagi shoes black. Of special interest are the different numbers of segmenta stripes on the tunic cuffs - two, and four. **Recalling the Dura Europos** frescoes and the mosaics of Sta Maria Maggiore, these may be indications of rank. Massacre of the Innocents fresco, Sta Maria in Stelle, Verona. (ex Ing Luigi Antolini book, see Biblio)

sticharion or lineum. The colobium was another long tunic with short sleeves or none (longum et sine manicis, Isid., Etim., 22–24), sometimes provided for guardsmen.

Artistic sources sometimes show continued use of ancient styles, and we cannot reject these simply as artistic conventions, since dress traditions in the Graeco-Roman world were long-lasting. The Theodosian columns, for instance, show soldiers of the factions dressed in the *exomis*, a kind of ancient Greek *chiton* which left the arms and part of the breast bare.

Tunics were often used to conceal weapons. Interestingly, during a plot one Artasires, an Armenian officer of the African army, concealed arrows up his tunic sleeve by binding them to his left wrist (BV, IV, 28) – they were not for use, but for protection against blows. This implies that the *chitoniskos* had fairly full sleeves.

The usual colour for ordinary soldiers' tunics was red, believed best to hide bloodstains as well as dirt; Synesius uses the word *blati* to describe



Encaustic painted wooden panel from 6th century Egypt, showing a cavalryman leading his horse. His white Persian-style tunic is trimmed with a T-shape of brownish-purple stripes ornamented with white dots – pearls? (Louvre, inv.E 14352; drawing by Graham Sumner)

Kamision or himation from one of the 7th century 'horsemen's graves' at Antinoopolis. Of fine linen, with tightly closed cuffs, it has a triangular neck opening and bands of silk embroidery arranged in a T-shape. Typically the riding costume found in the Egyptian graves consisted of a coat, one or even two undertunics or shirts, trousers, underpants, gaiters and boots. (ex Vollbach, Berlin Museum, inv.14243, courtesy DAI) the purple or reddish-purple tunic. But in many figurative sources soldiers are seen to be wearing white garments – either *candidus*, the pure white reserved for the Emperor, high Imperial officers and bodyguards; or *albus (leukos)*, the usual unbleached off-white colour worn by other ranks. The average size for tunics, judging from sources and specimens, was 44in long by 35in wide in the 5th century, and slightly larger in the 6th–7th centuries; however, this is simply an average from a limited number of random survivals.

New tunic patterns

New tunic patterns appeared in the 5th and 6th centuries. The *Strategikon* of the Emperor Maurice (AD 582–602) mentions, for the infantry, two types: either *zostaria*, or *armelausia* (XII, B2), i.e. short and slit up the sides (XII B, 1, 1ff.), 'coming down to their knees'. Maurice speaks here of tunics worn by soldiers over or under their armour. The first type, *zostaria* (meaning 'closed by belts') were of Germanic origin and are first visible on the fragments of Theodosian columns. The 5th century Carrand Diptych in Florence shows an Eastern soldier of Germanic origin wearing a *zostarion* together with wide trousers and a shaggy mantle with hanging sleeves.

After the 6th century tunics were characterized by tablet-woven embroidery, often decorated with lozenges; together with trousers similarly decorated, these were adopted from the Goths and Iranians.



Examples are represented in the Barberini Diptych in the Louvre, and on the Cathedra of Maximianus. A central, vertical band of embroidery extended down the front from the decoration of the neck vent to the waist or below, and a second band extended in a T-shape along the top of the shoulders, sometimes to the elbow.

The Strategikon uses the word himation to describe a specific type of cavalry tunic (though this also belonged to the category of belt-closed zostaria). This was a barbarian fashion that evolved in Byzantium into a new garment called the skaramangion, a variation on the Steppes kaftan that came directly from Sassanian Iran (Theophanes, 319) and from the Steppe peoples. The Strategikon prescribes, for the cavalry, a tunic made of linen, goat's hair or thick wool, cut broad and full according to the Avar pattern, so it would cover the knees while riding and gave a neat appearance (I, 2, 46 ff.). It was secured by a belt of flax, goatskin or smooth leather, sometimes silk-covered (imatia olosirika, Theophanes 322). In later times this became the distinctive dress of the Emperor and senior officers. The Latin term scaramagnium may originally have meant cover or protection, and have passed into Roman use - together with the actual garment - from 6th/7th century Gothic foederati. We may therefore suppose that originally this garment of Persian and/or barbarian origin was worn over other clothing for warmth. Horsemen from Dura Europos and Palmyra were already using such garments in the 2nd/3rd centuries.

The contemporary Isidorus of Seville (*Origines*, XIX, xxii) describes a second kind of tunic called *armelausion*, 'so called by the people, because it is cut and open front and back, closed only on the arms, i.e. *armiclausa*, omitting the letter C'. The word could well come from a tunic worn in the Roman army by Germanic infantry, which were seen by Isidorus with his own eyes. However, Reiske describes the *armilausion* as a kind of military surcoat extending over the lower abdomen, sleeveless and having wide armholes; he, too, ascribes its origins to German troops. The etymology should indeed mean a garment without arms, or perhaps short-sleeved.

There existed two main types of *armilausion*. The first was the so-called *epomis* or *scapulare*, covering the shoulders to the elbows; *epomis* meant a cloak or garment which covers the whole body, large enough to conceal a sword (BV, IV, 28). It was sometimes worn over a cuirass, and was also called *epilorikon* ('over the mailcoat'). The other was the sleeveless type, worn over an under-tunic but under the cuirass. The first of these garments compared to the military cloaks and, like them, was often of red colour (*Martyrium* of St Bonifatius, 14: 'wearing a red *armelausion*'; Paulinus, *Ep.* 17: 'the *armelausion* was of shining red').

The Egyptian finds

Excavating at Antinoopolis between 1896 and 1912, the archaeologists Schmidt and Gayet found in the so-called 'horsemen's graves' many complete tunics and hundreds of fragments of decoration. Many of these burials included objects such as swords or whips. The presence of small crosses, inscriptions and figures of saints identify them as Christians, while their Hellenized names (e.g. Pamio) indicate Romano-Egyptian origin. These tunics are dated between the 5th and 8th centuries. A typical example is of linen, made from several pieces sewn



Fragment of a wool and linen *clavus* once attached on a white tunic, one of hundreds of such finds from Antinoopolis, Egypt. (Museo Egizio, Florence, inv.12468) The use of the old *paenula* was still popular among 5th century soldiers. This was the last or 'baroque' type, with the front part shorter and shaped in a point or rounded, and the rear long. Note the added decorative *clavi* stripes down each side of the breast, and *segmenta* at the bottom. The long tunic worn beneath it also shows *clavi* and *segmenta*. (Reconstruction by Andrea Salimbeti from Sta Sabina Rome)



together, with a triangular neck opening, and sleeves tightly closed at the cuffs. Silk brocade or wool-embroidered bands are sewn to the cuffs and neck opening and extend out over the shoulders. This kind of decoration is visible in many pictorial sources which confirm their military use in the 6th century.

MILITARY CLOAKS

The *chlamys* or *paludamentum* was the main cloak worn, being a symbol of the *militia armata* (*Cod. Theod.* VIII, 4, 30 = *Cod.Just.* XII, 33, 4); note that *militia armata* (*Cod. Theod.* VIII, 4, 30 = *Cod.Just.* XII, 33, 4); note that *militia* simply signified public service, but *militia armata* the military calling. The most common was a hip-length, semi-circular cloak, limited from AD 382 to soldiers, officers, and officials charged with civil functions but formally part of the military. It distinguished the *armati* from the *officiales* (*Cod. Theod.* XIV, 10, 1); military garments were forbidden to civilians. The cloaks of senior military officials were longer, being ankle-length, usually trapezoid in shape; they were ornamented on front and back with squared embroidered panels butted up against the vertical edges, these *tabula* or *tablion* being of two contrasting colours.

The cloak was pinned on the right shoulder by a large brooch. The so called 'crossbow' *fibula* was widely used by both military and other state officers throughout the 5th–7th centuries, and finely decorated specimens in precious metals are often shown worn by high officers. However, circular brooches are also found in both halves of the Empire.

Even though the physical difference between it and the *chlamys* would become minimal, the word *sagion* (Latin *sagum*) always described the rectangular campaign cloak, originally shorter than the *chlamys*. If worn by a *Magister Militum* it was of purple (*sagion alhetinon*). A special cavalry version was called the *sagulum*. Another short military cloak was the *mantion* (*Chronicum Alexandrinum* p.102), thrown back over both shoulders and fastened at the centre of the breast by a round brooch.

The usual colour for the military cloak was red or red-brown, as in the 5th century Sta Maria Maggiore mosaics. The materials varied: linen for summer, and wool – apparently sometimes coated with a

proofing substance (gausape) – for winter. The reddish- purple paludamentum was reserved for senior officers. Purple tablia or even complete cloaks were the symbol of the Patrikioi: Lydus (De Mag., I, 17), states that their chlamys was doubled, calf length, and the colour 'of a dried vine leaf'.

In Achmim-Panopolis cloaks of squared trapezoidal shape were found, decorated on the four corners with rectangular, squared or round *segmenta*, often woven in purple; the edges were decorated with red or violet single, double or triple stripes. Their length varied from 6ft 6in to just over 8ft, and the width from 3ft 4in to just under 5 feet. Also still in use was the old *paenula*, the circular cloak with a central neck opening and sometimes a hood. The *paenulae* of this period were usually ornamented with *clavi*, and might be any length from hip to ankle. Sometimes heavy versions were made of leather. Fringed *paenulae* worn by officers are shown in drawings of the lost column of Theodosius, as well as by soldiers on the Sta Sabina door.

New military garments

The *Strategikon* (I, 2, 50) mentions an extra large cloak or hooded mantle for the cavalry called the *gounoberonikion*. It was made of felted or padded material *(kentouklon)*, with wide sleeves, and large enough to protect the mail coat and even a bow from the rain; it usefully concealed the reflections from armour, and was even thick enough to give protection against arrows. The origin of the word is Slavic: *guna* means a hairy or fur garment.

A garment of this type could perhaps be identified with that of Iranian origin (kandys), worn with the long sleeves hanging down behind. Such coats, of fur or woven materials, are seen in late Roman monuments representing mercenaries, soldiers and senior officers of East Germanic or Iranian stock in Imperial service, e.g. on the Carrand Diptych and the St Menas pyx in Egypt; they are also clearly visible on relief carvings of Georgian and Armenian vassal princes. This type of garment, adapted from the Iranian lambskin coat with dangling sleeves, was probably introduced via the Goths and Slavs. Asiatic influence on late Roman clothing, especially in Egypt, is explicable by the long (and sometimes peaceful) co-existence of the Roman and Persian Empires in the Near East, and Rome's employment of Persian mercenaries (e.g. the Perso-Justiniani regiment stationed at Grado, north Italy, in the 6th-7th centuries). Several beautiful specimens of riding coats were found in the Antinoopolis necropolis; these were sturdily made, but lighter types may have existed. One grave revealed a green-blue coat ornamented with red silk brocade, worn over a second linen garment with black and white patterns. The horse harness and whips found with the bodies indicated cavalrymen, although Gayet assigned these coats to high-ranking officers. Examples are preserved in the Berlin Museum, the Lyon Textile Museum, the Louvre and several other collections.

These riding coats are formed from sewn sections, with very long sleeves narrowing towards the cuff and then flaring out. All are made from a woollen cloth whose combed fibres give a napped appearance. The front is open, with the right side cut so that it overlaps to the left, and silk brocade bands decorate the edges, cuffs and neck. The very long sleeves are sometimes extended by a leather cuff; their ends are decorated with coloured wool embroidery or applied silk bands. This 6th century officer has a *kandys*-style coat slung over his shoulders, with long sleeves hanging free. Under it his round-necked tunic is trimmed with the usual tablet-woven bands. St Menas pyx, British Museum. (Drawing by Graham Sumner)



7th century riding coat from Antinoopolis, the only example found which has underarm openings in the side seams to permit the arms to pass through, leaving the overlong sleeves hanging empty; the influence of the Iranian horseman's clothing traditions is clear. It is carefully cut and sewn from a blue-green cashmere wool fabric, and trimmed with tablet-woven silk. The right breast panel could be fastened across, thus providing warmth for the torso while leaving the skirts open for ease when riding. (ex Vollbach, Berlin Museum inv.14232, today 9965 in MBK; courtesy DAI)



Gayet mentions that in two graves he found 'Byzantine gauntlets' attached directly to the sleeve; fragments of silk sleeves associated with a leather background are still visible in the Louvre. The average length of the coats is 4ft 3in, and the sleeves often surpass 3ft 4 inches.

The problem of identifying such coats with the *gounoberonikion* described in the *Strategikon* is the absence of the wide sleeves mentioned there. However, one of the riding coat specimens preserved in Berlin (inv. 9965) has underarm openings. Many of the new military garments, tunics as well as coats, were characterized by these, which allowed the arm to pass through, leaving the sleeves hanging decoratively from the shoulders and allowing free movement. Such apertures are found with reinforcing braids or cords, and two specimens have openings approximately 9½ in long – ample for the brawniest arm.

FABRICS AND DECORATION

The predominant fabric in the Eastern Empire was linen, from the spun fibre of the flax plant. Egypt was the main producer, and Alexandria manufactured and exported linen garments for centuries. The linen, especially that used for the *kamision* worn under the main tunic, shows a high quality; some shirts found by Gayet at Antinoopolis are of true translucent chiffons, and the fineness of embroidery is not inferior to silk brocade.

Wool appears to be the primary fabric used for military tunics. It was woven and used in many weights, from fine veils to winter tunics and heavy winter cloaks. It was also felted for use in shoes and hats.

The biggest difference since the 'classical' period was the use of silk, which was purchased from the Persians; a state monopoly restricted its primary purchase to the *commerciarii* of the Praetorian Prefecture, reserving what was necessary for state manufacture and selling on the rest. In the time of Justinian the merchants were

obliged to raise prices due both to the high costs demanded by the Persians and the tariffs extracted by the Imperial bureaucracy. In AD 540, Justinian fixed the official price; and proposed an agreement with the Ethiopians which would allow the purchase of silk directly from India (BP, I, XX, HA, XXV). This plan never reached fruition; but a little later Christian monks smuggled silk worms directly from China, and the cultivation of silk was diffused throughout the Empire (BG, VIII, 17), though remaining a state monopoly. Silk was so expensive that it was often combined with other fibres to make more affordable fabrics. Byzantium began its own silk industry, the tapestry-woven brocades in various qualities being finished by needlework in multicoloured silk and/or gold thread.



Recent excavations at Antinoopolis by archaeologists from Florence brought to light this fragment of a blue-green coat decorated with silk samite – a heavy, lustrous silk fabric. (Museo Egizio, Florence, inv.12700)

Decoration

During this era Egyptian weavers produced amazingly intricate textile art, featuring Graeco-Roman designs and delicate interlaced motifs. The single wool colour used in most of the early pieces was a dark brownish purple (the 'royal purple' of antiquity), set against the natural-coloured linen of tunics; the madder plant was also cultivated in Egypt to obtain a strong red.

All the preserved examples of *tunicae* are ornamented, some very simply, others elaborately. Usually the silk or wool decoration was distributed around the neck opening, on wrists and hems, and on the skirt in patches or inserts. Typical tunic decoration of the early 'Coptic' period consisted of narrow vertical bands from the shoulders, and squared, oval or round 'loom-tapestry' inserts. The neck opening was trimmed on both edges, the trim carried down on to the breast. Two stripes or *clavi* ran straight down both front and back. Seen on military garments since at least the beginning of the 3rd century, clavi might be either embroidered cloth strips applied to the garment (appliqué), or tapestry-woven into its fabric at manufacture. Sometimes the vertical strips were filled in with foliate patterns or arabesques of the same pattern as the neck embroidery. Applied Tunic decorations were woven or embroidered with geometrical patterns, foliate and floral arabesques, or animals – as on this 4th–6th century example from Antinoopolis. (Museo Egizio, Florence, inv.12411)





A 5th century *tubator* wearing a red-orange *sagum* displays the ancient swastika sun symbol on the corners of his white tunic; this *crux gammata* passed from Mithraism to Christianity. Mosaic of the Achilles legend, Tipasa; National Museum of Antiquities, Algiers. (Drawing by Graham Sumner)

clavi might be re-used from another piece, cut from embroidered cloth, or even purchased as commercially-made trim. *Clavi* might extend to the hem, or terminate part-way in roundels or squared elements; similar patches or inserts were seen at thigh height on the skirts. These patterned elements were called *orbiculi, calliculae, segmenta,* or a number of different terms depending upon their shape.

The cuffs were decorated with silk or wool bands, multicoloured arabesques or other delicate ornaments; usually the pattern of the cuffs reproduced that around the neck. On the wrists these *segmenta* were worn in different numbers, perhaps as an indication of military rank. Purple stripes indicating the rank of a *tribunus* are visible on the 3rd century fresco at Dura Europos; and the same pattern is still depicted on officers from the 5th century, including those from Sta Maria Maggiore in Rome and Sta Maria in Stelle in Verona.

Frescoes and mosaics of the 6th and 7th centuries showing military tunics with typical decoration are confirmed by actual specimens. Silk appliqué at the cuffs, neck and borders characterized the finds from Antinoopolis, and a pictorial example is the tunic worn by the executioner of St Menas on a British ivory casket. Often this kind of trim featured tablet-woven lozenges. They are visible on the garments of soldiers probably representing men of Legio

Quinta Macedonica in Egypt, and Germanic *Buccellarii* on the ivory Cathedra of Maximianus of AD 550 in Ravenna. This trimming was typical for soldiers in Egypt, as seen in 6th century Coptic carvings of David and Goliath (see Campaign 31, *Yarmuk AD 636*, page 10).

By the end of our period the embroidery was typically reduced, to a chevron-shaped trim round the edges of the neck opening, and narrow stripes on the edges and the breast. The ornamentation of such trim was reduced to simple interlaced foliage patterns, usually in blue and violet.

Patterns and symbols

On military clothing, bright multicoloured decoration offering a profusion of infinitely varied images characterized the last centuries of Roman domination in Egypt, Syria and North Africa. Still following the Hellenistic tradition, geometric designs were filled in with fantastic creatures, religious images or elaborate repeating floral motifs. The usual features were flowers and plants, monochrome or sometimes multicoloured like those on the 6–7th century *kamisia* found at Deir el Keyr. In that instance the *clavi* are multicoloured, and filled with patterns of embrasures, medallions, foliage, flowers, fishes, birds and figures of children. We find the whole classical pagan repertory in such decorative bands and panels: lions, dolphins, sea-horses, figures Fragments of edge trim in tendril-and-leaf pattern, and *crux gammata,* from a 5th–6th century tunic from Achmim-Panopolis; black wool on linen background. (ex Forrer, courtesy DAI)



personifying royal power, and armed warriors. Christian subjects were often used by officers, guardsmen and Emperors, or by devout Christian soldiers, particularly figures of St George and St Michael as armoured horsemen; and retained classical motifs – vines and palms, birds and fish, baskets with bread, archways – were also interpreted according to Christian symbolism. One of the most common subjects was the horseman, and – from the 7th century onwards – the mounted image of the victorious Emperor identified by a *nimbus*.

Interaction with Sassanid Persia gradually led to patterns becoming more stylized, discarding Greek naturalism in favour of intricately worked abstract motifs.

OTHER CLOTHING

Belts

The belt was the symbol of the *militia armata*, and depriving a soldier of his belt signified expelling him from the army (*Cod.Just.* XII, 7). The Roman belt was often bossed (*cingula bullata*, Cor., *Joh.*, II, 131) and used for weapons suspension. Like clothing, belts also followed the new fashions inspired by barbarian styles.

At the turn of the 4th/5th centuries the typical leather belt was more than 4in wide; it was furnished with bronze and iron fittings, both cast and chiselled, ornamented with punched or carved work. Such belts originated from the second half of the 4th century. They were mainly produced in the Imperial factories along the Rhine and Danubian *limes* mentioned in the *Notitia*, which supplied arms and clothing for the field army and *limitanei*.

From the second quarter of the 6th century Roman soldiers appear to wear so-called composite belts, with fittings and pendants of silver, gold, bronze and gilded bronze. These probably showed the influence of Germanic, Iranian and Steppe peoples. Vandal warriors in Carthaginian mosaics of the beginning of the century have pendant belts; and Procopius (BV, IV, 9) describes Belisarius' distribution of 'gold' belts as booty of the Vandal war. Silver-furnished belt sets from the Crimea and the western Black Sea coast may confirm the earlier use of composite belts by Roman soldiers stationed in the Bosphorus area.

Archaeology has confirmed the pictorial and literary sources, and beautiful specimens have been found all over the Empire. The craftsmen of centres such as Alexandria and Constantinople produced the most precious fittings for Imperial and military elites; belt furniture was also made by workshops in Greece, Asia Minor, Syria, Egypt, North Africa, Sicily, and even in the reconquered areas of southern Spain.

Trousers

Trousers (*bracae*) were now an integral part of military uniform, derived from both Easterners and northern Europeans. Although they were still considered 'barbarian' at the end of the 4th century, as evidenced by Imperial decrees of AD 397 and 399 (*Cod.Theod.* XIV, 10, 2–3), which forbade their wear in Rome, their use by the army was already nearly 200 years old.

They could either be made like footed hose or tights, covering the whole leg including the foot; or like the Celtic model, looser and reaching the ankle, and secured by a waist belt (perizoma, Lydus, De Mag. II, 13). The Grue mosaic from Carthage, of the Honorian period, shows army officers in Africa wearing a new type, wider than the preceding kind and similar in shape to modern trousers; they have noticeable pleats, parallel-sided legs, and the lower edge is cut obliquely from instep to heel. Similar trousers are worn by three soldiers on the Carrand Diptych. It is difficult to say if this so-called 'elephant's foot' fashion was adopted from the Easterners, as Parthian and Sassanian models suggest. It passed from the Romans to the Vandals, and through them to the 6th century Eastern army. Straight-legged trousers, open in the lower part and decorated with a wide band at the bottom, are worn by barbarian kings in the Barberini Diptych, probably representing the triumph of Justinian and Belisarius over the Africans, Vandals and Persians.

Some 6th century ivories from Alexandria, probably representing *milites* of the *officium* and soldiers of the *numeri* under the *Dux Thebaidae*, show the transformation as complete: very wide trousers ending in a flounce of different cloth. This was the general fashion for 6th and 7th century Eastern troops in Egypt and the Near East. Sometimes they are decorated with broad lozenge-pattern embroidery. The charging Roman armoured cavalryman on the 6th century Isola Rizza silver dish wears tubular trousers, though more fitted to the leg (see MAA 150, page 6). His Germanic opponents are wearing highly embroidered 'elephant's foot' trousers; they are probably Gothic warriors, wearing the prototype of the trousers later widely distributed in the Roman army.

Suidas describes this costume as Persian, referring to the trousers, like the rest of the costume, as *sarabara* (Persian = *sarafan, sciarvari*). In the East, trousers and especially 'tights' were called *anaxyrides*; they were of various colours, as attested in the 2nd century in the *scolii* of Dio Chrisostomus: 'the *anaxyrides*, as the superior *brakia* of various colours

One of a pair of multicoloured socks in coarse wool, from Egypt, 4th–6th centuries. The colours are red, green, orange and blue; dimensions are 11¾in from heel to toe, 8½ in from heel to top. (Museo Egizio, Florence, inv.12920)



are called, began to be called this from the highly decorated leg bands... the *anaxyrides* [are] called in the popular language *toubia*'. In the 5th century they were also called by Hesychios *fiminalia*, and defined as 'barbaric dress of the feet'. Hesychios (*Lexicon* Σ 19-190-896) calls the wide trousers derived from Parthia and Persia *sarabara* or *saraballa*, though Procopius does sometimes use the term *anaxyrides*. They could be made of different cloths depending on the season, of different colours and variously ornamented with checkered, rhomboidal, flowered or circular patterns, often in a band running down to the feet.

Trousers could be more or less loose, extending to the instep or tucked inside the footwear. In the latter cases it is difficult to tell if they are tights or trousers, but normally vertical pleats indicate true trousers folded to fit into the boots.

From the 5th century, trousers became more fitted to the leg, and were laced below the stomach and secured at the sides by a strap (*Historia Arcana*, 1,20: 'the strap... which fastened the *anaxyrides*'). But they could also be simple tubes: Gayet found a body with 'voluminous linen trousers, which consisted... of two single, unconnected tubes'. At the bottom these trousers were covered by gaiters, but reached to the ankle and were tied there by a string. We can assume that the *anaxyrides* were normally worn with the *campagus* (see below), as in the Ravenna mosaics, while the wider trousers were worn over boots and shoes, covering the instep (even though, towards the end of the 6th century, they were worn inside short boots).

A third type of garment still in use were the so-called *femoralia*, short trousers used in combination with leggings or *tibialia* (St Jeronymus, *Ep.* LXIV). In the Western army they were used particularly by infantrymen. In the Sta Maria Maggiore mosaic a soldier of Herod is shown wearing short white breeches, dark blue leggings and *caligae* or *campagi reticulati* on his feet (see Plate A2). This seems to be a fashion that survived in the West, as shown in the Ashburnham Pentateuch, probably produced in

Africa or Roman Spain at the beginning of the 7th century. Similar trousers covering the leg to the knee, but of Persian type, are called *skeleai* in the Hesychios Lexicon. A specimen from Panopolis was actually preserved in Dusseldorf before World War II: they were knee- length *bracae* of linen interwoven with red wool.

The column of Arcadius provides evidence for the use by officers and infantrymen of *femoralia* in combination with *tibialia*, and an interesting figure of a mounted official is seen in the Renaissance 'Freshfield' drawing n.37 of the Column of Theodosius. In the 6th century Rossano Codex officers wear short pants, but slightly larger and without either leggings or shoes.

Socks

The excavations at Antinoopolis and Achmim-Panopolis recovered socks for both military and civilian use. From Antinoopolis, a fine rough wool specimen was in bands of green, red, blue and Painting of the heel of a campagus shoe from a 6th century grave at Achmim-Panopolis. The black leather is partly covered with a second layer in gold and red – on the heel a red cross on a gold ground, on the sides a red leaf with gold detail. (ex Forrer, courtesy DAI)



orange. From Panopolis other preserved specimens are calf length, with a string around the upper edge for fastening. Stockings of woven material were found on a body at Antinoopolis, under linen trousers and gaiters: they are quite rare, as socks made by single-needle knitting are more common. Schmidt found black and green socks for cavalrymen; and in the 'horsemen's graves' Gayet recovered calf-length examples of wool, of linen with a green wool sole, and of green wool with a yellow tip.

Shoes and boots

Closed *calcei* – ankle boots – were still used throughout the 5th–6th centuries. Pointed, nailed *calcei* are attested for Germanic *Equites Batavi* levies stationed in the Theodosian barracks at Arras during the 4th and 5th centuries, where 40 specimens were found. These should be the *hypodemata* mentioned by Procopius in the passage quoted above about the shoes retained by sub-Roman *laeti*. A similar specimen comes from Aquileia; and others from Panopolis show a highly decorated surface, often with incised lines. Some sources similar show boots with lacing across the open instep and ankle (see Plate B2).

A particular form was the *calceus equestres* for cavalrymen. Examples were found in the 'horsemen's graves' at Antinoopolis; of black leather and reaching to the bottom of the calf, these had laces passing through punched holes, though one specimen had a leather fastening strap around the ankle (see Plate A3).

The *Strategikon* (B, XII, 1) provides evidence for the use of Gothic shoes; for the infantry the *hypodemata* had thick soles studded with a few small nails, broad toes, plain stitching, and were fastened with no more than two clasps. These campaign shoes are well represented in Egyptian ivories, e.g. the soldiers on the Cathedra of Maximianus. Longer boots or greaves were not considered advisable for footsoldiers on the march.

The *kampagion* or *campagus*, a low military shoe made of wool or felt, left the upper instep uncovered and enclosed the toes and heel only. It was fastened either with a buckled strap or leather thongs. Already in use by the 4th century, it was produced in all qualities for use by anyone from the elite to common soldiers and civilians. It is described by Lydus (*De Mag.*, I, 17): 'a black shoe, like a sandal, completely open but covering the

heel by means of a small tongue and the toes at the front; laces are drawn from both sides of the instep, down to the toes; they join over and fasten the foot, in such a way that the shoe is hardly visible'. These shoes were associated with leggings of cloth or leather, and a low shoe attached by lacing carried up around the ankle had been called *campagia reticulata* since the 3rd century. The mosaics of Sta Maria Maggiore show that they were still used by the 5th century Western army.

Higher boots were widely used by officers, and black boots (*melanpedila*) may have been typical for cavalrymen. A 5th century letter from Arsinoe speaks of Armenian boots (*kalikia armenika*). Normally officers wore far more elegant boots than common soldiers, typically calf-length, open-

Two fragments of 5th century black leather *calcei* survived in the Attila destruction level at Aquileia; they still have the holes for laces, and a part of the nailed surface of the sole. (Aquileia, Museo Nazionale Romano, courtesy Dr Maselli Scotti)





laced *cothurni*. We have a literary reference to the boots *(ocreae)* of a *dux* of the African army: they were of red-purple leather with gold laces and ornamented with gold and gems (Corippus, *Joh.*, IV, 491–500: 'he wears on the calves boots, of Parthian leather wrapped with much gold... red-purple... with gems and artwork'). This type must be similar to the boots worn by the general in the Barberini Diptych, or in the Hippolytus mosaic from Madaba; and such boots – although without the gems – were recovered from Antinoopolis.

'Wearing purple boots' was synonymous with being an Emperor. Since the time of Claudius the Goth, the Emperors wore garments and shoes ornamented with precious stones (Lydus, *De Mag.*, II, 4). The *tzanca* or *tzaggia*, red-purple leather footwear, were of oriental origin and perhaps derived originally from boots worn by the Tzani people of the Caucasus. This type of boot was also worn in battle; in AD 625 the Emperor Heraclius was recognized by his 'true purple(*alethina*) boots' while fighting against the Persians at the Saros bridge (Theophanes p.314). Theophanes uses the word *alhetinon* to indicate boots in violet, amethyst or hyacinth-purple colour – the most expensive dye.

Large leather boots were also discovered by Cledat on a Coptic mummy in the desert necropolis of Bawit. They were formed of three parts sewn together, two for the foot and one for the leg. The *Liber Pontificalis* (cap. 70) confirms that goatskin was used for *zancae*. Another version found at Antinoopolis were of a different type, almost covering the calf. In addition Gayet mentions high boots of brown or red colour, often finely decorated with ribbed leather on the instep, dyed edges, small gilded iron ornaments and silk appliqué. In the Louvre is still preserved a silk fragment once sewn to the edge of a very fine redcoloured boot (inv. 29394). Of very tight shape, the boots still preserved on the mummy of the 'Byzantine horseman' in Lyon Museum end below the knee, with double seams forming a trimming. High boots decorated with incised lines were recovered from the Panopolis necropolis.

Leggings and gaiters

From the Eastern peoples the Romans adopted the use of leggings, which soon became a distinctive sign of military status. They were called *toubia* in the East and *tibialia* or *ocreae* in the West (Isidorus, *Orig.* XIX, 34, 5: '*ocreae* are the leggings called *tibialia*, which cover the legs'). Their

The 5th–7th century graves at Achmim-Panopolis revealed, as well as campagi and calcei, these boots in ornamented leather. Typically they have broad legs for easy fitting, upturned toes, soft leather soles and no built-up heel. The highly ornamented red goatskin boot, second left - with a yellow-onwhite leather decorative section at the top of the shaft, and transverse folds on the instep is exceptional; it also has a heavy cow-leather outer sole, and a reinforced heel. (ex Frauberger-Forrer, courtesy DAI)



Leggings found by Carl Schmidt at Antinoopolis. This pair are of napped woollen fabric, solid red, with silk trim at the top edge, and a small heart-shaped appliqué at the outside top (left). The tapering tubes are sewn at the inside lower part only. The average height of those recovered, from ankle to top, was just under 28in, with a circumference of between c.20in and 12 inches. (Staatliche Museum, Berlin, but lost during World War II; inv.9925, courtesy MBK, Berlin)

use by both cavalry and infantry is attested in pictorial sources and confirmed by archaeology from Antinoopolis. *Toubion* derives from the Latin *tuba*; originally a simple trouser, it described successively a kind of greave, leggings, or stockings pulled up over trousers, sometimes fastened by simple or more elaborate lacing at the ankle and below the knee. (*Toubion* was also the term sometimes used for a true leather boot, lined with wool in winter.)

The cloth leggings were sewn to form a tube like a trouser leg; in Vulgar Latin the term *tubrugi birrei* indicated red cloth leggings, which were later copied by the Lombards (Paulus Diaconus, IV, 22). John of Ephesus (III, 28) describes a functionary of the *Praeses* of Edessa as wearing leggings in combination with low shoes, called *calcei viatorii* – i.e. travel shoes. It is noteworthy that these *tibialia* are described as *pelliccea*, i.e. made of fur, and that the man also wore a hooded garment for travelling, a *virronikion* (from Latin, *byrrus*).

The surviving specimens from Antinoopolis

conform more to the type visible on Palmyrene and Sassanian monuments, and specimens of two differing types survive in the Louvre and Berlin, both reaching above the knee. One type was of coloured wool with the lower part imitating silk decoration; the Lyon specimen is decorated with a probably Sassanian battle scene. The second type was in wool cloth but the lower leg was ornamented with a broad sewn-on silk band with Sassanian motifs. Complete silk covering was probably reserved for senior officers, and figurative sources show some leggings highly decorated with human figures, real and mythical animals and battle scenes, to match the rest of the costume. Examples of decorated leggings are visible on carved Coptic panels representing guardsmen surrounding the Virgin Mary.

The preserved specimens allowed the German scholars to reconstruct the fastening to the leg; the outside upper extension allowed the legging to be hitched to a waist belt or cord under the tunic by means of a loop. Sometimes the leggings were worn in combination with low footwear or *kampagia* (*De Cer.*, I, 423) – see above – thus forming the so-called *kampotouba*.

Sashes

Senior officers and Emperors are often represented still wearing on the breast the scarlet *zona militaris*, a scarf or sash of silk or fine linen tied around the cuirass with the so-called knot of Hercules. The expression *secare zonam* (John of Ephesus, VI, 2) meant to degrade a senior commander; in AD 573 the *officialis* Acacius cut the *zona* from the breast of the *Magister Militum per Orientem* Marcianus, signifying his removal from command of the troops besieging Nisibis.

A sash of rank was also called a *loros*; this was a long embroidered cloth, sometimes ornamented with precious stones. In special ceremonies some guardsmen and senior officers wore the *loros* fan-folded and wrapped

around the body (Lydus, *De Mag.*, II, 2) like a shawl, in the shape of the *trabea*, the last survival of the ancient *toga*. Wide sashes were also worn in the same way as protection against cold.

Headgear

Caps used by the army are found in literary, artistic and archaeological sources. Figurative sources of the 5th century still confirm the use by soldiers on active service of the cylindrical 'Pannonian' cap, the socalled *pileus pannonicus* mentioned by Vegetius (I, 20); derived from the Persian *tiara*, this might be of felt or napped wool, smooth or shaggy, low or tall. In the Eastern Empire various terms were used, including tiara, and kamelaukion, which was used throughout the Byzantine period for hats in general. The Phrygian-shaped cap is widely shown in figurative sources. The 'horsemen's graves' at Antinoopolis yielded a felt 'helmet' with plumes, together with a blue Iranian cloak decorated with silk brocade, leather boots and a red and green wool coat, all associated with a scabbarded sword. Gayet believed that this cap might be worn as padding under a helmet; however, plumed caps are shown worn by the factional militia on the now lost column of Theodosius (Freshfield drawings, n.24-25). Caps were sometimes replaced by or wrapped with a phakeolis: a kind of turban, usually of linen, wound around the cap and head in complex folds with an end falling to the shoulders as protection from the sun. This would also have allowed the use of other headgear perhaps helmets – on top.

The Pentateuch of Tours shows soldiers, officers, governors and even the pharaoh with the round cap called *pileus* or *pilos* in antiquity. These were of conical, cylindrical or 'sugarloaf' shape, as used since the earliest times in Greece and Rome, and were made of felt, wool or leather. The graves of Achmim-Panopolis revealed the use of embroidered caps, entirely white, red, or violet with yellow lining; a cord allowed size adjustment at the brow.

Garments worn beneath armour

An anonymous writer of Justinian's time (*De Re Militari*, XVI, 20 ff.) describes among other items of Roman equipment the garment worn under the cuirass by infantrymen. He refers to felt and leather armour worn by soldiers instead of metal, or used underneath metal armour. The use of 'arming doublets', and combinations of metal and 'soft armour', was commonplace in medieval times, to protect the body from the metal and from blunt trauma; so such garments are entirely logical for our period. The author writes that armour 'should not be worn directly over ordinary clothing, as some do, to keep down the weight, but over a *himation* at least a finger thick.' These garments were not worn under metal armour alone, but also under leather lamellar defences, when their protective function took on more importance. A passage of Procopius (BV, III, 23) mentions Roman bodyguards preparing to fight first putting on their *imatia*, then taking up their weapons.

Padded undergarments of this kind (*imatia* or *peristithidia*) are often represented in pictorial sources with hanging fringes of *pteryges* at the shoulders and abdomen. Such garments are still visible on many monuments, as under the muscled leather cuirass worn by *Palatini* infantry in the surviving fragments of the Theodosius column. The



Another legging from

Antinoopolis; the bottom of the grey-green woollen leg is faced all round with a silk samite panel, patterned with white and blue palmettes on a dark red ground. See Plate D1 for reconstruction of such leggings in use. (inv.9926, courtesy MBK, Berlin) mosaics of Sta Maria Maggiore also show them finished off with double layers of *pteryges*, so thick that the under-tunic is not visible. The material of such strapwork fringes (*kremasmata* in medieval Greek) might have been silk and coarse cotton stitched in layers, as in later periods. A good example of a *peristithidion* worn by an infantryman is visible on a terracotta plaque from Vinicko Kale; and decorated fragments of similar garments have been found in the Ballana graves, entirely in red leather, including fragments of *pteryges*.

GUARD UNIFORMS

The splendid dress and equipment of Imperial guards and retinues had a degree of true uniformity, characterized by white with gold ornamentation. For example, the 40 *Candidati* taken from the 6th *Schola Palatina*, who were always in close attendance on the Emperor (*candidus exercitus*, Claudianus, *De nuptiis Honorii*, AD 398), wore white silk uniforms and a gold triple necklace (*De Cer.*, I, 86, pp.391–392; Corippus, *Just.* 3, 161). The superior tunics of the *Scholae Palatinae* were of white linen (St Jeronymus, *Ep.* 60, 9, 2) as a distinction from the red or red-brown of other *milites* (Isid., *Orig.*, XIX, 22,10); but *Palatini* officers wore red or red-purple – St Jeronymus writes of the noble young officer Ausonius 'dressed in a red-purple tunic'.

The *paragauda* (Lydus, *De Mag.*, I, 7) were appliqué cloth strips or sewn borders in gold or silk thread, but the term was also used for complete garments – a kind of long-sleeved tunic (*dalmatica manicata*) of white silk,



ornamented with gold or purple stripes worked with decoration, and with gold trim at the wrists and edges. From the Historia Augusta (Probus, 4; Aurelianus, 15; Claudius, 17) we know that paragauda were decorated with single, double or triple lora or segmenta, and that these indicated a graded importance (Diocletian edict XIX, 29). John of Ephesus (II, IX) mentions the use of *paragaudis* by Imperial Cubicularii.

Guardsmen also wore shorter versions with elbowlength sleeves as over-tunics or surcoats, e.g. those of white linen worn by imperial *Candidati*, and also by the bodyguards of the *Magistri Militum* (see Plate A3). *Gentiles* (i.e. strangers, *(continued on page 33)*

The 6th–7th century Vinicko Kale plaques represent the Danubian army of the Emperor Maurice. A general (left) wears a mantion fastened on the breast by a round brooch, a sleeved tunic reaching below the knee, and perhaps cothurni boots like those described by Corippus. The soldier seems to wear a fabric or leather peristithidion as mentioned in the anonymous De Re Militari - see also Plate G3. National Museum, Skopje, inv.337-353-VI. (Drawing by **Graham Sumner**)

















barbarians) served in some *Scholae Palatinae* of guard cavalry under the *Magister Officiorum*. Being *Palatini*, they had the rank of junior officers *(milites principales)* and accordingly wore white surcoats as *Candidati*. This surcoat is visible on the Madrid silver plate representing Theodosius the Great.

The Scholae (scholarii-scholastici) are often referred to as chlamydati and palliati (John of Ephesus, II, XXXVII), i.e. wearers of the chlamys or pallium; the latter was a very rich court tabard. A precise reference to the white cloaks worn by Domestikoi Protiktores and members of the seven Eastern Scholae Palatinae at Justinian's triumphal ceremony of 11 August 559 is found in the Book of Ceremonies (I, p.498). The reference to the white cloak for the Tribunoi shows us that ancient traditions in the Roman Army continued throughout this period.

The *anaxarydes* of guardsmen are shown as white in figurative monuments. The Imperial *Excubitores* wore precious *cothurni* boots of the old style (Cor., *Iust.*, III, 169). Shining *campagi*, sometimes adorned with gems, were also distinctive symbols of the Imperial bodyguards (see Plate C1).

SELECT CATALOGUE OF EVIDENCE FOR THE COLOUR OF MILITARY GARMENTS

The range of iconographic and written sources from the late Empire is vast, and precious artefacts recovered from desert graves confirm some of the artistic sources. However, shortage of space in a book of this size limits us to citing only a very small selection; a few others are identified in the illustration captions and plate commentaries.



A mosaic in the Basilica of Moses, Mt Nebo, Jordan, dating from AD 530–531, includes this cavalryman; he wears a light brown tunic, red cloak, and broad white trousers with yellow trim at the bottom of the legs. The figure can perhaps be identified with the barbarian foederati mentioned in Nov.lust. 103, 3, under the orders of the Dux Palaestinae in AD 536. (Studium Biblicum Franciscanum) Mosaic from the Church of Al-Khadir, Madaba, Jordan, c.AD 530. This soldier wears a red Phrygian cap, a naturalcoloured tunic of Gothic shape, and wide ochre trousers, both the latter apparently with white embroidered decoration. Note the Christian cross on his shield, and the sword slung from a baldric. One of the caps represented on other figures has long fluttering ribbons. (Studium Biblicum Franciscanum)

(1) Fresco, Church of Sts Paul and John, Rome; c.AD 395

Soldier in red cloak; others in white tunics and cloaks, red-purple Pannonian caps. Probably represent *Palatini* garrisoned in Rome.

(2) Dome mosaics, the Rotunda, Thessaloniki, Greece; c.AD 400

Soldiers wear belted tunics with tight-fitting sleeves, under *chlamys* cloaks with broad purple *tablia*, and gold 'crossbow' brooches. One tunic is off-white, *tablia* and *orbiculi* purple and gold. Two cloaks are brown, the other white, with blue, gold, green and violet *tablia*. Black *campagi*, white socks or *anaxyrides*.

(3) Mosaics, Argo and Thebes, Greece; 5th century

See *flammoularios* reconstructed as Plate B3. The 'Seasons' mosaic in Argos Museum also shows hunters wearing short off-white or brown *aliculae* (hooded capes) decorated with red and blue *clavi*, but with hanging sleeves in oriental style, over white tunics and red trousers. Footwear includes high black boots, and pointed brown boots exactly as those from Panopolis, worn under or over *bracae*, *campagi raeticulati*, or brown laced *cothurni*.

(4) Mosaics from North Africa, late 4th-6th centuries

(a) Grue mosaic, Carthage Officers hunting, in natural linen-colour tunics, seem to be distinguished from servants by grey-white trousers; one rider wears light purple *femoralia;* cloaks are light purple and redorange. (b) idem, worship scene Six cavalrymen in orange, yellow, red and grey-brown tunics with dark purple *clavi* and *orbiculi;* grey-brown military neck scarves *(maphora);* high or calf-length brown boots. (c)



Great hunt mosaic, Djemila Among bestiarii uniformly equipped with decorated red leather pectoraris (e.g. see Plate E3), a cavalryman wears a green tunic with red *clavi* and *orbiculi*, a red-brown sagum, high leather (?) leggings, and brown *calcei* over green socks. (d) Qsar Lybia Among 50 mosaics executed after the Justinian reconquest of Africa from the Vandals, one represents a cavalryman of the *Libyi Justiniani* in red tunic, yellow cloak, white anaxyrides and black cothurni.

(5) Mosaics, Church of Sta Maria Maggiore, Rome; AD 432–440

Among hundreds of Biblical military subjects of relevance for the 5th century Western army are: (a) Commanders – white tunics with gold embroidered elements, or scarlet tunics with gold segmenta; that of Joshua shows red and black chequers on its lower hem. Large squared gold tablia upon dark purple cloaks; red or purple trousers, where seen. One wears white tzaggia with red laces and decorated with red gems; another, silver boots with gold laces. (b) Infantry – red and white tunics (distinction between Palatini and Comitatenses?), respectively with two yellow or
purple stripes at wrist; only white tunics show dark purple *orbiculi* and *tabulae*. Red belts. (c) Cloaks mainly red or red-brown, but some yellowbrown, green, green-blue, sea-blue, dark blue. (d) Infantry *anaxyrides* green-brown or sky blue, some with red vertical band down front. One soldier has wide white *sarabara* of Persian type, with red-brown vertical frontal band; but his companion wears close-fitting white *anaxyrides* inside black *campagi*. *Femoralia* are shown white or green, leggings dark blue. (e) Blue or brown *calcei;* black *campagi;* old-fashioned brown *caligae*. White or natural wool socks often shown inside red-brown *campagia reticulata* or open shoes. One cavalryman wears high white (felt?) boots.

(6) Decorated shield, Egypt; c.AD 450-475

Besides that described in MAA 390 as item 28 (p.23), a second has come to light, decorated with a battle scene. An Imperial functionary in *officium* costume has a knee-length long-sleeved pink tunic, dark brown *anaxyrides*, and a dark brown or black *chlamys* with purple *tablion*. Roman soldiers wear knee-length pink tunics, grey *anaxyrides*, and black boots with white laces; an archer has a pink tunic and blue-grey cloak. The scene may represent Florius, *Comes Aegypti* and *Praefectus Augustalis* under the Emperor Marcian (AD 450–457).



Mosaic from the Hippolytus Room, Church of the Holy Virgin, Madaba, Jordan; c.mid-6th century. The officer wears a long light blue chlamys fastened with a round gold and red brooch; the tunic seems to be an ochrebrown sticharion with white and purple clavi, orbiculi at the shoulder, and segmenta at the wrists. His elegant red cothurni boots are lined with white. Three other figures in this mosaic wear broadly similar costume in various different colours, with red belts. The discovery of the ancient Kastron Mefa near Madaba might possibly identify these figures with the Equites Promoti Indigenae mentioned as stationed there in the Notitia Dignitatum. (Studium Biblicum Franciscanum)

(7) Mosaics, Great Palace of Constantinople; turn of 5th-6th centuries Imperial doriphoroi or hypaspistai in hunting scenes wear garments in colours associated with Circus factions - a known practice among Praetorians centuries before, and in later Byzantine times; this supports the thesis of use of red, white, blue and green by military elites. Here the dominant colour is green, which may derive from the date of execution in c.AD 500, when the Emperor Anastasius was mainly supported by the green faction. Other images include: (a) Rider with red tunic with purple and white cuff stripes, white-fringed green cloak, and rough green trousers tucked into brown boots. (b) Officer wearing metal armour over white *peristithidion* with *pteryges*, dark green tunic, and black leggings tied with yellow strapping. (c) Short knee-breeches in yellow and white, worn by two doriphoroi, bound at the thigh by broad green and red bands/garters. They have loose sleeveless leather pectoraris, decorated with tablia and orbiculi in same colours as garters, and brooched at both shoulders; short-sleeved undergarments of ochre and white; small cloaks or wide sashes, white and green, are wrapped around the waist.

(8) Procopius of Caesarea, De Bello Vandalico; 6th century

The dress given to military leaders of Libyan tribal *Symmacharii* (BV, III, XXV, 5–8) is described as: '...a silvered cap (*pilos*) not covering the whole head, but held in place like a crown by bands of silver; a kind of white cloak (*tribon*) gathered at the right shoulder by a golden *fibula*, like a Thessalian cape; a white embroidered *chiton*, and gilded boots (*arbuli*)...' The term *pilos* must refer to a cylindrical cap, tightened by laces like the Imperial *kamelaukion*. The *arbulli* were high, strong boots for travel or hunting, made of untanned leather and fastening at the front.



6th-7th century wall painting from Chapel 3 of the Apollo Monastery, Bawit, Egypt, showing Saul dressed like a senior officer of the Eastern Empire. His white tunic is decorated with purple *clavi*, roundels on the shoulders, and cuff stripes; his purple *chlamys* is also decorated, and he wears a yellow waist sash. This supports a description by Lydus of the costume of *Patrikioi*. (Drawing by Graham Sumner)



A 6th-7th century wall painting from Chapel 37 at Bawit shows soldiers and servants hunting. Right, a military servant in a green tunic with prominent dark green decoration at the neck, shoulders, cuffs and hem; patterned trousers, and enclosed shoes. Left, the lower part of an officer; note the pteryges of a peristithidion garment worn under his cuirass, and below them a pinkish tunic, edged white. Folds show that his legs are not bare but clad in tight-fitting pinkish anaxyrides tucked into brown boots. (ex Prof Falko Daim book, see Biblio)

(9) Mosaic, Church of St Vitale, Ravenna; AD 532-547

The garments of two of the guardsmen escorting the Emperor Justinian are visible. (a) Tunic and shield as Plate C2. (b) Similar, but green tunic, ornamental bands and cuff stripes in gold. Both wear white *anaxyrides* in black *campagia*; and display the jewelled gold collar of their *ordo* (probably *Protectores Primoscutarii*). (c) In the same mosaic are two Imperial officiales of Patrician rank in very similar but differently ornamented costumes, the second possibly representing Belisarius. His white *chlamys*, pinned by a gold 'crossbow' brooch, has a squared purple *tablia* at the breast. His white *paragauda* displays at the shoulder a squared dark purple and white panel; white trousers are worn inside black *campagia*. The shoulder decorations could be an indication of military rank; if this man can indeed be interpreted as Belisarius, then the large squared appliqué could be the sign of a *Magister Militum*.

(10) Stobi frescoes, Vardar valley, Macedonia; 6th century

Fragmentary Justinian period frescoes from near Skopje. Tunics and cloaks are white, the latter fastened on the breast by a round brooch. Some figures are bareheaded; some have red Phrygian caps, one a low turban of pinkish colour – perhaps the first representation of the *phakeolion* mentioned in the sources. *Segmenta* on the cuffs may be marks of rank. The garments represented suggest identification as soldiers of the *Magister Militum per Illyricum*.

(11) Mosaics from Jordan:

(a) Church of the Deacon Thomas, Ayoun Mousa, Mt Nebo; c.AD 500–550 *Limitanei* of local garrison hunting. An archer wears a short off-white tunic, tied up for shooting, cut diagonally on the front by a yellow border and with the left front overlapping the right. Tight yellow-orange

From the same damaged painting at Bawit, two soldiers are represented with natural linen and off-white tunics with (probably) T-shaped trim and red-purple clavi; the trousers are green and ochre respectively, and the shoes black. Note the small black lines representing the pendants of composite belts. The painting may represent men of the detachment of the Scytae Justiniani detailed to protect the convent of Baullos (Bawit) since the time of Justinian (Papyrus Grenf II, 95). (ex Prof Falko Daim book, see Biblio)



anaxyrides with white-black chequered decoration; light brown calcei with open 'fingers'. A spearman wearing a linen armilausion decorated with red *clavi* and *orbiculi* shows an interesting detail: the back of the tunic is knotted, emulating the old fashion of 'bunching' the neck. (b) The Old Diakonikon, Mt Nebo; AD 530 Military figures hunting with spears and shields. One has a Phrygian cap (orange with a red stripe), a Gothic tunic (red with dark green embroidery at neck and cuffs only); wide light red-brown trousers, edged at the bottom in black or dark green decorated with small white circles, over short red boots. One of two cavalrymen shows evident Germanic origin, being similar to Vandal mosaics at Carthage. He wears a white Gothic tunic, with wide gold embroidery on the lower hem and light brown segmenta on the sleeves; a dark green sagion; wide orange trousers, embroidered at the bottom in black and white, and red boots. (c) Martyr Theodore chapel, Madaba, c.AD 562 A soldier hunting a lion shows an interesting detail: the skirt of his sleeved white tunic is tied up with knots, for freedom of movement, and under it a light kamision is tied up in the same way. (d) Chapel of Suwayfiyah, c.AD 550-600 A partial image of an archer shows a white tunic edged at neck and cuffs with red and white lozenge decoration, strikingly similar to original specimens found in Egypt.

(12) Wall paintings and frescoes from Egypt; 6th-7th centuries

(a) Hunter or soldier, Chapel 18, Bawit Long-sleeved knee-length white tunic with red T-shaped trim, white trousers, composite belt set, enclosed shoes. (b) Two angels, Chapel 3, Bawit Represented as Imperial guardsmen; long white *paragauda* decorated with gold *clavi*, *orbiculi* on lower leg, *segmenta* on cuffs; gold *taenia* headband; off-white *anaxyrides* tucked into silver boots. (c) David armoured before Saul, idem Under lamellar armour he wears a pinkish-red tunic, and high yellow boots. (d) Goliath, idem Fully armoured; pink-red *peristithidion* with attached *pteryges* visible under muscled cuirass; pink-red cloak, linen *anaxyrides*, green boots. (e) Four cavalrymen, Chapel 26, Bawit All have T-shaped tunic trim. (1) Green tunic, red-purple trim, lower edge black/purple with pink roundels; white trousers; white cloak, red *tablion*. (2) White tunic, grey (purple?) ornaments; white trousers, black leggings, brown boots; cloak with red *tablion* and black spots. (3) Only red *toubia* decorated in white, and white tunic with black Phrygian work,

are visible. (4) White garment embroidered in red and white, light brown cloak; light green trousers (leggings?) outlined red over second, white pair; black boots identical to specimens found at Panopolis. (f) Saints as two cavalrymen, panel from Bawit Tunics (off-white, ochre) with T-shaped blue-green decoration showing roundels; cloaks (ochre, brown); off-white trousers, black boots. The 'Byzantine horseman' found by Gayet (Musée Guimet) was dressed in this way. (g) Herod's soldiers, frescoes, Abu-Hennis sanctuary Long-sleeved white or redbrown tunics with red-purple T-shaped trim; yellow-ochre trousers; guards with helmets, executioners bare-headed - distinguishing Roman guardsmen from Gothic or Asiatic mercenaries? (h) Military saints, paintings, Kellia (modern Qocur el-Izeila) Three (Kom 14) have yellow and brown tunics, muscled leather armour, thoracomacus with two or three rows of pteryges; purple cloak, large brooch on right shoulder; high black boots. St Menas (Kom 219) has natural linen cloak sprinkled with white flowers; long-sleeved red-pink tunic with clavi, orbiculi, yellow cuffs; pteryges below waist suggest rare example of thoracomacus entirely of cloth and decorated on the breast like the usual Coptic tunics.

(13) Mosaics, Church of St Demetrios, Thessaloniki; 5th–7th centuries (a) Earliest mosaics destroyed 1917, but 1906 watercolours show important details. Pattern visible on purple *tablion* continues in lighter shadows on white surface of *chlamys*, indicating overall woven pattern.



A 6th-7th century painting in Chapel 17 at Bawit shows St Sisinnios as a Roman cavalryman. Over an off-white long-sleeved zostarion tunic he seems to wear a short armelausion with elbow-length sleeves, heavily trimmed in the usual T-shape with gold, pinkishred and white 'Phrygian work' embroidery. The orbiculi on the skirt are pinkish-purple edged with gold. His white cloak has a squared reddish-purple tablion on the chest, and is pinned at the right shoulder with a 'crossbow' brooch. A red belt fastens the tunic. His linen trousers in the shape of Persian sarabara are decorated with similar embroidery at the ankles, over black boots. (Drawing by **Graham Sumner**)

Tunic similar, with red floral design, rhomboidal decoration on *tablia* at shoulders and thighs, *segmenta* at wrists. (b) Other 5th century survivals show simplified colours, including white *chlamys* lightly decorated with dark flowers, blue *tablion* with lighter embroidery; white tunic, rhomboidal white decoration on dark *tablia*, squared red shoulder panel bearing double white circle surrounded by points; red belt. (c) Mosaic of AD 629–634 shows white cloak patterned with small flowers, dark blue *tablion* with red flowers; tunic has white embroidered angel on squared red-purple shoulder panel, white circles on cuff *segmenta*; detailed red leather belt, gold buckle.

(14) Clothing finds from Antinoopolis, Egypt; 6th-7th centuries

The inventory includes: (a) c.32 riding coats found by Gayet and Schmidt, though hundreds of other fragments now dispersed point to almost another 50. Main colours red-purple (10), blue-green (13) and green. They are trimmed with silk brocade of various patterns and colours, e.g. blue with yellow lions, blue with white and brown birds, etc. (b) Cavalry tunics following Gothic and Persian fashion, with woollen tablet-woven trim, or silk brocade stripes embroidered in blue, yellow and red. (c) Linen Coptic tunics embroidered with orbiculi, clavi and tablia; patterns of e.g. small monochrome flowers. (d) Cloaks in purpledyed linen with blue wool lining; brocades of small red-brown flowers. (e) Leggings of grey-green felted cloth edged with silk brocade - red tendrils and geometrical patterns on blue background. (f) Woollen socks dyed black. (g) Officer's belt in yellow leather. (h) Officer's cothurni in brown leather. (i) Men's calcei in brown leather. Various metallic fittings were also found, e.g. buckles in gold/silver alloy and bronze, and iron fibulae.

(15) Two Viennese papyri from Egypt; 7th century

Recently published, these attest to the use of 'Bulgarian' belts and clothes of 'Hunnic' types, i.e. the Avar pattern tunics provided for the cavalry in the *Strategikon*. Note that '*ounnikon*' was employed as an adjective for silk cloth (Evagrius, 6, 21), perhaps reflecting the preference (BG VIII, 19, 16) of Huns in Roman service for fine decorated clothes. The list of 'Hunnic' garments includes elbow-length, pure silk with figurative motifs in nut-brown; elbow-length 'following the Hun fashion'; and elbow-length with purple appliqués.

(16) Encaustic (wax) portraits on linen and icons on wood of military saints, Egypt; 5th-7th centuries

Hundreds of these survive. Military icons were displayed in army camps. The most striking example is one from the Sinai Monastery, representing Sts Sergius and Bacchus as 6th/7th century Roman officers. Each wears a white *chlamys* with dark brown *tablion*, and a red *chiton* with gold shoulder bands; neck *torques* set with three gems classify them as Imperial officers or guardsmen.

(17) Codex miniatures, 5th–7th centuries

(a) Quedlinburg Itala codex, AD 425, Italy Roughly contemporary with Sta Maria Maggiore mosaic (item 5 above) and in similar artistic style. Generals in red *chlamys*, red *anaxyrida* and cloth-lined boots; white

under-cuirass garment decorated with purple segmenta on the pteryges. (b) Codex Vergilius Romanus, 5th century, Britain, Gaul or Italy? Recently proposed theory of British origin would suggest a unique representation of sub-Roman warriors of Arthurian times. Richly goldembroidered white paragaudia worn by officers with yellow, orange and brown Phrygian caps (cf use of Phrygian caps by Romano-British soldiers from 4th century mosaic at Low Ham Villa, Somerset - MAA 390, item 29, p.23). Brown tunics with red trim; sagula orange, redpurple, red-brown, red and green; all the brown and mauve anaxyrides are decorated with small orbiculi and lines on the front - found elsewhere only on the Ravenna mosaics. (c) Codex Rossanus Purpureus, 6th century, Constantinople Among a rich variety of military uniforms, the tunic colours of Imperial semeiophoroi follow those of the Circus factions; moreover, the white tunic is linked with the blue, and the red with the green: in medieval Byzantium the white and blue factions were opposed to the red and green, and their *militia* gave rise to two different regiments, the Teichistai and the Noumera, from the end of the 7th century. (d) Genesis of Vienna, 6th century,

Mosaic from Church of St Demetrios, Thessaloniki, Greece, associated with the third siege of the city by the Slavs at the beginning of the 7th century; the saint is depicted as a high Imperial officer. His white chlamys is decorated overall with gold rhomboids, and a red-purple tablion bears white rhomboids; the inside of the cloak is light blue with a bottom edge band of the same pattern. The light brown tunic has dark blue or purple panels at shoulder and lower leg with white floral, Christian and geometrical patterns. (Drawing by Andrea Salimbeti)

Syria or Constantinople? The Melchisedec image wears high red-purple boots with pearls on the edges; these *tzangia* are the unique representation of Imperial boots described by Theophanes as worn in battle by Heraclius. (e) Ashburnham Pentateuch, 6th-7th century Perhaps a rare source from the North African provincia reconquered by Justinian (though some scholars disagree, so the identification of figures with units listed in the sources after the reconquest is problematical). Many types of troops and commanders are illustrated, some in armour, in tunics of many colours, and some with cylindrical caps and legwear which can be associated with other sources. Some tunics have trim at the lower edge, and/or two segmenta at the wrists; some trousers are of Gothic style, with embroidery at the ankles. Most striking is that very few tunics and cloaks are decorated. (f) Rabula Gospel, 7th century, Syria Preserved in Biblioteca Laurenziana, Florence. Guardsmen wear pinkish paragauda embroidered in gold; an executioner has a red tunic, green trousers and off-white fasceolae as mentioned by Paulus Diaconus, tucked into brown calcei; a centenarius wears a red tunic, white sarabara, light purple leggings and black cothurni; other soldiers display typical Persian costume; and a senior officer has a red tunic, lamellar gold armour, violet chlamys, white fasceolae and brown cothurni - as does the general in the contemporaneous codex of the Syrian Orthodox Church of Mar Jacques de Sarug.



A series of 7th century bronze statuettes from Egypt and Asia Minor depict typical late 6th century tunics (though note example with vertical fluted effect), with broad T-shaped trim around the neck, along the shoulders and down the front to the waist, and composite belts with pendants. The hairstyle is what used to be called a 'pageboy bob'. (ex Prof Falko Daim book, see Biblio)



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One statuette from Asia Minor is clearly a rare representation of an iron or leather knee defence strapped over loose trousers – note the folds above it. Such defences are mentioned in *De Re Militaris*, 27, 17–18. (ex Prof Falko Daim book, see Biblio)

Details of the statuettes – rear shoulder and waist, and front of leg. Short *femoralia* trousers are worn with boots and perhaps leggings, but the details shown in (c) are hard to interpret. (ex Prof Falko Daim book, see Biblio)

THE PLATES

A: THE FALL OF THE WEST, 5th CENTURY AD A1: Aetius, Magister Utriusque Militiae

This reconstruction of 'the Last of the Romans' shows the basic elements of the costume of barbarian auxiliaries now adapted into the luxurious dress of senior commanders. The cloak is pinned with a gem-encrusted gold 'crossbow' *fibula*; the sword belt has gold plates and large gems. The *sticharion* tunic and *paludamentum* are richly patterned with circled busts of Emperors, and rows of arcades filled with full-length figures. The tight-fitting *anaxyrides* show an embroidered *orbiculus* low at the left knee. Blue leather *campagi* shoes have small points behind the toes and narrow straps with silver buckles.

A2: Imperial buccellarius, or miles of the Placidi Valentiniani Felices

From the Sta Maria Maggiore mosaics, this figure may represent a member of the Imperial *Buccellarii* sent to Italy by the Eastern Emperor Theodosius II, with Galla Placidia and his son Valentinian III, the new Emperor of the West. Among them are represented *Palatini* and *Comitatenses* units of the Italian *Diocesis*, and the *Numerus Placidi Valentiniani Felices*. The long-sleeved tunic of heavy wool is gathered by a typical military belt; and the trousers are short *femoralia* worn with cloth leggings or gaiters. The footwear are either a survival of the old *caligae*, or *campagia reticulata*, with thongs carried up around the ankle. They are worn over wool socks, which have a separate big toe.

A3: Hun of Aetius' bodyguard

This Hun, as a guardsman of the Magister Militum, wears a linen paragauda podheres i.e. with short sleeves (Lydus),

embroidered in blue-purple wool. The knee-length red linen *kamision* worn beneath it is similarly embroidered; Gayet excavated bodies wearing such pairs of tunics in Egypt, and the decoration conforms to 5th century specimens at Camposanto. The decorated cloak is basically the simple Roman *paenula* of heavy wool; this one is copied from the Sta Sabina door. For such garments the sources speak of *gausapa*, a weatherproof material rough on one side but compact on the other. The loose-fitting trousers are also of heavy wool, tucked into *calcei equestres*.

B: EASTERN ARMY, c.AD 425-475 B1: *Biarchus* of the *Cuneus Equitum Scutariorum*

This Ostrogothic cavalryman's equipment is from latrus in the Balkans, destroyed by the Huns between these dates. Paintings from Silistra show a *sagion* cloak of this colour with two red-purple *tablia* on the back. The scarlet tunic, from the Hermitage Museum, is in a wool-and-linen fabric, with light purple appliqué decorations in net-pattern 'Phrygian work'. The boots are after a specimen from Aquileia.

B2: Military officer (Primikerios) in Officium dress

The *tunica militaris linea auroclavata paragaudata* is the main garment worn by this senior officer of the Syrian army, perhaps from Antioch. It is richly decorated with gold thread around the forerarms, neck and lower edge, from which gold *semeia* and *clavi* extend on the shoulders, breast and skirt sides; squared *tablia* are stitched to the thighs. *Paragauda* decoration was characterized by *segmenta* forming four Greek *gamma* letters reversed and contraposed. The internal lower edge of the cloak shows a



Detail of tunic segmentum decorative bordering or patch from Egypt, 4th-5th centuries (compare with Plate A3). It is woven in red wool and naturalcoloured linen, with details in black, purple and green. Subjects associated with military garments usually represent military, heroic or hunting scenes, since hunting was the soldier's favourite exercise; we have shown Plate B2 holding a hunting spear. (ex Vollbach, Berlin Museum, inv.6922, courtesy DAI)

OPPOSITE Ways of wearing the riding coats found at Antinoopolis (see Plate D1). Left to right: open, with sleeves full length; closed, with sleeves full length; closed, with sleeves pushed up, the decorative extensions displayed on the backs of the hands; and a coat with armpit openings through which the arms pass, leaving the sleeves hanging. (ex Malk in Knauer, 2002; drawing by Graham Sumner) sewn-on decorative lining (*limbus* – Hesychios Lexicon, O, 2042). The *cothurni* are worn over a cloth lining or socks. B3: *Flammoularios* of the *Mattiarii luniores*

Based on the 'Seasons' mosaic from Argos museum, he holds a small *vexillum* with swallow-tails (*flammoula* – Lydus, *De Mag.*, I, 4). Under the cuirass and over his tunic he wears two other garments. The first is a leather *thoracomacus* faced with quilted felt (*kentouklon*); its upper edge is just visible at the neck. The second is a silk and cotton *peristithidion*, from which hang double layers of thick *pteryges* at the shoulders and waist.

C: IMPERIAL GUARDSMEN, CONSTANTINOPLE, 6th CENTURY C1: Spatharios

The Palatine guardsmen's elaborate decorative uniforms varied between individuals and regiments (Cor., *Just.*, III, 164). This man carrying a *spatha* sword wears a white linen *tunica talaris linea auroclavata paragaudata* for ceremonial duty, heavily decorated with gold embroidery at the neck, shoulder, cuffs and skirt. The *chlamys* displays rich *tablion*, woven in pure gold thread, decorated with red circlets enclosing birds, and red ivy leaves (mosaic, Church of St Apollinaris, Ravenna, AD 549). A reference to his careful hairstyle, held in place by a silver circlet (*taenia*), is found in the description of Narses by Corippus (*Just.*, III, 223).

C2: Protector of Primoscutarii

This man, from the St Vitale mosaic at Ravenna, wears a scarlet *paragauda* with purple and gold embroidery. Note the pattern of gold arrowheads on the shoulder pieces, the skirt, and the two stripes on the sleeves. Neck ornaments varied according to the different *ordines* of guardsmen; a wide range of such *maniakia* or *torques* were worn both as military decorations and symbols of rank by officers, standard-bearers and guardsmen collectively termed *torquati* (Lydus, *De Mag.*, I, 47). The shield displays a gem-studded Christian CHI-RHO monogram. His shoes are black *campagia*.

C3: Excubitor

According to Lydus (*De Mag.*, I, 5) the *Excubitores* unit was still equipped in imitation of the old Roman tradition. Created in AD 468 by Leon I, by Justinian's reign it consisted of 300 men recruited among the ferocious Isaurians. Corippus and Lydus mention bronze helmets (*cassides*), gilt javelins (*pila*), axes (*secures*) and round *clipei* shields. Their footwear was the *cothurnus*, a short boot laced or buckled to calf height. Theophilact (VI, 2–6, 10–4) describes an Imperial guardsman dressed in bright clothing, and Corippus has men in a consular procession wearing scarlet tunics; both mention gold-fitted belts, clearly this composite type.

D: ARMY IN EGYPT, c.AD 550-600 D1: *Buccellarius* of the *Dux Thebaidae's* bodyguard

This cavalryman, from the Bawit frescoes, is detailed after Gayet's finds. The riding coat edged with silk brocade bands is cut to overlap on the breast; the overlength sleeves hang free. Under it he wears a linen tunic trimmed with wool or silk bands at the cuffs, and in a T-shape (although hidden here) at the neck, breast and prolonged on the shoulders. His leggings *(toubia)* are hitched to a belt under the tunic and worn over white trousers; copied from the lost specimen inv.9925 from Berlin, they are of red wool embroidered in silk at the lower legs in Sassanian style.

D2: Primikerios of the Quintani

From the Cathedra of Maximianus, he wears the typical *zostarion* for infantrymen; note the richly embroidered T-shape of decoration. His cloak is fringed at the edges; Bawit paintings show a red-orange colour, and the remains of the fringed edge of a linen-and-wool cloak were preserved before World War II in the Berlin Museum. Gayet found a yellow leather belt in an officer's grave; belt fittings from Egypt identify the Quinta Macedonica (*Quintani*, in military slang) as the main *katalogos* in the Thebaides. Note his wide Persian *saravara* trousers and *hypodemata* boots, corresponding to those described in the *Strategikon*.

D3: Flavius Macarius Isaccus, military adiutor of the Justiniani

Gayet found '20 men's mantles with splendid silk embroidery, many pairs of high quality leggings with green background sprinkled with red medallions each enclosing an animal figure, ten pairs of leather wristlets with silk appliqués (winged bulls and birds, in Sassanian style), and boots'. A corpse was also found buried with his writing instruments – a leather case engraved with a warrior figure, and a bronze pot sealed with leather – and a red oriental coat. Perhaps he had held the post of *adiutor* in the Antinoopolis regiments, in which this officer of a *Justiniani katalogos* at Panopolis is mentioned? Holding his coat, he wears a superior white linen



hooded *dalmatica*, heavily decorated with red and purple. The under-tunic is the usual linen *kamision*. The woollen leggings, copied from the Louvre specimen, are dark purple with silk facings on the lower legs.

E: ARMY IN ITALY & AFRICA, 6th CENTURY E1: Eques of the Primi Felices Justiniani

Based on the Ashburnham Pentateuch, this cavalry trooper wears a felt *pilos* cap of 'sugarloaf' shape. His tunic has two gold bands above the wrists; the knotted cloth belt is like that of the Bawit frescoes. Over his red trousers he has *tubrugi birrei* – tubular gaiters of red woollen cloth, laced up the back. Gayet also describes leggings or greaves made of Morocco leather, with a broad silk band decorating the lower edge.

E2: Papal guardsman

Based on the Judgement of Solomon fresco in Sta Maria Lata, Rome. Germanic soldiers are mentioned in the Pope's retinue, and the references are confirmed by 6th century graves found in Rome. The main tunic is from an example of a bell-shaped oriental type, in wool and linen, now preserved in the Vatican. Sewing is visible on the shoulder seam and along the sleeve, and note that the inside surface of the sleeves is of silk of a contrasting darker shade. The leather greaves are copied from African mosaics.

E3: Officer of the *Patrikios Obsequium*; Ravenna, AD 568

A splendid mixture of Romano-Persian equipment includes a leather *pectoraris* protecting the breast and upper back. Of pink, decorated in scarlet, it has semicircular shoulder defences with *pteryges* of matching leather. It is worn over the distinctive tunic of Imperial guardsmen, as described in the sources for *Candidati*. The trousers are of cashmere cloth trimmed with silk bands; and the *campagia* shoes are from a specimen found at Panopolis.

F: ARMY IN SYRIA & PALESTINE, 6th-7th Centuries

F1: Biarchus of the Tertio Dalmatae Vexillatio Comitatensis Biarchus

The Equites Tertio Dalmatae are listed in the Notitia Dignitatum with the field army stationed in Syria, and are also recorded in Edict IV, 2 of Justinian as part of the Phoenician army. He wears a natural linen tunic decorated with *clavi*, *orbiculi* and *calliculae*. Knee-length trousers of heavy dark brown cloth, with vertical sewn seams, are copied from a unique example found at Panopolis. *Calcei reticulati* are worn over white fabric lining, copied from an example of a composite boot from Achmim.

F2: Soldier of the Lykokranitai

Copied from a mosaic at Mt Nebo, Jordan. The *Lykokranitai* ('wolf heads') were a unit of Pisidian *limitanei* from Asia Minor; Theophanes (p.178) writes that they were sent against Samaritan rebels in AD 530. The Phrygian cap has decorative bands. His *zostarion* of yellow-brown linen is decorated at the neck, breast, wrists and lower hem with applied tablet-weaving or silk bands. Under his 'elephant's foot' *brakia*, decorated with silk at the ends, he wears soft red goat's-leather boots copied from a superb

specimen from Panopolis; hidden here, the upper shafts were of white leather with yellow leather decoration.

F3: Miles of the Vandali Justiniani

This Germanic soldier, stationed in Syria by Justinian after the reconquest of North Africa, is based on a mosaic of AD 578–594 from Umm Al-Rasas, Jordan. The tunic is decorated with lozenge-pattern bands at the wrists and around the neck and shoulders, but lacks the T-shaped decorative scheme usual at this period. The composite belt, with its several pendants, is worn at hip height. He wears linen *bracae*, and high boots with knee extensions, based on an excavated example from Antinoopolis.

G: ARMY ON THE DANUBE, LATE 6th CENTURY

G1 & G2: Soldier (phoideratos) and junior officer (campidoctor) of Lanciarii Seniores

From the Vinicko Kale terracottas and Stobi frescoes. The junior officer **(G2)** wears a red-brown Phrygian cap, the soldier **(G1)** a *phakeolion* turban. Their *kamisia* and *chitones* have armpit openings for ease of movement, just visible on **G1**; they are variously decorated with embroidery at the wrist, breast, lower hem or skirt. The officer's cloak is an attempt to reconstruct the so-called *sagion Boulgarikon*, which the *Strategikon* advises against for infantrymen, but which documents in Egypt confirm was provided. It is of heavy wool, rectangular, and bears large wool and silk decorations on all four corners of a *crux gammata* in violet. Some authors interpret the word *Boulgarikon* as 'common, vulgar', rather than as meaning of Bulgar (Hunnic) origin.

G3: Senior officer (senator) of infantry

Again based on the Vinicko Kale terracottas, he wears the reconstructed *peristithidion* from Ballana. The leather is decorated with a pierced floral design and zig-zag decoration between the heavier red lozenge-shaped elements, and the tongue-shaped *pteryges* at the shoulders are stamped with patterns. The edges of the Ballana garment were strengthened with an extra strip of leather through which passed thongs; note under his right arm, protruding through holes in one of the lozenges, loops of this plaited leather fastening cord.

H: THE TRIUMPH OF HERACLIUS, AD 629 H1: Emperor Heraclius

Heraclius is dressed in the *schima* of a brave and victorious general, known as the 'Achilles' uniform; he has laid aside the cuirass in 'heroic' style *(thorakion heroikon)*, but wears the helmet-crown with peacock feathers *(toupha)*. The

Black calf-leather boot (see Plate F3) excavated at Antinoopolis by Carl Schmidt, 1896. The sole is 9¼in long, and the leg – extended to protect the knee – is just over 17in high. The top of the instep is decorated with double and triple embossed transverse lines. A vertical seam runs up the front, and a sewn-on piece of leather reinforces the back of the heel. (Courtesy Museum fur Byzantinische Kunst, Berlin, inv.9752) padded, riveted garment worn under the cuirass – called a *zoupa* in later times – is copied from a sarchophagus in Salona Museum; note the decorated *pteryges*. Under it he wears the triumphal dress for Palatine ceremonial, the *divitision:* a dark purple medium length long-sleeved *chiton* decorated in gold, woven for the occasion of his triumph. The belt, copied from the specimen given by Heraclius to the Bulgarian Khan Kuvrat, displays gold fittings and gems (Cor., *Just.*, II, 88, 114–116). The Imperial cloak was of glowing violet-purple (*ardens murex*), with a *tablion* woven of gold metallic thread and multi-coloured silks (id., II, 119). His *cothurni* half-boots are of soft red leather decorated with pearls.

H2: Imperial somatofulax

This Persian-style ornamental silk parade uniform dated from the 4th century (Tertullianus, *de Pallio*, col. 1043 Migne). The *tunica superiore* is entirely of gold thread, according to John Crysostomus' description of Imperial guardsmen. The *orbiculi* and other decorations were worked in so-called 'darned weaving': i.e. the weft is absent where *semeia* were inserted, so that they were visible from both inside and outside the cloth.

H3: Imperial doriphoros

This costume shows a close resemblance to that of ancient Palmyra. At the time of Tiberius II (AD 578–582) the soldiers of factions following Kedrenos wore 'tunics variegated with silk segments and purple-red', with gold embroidery. This *armelausion sarafan* is decorated with bands in *mesoporphyros* (interwoven purple-red and gold), and dark purple and gold *semeia*. Note the narrow sleeves of the Persian style under-tunic. He wears highly decorated Persian *sarabara* trousers and *campagi* of red and gold leather.



Fragment of leather garment, with parts of lateral fastening, from the 4th–6th century Ballana graves in Nubia (see Plate G3); it was probably made in Christian Egypt. Associated tongueshaped fragments of brown leather *pteryges* have incised double borders, and a series of double *ankh* symbols. (Drawing by Graham Sumner)

Imperial guardsmen of the time of Heraclius, from silver plates now in the Metropolitan Museum and the Hermitage. They are dressed in a mélange of Persian and Roman costume, the torso decorations apparently imitating the shoulder pieces of armour; see Plate H2. (Drawing by Graham Sumner)



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