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**THE PANOPLY OF THE ARMoured PERSONAGE
FROM THE CAPITAL FROM BISOTUN.
REMARKS ON THE SPREAD OF THE MILITARY TECHNOLOGY
ALONG THE SILK ROAD***

ABSTRACT The armour of the personage depicted on the capital from Bisotun, exhibited in Tāq-e Bostān, has been an object of the research already several times with no definite setting in typology of arms and armour and allocation in historical trends. The article attempts to fill this gap. The article defines the helmet as lamellar/laminar type with the splints with ornately incised edges and central splint over the personage's nose. The top of the dome is crowned by the decorative, solid finial to which a *korymbos* is attached. This relates the helmet to the lamellar helmets from Xinjiang and Tang Dynasty China rather than to [?] earlier Kushan lamellar helmets and related Eurasian types, characterised by a flat, round sheet at the top of the dome, usually a sheet over the face, often with a nasal and the laminae running overlapping around the dome, without the central lamina over the face and other laminae spreading to its sides.

The body armour can be described as a cuirass made of metallic stripes riveted to each other and placed horizontally, with the central, vertical stripe in front. The type is derived from Parthian predecessors with plausible earlier, Achaemenid and Hellenistic sources. The cuirass with frontal opening was a dominant type of construction among the Sasanian armours. The direct relation was evidenced with Korean and Japanese cuirasses of 3rd and 4th centuries (later replaced by lamellar coats) and Eurasian, mainly Xinjiang types.

Key words: Sasanian armour, Capital from Tāq-e Bostān, Early Iranian armour, Lamellar helmets, Eurasian cuirasses, Eurasian armour, Xinjiang armour, Early Korean and Japanese armour

ABSTRAKT Pancerz postaci przedstawionej na kapitelu z Bisotun, wystawianym w Tāq-e Bostān stała się przedmiotem badań już kilkakrotnie, jednak bez konkretnego osadzenia w typologii uzbrojenia, oraz przypisania do trendów historycznych. Artykuł jest próbą wypełnienia tej luki. W artykule określono hełm jako lamelkowy/laminarny, z lamelkami o ozdobnie wycinanych krawędziach i centralną lamelką nad nosem postaci. Szczyt dzwo-
nu zwieńczony jest ozdobnym, masywną sterczyną, do której przymocowany jest *korymbos*. To odnosi hełm do hełmów lamelkowych z Xinjiang i Chin dynastii Tang raczej niż do wcześniejszych kuszańskich hełmów lamelko-
wych i typów euroazjatyckich z nimi związanymi, charakteryzujących się płaskim, okrągłym dyskiem na szczycie kopuły, a także zwykle arkuszem nad twarzą, często z nosem i lamelami biegnącymi wokół kopuły, bez centralnej lamelki nad twarzą i innych rozprzestrzeniających się na jej boki.

Pancerz określano jako kirys złożony z metalowych pasów przynitowanych do siebie i ułożonych poziomo, z centralnym, pionowym pasem z przodu. Typ wywodzi się od partyjskich poprzedników z prawdopodobnymi źródłami wcześniejszymi, achemenidzkimi i hellenistycznymi. Zasugerowano, że kirys z centralnym otwarciem był dominującym typem konstrukcji wśród zbroi sasanidzkich. Bezpośredni związek wykazano z kirysami koreańskimi i japońskimi z III i IV wieku (zastąpionymi później przez okrycia lamelowe) oraz typami euroazjatyckimi, głównie z Xinjangu.

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Fig. 1. The capital – armoured figure, frontal view.
Picture by Yousef Moradi

Introduction

Among the Sasanian capitals with figural decoration originating from Bisotun and until recently exhibited in Tāq-e Bostān,¹ one contains the depiction of an armoured male personage (Fig. 1). Unlike the other capitals from the collection, this one had not had the faces deliberately destroyed, which suggests that it might have been deposed before becoming Islamic spolia. The capital was with all probability discovered during the construction of the new mosque of Kermānshāh in the Ābšūrān river which was transferred to a sewer. The piece is said to have been found during the groundworks during construction of the congregational mosque eventually turned into police station.² Thus, the source of the capitals remains unknown. It is not known if they originally created a single group, what kind of building did they decorate, either religious or secular.³ If secular, would that be a public or palatial construction? Different treatment of the pieces in the course of the history suggests that either original building was demolished in phases which allowed employment of part of the capitals, possibly, as ablution basins after erasing of the representations of the faces.⁴ The deposition of the capital with the depiction of the king and the

warrior might mark (1) a further stage of demolition of the original structure, (2) the fact that the builders of the mosque were satisfied with the amount of spolia used and found no use for more, (3) the depiction could be too legible and thus inappropriate for the mosque or (4) the capitals might derive from different buildings. For whatever reason the piece ended at the bottom of the Ābšūrān river, later sewer, it was added to the collection, which is stylistically sufficiently homogenous to argument their shared program or at least origin.

The iconography of the reliefs has been examined several times.⁵ Although the very nature of the Sasanian visual culture remains rather obscure; furthermore, the modern history of later pre-Islamic Iranian art is obsessed with the identification of the personages, usually with the assumption of their religious content, somehow ignoring other forms of symbolic, secular representations. General eagerness to jump as quickly as possible from visual to textual expression of spiritual content is a natural phenomenon in a field of study which originated from linguistic studies, however, given the relatively small corpus of known Sasanian art and the fragmentary state of the available literature, such attempts are statistically not credible. Nevertheless, it is almost unanimously agreed that the armoured figure represents Bahrām-Vərəθraǵna, the Iranian god of military victory.⁶ In my 2017 article I was bold enough to propose that the subject might suggest a date for capital after 610, when the war with the Byzantines reached its nominal goal, i.e. avenging the death of emperor Maurice – the benefactor of Kōsrow II Parvēz. The divine identification was supported by the fact that the personage is shown without any offensive weapons, which was reputed a feature of the gods in Sasanian iconography.⁷ The observation of deities not carrying arms might seem true, however a question should be asked about how could unarmed personage achieve, and subsequently symbolise or personalise, a victory, which cannot be achieved by remaining protected only? Also, literary sources describe the deities armed and similar scruples were not shared by Kushan iconography, where Iranian deities were not only depicted, but also named in the inscriptions.⁸ Surely, the omission of arms cannot result from the pacifistic nature

¹ Compareti 2018: 22.

² Compareti 2006: 164-165; 2014:140, 145; 2018: 24; Luschey 1990.

³ Compareti 2014: 16.

⁴ Compareti 2006.

⁵ Compareti 2006, 2014, 2018, 2019b; von Gall 1990a; Skupniewicz 2017.

⁶ Moradi 2003; Compareti: 2006, 2014, 2018, 2019b; Shenkar 2014; Skupniewicz 2017.

⁷ Vanden Berghe 1993: 74; Compareti 2018: 25.

⁸ Shenkar 2014; Compareti 2014: 146-148.

of the Sasanians. On the margin, it is worth mentioning that, if we were to believe the testimony of Ammianus Marcellinus, the Sasanian aristocrats or free-men/*āzādān*⁹ carried the swords on all occasions, the personages without arms could be found excluded from this group but not necessarily as not-noble, but rather as not free, or bound to something, perhaps to a deity or a temple, most likely with an oath. In such a case, the unarmed personages might be interpreted rather as priests who acted on behalf of the deities rather than deities themselves. Such explanation would reconcile textual sources depicting armed deities, Kushan iconography and alleged Iranian reluctance to visualise the gods. Another problem appears with royal portraiture, as the Sasanian kings claimed semi-divine status, it would be difficult to mark the boundary at which step of divinity the weapons were becoming *faux pas*.

The armour might, possibly, signify different things,¹⁰ but no enemy could be defeated just by the virtue of wearing an armour. Despite the occasional boastful claims,¹¹ the actual structure of visual communication of Sasanian art, its semantics, semiotics and hermeneutics is often based on conclusions built over assumptions. The knowledge of Sasanian iconography, with the current amount of material, both visual and textual, cannot reach the level of iconology. Even real iconographic analyse is difficult to achieve. Therefore, the following analysis does not aim at the identification of the armoured personage, but takes as a goal the proper definition of the depicted armour, providing associated comparable material and, thus, setting it in the evolutionary frames of armour development in Eurasia.

Despite the obvious importance of the capital for the history of Iranian arms and armour, the depiction on the capital was omitted in the most highlighted works on the topic.¹² This is especially surprising in the case of von Gall, whose seminal work on the scenes of mounted combat on Parthian and Sasanian rock reliefs was published the same year as his article about the so-called investiture scenes in the light of the capitals from Bisotun/Ṭāq-e Bostān.¹³ It is possible that von Gall ignored the capital as it does not represent a mounted combat, which was the topic of his book. On the other hand, however, he examines the types of armours

used by the Sasanian warriors, where the capital could have provided an excellent comparison.

The capital was introduced to the arms and armour research in 2007¹⁴ as an example of Sasanian plate armour or cuirass¹⁵ and, separately, as a study of the helmet depicted there.¹⁶ The former essay described the evolution of the plate cuirasses in Sasanian Iran arguing their relation with the Hellenistic muscle cuirasses. The article shared large part of the arguments with the article of Ulf Jäger,¹⁷ published independently, authors were not aware of their works, however Jäger, being focused on the possible derivations of the muscle cuirass in Central Asia, omitted Sasanian material and, thus, the capital from Bisotun/Ṭāq-e Bostān. Nevertheless, both authors have drawn similar evolution scheme of luxury armour in Asia, to which the item under discussion definitely belongs. The topic was further developed in my 2015 article which emphasised the symbolic functions of plate armours, where I included Bisotun/Ṭāq-e Bostān capital again believing that it would represent direct continuation of Hellenistic cuirasses.¹⁸ Although these early views were, to some extent, incorrect and the current essay aims at correcting the mistakes by shedding new light on the topic, they were important attempts to define the type of the armament depicted on the discussed image. The mistakes resulted from working on an incomplete photographic material, overly focussing on certain features while omitting others, and confusing descriptions in existing texts. Compareti, in his, otherwise excellent, iconographic studies of the object seemingly had a methodological problem with the conceptual location of the armour. In 2006 he stated that the personage “is dressed as the chain-armoured horseman statue reproduced in the interior part of the bigger grotto at Ṭāq-e Bostān”,¹⁹ which was obviously incorrect as the Ṭāq-e Bostān horseman is fully armoured in mail and the personage on the capital has only fragments of the body protected by mail. Also, both figures differ in the kinds of helmet, the rider wears face-covering aventail and, generally, reminds in his attire the depictions on *spāhbedan* bullae²⁰ rather than the figure depicted on the discussed relief.

⁹ de Blois 1995.

¹⁰ Skupniewicz 2015.

¹¹ Soudavar 2003; 2009.

¹² Bivar 1972; von Gall 1990b; Mielczarek 1993; Nicolle 1996.

¹³ von Gall 1990a; 1990b.

¹⁴ Skupniewicz 2007a; 2007b.

¹⁵ Skupniewicz 2007b.

¹⁶ Skupniewicz 2007a.

¹⁷ Jäger 2006.

¹⁸ Skupniewicz 2015.

¹⁹ Compareti 2006: 166.

²⁰ Gyselen 2001; 2007; Daryaei, Safari 2009; 2010; Skupniewicz 2017.

In 2014 Compareti described the armour of the said personage as “peculiar [...] remembering the one worn by Roman centurions and it is possible that it was not intended to reproduce something in metal but in textile or leather”,²¹ which does not say much as the identification of particular types of armour with ranks in Roman army is, apparently, not as common knowledge as assumed by the Author, who did not support his statement with any reference. If my earlier ideas were to be followed, the association with muscular cuirass (worn by the highest ranking Roman officers) would apply, however, because of the reasons discussed below, Compareti might have meant *lorica segmentata*, hardly restricted to officers ranks. Equally obscure is the statement that the sculpture was “not intended to reproduce something in metal but in textile or leather”.²² The reader does not know what kind of non-metallic construction would be reproduced, what caused such an idea and why would it apply to the haloed personage depicted on the capital in high relief, in Compareti’s interpretation, a deity. Actually precious metals would seem more appropriate material. Compareti, renown specialist of the Sasanian iconology, ignored the armour type as an element of no possible semantic significance and abandoned it on the no-man’s land between *signifié* and *signifiant*.

In 2020 Dwyer, Farrokh and Khorasani identified the armour as “somewhat like a Roman *lorica segmentata*”²³ and “similar to a Roman *lorica segmentata*”,²⁴ and compared with later Japanese armor called *nuinobe-do*,²⁵ which is closer to a technical term, but, as the Authors do not refer to any earlier work discussing the depictions on Bisotun/Ṭāq-e Bostān capitals, nor they make an effort to provide references to *nuinobe-do*, but at the same time claim novelty of their interpretation,²⁶ their work can hardly be found academic in nature. It is true that they publicly noticed the details omitted by Compareti and von Gall, whose interests were placed elsewhere, and which were missed in my previous studies, however Dwyer, Farrokh and Khorasani failed to construct any consistent conclusions.

My identification of the helmet as lamellar was sustained in several works of Kubik,²⁷

who pointed out inaccuracies and weaknesses in my 2007 research. The Author located the position of the helmet depicted on the Bisotun/Ṭāq-e Bostān capital within the evolutionary network of Eurasian headgears. Referring to similar material, Kubik reveals the insights of dedicated arms and armour researcher with astounding knowledge of new archaeological material, especially from the territory of Russia. A focus on materiality and the attention to details allows him to notice technical associations beyond simple construction. The vast advantage of Kubik is the fact that since 2007 several excellent publications dealing with the lamellar helmets appeared, allowing better structured methodology and mature nomenclature.²⁸ Unfortunately Kubik’s interest was limited to the helmets.

To wrap up the introduction, I observe the following reasons to re-examine the depiction of armoured man on the capital from Bisotun: (1) the iconographic studies of the capitals ignored the armour in its typology, leaving it at the margin of the semantic problems they tackled, (2) my own previous studies were based on inadequate photographic material and did not fully exploited the potential of the piece, (3) the armour shown on the capital was not analysed otherwise, (4) despite the several publications on the topic, it remains relatively unknown which is evidenced by unjustified claims of novelty when mentioning the piece.²⁹

Description

The article deals only with the armament of the personage on the capital from Bisotun/Ṭāq-e Bostān. Therefore, there is no need for a description of the entire capital and a description of the figure itself will be sufficient for the purpose. For the same reason the description will include elements of basic pre-iconographic analysis, which will be of some importance, but, as the study is not a thoroughly iconographic, art-historical one, there will be no separate section dedicated to it.³⁰

The relief depicts a male figure from the hips up (Fig. 1). The proportions are disrupted and not realistic. The torso is too shortened in comparison

²¹ Compareti 2014: 145.

²² Compareti 2014: 145.

²³ Dwyer, Farrokh, Khorasani 2020: 175.

²⁴ Dwyer, Farrokh, Khorasani 2020: 177.

²⁵ Dwyer, Farrokh, Khorasani 2020: 175.

²⁶ Dwyer, Farrokh, Khorasani 2020: 174.

²⁷ Kubik 2017a; 2017b; 2018; 2019.

²⁸ Glad 2012; Lurye 2013; Radyush 2012; Kazansky 2019.

²⁹ Dwyer, Farrokh, Khorasani 2020: 174.

³⁰ It should also be mentioned that proper description, followed by pre-iconographic, iconographic and possibly iconologic analyse of the analysed items is rarely a habit of the researchers of the Sasanian art.



Fig. 2. The capital – armoured figure, the head of the personage. Picture by Yousef Moradi



Fig. 3. The capital – armoured figure, the helmet. Picture by Yousef Moradi

with the head, which is a deliberate effect as the figure was elevated and the viewer could only see it from below. Enlarged head and headgear was important for identification of the figures and when observed from below these parts were more distant, thus had to be shown bigger to annulate the perspective. The shoulders are wider than the waist but still reduced in comparison with the head. The head is of roughly the same height as torso and the entire head part, including the plume or *korymbos* on top of the helmet, equals in height the torso and hips, thus the line of shoulders marks approximately the middle of the figure. The effect is further emphasised by the shape of the capital widening to the top, creating a trapezoid shape of the pictorial field placed obliquely with the shorter part by the former body of the column and wider protruding out. The head of the personage is depicted slightly turned to his right (Fig. 2), marking mild *en trois-quarts*, a projection rarely employed, however not totally unknown in Sasanian art, which revealed a prevalence of the profile with some frontal views. His eyes are disproportionally large, almond or laurel-leaf-shaped, with eye-lids almost touching the eye-brows. The overly big

eyes are the typical feature of Sasanian aesthetics. One may speculate about the function of this stylisation however it seemingly played a role in creation of an impression of communication between the viewer and depicted personage. The beard of the figure depicted on the Bisotun/Tāq-e Bostān capital is rendered in softly curved lines carefully representing each hair. The lower part of the beard is covered by the edge of the mail coif. The nose is missing and the lips are also damaged, however their former, fleshy, slightly wavy shape remains legible.

The figure is shown with his right arm turned outside with the raised forearm holding a large ring consisting of two rows of balls or large, round beads. His left hand is turned inside, with horizontally held forearm and hand covering the over-shortened area of *plexus solaris* and stomach. The thumb and the forefinger of the hand are linked while the remaining fingers are extended.

The head is covered by a hemispherical helmet with the dome consisting of long vertical lamellae (Fig. 3), the central lamella/lamina over the forehead and nose seems two-sided, with a pronounced central rib. From it, the lamellae overlap left over



Fig. 4. The capital – armoured figure, the torso.
Picture by Yousef Moradi

right from the viewer's perspective, one the right side and opposite direction on the other. The visible ridges of the lamellae create a three wave sinusoid, however the external luges are softer and longer. The lamellae have central, slightly wavy, ribs at most of their length, probably at full length. The exception is the central lamella with straight rib marking the vertical axis of the head. At the top of the helmet there is a ribbon tied in a bow, fluttering being the personage, supporting a *korymbos*, a sphere consisting of tufts of hair, carefully marked with incised lines. The lower brim of the dome is concealed by the ribbon with two rows of spherical beads, packed tightly, in vertical pairs. Over the middle of the fore-head and beyond temples, there are the rectangular gems placed horizontally. The part of the bow-tie with the floating ribbons emerges from behind of the head.

A mail coif hangs down from the helmet, covering the entire head with opening for the face. As observed earlier, the coif partly covers the beard of the personage. The line of the helmet protrudes slightly over the nose of the personage highlighting the lines of the eye-brows. At the back of the head, additional mail neck guard hangs from the helmet, not unlike in depictions of the riders in combat in Naqš-e Rostam.³¹ The lower part of the coif is covered by the breastplate which includes a low ridge or a collar running around the neck of the personage. Just below the ridge run two rows of spherical beads carefully placed in pairs, belonging to a necklace which is clasped centrally, over figure's sternum with a pendant in shape of letter D turned curvature up (Fig. 4). Three spherical beads, larger than the ones constituting the necklace, hang from its bottom.

The personage wears a cloak covering his shoulders, over which are visible remnants of two



Fig. 5. The capital – armoured figure, the details of the cuirass. Picture by Yousef Moradi

korymbos, apparently smaller than the one on top of the head. The cloak is clasped at the middle of the breast with a round brooch consisting of a circle and twelve spherical elements around it. The folds of the cloak run radially from the brooch and create a thick rhythm of U shaped bends at the top part, emphasising the impression of a visual separation of head and torso as two zones with head being the more important one. The linked forefinger and thumb of the left hand of the personage touch the lower part of the round clasp. The forearms are in sleeves decorated with an ornament consisting of three flat circles whose determining equilateral triangle. A row of wavy, ornamental folds in typical Sasanian style decorate the lower part of the sleeve. Just above the elbows thick rows of rounded finials of straps of shoulder *pteryges* are visible.

The space between the necklace and the upper folds of the cloak is generally flat, with pair of crescent-shaped elements carved on each side of the pendant hanging from the necklace. The ridge running around the neck and almost flat surface covering the collar-bone make an impression of the metallic pectoral formed from the single sheet. The impression is compromised by the carved arches.

³¹ Skupniewicz 2007a.

It is difficult to determine whether the elements belong to the armour or are lunulae attached to the pendant. Heraldically placed double crescents are known in Sasanian coinage. It seems that they represent a layer over the sheet with the ridge and necklace resting on it. The arches may, thus, represent lamellae, scales or decorations of the gorget. Alternatively these might be ridges of yet another elements, symmetrically placed over chest.

Below the lower edge of the cloak, lower torso is visible mostly covered by the left arm and hand (Fig. 5). What can be seen in the space limited by the forefinger and the thumb of personage's left hand is the narrow vertical plate running through the center of the trunk of the body with upper part hidden below the round clasp of the cloak. Alongside the vertical edges four flat circles, evidently the rivet heads, are visible, two for each side. In the space between the lower part of the cloak and the forearm, three stiff bands are visible running almost horizontally, slightly obliquely down toward the center of the torso. One band is visible with both edges while the upper and lower are seen only fragmentary. Again, the row of flat circles, or rivet heads runs alongside the edge of the band. On the other side of the torso only one band is visible. This stiff armour terminates with the belt consisting of three rows of spherical beads from below of which falls a mail skirt.

Headgear

The helmet with the mail coif and additional mail neck guard is the best researched element of the armament depicted on the capital from Bisotun/Tāq-e Bostān. Its hemispherical dome is constructed from long lamellae with the central rib and decorated edge. No traces of lacing or rivets are visible. In the nomenclature proposed by Lurye, this type of construction is different from the actual lamellar helmets, made of rows of actual lamellae of less elongated rectangular shape, and should be named laminar type.³²

The helmets made of narrow straps of metal bound together by means of lacing or rivets were immensely popular across Eurasia in *long duré*.³³

Kubik has pointed out the influence which such headgear had on iconography of early Islamic art³⁴ and possibly on traditional, ritual crowns in Ethiopia. Also, the relation of the helmet with the headgear of the Kushans, Turkic Khaganate and China was pointed out by me and later emphasised in a couple of works of Kubik.³⁵ Placing the formerly unknown helmet within the frame of terminology and technological relations was an important step which allowed stating the existence of lamellar/laminar helmets in Sasanian panoply, defined the eastern direction of the influence and settled the piece within the network of archaeological finds and iconography. What seems to have been missed so far are certain peculiarities of the helmet depicted on the capital from Bisotun/Tāq-e Bostān: the hemispherical, almost bulbous shape of the dome, the decorative shape of the edge of the lamellae/laminae and gems used in its decoration.

The shape of the dome is unique among known lamellar/laminae helmets. Usually, they are much more slender, almost conical/sphero-conical or pear-shaped.³⁶ Even the headgear from a mould from Tunisia,³⁷ had it been related to Sasanian influence (which is likely in the light of Persian occupation of Egypt and presence of coif beneath the dome of the helmet), shows the helmet larger than head, somehow reminding a mushroom, but with the dome clearly tapering towards the apex. The lames/laminae of the helmet on the Bisotun/Tāq-e Bostān capital are not gathered at the top by any flat, round sheet or separate hemispherical dome,³⁸ they seem to run directly to a ring where the *korymbos* is attached. If a sheet was part of this construction, it would be of small, negligible size. In this aspect Kubik's reconstruction does not seem right.³⁹ It is rather Nicolle who is correct in his view, seeing in the finial of the discussed helmet a predecessor of later Iranian helmet finials.⁴⁰ What seems important, Nicolle has pointed out the relation of the finials with the iconography of the lamellar/laminar helmets from 8th century Xinjiang. Naturally the later elements are larger, however the volume of the *korymbos* hides the

as they serve the purpose of comparison only.

³⁴ Kubik 2018b.

³⁵ Skupniewicz 2007a: 15-23; Kubik 2017a; 2017b: 119-128; 2018a; 2019.

³⁶ Kubik 2018a: 142-148.

³⁷ Mackisen 2007; Kubik 2017a: 204-205.

³⁸ Types 6a and 6b in Kubik's typology, 207b, 23-24.

³⁹ Kubik 2017a: 208.

⁴⁰ Nicolle 2017: 229.

³² Lurye 2013: 272-273.

³³ Dien 1981/82; 2000; LaRocca 2006: 51-68; Skupniewicz 2007a: 15-23; Lurye 2013: 275; Glad 2012: 349-354; Bennett 2018: 20-23; Bottomley 2017: 6, 9, 14, 40-43, 56, 74 – the examples of Japanese helmets of this or related construction own their extensive bibliography not necessary to be referred here in detail



Fig. 6. The capital – the royal figure, frontal view.
Picture by Yousef Moradi

actual size of the apex part of the helmet on the Bisotun/Ṭāq-e Bostān capital.

The late pre-Islamic Iranian hemispherical helmets are attested on *spāhbedan* seals, in the relief of the larger grotto at Ṭāq-e Bostān, in a mural from Kuh-e Khwaja and “in the Shapur cameo”. A helmet of similar shape of dome, dated to the 1st century, was excavated in Sirkap site in Taxila.⁴¹ There is also Kushan evidence of hemispherical helmets.⁴² The hemispherical rounded helmets appear on the Tang dynasty murals from Shaanxi Province.⁴³

It cannot be excluded that the bulbous shape of the discussed helmet results from the stylisation which was to adapt the proportions to the position of potential viewer, at some distance below the statue. If the proportions were to widen, going upwards, around the central vertical axis of the figure, than such procedure might also affect the view of the helmet. Had this been consequent, the *korymbos* would need to be more voluminous as well. Similar lack of consequence would be observed with the figure on the opposite side of the capital, whose head is enlarged in proportions but that does not apply to his crown (Fig. 6). It must be remembered, however, that the wings and a disc on top of the crown overhang the personage in higher register of the capital. It should also be mentioned that when looking straight to the face of the armoured personage instead of facing frontally



Fig. 7. The capital – armoured figure,
the head of the personage in frontal view.
Picture by Yousef Moradi

the figure, as defined by the shoulders, the helmet appears far more slender (Fig. 7).

The importance of the decorative shape of the lamellae edges was already pointed out by Kubarev, who links the habit of incising the edges with the emergence of the Turkic khaganate and subsequent migrations.⁴⁴ He correctly noticed that earlier examples of lamellae are always rectangular. On Iranian ground this can be evidenced by the material from Old Nisa,⁴⁵ but also by the relief with the armoured rider from the larger grotto at Ṭāq-e Bostān and a find from Togolok Tepe.⁴⁶ This is even clearer with regard to the lamellar/laminar helmets of which all archaeological examples and the vast majority of iconography attest the laminae with straight edges deprived of any incised decoration on them. The exception are the helmets of the figurines from Xinjiang/East Turkestan and

⁴¹ Skupniewicz 2007a: 12-15; Kubik 2017b: 30.

⁴² Skupniewicz 2007a: 13.

⁴³ Koch 2006: 222; Skupniewicz 2007: 21.

⁴⁴ Kubarev 2006.

⁴⁵ Pilipko 2006: 264-265, 286, fig. 13.

⁴⁶ Vdovin, Nikonorov 1991.



Fig. 8. The head from the British Museum. MAS.1062.
The Trustees of the British Museum



Fig. 9. The head from the British Museum. MAS.1063.
The Trustees of the British Museum

iconography of Tang China. Excellent examples are provided by two heads from Karashahr, now in British Museum (MAS.1062, The Trustees of the British Museum) (Fig. 8, 9). Despite numerous similarities, and the fact that they represent the same type, the Museum dates one MAS.1062 to 6-7 century (Fig. 8) and the other MAS.1063 to 8-10 century (Fig. 9). This gives a wide range of 6-10 centuries, which, in my opinion, was artificially elevated to match the fall of Tang Dynasty. The *terminus ante quem* should read rather 8 century as per analogous figurine in Museum für Asiatische Kunst in Berlin.⁴⁷ Also very similar head from Hermitage (ShSh-211), also from Karashahr, wears the same type of helmet, reasonably dated to the 7-8 century.⁴⁸ An evolution tree of “East Turkestanian” helmets was offered by Gorelik.⁴⁹ Further comparable material can be found on murals from Shaanxi and head of hybrid tomb guardian from Astana (Fig. 10).⁵⁰ Less clearly the laminar or lamellar pattern is marked on the pear-shaped helmets of the figurines from the tomb of Li Xian (died 569) from Guyana, Ningxia.⁵¹ Thus, there seem to be no bigger differences in the layout and decoration of the lamellae



Fig. 10. The head of the tomb guardian from Astana.
Drawing Patryk Skupniewicz

of the helmets from Xinjiang figurines and other depictions from Tang Dynasty art, when compared with what we see on the head of the personage on discussed capital. The examples from the territory of Tang Empire and the dome of the helmet shown on Bisotun/Ṭāq-e Bostān capital represent a type recognised as Korean *Jongjangpanju* Type, with a central, symmetrical lamina over the forehead

⁴⁷ Nicolle 2017: 252, fig. 39.

⁴⁸ Kiy 2014: 161.

⁴⁹ Gorelik 1995: 419-425, especially 420.

⁵⁰ Koch 2006: 222; Skupniewicz 2017a: 21.

⁵¹ Dien 2001: 107.

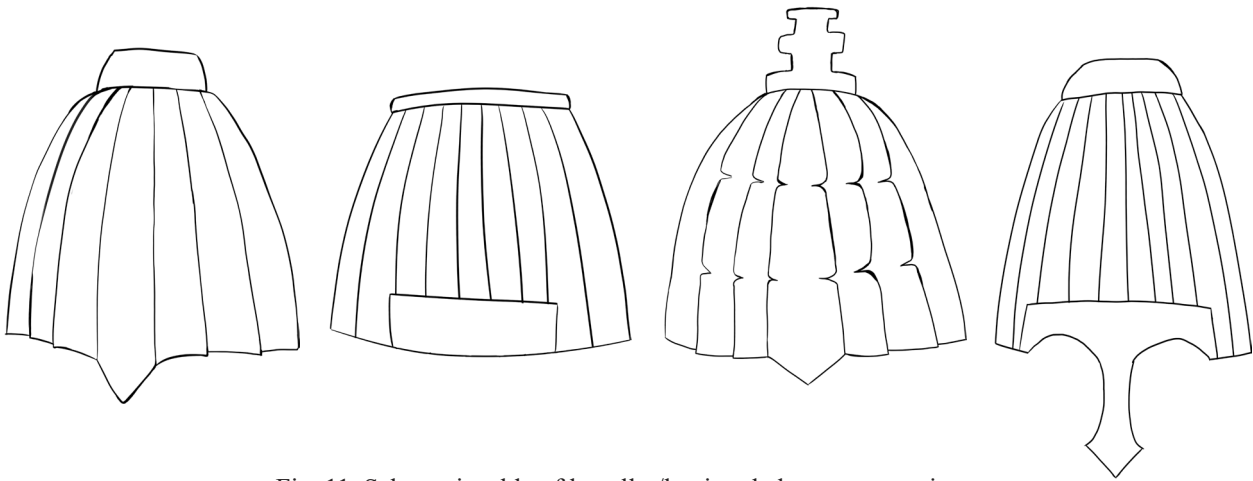


Fig. 11. Schematic table of lamellar/laminar helmet constructions.

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and the others spreading from it on both sides of the dome.⁵² Small, triangular protrusion over the nose of the personage at the lower edge of the dome of the Bisotun/Ṭāq-e Bostān capital reminds the Tang Dynasty constructions however it must also be stated that in China (both earlier and later) it was applied not only in laminar helmets and generally was a popular form in protective headgear of various cultures. The Xinjiang helmets have the element extended even to a form of small nasal. And the headgear from the discussed capital seemingly follows the same pattern, however because of the horizontal line of the diadem, the protrusion seems to belong rather to the mail coif than the dome. Nevertheless, the lack of rings does not allow any definite statement. It seems that the flat surface suggests hemming of the dome rather than the mail.

The alternative constructions of the front edge of the laminar/lamellar helmets include (1) horizontal sheet over forehead with or without incised eye-brows and/or a nasal,⁵³ and (2) straight line of laminae, most likely hemmed (Fig. 11).

The rectangular gems decorating the band of two rows of spherical beads, running across the lower edge of the dome, may remind the decorations of lamellar/laminar helmet from Kishpek or refer to luxurious Late Roman helmet from Berkasovo. The latter type was clearly an imitation of the Sasanian headgears. This would provide a possible western association of the helmet shown on Bisotun/Ṭāq-e Bostān with some clue on persisting earlier Iranian tradition. It must be, however, remembered that the gems are rather

part of the diadem, not of the helmet itself and the central rectangular gem over the personage's forehead appears also on the other side of the capital on the head of unarmored, crowned figure. It must be borne in mind that otherwise, the helmets were rarely decorated with gems, even when of lavish splendour which might indicate Iranian tradition.

In light of above, the helmet depicted on Bisotun/Ṭāq-e Bostān capital is unique on several fields and cannot be directly attributed to a single armament tradition. Subsequently, it cannot serve as a base to determine a hypothetical earlier group of Sasanian lamellar helmets as was attempted by Kubik.⁵⁴ Kubik, in his thorough study, attempts to fill the gap between the Kushan and the "Hunno-Sarmatian" or later Avar-related laminar/lamellar helmets and the helmet depicted on Bisotun/Ṭāq-e Bostān, however he seemingly misses the impact of the decorative edges of the laminae, the central ridge and the lack of the round, flat top of the dome. The helmet from Bisotun/Ṭāq-e Bostān does not have a dome finial either, so it must be excluded from the evolution of pear shaped domes. It seems more related to Tang Dynasty laminar headgears with decoratively incised laminae and with solid finials, as was suggested by Nicolle.⁵⁵ It does not have the laminated cheek-pieces, which seem to abridge the headgears with decorated laminae from Xinjiang with the north-western examples. There is no clear evidence of earlier, direct adoption of Kushan influence in Sasanian Iran, however the blending of the Kushan-style headgear with earlier Chinese tradition north-east from Kushanshahr

⁵² Kubik 2017a: 196; 2017b: 158.⁵³ Lebedynsky 2018: 176-179.⁵⁴ Kubik 2017a; 2017b: 119-128.⁵⁵ Nicolle 2017: 229.

has been rightly pointed by Kubik⁵⁶ and, to a lesser extent, by me.⁵⁷ It is possible that the apparent reflux of the headgear technology was in fact constant radiation of Chinese ideas on the Western Territories. It seems that the dome at the apex of the helmets, which, apparently, was an impulse to develop an entire group of pear-shaped helmets, had Far Eastern, Chinese or Korean origin and the adoption of the shape in the West took place without intermediary of Iran, possibly, directly through the Great Steppe. It should be believed that the helmet from Bisotun/Ṭāq-e Bostān does not evidence any stage of the development of Sasanian laminated headgears but would rather represent the local, Iranian adoption and response to fashions approaching from North-East and North-West, thus, being, probably, more hemispherical but made of elaborated laminae with decoratively incised ridges and ribs running alongside. Also, the elaborated, laminated cheek-pieces were replaced by the mail coif and additional neck guard referring to the royal combat scenes from Naqš-e Rostam but also, present among the Late Antiquity helmets.

Cuirass⁵⁸

The problems with the definition of the type of armour worn by personage on the capital from Bisotun/Ṭāq-e Bostān were mentioned before. The upward ridge or short, stiff collar must belong to a rigid construction, thus it was identified by me as a cuirass which matched ideological agenda of royal/divine power.⁵⁹ The agenda which would be related with the forms of Hellenistic heritage and Roman influence. It was assumed that, for technical reasons, the Iranian cuirasses were made of segments but retained the ideological message. With more details available, it is possible to reconstruct the cuirass of the discussed personage more accurately and suggest the development of the elements of the armour technology alongside the Silk Road.

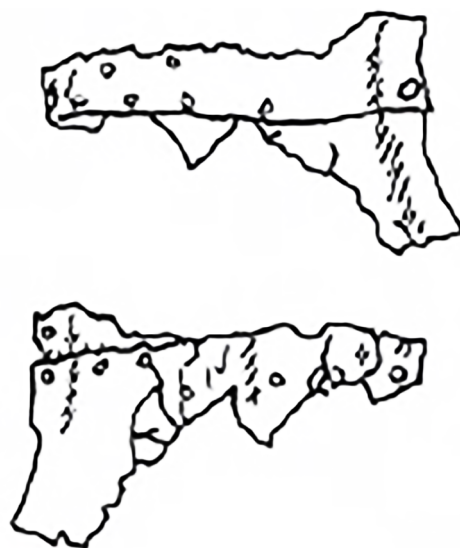


Fig. 12. Fragment of cuirass from Kampyr Tepe.
Drawing Patryk Skupniewicz

The torso protection of the personage on the capital from Bisotun/Ṭāq-e Bostān is largely covered by the cloak, nevertheless the lower and upper parts are clearly visible, which allows possible reconstructions when comparing the armour with the available material from analogous material. The abdomen of the personage is protected by a rigid corselet of elongated metal sheets riveted together. I will argue below why it should be believed that the material is metal rather than any organic equivalent, however covering with silk or coloured leather, in type of *kazagand* or brigandine, cannot be excluded nor confirmed. The corselet consists from vertical plate at the center to which the horizontal ones are affixed with the rivets (Fig. 5). The horizontal bands are also attached to each other by the same means. The construction is thus rigid and divided into two vertical halves made of horizontal lames. The lower rant of the corselet is flat, the upper is hidden below the cloak.

Hellenistic heritage. The oldest example of a cuirass made of metallic bands, riveted together, in an ancient Iranian horizon, comes from Kampyr Tepe, and is dated to second century BCE⁶⁰ (Fig. 12). Nikonorov and Savchuk concluded that the armour was in fact part of a repaired Hellenistic cuirass, however, equally well it might be a local attempt to produce one in shortage of metallurgical expertise of the western armourers,

⁵⁶ Kubik 2018a; 2019.

⁵⁷ Skupniewicz 2007: 17-19.

⁵⁸ After finishing the article, I was made aware that the idea of comparison between the armour depicted on Bisotun/Ṭāq-e Bostān capital with Korean cuirasses was expressed by Nadeem Ahmad on Facebook in 2012. My below observation was made independently, nevertheless, I cannot claim full originality and Nadeem Ahmad should be credited as the first one to make the observation public. Sadly, Mr. Ahmad has not decided to transform his insightful remark into academic text.

⁵⁹ Skupniewicz 2007b; 2015.

⁶⁰ Nikonorov, Savchuk 1992: 49-50; Nikonorov 1996: 7, 45, fig. 13. A; Nikonorov 2009: 194-195; Jaeger 2006: 21, 32, fig. 6, Skupniewicz 2007b: 28-30, 27, fig. 23.



Fig. 13. Orlat Plate – battle scene.
Courtesy Ciro LoMuzio

or in environment where the available armourers were used to produce the sets consisting of smaller pieces. The dating of the piece is based on the fact that bronze bullion and a silver drachm of Bactrian king Heliocles (c. 145-130 B.C.) were discovered on the floors above the deposit of the cuirass. This dating is not absolute but cannot be contested either. It should be noted here that Hellenistic muscle cuirass was not the only form of rigid body protection of the era. One might remind here the well-known cuirass from Vergina which proves that the metallic armours followed the shape normally associated with linen armours, and consisted of several moveable parts, being closed with the hinges. The piece slightly predates actual Hellenistic period but culturally marks its beginning. The horizontal bands of which the great and back plates are made of, suggest employment of employment of segments affixed to create larger surface.

Another example of Hellenistic cuirass comes from the Tomb of Lyson and Kallikles, where two such armours are depicted in the south lunette.⁶¹ The breast plates are clearly separated from the sides and shoulder pieces. The construction function of the large rivets on the latter is obscure, but seemingly important enough to have them clearly marked. An interesting, however completely irrelevant fact here is that a procedure similar to discussed capital was applied there. I.e. the proportions were adjusted to low perspective of the viewer, with helmets disproportionately large in comparison with the torso armours.

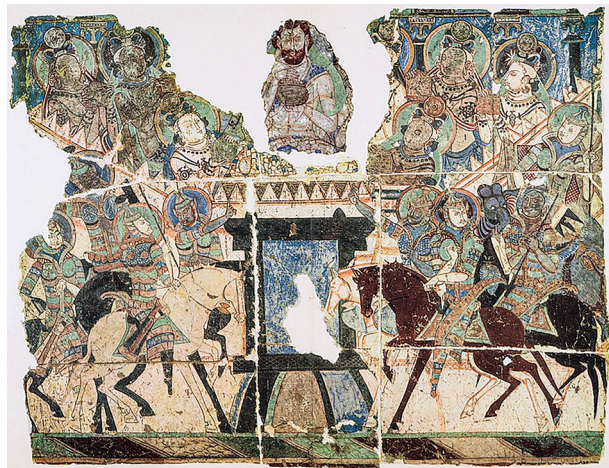


Fig. 14. The scene of war for the relics of Buddha, mural in cave 224/so-called Maya Cave, Kizil.
Public domain: https://commons.wikimedia.org/wiki/File:Maya_Cave,_section3,_Kizil_Caves.jpg, accessed 23/02/2021

This marks that the Hellenistic cuirasses were occasionally constructed of the elements attached to each other either by welding or by rivets.

Wide horizontal stripes can be seen on Achaemenid examples but they seem to relate to linen constructions, however, as was pointed out with regard of the armour from Vergina, the material of the depicted armours cannot be undoubtedly determined from iconography.

Naturally there are plentiful examples of movable parts of Hellenistic armours, but these do not seem the correct comparable material as the rigidity is the constitutive feature of the cuirass and source of its protective value.

Lorica segmentata eurasiatrica. There are several iconographic sources which confirm the existence of armours consisting of protective laminae among Eurasian nomads of first third/half of the first millennium CE. At first place comes the armour depicted on the metope of the Trajan's column which consists of the straps of seemingly soft material, probably leather, with opening in front, secured by the clasps. The column depicts the events of Trajan's Dacian wars, so the instant attribution would be Dacian, however the only encounter of the Romans who wore substantial amount of armour would be Sarmatian Iazyges. Pugachenkova went even further in her interpretation and identified the armoured riders depicted on the column as Iranian Parthians,⁶² however such identification, even if found correct, does not

⁶¹ Sekunda 2012: 44-45; 2013: 13-14, fig. 1.2.

⁶² Pugachenkova 1966.



Fig. 15. The scene of war for the relics of Buddha, mural in cave 8/so-called Cave of Sixteen Swordbearers, Public domain: https://en.wikipedia.org/wiki/Kizil_Caves#/media/File:War_of_the_Relics_scene,_Cave_8.jpg, accessed 23/02/2021

apply to the armour in the metope, which varies in construction from scale overalls of the riders chased by the Roman cavalry. Analogy of the armour can be found in crude graffiti from Iluraton (2-3 c CE) where a rider was shown with horizontal stripes covering his body.⁶³ Goroncharovskiy and Nikonorov have rightfully compared the graffiti with the murals from Kerch, discovered by Ashik and preserved in watercolour copies only.⁶⁴ In the copies, the armours were marked with brick-layer pattern, which seems a rationalisation of the copyist or an attempt to show a sort of scale armour. It is true that the lamellar armours were usually constructed of horizontal rows of lamellae attached by straps one to another but simplification allowing omitting the borders between lamellae is unusual in art, especially if the depictions are rich in other detail. Indeed, this is not the case in Iluratum graffiti but, as will be shown below, it happens in comparable material.

Figures in combat wearing the corselets of horizontal dark and bright stripes, running to the sides of vertical band in the centre of the torso, were depicted on the famous bone plaque from Orlat⁶⁵



Fig. 16. The scene of war for the relics of Buddha, mural in the Cave 207/so-called Cave of Painter [https://en.wikipedia.org/wiki/Kizil_Caves#/media/File:Mural_with_warriors,_Cave_of_the_Painters,_Kizil_Caves_\(detail\).jpg](https://en.wikipedia.org/wiki/Kizil_Caves#/media/File:Mural_with_warriors,_Cave_of_the_Painters,_Kizil_Caves_(detail).jpg), accessed 23/02/2021

(Fig. 13). Their torso armours are opening in front and have the high protective collars, flexible sleeves and wide leg protections attached. Torsos of the warriors are stiff, as they would be with cuirasses worn, however this could be the stylisation available to an artist. What seems more important is that the flexible parts are clearly marked as lamellar and one of the riders is distinguished by the lamellar corselet with lamellae and lacing clearly marked. It is impossible that with that amount of details provided in sleeves, aprons/skirts and also on one of the trunk armours, the divisions between lamellae would be omitted on the corselets. It is impossible to conclude the way of connection between the stripes from the picture itself as no rivets or lacing was depicted, which is naturally to be expected from the piece of small size filled with multi-figural scene (10,5 cm x 13,5 cm).

Similar, however more elaborated, type of armour was depicted on the murals from Kizil. The relation between Orlat and Kizil (and also related Khocho murals) armours was already noted by Brentjes⁶⁶ and Nikonorov and Hudyakov, who admitted predominant relation with the paintings of the Tashtik culture tombs⁶⁷ which depict undoubtedly lamellar and not banded armours. Ilyasov and Rusanov⁶⁸ and Abdullaev⁶⁹ emphasised similarity of the armament depicted on the Orlat plates with the Indo-Saka coinage, Sogdian coinage and sculptures of Khalchayan, which is not untrue in

⁶³ Goroncharovskiy, Nikonorov 1987.

⁶⁴ Goroncharovskiy, Nikonorov 1987: 203-204.

⁶⁵ Pougachenkova 1987; Brentjes 1990; Abdullaev 1995a; 1995b; Nikonorov 1997: 17, 75, fig. 43a-c; Ilyasov, /Rusanov 1997-98; Nikonorov, Hudyakov 1999; Olbrycht 1999: 204-206.

⁶⁶ Brentjes 1990: 178-179.

⁶⁷ Nikonorov, Hudyakov 1999: 146.

⁶⁸ Ilyasov, Rusanov 1997-98: 121.

⁶⁹ Abdullaev 1995a: 159-161; 1995b: 174-175.

terms of general construction of the armours consisting of torso protection and wide skirts/aprons over legs, however advocating the early dating of the Orlat plates the omission of later, but formally closer analogies, fits the hypothesis better.

The warriors in the torso armour consisting of horizontal bands, connected in the centre of the front of the trunk, with the connection covered by the wider vertical element or band are shown on the scene of the war for the relics of Buddha, on a mural in cave 224/so-called Maya Cave in Kizil (Fig. 14). The theme itself was repeated at least three times in Kizil (Cave 8/so-called Cave of Sixteen Swordbearers – Fig. 15 and Cave 207/so-called Cave of Painter and mentioned before Cave 224 – Fig. 16), armoured warriors were also depicted in other occasions, either as donors or in other Buddhist narratives, however only in the case of the mural in Maya Cave (224) the armours are not plain but consist of horizontal bands (Fig. 14). The bands are painted blue, reddish and green colours. It might be hypothesised that the green paint originally contained large amount of copper which oxidised with time but originally was to represent bronze or gilded elements. The blue bands are divided with S-shaped marks which might suggest lamellar construction, however the rhythm is far too seldom to support this view. The bottom edge of the cuirasses are covered by ornate belts consisting of circular segments, an element absent in other Kizil murals, so might as well represent the lapels protruding from below of the cuirasses. The scene in the Maya Cave (224) (Fig. 14) is considered later (up to the fourth quarter of the sixth century)⁷⁰ than the Cave of Painter (207) (Fig. 16), dated to late fourth till late fifth century,⁷¹ and the Cave of Sixteen Swordbearers (8) (Fig. 15) dated mid fifth to mid sixth century, thus the banded armour might have been introduced later or used together with the plain and scale cuirasses but missed from iconography if the relation with definitely earlier Orlat plates (Fig. 10) would remain valid.

The coloured stripes on the armours painted on the scene in Maya Cave (Fig. 14) remind lighter and darker bands from the Orlat plate (Fig. 13). The high, standing collars and central, front opening unmistakably mark the same tradition, however on the depictions from Orlat, the bands cover the entire torso, while in Kizil the chests and upper backs of the warriors are covered with paired oval

plastrons, either plain (when green) or filled with small circles reminding scales (when blue). The paired plastrons over each side of the chest are the usual element of the armours in Kizil, a fashion very popular in iconography of Tang Dynasty ornamented armours and present in later Far Eastern art, as well as in Sogdian painting.

It is impossible to determine the way the bands on the Kizil mural were attached to each other. There are no rivets or pieces of lacing visible, so the armours could make stiff cuirasses or equivalent of flexible Roman *lorica segmentata*. It must be stated that the multicoloured banded leg covers in Kizil iconography are definitely flexible, they are depicted over bent and crossed legs (The mentioned scene of the war for the Relics from Cave 8 – Cave of Sixteen Swordbearers (Fig. 15) or the warrior on the ceiling of Cave 38 (Fig. 17), now in Metropolitan Museum of Art, Fletcher Fund, 1951. Inventory ref. 51.94.1⁷² and on figurines of warrior from Kucha)⁷³ which does not determine the construction of the torso cover.

Similar horizontal bands cover the armour of the rider depicted on the Sogdian shield found in the fortress Mugh. The laminae are not differentiated by colour and there is neither front, central opening, nor paired plastrons on the chest. Also, no lacing nor rivets or the contours of lamellae can be seen. Similar depictions come from a mural from Karashahr (cave 11)⁷⁴ where some traces of lines between lamellae can be found so the example cannot be found conclusive.

It is possible that the horizontal stripes on the torso of the enthroned personage holding a bow on a painting from Kakrak (Fig. 21)⁷⁵ could represent the same form of armour, especially if golden spots on the blue background would mark the decorative rivets.

Similarly, the wooden, elongated capital of the pillar in Panjikent, despite being heavily damaged by fire shares numerous features with the sculpture under discussion, analogical architectural function being the first one (Fig. 22).⁷⁶ Clearly the man depicted there wears the chain skirt and the brim of the armour running around his neck is decorated with a row of circular objects, similar row runs along his hip. His torso seems being covered with the same pattern of the horizontal

⁷⁰ Kubik 2018: 147.

⁷¹ Kubik 2018: 144-147.

⁷² Morita 2015: 120-121.

⁷³ Samosyuk 2014.

⁷⁴ Kiy 2014b.

⁷⁵ Compareti 2008; Compareti 2021, 83-95.

⁷⁶ Tadjikistan, 171, cat. 119.



Fig. 17. The warrior depicted on the ceiling of the cave 38 in Kizil https://commons.wikimedia.org/wiki/File:Warrior,_Kizil,_6th-7th_century_CE.jpg, accessed 23/02/2021

stripes. The personage is clearly depicted in armour so, the stripes must represent the segments of the discussed type.⁷⁷

Armoured corselets. The cuirasses with the central opening in the front create a form of tradition in Iran and alongside the Silk Road. Although vast majority of sources show Achaemenid armours as the forms of *linothorakoi* or box cuirasses with high collars at the back, alternatively muscle cuirasses,⁷⁸ i.e. pieces opening at the side, a rider depicted on the Lydian stele at the Archaeology Museum of Manisa seems to have the cuirass with

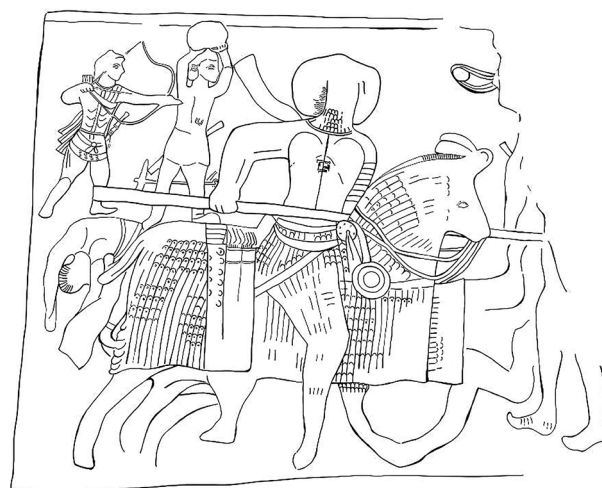


Fig. 18. Rider depicted on the Tang-e Sarvak III rock relief. Drawing Eleonora Skupniewicz

central opening in the front.⁷⁹ The stylisation of the stele affects perception but the deep line between shoulder-pieces must mark a frontal opening. The opening which by no means would be required in case of linen construction. Naturally, a kind of opening is needed when arming however choosing an opening at the center of the chest and abdomen where the vital organs are located must have resulted from technical or technological reasons. The smaller sheets, to create the box around man's torso, must have been easier to make and central opening might allow arming and disarming of the warrior without or with little assistance. Neither the armour from Vergina nor the cuirass depicted on the wall of the tomb of Lyson and Kallikles have a central opening, however they consist of several sheets covering front, back and the flanks.

The long vertical splints connected with the rivets, with hinges, found in Thracian site of Chatalka (Roshna Dragana) in Bulgaria (1st century CE) were interpreted as abdomen part of the heavy rider's armour by Negin and Kamisheva.⁸⁰ Although the Authors' main reference were the pieces of the much later armour from Vålsgarde, the riveted splints must have created quite rigid construction which explains the presence of the hinges. This allows hypothesis including the Chatalka armour into the group of armoured vests, with likely frontal opening. This might approximate the group with Scythian armoured belts

⁷⁷ I am grateful to Mr. Nadeem Ahmad for pointing this analogy to me in private communication.

⁷⁸ Benzel 1996; Bernard Inagaki 2000; Bittner 1987; Sevinč, Korpe, Tombul, Rose, Strahan, Kiesewetter, Wallrodt, 2001.

⁷⁹ Briant 2020: 20-21, fig. 4.

⁸⁰ Negin, Kamisheva 2018: 58-64; Negin, d'Amato 2018: 6-9.

consisting of vertical metal splints, however such view would require more evidence, especially when Negin and Kamisheva admit that the metallic splints from Chataka and Vålsgarde are usually reconstructed as limb armours.⁸¹

Clear depiction of the armour with the breastplate consisting of two vertical plastrons with central opening appears on the relief at Tang-e Sarvak III depicting armoured rider in charge with the long lance (Fig. 18).⁸² The small element at the level of plexus solaris might represent a clasp by which the plates were closed. The upper edges of the sheets are not clear. The plastrons seem to run up to the semicircular endings, but it is possible that there are separate rounded elements applied to cover chest. Further up, the rider's neck is protected by scale collar which is independent from the cuirass. Von Gall suggested that the cuirass might be made of leather however without providing any argument for this view. The front panel on the relief on Tang-e Sarvak seems flat, thus the likely construction of the item consists of two plates closing in the form of double door in the front, attached by the hinges to the side plates which in turn are attached to the solid backplate. This would make it a derivative form of hellenistic box cuirass in type of Vergina armour, with direct predecessor of the armour on Manisa stele. Naturally, it cannot be excluded that the flat appearance of the plates results from technique of carving and the frontal "door wings" were rounded and attached directly to the backplate.

The torso armour of the combatants depicted on the battle relief in Firuzabad also include central vertical indentation alongside torso.⁸³ The element might suggest construction proposed above for the armour of the rider on Tang-e Sarvak III relief (Fig. 18) however connection with the upper part remains obscure. It is possible that the parts were attached on hinges and fitted with great precision to build tight cuirass. The minor construction devices could be painted on the relief or made in stucco.

Cuirasses built of several bigger plates are known from sculpture from Hadda, where the

armoured statue wears a cuirass with the lower part divided vertically in the middle and upper part, covering chest, consisting of single sheet.⁸⁴ The halves of the lower part are attached by a small rectangular element, reminding the piece depicted on Tang-e Sarvak III relief which could be identified as a clasp. A late Gandharan figure of Dvarapala from the Metropolitan Museum of Art (1991.132) wears an analogous form of armour, with two large vertical plates, connected by two clasps, covering abdomen while on the chest he has the scale cover. It can be assumed that the scale cover overlaps the higher edges of the belly plates.

The plain sheets covering the belly, linked in the centre, with a symmetrical cover for the chest, are abundant in the iconography of Xinjiang. In fact, this is the most common type of armour, by far more popular than its version with banded elements covering abdomen. Examples can be found in the scenes mentioned before: the war for the Relics from Cave 8 – Cave of Sixteen Swordbearers or the warrior on the ceiling of Cave 38, now in the Metropolitan Museum of Art, Fletcher Fund, 1951. Inventory ref. 51.94.1⁸⁵ and on warrior figurines from Kucha.⁸⁶ Usually they are worn with banded or lamellar leg covers, either in form of wide skirt-like aprons tighter leggings, but sometimes they are worn without leg protection like the armoured Buddha's attendants on the mural from cave 181 from Kizil or with the thick padded skirts, possibly the far remnants of the *pteryges* as evidenced by figures of the Buddha's attendant and a warrior from Mara's army.⁸⁷ It is reasonable to believe that the eastwards movement of the cuirass with central opening, with separate chest-piece, usually consisting of two circular or oval plastrons located symmetrically over upper chest, resulted in the development of Chinese cord-and-plaque armour,⁸⁸ which became the main type of parade or lavish armour during Tang Dynasty.

Abundance of archaeological comparative material provide finds from first half of the first millennium CE, from Korea and Japan. With approximately 700 cuirasses found in both countries a chronological typology could be created by

⁸¹ Negin, Kamisheva 20018: 62-64.

⁸² Vanden Berghe, Schipman 1985: 79-81; Kawami 1987: 105-109, 255, fig. 19; von Gall 1990: 13-17; Mathiesen 1992 vol. 1: 62; Mathiesen 1992 vol. 2: 130-132; Mielczarek 1993: 60-61, 73 123, fig. 9; Nikonorov 2005; Haerinck 2005; Skupniewicz 2007b; 2015; Kawami 2013: 758-760.

⁸³ von Gall 1990: 20-27; Mielczarek 1993: 63-67; Skupniewicz 2007b; 2015; Nikonorov 2020.

⁸⁴ Gorelik 1982: fig. IV; Jaeger 2006: 22, 35, fig 11; Skupniewicz 2007b: 21-22, fig. 8.

⁸⁵ Morita 2015: 120-121.

⁸⁶ Smosyuk 2014.

⁸⁷ Buddha's attendant - Härtel, Yaldiz 1982: 96-97, fig. 32; warrior from the Mara army Härtel, Yaldiz 1982-98-99, fig.33.

⁸⁸ Dien 1981: 33-36.

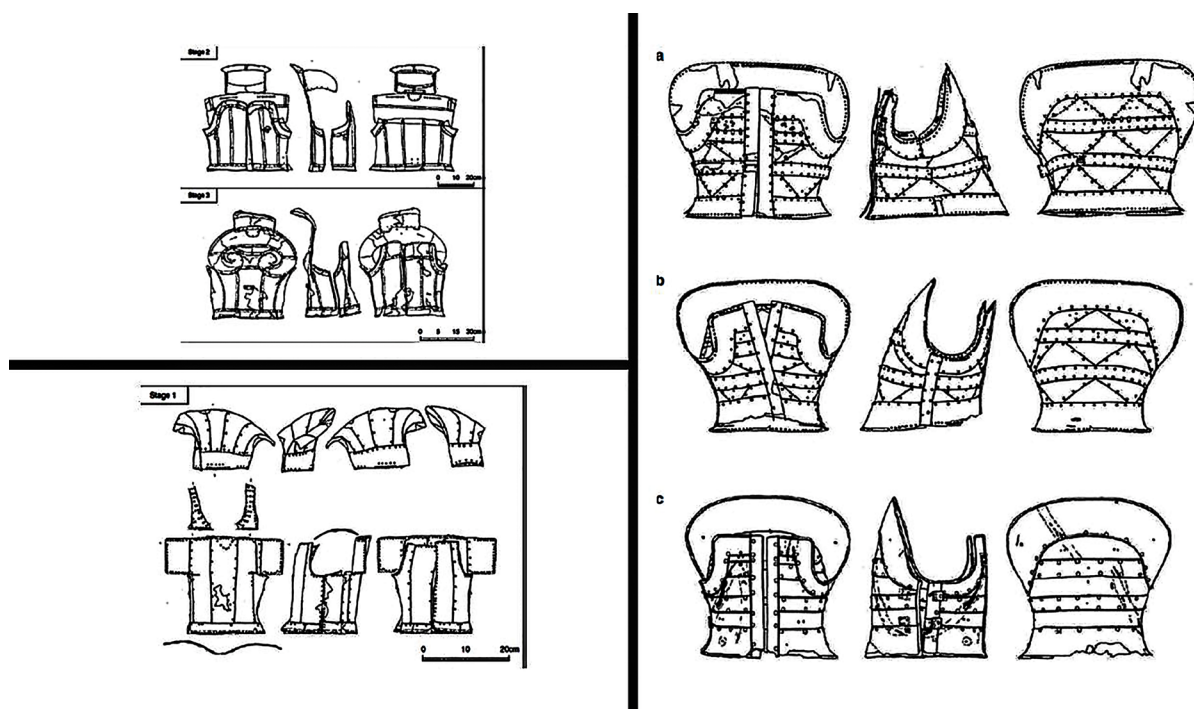


Fig. 19. Cuirasses from Korea and Japan.
Courtesy Gina Barnes

Barnes and Ryan (Fig. 19).⁸⁹ The cuirasses from Korea and Japan have central opening and leave the collarbone and shoulders open.⁹⁰ Often they have high protective collars at the back protruding from the backplate. The early forms consist of the vertical sheets welded into bigger surfaces, later becoming more elaborate and decorative, only in the third phase the cuirasses consist of horizontal stripes riveted together. Only at a later stage the cuirasses were suppressed by the full lamellar coats, which seems to reflect a general process observable across Eurasia.

Because the cuirasses in form of metallic vest leave vulnerable area of throat unprotected, a separate gorget was introduced with upturned ridge running around neck. The element was already noticed by Negin and Kamisheva in regard of Chataalka-Roshova Drangana armour.⁹¹ Naturally the high collars remained in use in early stage but were gradually abandoned. The vertical opening at the centre in front of the body, with pronounced metallic sheet and horizontal stripes studded with pronounced rivets clearly remind the cuirass depicted on the capital from Bisotun/Ṭāq-e Bostān.

Among some sets found in Korea, the laminar helmets accompany the cuirasses.

It is justified to believe that the cuirass of the personage on the capital from Bisotun/Ṭāq-e Bostān represents the form of the corselet with vertical central opening in front, with the side sheets consisting of horizontal stripes riveted together. The central collar-bone and lower throat would be protected by a separate gorget. It is not clear if the movable plates had separate chest plate above, or reached over the chest themselves. The crescent shaped elements at the sides of the pendant hanging from the necklace might be interpreted as frames of the oval plates and rounded edges of the high metal vest.

Closing the brief overview of the Eurasian cuirasses with frontal opening it might be added that in the *Šāhnāme*, the opening of the armour seems the vulnerable point which might be broken with the lance hit but still preventing penetration into the body. This might be a part of the older layer of the literary masterpiece still referring to Sasanian reality, however, it could also be applied to lamellar coats which also had central opening and which came into fashion after abandonment of the cuirasses.⁹²

⁸⁹ Barnes 2000: 63-70, fig. 6.; Barnes, Ryan 2014: 4-9.

⁹⁰ Barnes 2000: 63-70, fig. 6.; Barnes, Ryan 2014: 4-9; Bryant 1991.

⁹¹ Negin, Kamisheva 2018: 53-55.

⁹² Skupniewicz, Maksymiuk 2019.

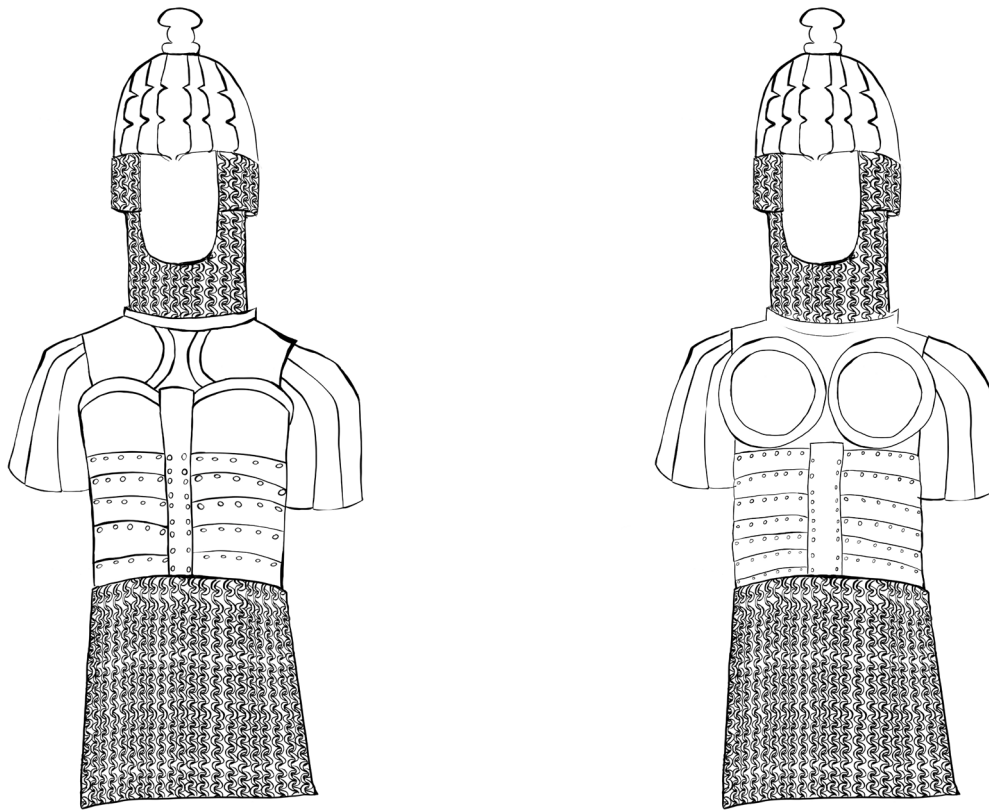


Fig. 20. Two possible reconstructions of the armour on the capital.
Drawing Eleonora Skupniewicz



Fig. 21. The painting from Kakrak.
Drawing Patryk Skupniewicz



Fig. 22. Tha "caryatid" from Panjikent.
Drawing Patryk Skupniewicz

Conclusions

The armour of the personage depicted on the capital from Bisotun/Tāq-e Bostān represents a type not unusual along the Silk Road. Although associated with the later stages of development of the Hellenistic cuirasses in Asia, it is possible that the construction principle was already present in Achaemenid Iran, and that developed further, taking local forms, probably enhanced by the influence of the Hellenistic armours. It seems that the metallurgical difficulty to obtain large sheets of metal was overcome by connecting metal stripes with rivets or welding. It is allowed to hypothesise that the armours depicted on Orlat plates represent this type of construction. It should be emphasised that the fashion for long lamellar coats was developed later and they were not necessarily direct descendants of the armours of Indo-Scythian coins and Noin Ula textile or Khalchayan sculptures. The cuirasses were worn with various sorts of limbs protection or even without limbs protection.

As a result of this study, two main ways to reconstruct the armour appear (Fig. 20): (1) with semi-circular upper edges of the cuirass sides, as they appear on Tang-e Sarvak III frieze and possibly continue on Firusabad frieze; (2) with roundish paired plastrons over chest as on the armours depicted in Xinjiang and in Tang Dynasty Chinese iconography. As an option of the latter form one might assume rectangular plate over chest with symmetrical patterns.

The helmet is clearly lamellar/laminar with central lamina extending over the nose but not forming the actual nasal. The laminae have decoratively incised edges.

In terms of meaning of the personage on the capital from Bisotun/Tāq-e Bostān, one might inquire to what extent shared armour could be the iconographic trait and semantic denomination, however analogy with the wooden capital (caryatid as catalogue describes) from Panjikent seems very clear (Fig. 22).⁹³ If the stripes on the torso of the man shown on the painting from Kakrak (Fig. 21) were to represent the same armour, it would be justified to associate these three objects and speculate that they might depict the same personage. The most convincing interpretation made so far identifies the man as Tištriya,⁹⁴ thus, the capitals from Panjikent and from Bisotun/Tāq-e Bostān could be interpreted the same way.

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⁹³ Tadjikistan 2021, 171, Cat. 119.

⁹⁴ Compareti 2021.

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