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## SASANIAN PLATE ARMOUR\*

From the third century to the mid seventh century, Sasanian Persia was an almost constant threat to the security of the eastern borders of the Roman Empire. Large scale invasions and smaller raids by highly mobile armies reached deep into Roman territory destroying, looting, taking large numbers of captives. But border insecurity also brought with it an exchange of goods and ideas. Western elements are visible in numerous Iranian works of art and in the form of several institutions, in return the Roman military system, textiles and even religion found inspiration in Persia. Iranian-type warfare proved efficient and was imitated and further developed by Romans.

It is often believed that unlike their western opponents the Sasanian Persians did not employ plate body armour. This opinion can hardly be justified. This paper briefly discusses the matter and argues that plate cuirasses were indeed in use in Sasanian Iran.

### Intrenched beliefs?

Any study of Sasanian arms and armour must rely mainly on the iconography. Surviving relics of armament from the era are few and their attribution in most cases uncertain. A mail shirt and helmet were found in a mine in Dura Europos – these apparently belonged to a Sasanian soldier who was attacking the city<sup>1</sup>. Several lamellae

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\* Despite modest size of this paper I was favoured with kind help of several persons in different matters. I need to acknowledge the help of Richard Brzezinski who showed great help with making the language of the article most similar to English. The help of Prof. Mariusz Mielczarek can by no means be underestimated as well as remarks of Dr. Ilkka Syväne. I also need to express my gratefulness to Dr. Valery P. Nikonorov for sharing his library.

<sup>1</sup> S. J a m e s, *Evidence from Dura Europos for the Origins of Late Roman Helmets*, "Syria" 63, 1986, pp. 120-127; eadem, *Excavation at Dura-Europos 1928-1937. Final Report VII. The Arms and Armour and other Military*

were found at Kasr-i Abu Nasr<sup>2</sup> and at Togolok Tepe<sup>3</sup>. And a few small metallic were found South Arabia<sup>4</sup>. Furthermore, classical authors like Heliodorus<sup>5</sup>, Libanios<sup>6</sup>, Julian Apostate<sup>7</sup> and Ammianus Marcellinus<sup>8</sup> stress the flexibility of Parthian and Persian armours constructed from small sheets of metal. On the other hand, Greco-Roman sources mention other organic materials for armour production in Iran such as hardened leather and felt are mentioned in <sup>9</sup>. Such evidence has presumably caused an exaggerated cautiousness or even disbelief among some modern scholars that metal plate armour could have been used in Arsacid/Sasanian Iran. Von Gall in his monograph on representations of mounted combat in Parthian/Sasanian Iran denies on the idea that the Persians employed plate armour<sup>10</sup>. The same is true of Michalak's text on Sasanian heavy cavalry<sup>11</sup>. Even Robinson in his

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*Equipment*, London 2004, pp. 101-105; H. v. G a l l, *Das Reiterkampfbild in der iranischen und iranisch beeinflussten Kunst parthischer und sasänidischer Zeit*, Berlin 1991, pp. 39-40.

<sup>2</sup> B. T h o r d e m a n, *Armour from the Battle of Wisby 1361*, Stockholm 1939, vol. 1, pp. 261-262, 267, Fig. 256; V. Yu. V d o v i n, V. P. N i k o n o r o v, *Fragments pant-sirnogo dospekha pozdnesasanidskogo vremeni iz Togolok Tepe*, „Izvestiya Akademii Nauk Turkmenskoy SSR“, 1, 1991, p. 78, Fig. 1, 3.

<sup>3</sup> V. Yu. V d o v i n, V. P. N i k o n o r o v, *op. cit.*, pp. 77-79.

<sup>4</sup> D. T. P o t t s, *Late Sasanian Armament from Southern Arabia*, [in:] *Electrum. Studies in Ancient History*, vol. 1, Kraków 1997, pp. 127-137.

<sup>5</sup> *Aethipica*, IX, 15.

<sup>6</sup> *Oratio* LIX, 70.

<sup>7</sup> *Oratio* I, 30, 15-28.

<sup>8</sup> *Res Gestae*, XVI, 10, 8, XXIV, 2, 10, XXIV, 6, 8.

<sup>9</sup> O. K u r z, *Cultural relations between Parthia and Rome*, [in:] *Cambridge History of Iran 3(1) The Seleucid, Parthian and Sasanian Periods*, Cambridge 1983, p. 560.

<sup>10</sup> H. v. G a l l, *op. cit.*, pp. 14-16, 22, 30, 61-72.

<sup>11</sup> M. M i c h a l a k, *Origins and Development of Sasanian Heavy Cavalry*, "Folia Orientalia", XXIV, 1987, pp. 78-79.

famous survey of Oriental armour denies the possibility that plate armour was known to the Sasanians<sup>12</sup>, while Dien's article, intended as a brief review of ancient Asiatic armour, fails to mention plate types at all<sup>13</sup>. The same is true of the popular studies by Farrokh<sup>14</sup>, Nicolle<sup>15</sup>, Cornuelle<sup>16</sup> and Wilcox<sup>17</sup>.

Quite the opposite view is held by Bivar<sup>18</sup>. In his milestone article on the exchange of military practices over the Euphrates border, he uncritically interpreted all depictions on Sasanian rock reliefs as representations of plate armour. Even on images where the outer protective layer is clearly mail, Bivar claimed that plate was being worn beneath, but provided no argument except common sense to support his view. Even more obscure is Allan's remark that among the rock reliefs only a single silhouette wears a breastplate while others do not<sup>19</sup>; unfortunately he provides no justification. Mielczarek in his ground-breaking work on ancient cataphracts and *clibanarii* admitted the existence of plate protection among Sasanian warriors but stated it was neither popular nor suitable for the Iranian model of mounted combat which required freedom of movement however he also suggested that the possible depictions of armour could in fact show cloth garments<sup>20</sup>. Gamber found plate muscle armour part of exclusive royal armament and Koliass supported his opinion<sup>21</sup>.

Coulston, in his article on tactical developments on the Romano-Iranian frontier, fails to conclude whether the plates were textile or metal.<sup>22</sup>

Most of these scholars fail to justify their conclusions. They also fail to suggest any possible typological or genetic relationship between the objects. Any interpretation of art always involves some degree of subjectivity. Of course, this will never replace uncertainty with certainty as would occur if archaeological finds of Sasanian plate armour are made.

In my opinion, three basic types of plate armour can be observed in the iconography:

1. muscle cuirass – representing survival of Hellenistic tradition
2. two-fold vertically divided cuirass
3. plain cuirass.

### The muscle cuirass

It seems that this type of body protection, which was definitely of Greek origin, was already employed by armoured cavalry in western parts of the Achaemenid state. A Lykian fresco dating from the mid-fourth century BC shows a rider in muscle cuirass mounted on an armoured horse<sup>23</sup>. This is also one of few possible representations of *parapleuridia* (or *parameridia*), as described by Xenophon. The muscle cuirass was employed by the Scythians and the Sarmatians and other Iranian nomads in the western part of the Eurasian steppe, although its popularity was over-shadowed by other types of protection, particularly scale armour<sup>24</sup>. The muscle cuirass

<sup>12</sup> R. R. Robinson, *Oriental Armour*, New York, 1967, pp. 17-26.

<sup>13</sup> A. E. Dien, *A Brief Survey of Defensive Armor Across Asia*, "Journal of East Asian Association", 2, 3-4, 2000, pp. 1-22.

<sup>14</sup> K. Farrokh, *Sassanian Elite Cavalry AD 224-642*, Oxford 2005, *pass*.

<sup>15</sup> D. Nicolle, *Sassanian Armies*, Stockport 1996, *pass*.

<sup>16</sup> C. Cornuelle, *An Overview of the Sasanian Military*, www.cais-soas.com.

<sup>17</sup> P. Wilcox, *Rome's Enemies (3). Parthian and Sassanid Persians*, Oxford 1986, *pass*.

<sup>18</sup> A. D. H. Bivar, *Cavalry Equipment and Tactics on the Euphrates Frontier*, [in:] *Dunbarton Oaks Papers* 26, 1972, pp. 278, 290.

<sup>19</sup> J. W. Allan, *Armor*, [in:] *Encyclopaedia Iranica*, www.iranica.com, pp. 483-487.

<sup>20</sup> M. Mielczarek, *Cataphracti and Clibanarii. Studies on the Heavy Armoured Cavalry of the Ancient World*, Łódź 1993, pp. 58, 60, 66.

<sup>21</sup> O. von Gamber, *Kataphrakten, Clibanarier, Normannenreiter*, „Jahrbuch der Kunsthistorischen Sammlungen in Wien“ 64, 1968, pp. 25-26; T. G. Koliass, *Byzantische Waffen. Ein Beitrag zur Byzantischen Waffenkunde von den Anfängen bis zur Lateinischen Eroberung*, Wien 1988, p. 50.

<sup>22</sup> J. C. Coulston, *Roman, Parthian and Sasanid Developments*, [in:] *The Defence of the Roman and Byzantine East*, BAR series, Oxford 1986, pp. 60-63.

<sup>23</sup> M. V. Gorelik, *Zashchitnoe vooruzhenye Persov i Midian akhemenidskogo vremeni*, "Vestnik Drevnei Istории", pp. 96; D. Head, *The Achaemenid Persian Army*, Stockport 1992, pp. 38, 56, 57; N. Sekunda, *The Persian Army 560-330 BC*, Oxford 1992.

<sup>24</sup> R. Brzezinski, M. Mielczarek, *The Sarmatians 600 BC-AD 450*, Oxford 2002, pp. 16, 21-22; E. V. Cernenko, M. V. Gorelik, *The Scythians 700-300 BC*, Oxford 1983, p. 7; M. Mielczarek, *Grecki kirys "wydobyty z Wolgi"*, "Archeologia" 41, 1990, pp. 67-71; eadem, *Cataphracti and Clibanarii*, p. 58; eadem, *Armes Greques, Scythes et Sarmates du Littoral Septentrional de la Mer Noire dans la Collection de Musee de l'Armee Polonaise a Varsovie*, Toruń 1995, pp. 35-40; eadem, *Army of the Bosporan Kingdom*, Łódź 1999, pp. 52-53; A. V. Simonenko, *Bewaffnung und Kriegswesen der Sarmaten und spaeten Skythen in nordlichen Schwarzmeergebiet*, "Eurasia Antiqua" 7, 2001, p. 279; V. D. Blavatskij, *Ocherki voennogo dela v antichnikh gosudarstvakh severnogo Prichernomorja*, Moskva 1954, pp. 29-32, Fig. 16.

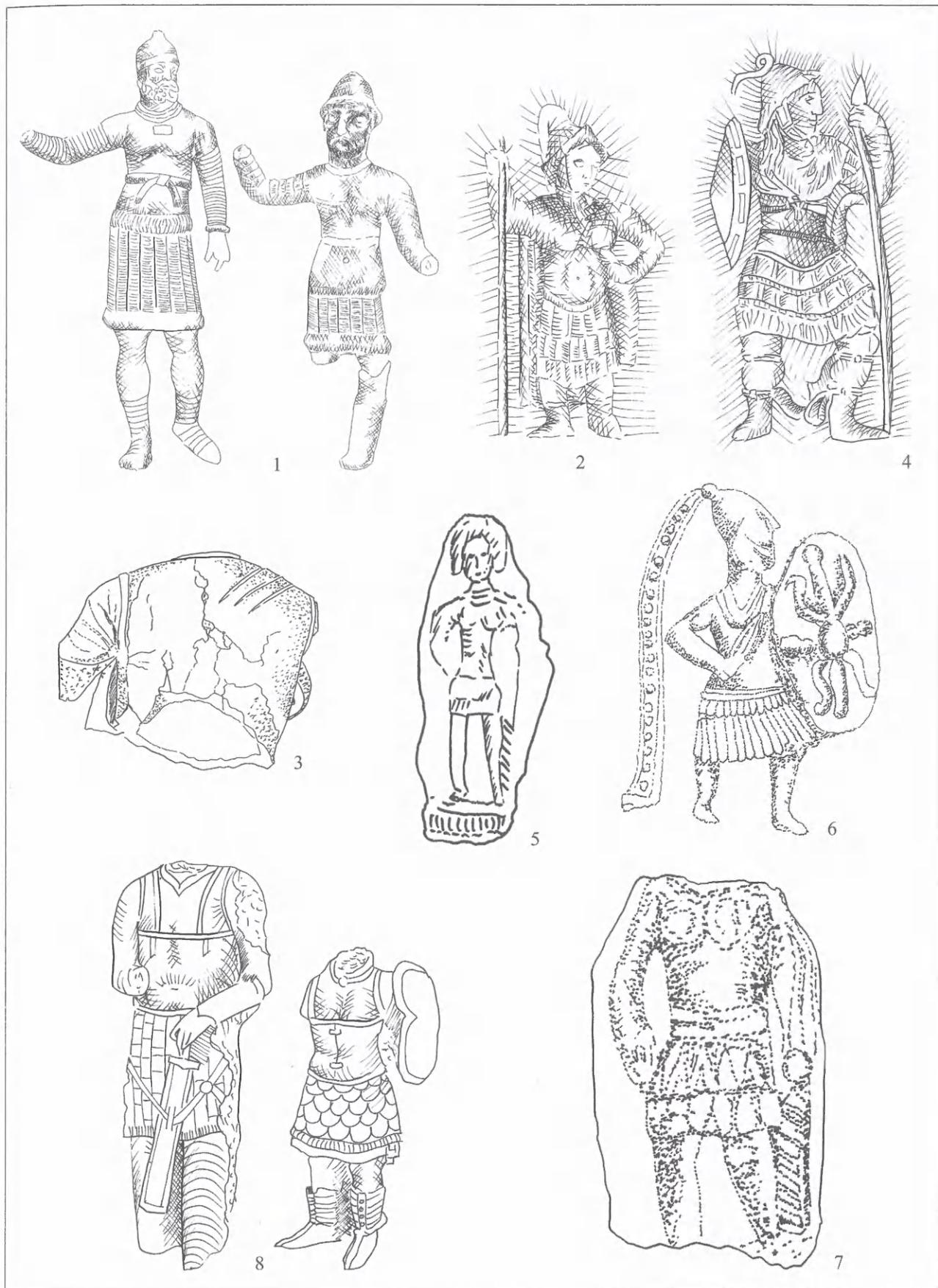


Fig. 1. Two late Hellenistic bronze statuettes from Louvre (AO 1760, AO 25538) depicting warriors; 2. Figure of Ares from rhyton No 2 from Old Nisa; 3. Fragment of clay sculpture from Old Nisa depicting armoured personage; 4. Depiction of a warrior from golden clasp from Tillya Tepe; 5. Warrior figure depicted on Kampyr Tepe terracotta; 6. Another warrior from Kampyr Tepe terracotta; 7. Depiction of a warrior on Chingiz Tepe terracotta; 8. Hadda sculptures depicting warriors.

gained popularity in Asia during the Hellenistic period in the Greco-Macedonian Bactrian states and the Seleucid empire. In the art it is worn both by foot soldiers and horsemen<sup>25</sup>. Two bronze figurines from Syria are thought to represent Seleucid *kataphraktoi* wearing helmets, muscle cuirasses, splinted arm protection and *pterygoi* (Fig. 1), which corresponds with cataphract panoply shown on the metope of the temple of Athena at Pergamon<sup>26</sup>. Interestingly, another metope depicts a carved anatomical breast plate<sup>27</sup>. The sculpture and paintings from Dura Europos prove that muscle cuirasses combined with “Parthian” dress, i.e. long loose trousers and long-sleeved tunics, are part of the iconography of local deities<sup>28</sup>. The descendants of the Greco-Macedonian states continued the Hellenistic tradition so that muscle cuirasses can be found on Parthian rhytons and probably on clay sculpture from Old Nisa<sup>29</sup> (Fig. 2, 3) and in Bactrian art of the Greco-Bactrian and Kushan periods<sup>30</sup>. While small sculptures from Nisa may be evidence of the Phil-hellenism of the Arsacid aristocracy, Bactrian representations of arms and armour seem more realistic. Warriors on golden clasps from Tillya Tepe (Fig. 4) wear anatomical breast plates together with skirts reinforced with small plates and trousers and long sleeved shirts

or tunics<sup>31</sup>. Two Kampyr Tepe terracottas depict warriors in plate body defences; one is clearly wearing muscle cuirass, the other wearing either an anatomical or a plain breast-plate (Fig. 5, 6)<sup>32</sup>. In fact no musculature is visible on the armour, which suggest the latter interpretation. A warrior on the Chingiz Tepe terracotta is also depicted in a muscle cuirass with a kind of protective skirt, probably of Greek *pteryges* type (Fig. 7)<sup>33</sup>. Some depictions of warriors from Hadda (Fig. 8) show them in muscle cuirasses with skirts reinforced with plates. In one example the warrior’s legs are clearly protected by splint leggings, which are characteristic of ancient Central Asian and Roman armoured cavalry. Other statues show that a breastplate constructed of several separate plates fastened together. It is hard to believe that this construction resulted from the technological inability of Kushan craftsmen. More probably the armourers’ intention was to gain better flexibility for fighting from horseback<sup>34</sup>. Another Hadda stucco sculpture (Fig. 9) shows a warrior wearing a device known in Armenian as an *apezak*, a characteristic pectoral disc worn in the centre of the torso fixed with four straps<sup>35</sup>. The *apezak* appears to have had mainly symbolic functions. On the Hadda sculpture, the warrior’s muscles are clearly visible and it is possible that he is wearing a muscle cuirass, although he may equally

<sup>25</sup> V. P. N i k o n o r o v, *Armies of Bactria 700 BC-450 A.D.*, Stockport 1997 vol. 1, pp. 35-37, 48, vol. 2, *pass.*; N. S e k u n d a, *The Seleucid Army*, Stockport 1994, *pass.*

<sup>26</sup> M. M i e l c z a r e k, *Cataphracti and Clibanarii*, pp. 70-72, Fig. 15-16; M. O l b r y c h t, *Seleucydzi i kultura ich epoki*, [in:] J. Wolski, *Dzieje i upadek imperium Seleucydów*, Kraków 1999, pp. 198-201, Fig. 54; N. S e k u n d a, *op. cit.*, pp. 54-55, 65, 76, 78, Fig. 32-34, 54.

<sup>27</sup> M. O l b r y c h t, *op. cit.*; N. S e k u n d a, *op. cit.*, pp. 59, 77, Fig. 44.

<sup>28</sup> S. B. D o w n e y, *Excavations at Dura-Europos. Final Report III: The Stone and Plaster Sculpture*, Los Angeles, 1977, pp. 62-64, 77, pl. 47, 60, 61; S. J a m e s, *op. cit.* pp. XXV, 42, pl. 1, Fig. 18-21.

<sup>29</sup> V. P. N i k o n o r o v, *op. cit.*, vol. 2, pp. 9, 55, Fig. 23 q; N. V. P i l i p k o, *Staraya Nisa. Osnovnye itogi arkeologicheskogo izoucheniya v sovetskiy period*. Moskva 2001, pp. 288-296; G. A. P u g a c h e n k o v a, *O pantsirnom vooruzhenii parfyanskogo i baktryiskogo voinstva*, “Vestnik Drevney Istorii”, pp. 32-33.

<sup>30</sup> M. V. G o r e l i k, *Kushankyi dospekh*, [in:] *Drevnaya India*, Moskva 1982, pp. 90-91, fig 4; V. P. N i k o n o r o v, *op. cit.*, *pass.*; eadem, *Greko-Bakryiskaya tyazhelaya kavaleriya (K istorii voennogo dela na ellenisticheskom Srednyem Vostoke)*, [in:] *Mezhdunarodnaya konferencya: Srednaya Azia I. mirovaya civilizacyia. Tezisy dokladov*, Tashkent 1992, pp. 106.

<sup>31</sup> K. A b d u l l a e v, *Armour of Ancient Bactria*, [in:] *In the land of the Gryphons. Papers on Central Asian archaeology in antiquity*, Firenze 1995, pp. 168-169, Fig. 3:1; V. P. N i k o n o r o v, *Armies of Bactria*, pp. 24, 56, Fig. 24 e, f; V. I. S a r i a n i d i, *Bactrian Gold from the Excavations of the Tillya-tepe Necropolis in Northern Afghanistan*, Leningrad 1985, il. 69,73,81-84.

<sup>32</sup> K. A b d u l l a e v, *op. cit.*, pp. 167-168, Fig. 2; V. P. N i k o n o r o v, *op. cit.*, pp. 10, 14, 56, 68, Fig. 24 a, 36 c; V. P. N i k o n o r o v, S. A. S a v c h u k, *New data on ancient Bactrian body-armour (In the light of finds from Kampyr Tepe)*, “Iran” 30, 1992, pp. 50-53; N. S e k u n d a, *Hellenistic Infantry Reform in 160’s B.C.*, Łódź 2001, pp. 172-175.

<sup>33</sup> K. A b d u l l a e v, *loc. cit.*; V. P. N i k o n o r o v, *loc. cit.*, V. P. N i k o n o r o v, S. A. S a v c h u k, *loc. cit.*; B. J. S t a v i s k i j, *Central Asian Mesopotamia and Roman World*, [in:] *In the land of the Gryphons. Papers on Central Asian archaeology in antiquity*, Firenze 1995, pp. 194-195, fig 3.

<sup>34</sup> M. V. G o r e l i k, *loc. cit.*, V. P. N i k o n o r o v, *op. cit.*, pp. 16, 74, Fig. 42.

<sup>35</sup> M. V. G o r e l i k, *op. cit.*, pp. 96-99, Fig. 10 b; B. K a i m, *Irańska ideologia władzy królewskiej w okresie panowania Sasanidów*, Warszawa 1997, p. 63.

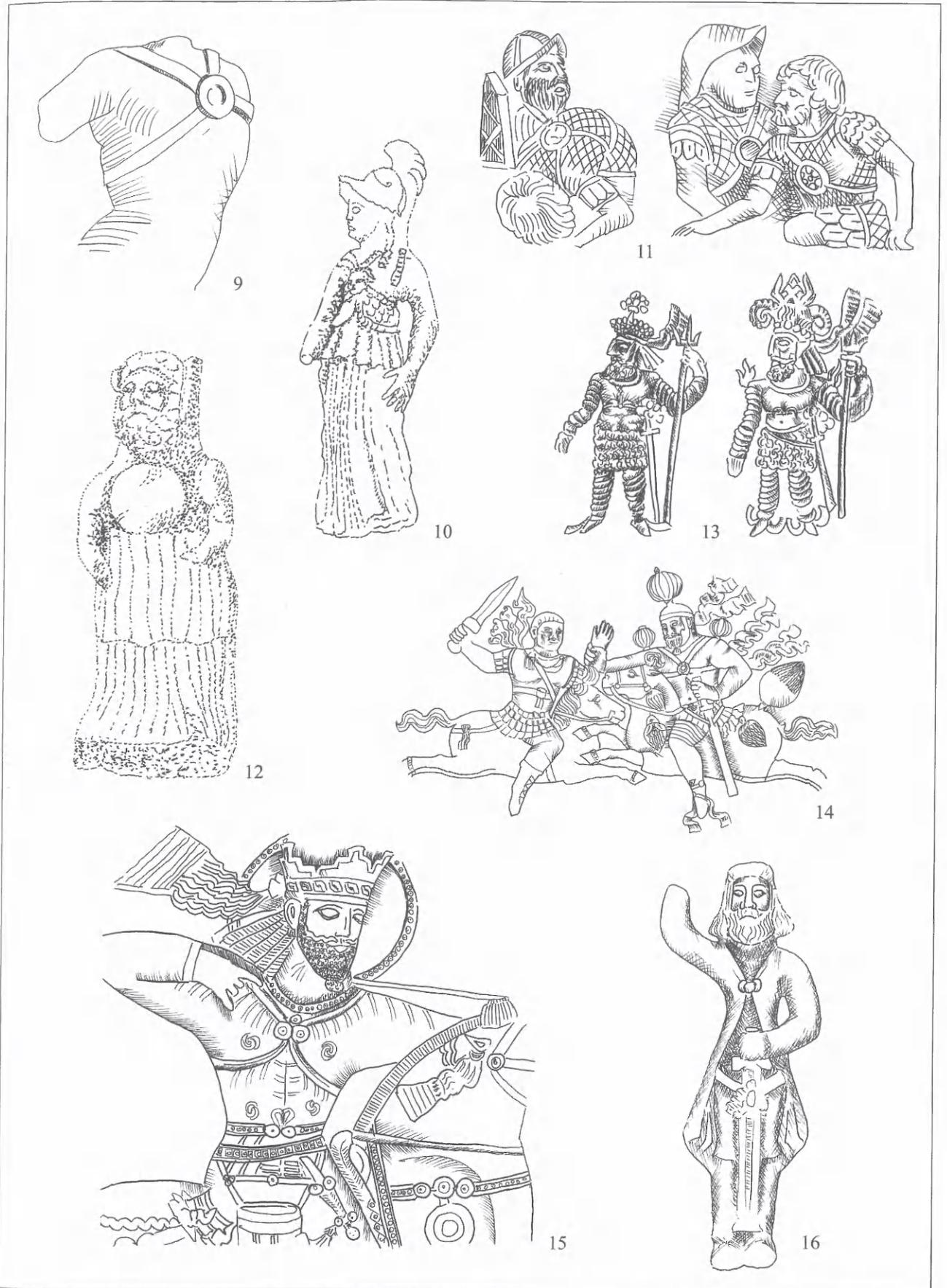


Fig. 9. Another piece of sculpture from Hadda; 10. Silver figurine of Athena from Old Nisa; 11. Kushan sculpture depicting warriors; 12. Terracota figurine from Kampyr Tepe depicting Saka warrior (?); 13. Depictions from coins of kushanshahs Bahram and Hormizd; 14. Mounted combat scene from "Shapur cameo". Bibliotheque Nationale, Paris; 15. Fragment of Pereshchepina plate from Hermitage (S-272); 16. Bronze figurine from Louvre (AO 22134).

just be naked. The *apezak*'s protective value was evidently inferior to its symbolic association with royal ideology. A figurine of Aphrodite from Old Nisa (Fig. 10) shows the goddess wearing an *apezak* type contraption with depiction of Medusa head, stressing its apotropaic/symbolic role<sup>36</sup>. Similar devices described as triangular necklaces with round pendentive and horizontal reinforcing stripes appear on Central Asian terracotas in civilian contexts<sup>37</sup>. Heart-discs became a constant element of Shamanistic and Buddhist/Lamaic utensils<sup>38</sup>. Other Kushan art show warriors in padded armour and scale body protection, also wearing disc pectorals on the centre of the chest (Fig. 11)<sup>39</sup>. This suggests the device was worn together with armour as a sort of military distinction mark. However, one of the Kampyr Tepe terracotta figure is depicted wearing on his chest a large disc of superior defensive value with no visible mode of reinforcement (Fig. 12)<sup>40</sup>. In later periods, circular metallic chest plates of various sizes were a popular element of Oriental armour from Persia to China<sup>41</sup>. It should be also mentioned that on a rock relief of Shapur I Bishapur the king is depicted with two straps crossing on the chest though without a reinforcing central disc<sup>42</sup>. Kushan

coins also depict deities in muscle cuirasses and helmets of Hellenistic tradition<sup>43</sup>. In this case it seems more likely that the symbolic sense highly predominates the realism and fits with the tradition of religious iconography. Nevertheless, the stucco sculpture from Hadda suggest that the armament of deities was not very different from the types in actual use.

The date when the Kushan state finally submitted to the Sasanians is uncertain. There are two main theories. The more commonly accepted theory suggest this happened following Shapur I's declarations concerning the conquest of the Kushan country in the mid 3<sup>rd</sup> century<sup>44</sup>. The later theory points to the late 4<sup>th</sup> century as the date of acquisition of *Kushanshahr* by Persia<sup>45</sup>. The limited historical data available do not allow us to establish an undisutable chronology of events but it is certain that from the late 4th century Bactria was incorporated into the Sasanian Empire and was governed by the "Kushanshahs" – Kushan kings of royal Sasanian blood<sup>46</sup>. Perhaps the nature of "governorship" was more "feudal" in character

<sup>36</sup> N. V. P i l i p k o, *op. cit.*, pp. 322-323, Fig. 232.

<sup>37</sup> D. H u f f, *Terracotta Figurine from North Bactria*, [in:] *In the land of the Gryphons. Papers on Central Asian archaeology in antiquity*, Firenze 1995, pp. 267-273.

<sup>38</sup> Z. G u a n g - d a, *City-States of the Tarim Basin*, [in:] *History of civilizations of Central Asia. Vol. III. The crossroads of civilizations; A.D. 250 to 750*, Paris 1996, pp. 296-298, Fig. 7-9; J. F o n t h e i n, *Dancing Demons of Mongolia*, Amsterdam 2001, pp. 28-29, 38-41, 47-49, 55, 63, figs. 8-11, 13-14, 18, 280; W. F o r m a n, B. R i n c z e n, *Lamajskie Maski Taneczne*, Warszawa 1970, pl. 11, 16, 25; German edition: *Lamaische Tanzmasken*, Leipzig 1967; L. S i s i l, *Mongolei. Kunst und Tradition*, Praha 1960, pp. 25-27, figs. 68, 88, 90; P. R a w s o n, *Sacred Tibet*, London 1991, pp. 52, 56-57, 59, 72-73, pl. 25-26, 29-30, 32, 86; eadem, *Tantra. The Indian Cult of Ecstasy*, London 1973, pp. 99, 102, 104, 110 figs. 10, 19, 29, 47-49, pl. 41-42, 64.

<sup>39</sup> M. V. G o r e l i k, *op. cit.*, pp. 94, 96-99, Fig. 8.

<sup>40</sup> K. A b d u l l a e v, *op. cit.*, pp. 176-178; V. P. N i k o n o r o v, *op. cit.*, pp. 14, 68, Fig. 36 a; V. P. N i k o n o r o v, S. A. S a v c h u k, *op. cit.*, pp. 50-53, Fig. 3.

<sup>41</sup> J. W. A l l a n, *op. cit.*, pp. 488-489, figs. 23-24; A. R. C h o d y Ń s k i (ed.), *Persian and Indo-Persian Arms and Armour of 16<sup>th</sup>-19<sup>th</sup> Century from Polish Collections*, Malbork 2000, pp. 140, 227, il. 35; R. R. R o b i n s o n, *op. cit.*, pass, L. S i s i l, *op. cit.*, pp. 25, pl. 68.

<sup>42</sup> B. K a i m, *Sztuka Starożytnego Iranu*, Warszawa 1996, pp. 204-206, il. 151; D. S h e p h e r d, *Sasanian*

*Art*, [in:] *Cambridge History of Iran 3*, Vol. 2, Cambridge 1983, p. 1089; pl. 97; dr. Ilkka Syväne was kind to note in personal communication that in his opinion the original role of the straps was to tighten the body armour and in the case of mail/lamellae/scales to relieve some of its weight, in a similar way to the straps employed in Byzantine armament. He suggests therefore that the presence of the *apezak* may be connected with armour worn under garments even in situations when no armour or only pieces of it are visible (see below).

<sup>43</sup> V. P. N i k o n o r o v, *op. cit.*, pp. 15, 71, Fig. 39 a, b.

<sup>44</sup> A. D. H., B i v a r, *History of Eastern Iran*, [in:] *Cambridge History of Iran 3*. Vol. 1, Cambridge 1983, pp. 209-210; A. H. D a n i, V. A. L i t v i n s k y, *The Kushano-Sasanian Kingdom*, [in:] *History of Civilizations of Central Asia. Vol. III. The crossroad of civilizations: A.D. 250 to 750.*, Paris 1996, pp. 104-108; B. G a f u r o w, *Dzieje i Kultura Ludów Azji Centralnej*, Warszawa 1978, pp. 165-167; O. P. H a r p e r, P. M e y e r s, *Silver Vessels of the Sasanian Period. Vol. 1: Royal Imagery*, New York 1981, pp. 42-43; E. H e r z f e l d, *Kushano-Sasanian Coins*, New Delhi 1998 (original edition 1930), p. 3.

<sup>45</sup> A. H. D a n i, V. A. L i t v i n s k y, *op. cit.*; B. G a f u r o w, *op. cit.*; O. P. H a r p e r, P. M e y e r s, *op. cit.*, p. 42; V. G. L u k o n i n, *Kultura sasanidskogo irana. Iran v III-V vv. Ocherki po istorii kulturyi*, Moskva 1969, pp. 124-152; eadem, *Zavoevanyia sasanidov na vosstoke*, [in:] V. G. L u k o n i n, *Drevnyi i rannesrednevekovyi Iran*, Moskva 1987, pp. 207-231.

<sup>46</sup> Frye, *loc. cit.*; A. S a m i, *Kushan in the Days of the Sassanian Empire according to the Pahalavi Inscription of Naksh-e-Rustam*, [in:] *Central Asia in the Kushan Period*, vol. II, Moskva 1975, pp. 146-151.

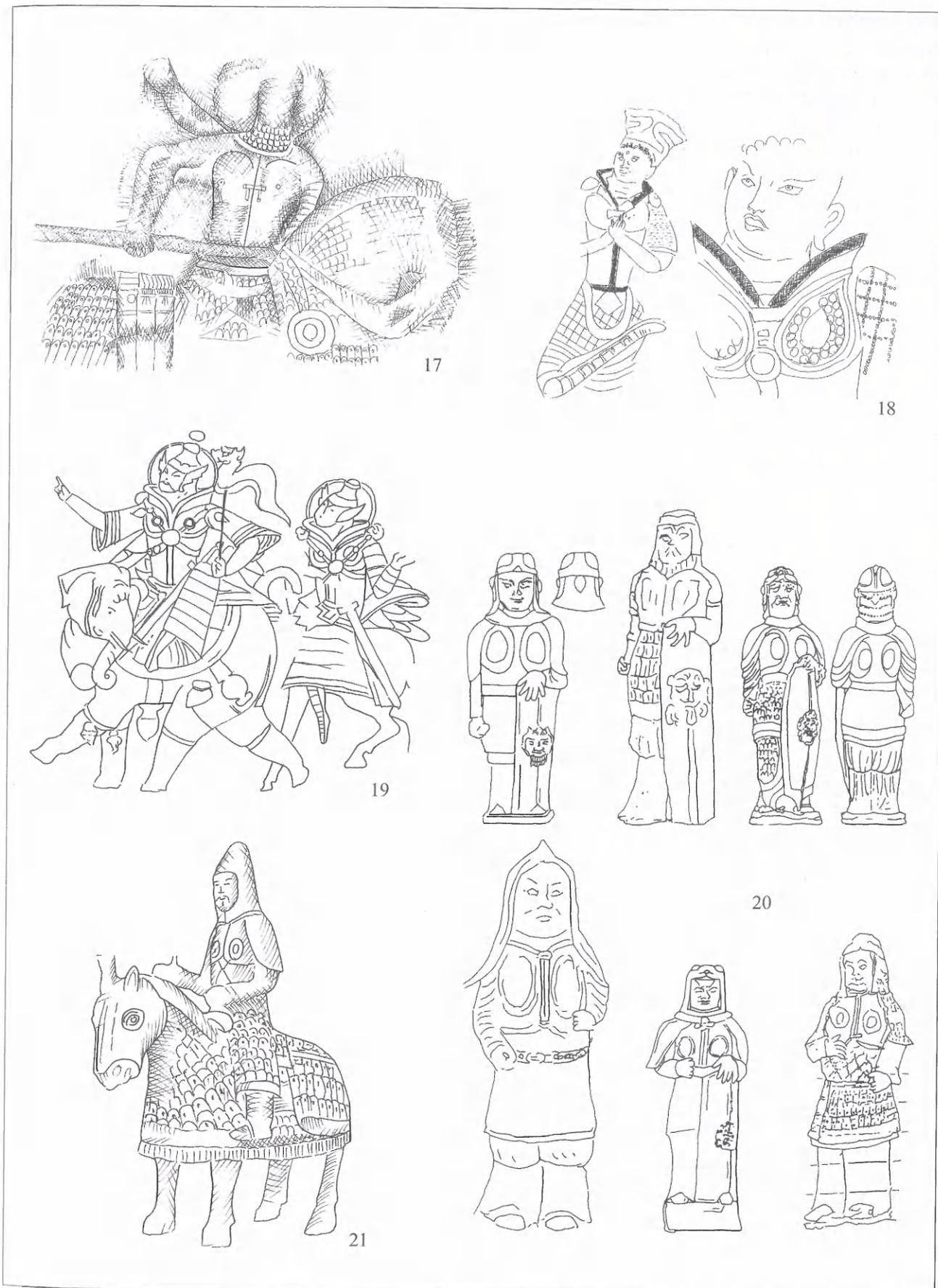


Fig. 17. Rock relief in Tang e Sarvak. Iran (in situ); 18. Various fragments of frescoes from Kizil with armour depiction; 19. Distribution of Buddha's relics. Fragment of fresco from Kizil; 20. Various warriors depiction from Chinese art Sui/Tang dynasties. In: A. E. D i e n, *Study of Early Chinese Armor*, "Artibus Asiae" 13, ½, p. 25-31, 34-35; 21. Clay figure of heavy armoured horseman. China. Sui/Tang dynasty.

and involved a degree of independency. One of specific features was the right of *Kushanshahs* to wear distinctive crowns and to mint coins. It is also possible that the Sasanian kings of Kushans were in fact separatists who had rebelled against their suzerains<sup>47</sup>. In this case, their use of crowns and minting coins might be treated as a declaration of independence. Some issues of “Kushano-Sasanian” coins directly copy Kushan patterns; others modify them, but the coinage always remain distinct from Sasanian variety. On their coins, the Persian rulers of Bactria usually stand frontally with head facing left, with the left hand raised and holding a trident. The crowns and helmet decorations are individually diversified. Except in some early series, the *Kushanshah* usually wears a muscle cuirass with mail skirt and splinted arms defenses and possibly the same type of leg protection<sup>48</sup> (Fig. 13). Some of the Kushano-Sasanian muscle cuirasses depicted on coins seem to consist of several plates as on the above-mentioned figure from Hadda, though this may be just an attempt to depict anatomical details of the abdomen sculpted on the armour in the small area available on a coin. Kushano-Sasanian coins were copied by the Kidarite rulers after they conquered *Kushanshahr*<sup>49</sup>. Muscle cuirasses are attested in other types of post-Kushan art, such as the warrior depicted on a silver bowl found in Kustanai, dated to the beginning of the 5<sup>th</sup> century<sup>50</sup>.

Another piece of art which shows a Sasanian warrior in a muscle cuirass is the famous “Shapur cameo”<sup>51</sup> (Fig. 14). Leaving aside discussion on its attribution and dating, it is sufficient here to agree that it represents a royal Sasanian in combat

with a Roman horseman, and was produced in the late 3<sup>rd</sup> or 4<sup>th</sup> century. This Sasanian warrior wears body protection showing anatomical details of the abdomen which clearly suggest a muscle cuirass. He also wears an *apezak* on the chest. His long sleeves are problematic since there seems to be no way to divide them from main body. Either the armour was made of a material which allowed a smooth transition from the hardened muscle-shaped breastplate (and perhaps back plate) such as leather processed by a skilled craftsmen or an *apezak* could have included a sort of long sleeved vest worn over the tunic or shirt. Similar robes could be represented for example on a silver dish showing a king hurling a javelin from the Berlin fragment of a silver vessel or silver plate from Krasnaya Polana, Shapur II from Pereshchepina plate (Fig. 15) and on a bronze figure from the Louvre (Fig. 16); though in two latter cases a longer robe is depicted rather than a vest<sup>52</sup>. The Sasanian on the cameo wears a muscle cuirass while his thighs are protected by laminar defences, his groin is covered with a scale skirt which might be a form of *pteryges* as worn by his Roman adversary. It is possible to interpret the plain lower leg as a greave – an armoured shin protection successfully employed by Scythian and Sarmatian mounted warriors<sup>53</sup> and attested for the 4<sup>th</sup> century Persians by Libanios<sup>54</sup> but also mentioned in Heliodoros’ romance<sup>55</sup>. As was stated above the combination of muscle cuirass and *apezak* was known in the art of the Kushans. Knee-length laminated thigh protection is known from the Khalchayan frieze as well as from the Roman finds from Newstead and Dura Europos<sup>56</sup>. The Arch of Arcadius, which is not preserved but is known from 18<sup>th</sup> century

<sup>47</sup> O. P. Harper, P. Meyers, *op. cit.*, pp. 42-43.

<sup>48</sup> A. H. Dani, V. A. Litvinsky, *op. cit.*, pp. 105-108, Fig. 1-2; E. Herzfeld, *op. cit.*, *pass.*; V. G. Lukonin, *Iskusstvo Drevnego Irana*, Moskva 1977, p. 177; eadem, *Kultura sasanidskogo Irana*, pp. 124-152, 233-234, Fig. XIII-XIV; K. V. Trever, V. G. Lukonin, *Sasanidskoe srebro. Sobranie Gosudarstvennogo Ermitazha*, Moskva 1987, p. 60.

<sup>49</sup> E. V. Zeimal, *The Kidarite kingdom in Central Asia*, [in:] *History of Civilizations of Central Asia. Vol. III. The crossroad of civilizations: A.D. 250 to 750*, Paris 1996, pp. 128-132, Fig. 3.

<sup>50</sup> V. P. Nikonorov, *op. cit.*, pp. 18, 77, Fig. 45 d.

<sup>51</sup> H. v. Gall, *op. cit.*, pp. 56-59, pl. 19; A. B. Nikitin, *Voennoye delo Irana pri Sasanidakh (zamechaniya k knige H. von Gallya)*, [in:] *Military Archaeology. Weapons and Warfare in the Historical and Social Perspective*, St. Petersburg 1998, pp. 109-110; D. Shepherd, *op. cit.*, pp. 1100-1101.

<sup>52</sup> O. P. Harper, *The Royal Hunter. Art of the Sasanian Empire*, New York, 1978, pp. 88-89, fig 30; O. P. Harper, P. Meyers, *op. cit.*, pp. 51, 57, 81-82, 210, 213, 229, pl. 9, 12, 28, K. V. Trever, V. G. Lukonin, *op. cit.*, p. 107, il. 6 [2], 7 [2].

<sup>53</sup> E. V. Cernenko, M. V. Gorelik, *op. cit.*, p. 12; A. I. Melyukova, *Vooruzheniye Skifov*, Moskva 1964, pp. 75-76, pl. 16; M. Mielczarek, *Army of Bosporan Kingdom*, pp. 53-54; A. V. Simonenko, *op. cit.*, p. 282.

<sup>54</sup> *Oratio*, LIX, 69.

<sup>55</sup> *Aethiopica*, IX, 15.

<sup>56</sup> S. James, *op. cit.*, pp. 126-128, Fig. 71-73; S. MacDowall, *Late Roman Cavalryman AD 236-565*, Oxford 1995, pp. 16-17; V. P. Nikonorov, *op. cit.*, pp. 11-12, 62, Fig. 30, G. A. Pugachenkova, *op. cit.*, p. 42.



Fig. 22. Shah's Suleyman's (?) cuirass, Cracow National Museum (V.334/1-5); 23. Fragments of metallic cuirass from Kampyr Tepe; 24. Statue of Ashur-Bel from Hatra. Now in Baghdad (IM 56766); 25. Fragment of nephrite disc from Old Termez; 26 Terracotta slab found in Dalverzin Tepe; 27. Rock relief from Firusbad depicting mounted combat. Iran (in situ); 28. Naqsh-e Rostam rock reliefs with "jousting scenes". Iran (in situ).

drawings, depicts the panoply of defeated Persians including muscle cuirasses with laminated arms defences<sup>57</sup>. Although this is often treated as a type of antiquarian representation unfortunately no other pictorial document depicting Sasanian arms and armour from the 5<sup>th</sup> century is available.

### Two-fold vertically divided cuirass

Armour which appears plate-like is depicted on a late Parthian rock relief at Tang-e Sarvak<sup>58</sup> (Fig. 17). The king, who is represented as heavily-armed rider, is seated on a horse covered in lamellar-armour, and wears lamellar leggings, laminated arms defences and a breast-plate. The king's throat seems to be protected with a separate combined scale-laminar device. The plate is two-fold vertically divided and seems either to consist of two plates or be decorated in a way suggesting such a division. The plates seem to be fastened by a rectangular device on the centre of the chest. The armour seems to be closely fitted to the rider's body. Von Gall believes that these plates were rather leather covering of scale armour than actual metallic protection<sup>59</sup>.

This particular type has no analogy in ancient Persian panoply but is attested in later Central Asian and Chinese armament. Interesting depictions of analogical forms of armour come from Kizil (Fig. 18, 19) on the very edge of the zone of Iranian cultural influence<sup>60</sup>. Armours depicted on Kizil frescoes appear to be vertically divided throughout their length, and the chest part is either only separated or doubled with a second layer. This type of armour could be the descendant of the Hellenistic muscle cuirass, which was conveyed east through Bactria. Constructing breast-plates of several sheets might have resulted in the visual

division of abdomen protection and chest protection. The Kizil fresco depicting the distribution of the Buddha's relics (Fig. 19) shows armoured riders wearing such fourfold breast-plates together with *apezaks*. This corresponds with Kushan and Sasanian traditions, though it is more closely associated with Buddhist iconography<sup>61</sup>.

It seems justified to believe that Chinese so called *liang tang* and "cord and plaque" armour originates from Parthian plate breast-plates transmitted through the Silk-Route Iranian-speaking states which remained under the strong cultural dependency of Sasanian Persia. This type of Chinese armour was manufactured both from metal and hardened leather<sup>62</sup> (Fig. 20, 21). Metallic plates of similar appearance are known in 17<sup>th</sup> century Persia<sup>63</sup>, though, naturally this might be purely coincidental (Fig. 22).

### Plain cuirass

In the iconography, this type of body armour might easily be mistaken for a muscle cuirass, especially in works of smaller size. Plain body armours appear on Persian seals of the Achaemenid period as well as in contemporary Greek depictions of Iranian warriors<sup>64</sup>. They are Greek type armours constructed of hardened linen. This type of breast-plate appears also on the metope of the temple of Athena in Pergamon, which probably depicts the panoply of a Seleucid *cataphract*, together with masked helmet, tubular arm defences and elements of horse-armour<sup>65</sup>. A metallic cuirass was found at the Bactrian site of Kampyr Tepe and dated to the 2<sup>nd</sup> century BC (Fig. 23)<sup>66</sup>. Although the excavated breastplate was made of horizontal

<sup>61</sup> T. Zhu, *ibidem*.

<sup>62</sup> A. E. Dien, *op. cit.*, p. 35; E. T. C. Werner, *ibidem*.

<sup>63</sup> A. R. Chodyński, *op. cit.*, pp. 139, 224, il. 29; O. von Gamber, *op. cit.*, p. 33, Fig. 51; T. Majda (ed.), *Arcydziała Sztuki Perskiej ze Zbiorów Polskich*, Warszawa 2002, p. 101, il. 124; R. R. Robinson, *op. cit.*, pl. V; Z. Żygulski Jun., *Broń Wschodnia*, Warszawa 1983, pp. 67-68.

<sup>64</sup> M. V. Gorelik, *Vooruzhenyie Persov i Midian*, p. 103; D. Head, *op. cit.*, p. 25, Fig. 12 f-h, 27, Fig. 14 a-b, 34, Fig. 21 c, 36, Fig. 23 c, 37, Fig. 24 a-c; N. Sekunda, *The Persian Army 560-330 BC*, pp. 15, 25, 28, 49, 52.

<sup>65</sup> see: note 20.

<sup>66</sup> V. P. Nikonorov, S. A. Savchuk, *op. cit.*, *pass.*; V. P. Nikonorov, *Armies of Bactria*, pp. 7, 45, Fig. 13.

<sup>57</sup> D. Nicolle, *Romano-Byzantine Armies 4<sup>th</sup>-9<sup>th</sup> Centuries*, Oxford 1992, p. 12.

<sup>58</sup> H. v. Gall, *op. cit.*, pp. 13-19, il. 1.

<sup>59</sup> *Ibidem*, p. 16.

<sup>60</sup> A. E. Dien, *Study of Early Chinese Armor*, "Artibus Asiae" 13, 1/2, pp. 25-31, 34-35; C. J. Peers, *Imperial Chinese Armies (1). 200 BC-A.D. 589*, Oxford 1995, pp. 17, 47; C. J. Peers, *Imperial Chinese Armies (2). 590-1260 AD*, London 1996, p. 6, *pass.*; W. Watson, *Iran and China*, [in:] *Cambridge History of Iran 3(1)*, Cambridge 1983, p. 551; E. T. C. Werner, *Chinese Weapons*, Bangkok 1986 (originally published in Shanghai 1932), pp. 36-37; T. Zhu, *Sun God and the Wind deity at Kizil*, [in:] *Webfestschrift Marshak 2003*, www.transoxania.com.



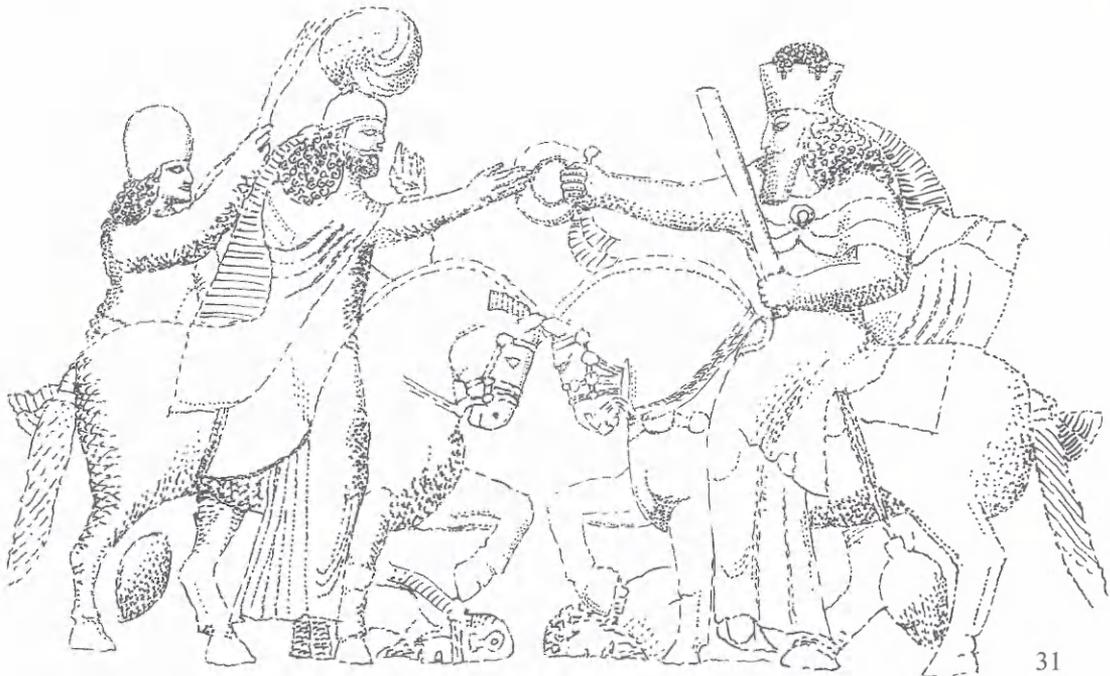
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Fig. 29. Depiction of a warrior from Taq-e Bostan capital. Iran (in situ); 30. Depiction of a mounted warrior from niche in Taq-e Bostan. Iran (in situ); 31. Depiction from "mounted investiture scene" from Naqsh-e Rostam. Iran (in situ); 32. Depiction from stucco relief from Chal Tarkhan. Museum of Fine Arts, Boston (39.488).

iron bands riveted together, it was stiff and the rivets may represent repairs rather than a novel mode of construction. Alternatively, this may have been an attempt to create a type of armour with the protective value of plate but greater flexibility. Similar experiments were made in western Asia, as is demonstrated by the remains of a Hatrean figure (Fig. 24) showing a king wearing Hellenistic/Roman type armour, with *pteryges* protecting his groin and shoulders, consisting of one bigger plate on upper chest and wide, horizontal segmented pieces on lower chest and abdomen<sup>67</sup>. This could have been found the influence of Roman so-called *lorica segmentata*, however decorative appliqué, *pteryges* and the whole appearance suggest rather that it is a attempt to create more flexible version of plate cuirass being a sign of high status than adaptation of standard armament of regular Roman infantry to the requirements of royal prestige. It is possible that depiction of Zeus Theos from Dura Europos fresco show him in similarly constructed armour<sup>68</sup>. Pieces of decorated metallic breast plates were also found in Hatra<sup>69</sup>. Also it must be remembered that one of Kampyr Tepe terracottas most likely represents plain breast plate<sup>70</sup>.

The plain cuirass is also attested in a sculpture from Dura Europos. The silhouette of a god is depicted wearing a plain breastplate decorated with stars and crosses and distinct semi-globular dome-shaped insets probably representing rivets. Additionally, he wears *pteryges*, arm- and groin protection<sup>71</sup>.

A mounted lancer depicted on the reverse of a nephrite disc from Old Termez shows him wearing plain breast plate and splinted arm defences (Fig. 25)<sup>72</sup>. The lancer's head is unfortunately not preserved, though two ribbons which are usually seen attached to helmets are clearly visible and give him a distinctive "Sasanian" appearance. The piece is dated on the basis of its obverse which

is suggested to be of different workshop than reverse. The wide range of dating – between 50 AD and 250 AD – allows the depiction to be associated with Kushan and Kushano-Sasanian and even Sasanian examples. The Daverzin Tepe terracotta slab shows a goddess wearing a plate-like breast plate, arm splint defences and scale skirt (Fig. 26). It cannot be stated with certainty that the breastplate depicted is plain rather than muscled. However, iconographical associations prove that it is indeed a form of armour and not another form of dress<sup>73</sup>. The monumental rock frieze at Firusbad (Fig. 27) depicts, in idealized form, scenes from the battle of Hormizdaran, a decisive struggle between Ardashir and Artaban<sup>74</sup>. In the course of the battle the last Arsacid king was killed by the Sasanian ruler and a new dynasty was placed on the throne of Iran. Formally, the depiction follows the Iranian pattern showing victorious personages in calm stately poses, while the defeated individual is presented in a desperate dynamical fall in accordance with so-called "oriental verism"<sup>75</sup> which generally means that in order to present symbolic content highly realistic means were employed. One cannot therefore determine, based on the Firusbad frieze alone, whether Ardashir really fought in battle bare-headed and his son in ritual headgear, since these elements have symbolical meaning – in this situation superior to "realism"<sup>76</sup>. Nevertheless, all other elements of weaponry and equipment were executed with extreme attention to detail. Both the Sasanian and the Parthian warriors depicted on the Firusbad frieze wear similar plain body coverings<sup>77</sup>. The Parthians are distinguished by their laminated limb

<sup>73</sup> V. P. N i k o n o r o v, *op. cit.*, pp. 18, 77, Fig. 45 a; G. A. P u g a c h e n k o v a, *Ob odnom ikonograficheskom obraze v iskusstve Baktrii*, „Vestnik Drevneyi Istorii” 4 (191) 1989, pp. 97-105.

<sup>74</sup> H. v. G a l l, *op. cit.*, pp. 20-30, Fig. 3, pl. 5-8; B. K a i m, *op. cit.*, pp. 130-131; eadem, *Sztuka Starożytnego Iranu*, 192-193; M. M i e l c z a r e k, *Cataphracti and Clibanarii*, pp. 38-40, 62, 66, 125, Fig. 10; D. S h e p h e r d, *op. cit.*, pp. 1078-1079, pl. 89; E. P o r a d a, *Alt-Iran. Die Kunst in vorislamischer Zeit*, Baden Baden 1962, p. 206; P. S k u p n i e w i c z, *loc. cit.*

<sup>75</sup> D. S c h l u m b e r g e r, *Parthian Art*, [in:] *Cambridge History of Iran* 3, Vol. 2, Cambridge 1983, p. 1050.

<sup>76</sup> K. J a k u b i a k *Bunt Ardaszira I w Iranie w III w. n.e.*, [in:] *Zamach Stanu w Dawnych Społecznościach*, Warszawa 2004, pp. 151-152.

<sup>77</sup> O. v o n G a m b e r, *op. cit.* p. 25, believes these represent muscle cuirasses.

<sup>67</sup> S. W i n k e l m a n n, *Katalog der partischen Waffen und Waffenträger aus Hatra*, "Orientwissenschaftliche Hefte" IV/2004, pp. 270-273, il. 110; R. G h i r s h m a n, *Iran: Parthians and Sassanians*, New York 1967, Fig. 1.

<sup>68</sup> M. A. R. C o l l e d g e, *The Parthians*, New York-Washington 1971, pp. 106-107, Fig. 22; V. S. C u r t i s, *Parthian Culture and Costume*, [in:] *Mesopotamia and Iran in the Parthian and Sasanian Periods: Rejection and Revival c. 238 B.C.-A.D. 642*, London 2000, p. 33, Fig. 9.

<sup>69</sup> S. W i n k e l m a n n, *op. cit.*, pp. 300-301, il. 122.

<sup>70</sup> see; note 26.

<sup>71</sup> S. B. D o w n e y, *op. cit.*, pp. 7-9, pl. 1.

<sup>72</sup> V. P. N i k o n o r o v, *op. cit.*, pp. 15, 70, Fig. 38 c.

defences, scale aventails on their helmets, and scale skirts while the victorious Sasanians have mail sleeves, mail skirts and laminated leggings, but no helmets or neck protection are shown. The breast-plate worn by Shapur and by the Parthian warrior wrestling with the Persian "page" on the outer left scene of the frieze, both seem to have a central vertical "rib". Ardashir wears an *apezak* on his chest. It is too small to have any protective value, but rather must be a distinction of his royal function. On the collar of the "page's" cuirass one can see domed objects regularly placed around the neck, which may represent rivets reinforcing a metallic edge band. This element is similar to sculpture from Dura Europos mentioned above. The collar of Shapur's body covering also seems to be reinforced, though no rivets are visible. It should be stressed here that the armours depicted on Kushano-Sasanian coins also have a reinforced edge around the neck. This naturally might result from limitations of coin size.

Similar body protection is depicted on the mounted combat scenes in the Naqsh-e Rostam friezes<sup>78</sup> (Fig. 28). The state of preservation does not allow the armour types of all the personages to be determined, however where visible it seems they wear plate body coverings with scale skirts and splinted limb defences. The armour of a defeated warrior trampled beneath the *shah's* horses hooves seems to show details of chest musculature. Perhaps these two are intended to represent muscle cuirasses. This suggests a strong correspondence in armament between the tradition of Sasanian Bactria and the Persian heartland. The personages defeated by the *Shahinshah* may perhaps represent his opponents from the Eastern part of Empire.

An armoured individual carved on a figural capital from the Taq-e Bostan complex (Fig. 29) which accompanies the Khusro II investiture scene is depicted in an interesting set of war gear. He wears a helmet with mail aventail and additional mail neck protection, a cloak fastened with round brooch on the chest and plain body protection with low vertical ridge around the neck decorated with necklace of two rows of

beads or pearls<sup>79</sup>. Below the edge of his cloak glimpses of *pteryges* worn as shoulder defences are also visible. A mail skirt protects his waist and groin area. This depiction from the last Decades of Sasanian rule indicates survival of two traditional modes armament – the combination of mail aventail with mail skirts and plate cuirasses (which had appeared already on the Firusabad frieze) with the still vivid Hellenistic influence in form of *pteryges*. The lack of arm defences cannot easily be explained. However, if we assume that the armoured rider in the Taq-e Bostan niche (Fig. 30) represents the same individual as depicted on capital, then either the difference in armament must be concluded or we must agree with Bivar's opinion that an additional mail shirt was worn over the plate cuirass<sup>80</sup>. This does not seem very credible due to *pteryges* sleeves which either should be worn under the shirt or would have been detached. Also the aventail and helmet are of different forms so even if the same individual is depicted twice he is shown wearing different types of armour rather than at different stages of arming. Interestingly, the round clasp fastening the cloak at the centre of the chest seems to take over the visual function of an *apezak* though it is not clear whether there are any additional straps to tighten the plates under the robe in the Byzantine manner. This might relate to the Ardashir I rock relief at Naqsh-e Rostam (Fig. 31) where both king and Ahura Mazda wear long cloaks fastened at middle of chest with a round brooch-like clasp<sup>81</sup>. Greek elements in the Taq-e Bostan sculpture may reflect close relations between Khusro and Maurice, not least that Khusro was re-installed on the throne with Maurice's support. Alternatively, the close co-operation of the two armies (Khusro employed a unit of Byzantine cavalry as his bodyguard) may have led to increased popularity of the Greek type armament among Persians<sup>82</sup>. There are connections between

<sup>79</sup> H. v. G a l l, *Figural Capitals at Taq-e Bostan and the Question of the so-called Investiture in Parthian and Sasanian Art*, "Silk Road Art and Archaeology" 1/1990, pp. 99-100, pl. I.

<sup>80</sup> A. D. H. B i v a r, *Cavalry Equipment and Tactics*, p. 290.

<sup>81</sup> B. K a i m, *op. cit.*, pp. 143-144, il. 5; eadem, *Sztuka starożytnego Iranu*, pp. 193-195, il. 145; E. P o r a d a, *op. cit.*, pp. 203-205; D. S h e p h e r d, *op. cit.*, pp. 1079-1082, pl. 90 a; E. P e c k, *Clothing IV. In the Sasanian Period*, [in:] *Encyclopaedia Iranica*, pp. 745-746, pl. LXXVI.

<sup>82</sup> I. S y v ä n n e, *Age of Hippotaxotai. Art of War in Roman Military Revival and Disaster (491-636)*, Tampere 2004, p. 345; M. W h i t b y, *Emperor Maurice and his*

<sup>78</sup> H. v. G a l l, *op. cit.*, pp. 30-36, Fig. 4, pl. 9-13; B. K a i m, *Ideologia władzy królewskiej*, pp. 131-134; M. M i e l c z a r e k, *op. cit.*, pp. 39-40, 60, 66, 127, Fig. 11; E. P o r a d a, *op. cit.*, pp. 206-207; P. S k u p n i e w i c z, *loc. cit.*

the different “types” of plate armour employed by Iranian warriors in the Sasanian era. Firstly, the basic type of panoply remains generally intact – cuirasses were combined with splinted sleeves and/or leggings and protective skirt of scale, mail or *pteryges* type with exception of Taq-e Bostan capital where no arm defences are depicted. The *apezak* appears together with muscle, plain and two-fold cuirasses.

### The problem of material of Iranian cuirasses

It would be wrong to call the disagreement of the scholars over interpretation of armoured warriors in Iranian art, a controversy. Some deny that Sasanian warriors could have worn plate armours and therefore such depictions show textile or leather coverings worn over metallic protection. Their function could have been reinforcement of the main armour. Others simply agree that Sasanian art shows metallic cuirasses – this type of costly armament having a high protective value. Undoubtedly, the individuals depicted on the art pieces could have afforded the best protection available. Of course, plate armour was not an Iranian idea. The bulk of any Iranian army consisted of light-armed warriors. Nor was plate armour inherited from the cultures of Mesopotamia. Undoubtedly it was transmitted from the Greek world. Although for Parthians and Sasanians it is likely that plate armour was borrowed from the East as well as the West. Bactrian examples show how organically united became the combination of muscle cuirass with splinted sleeves and leggings and a protective skirt. An elaborate crown and long sword completed the outfit, which appeared sufficiently “native” for it to be shown in official representations of the king. The combination of plate cuirasses with long sleeved robes and trousers is attested for both Eastern and Western neighbours of Sasanian state remaining under Iranian influence. Hyland supposed that employment of solid metallic plate breast and back plates might be one of distinctions of Roman *clibanarii* in contrast to *cataphracti* who were clad in mail or scale armour<sup>83</sup>.

There is no doubt that Iranians had the custom of wearing cloth garments over their armour. In Plutarch’s description of the battle of Carrhae Parthian *kataphraktoi* removed the textile coverings from their armour shortly before joining battle<sup>84</sup>. Rostam used to wear *babr e bayan* – tiger armour; in mediaeval *Shahname* illustrations this is always depicted as a tiger skin (though some text passages suggest it might rather be scale armour)<sup>85</sup>. On the Dura Europos graffito with battle scene, warriors fighting with spears do not wear any visible forms of armament. The Chal Tarkhan stucco (thought made after fall of dynasty but still representing Sasanian style, taste and realities), shows the king hunting spearing a boar from horseback (Fig. 32)<sup>86</sup>. Though the king’s body is hidden with cloth garments, the scales are visible at the neck which suggests that armour was worn beneath the garment or that the scales were part of an elaborate royal head-dress. The Bamiyan murals show warriors wearing robes over armour<sup>87</sup>. The Sogdian Pendjikent paintings depict some warriors in battle wearing long koftans over metallic armour<sup>88</sup>. On the other hand the same passage from Plutarchos clearly states that Parthian heavy horse were shining in the sun<sup>89</sup>. Similarly Heliodorus<sup>90</sup>, Libanios<sup>91</sup>, Julian Apostate<sup>92</sup> and Ammianus Marcellinus<sup>93</sup> mention glittering metallic armours. The late Sasanian relief from Taq e Bostan depicts mail-clad horseman with no additional covering (Fig. 30). It can therefore be concluded that at least the heavily armoured elite of the Sasanian cavalry did not wear non-metallic coverings in combat. Just like the Pendjikent frescoes, later Persian art show warriors wearing different types of armament, some with outer textile layers, some without, in

<sup>84</sup> *Crassus*, 24.

<sup>85</sup> Dj. K h a l e g h i - M o t l a g h, *Babr-e Bayân*, [in:] *Encyclopaedia Iranica*, pp. 324-325.

<sup>86</sup> O. P. H a r p e r, *Royal Hunter*, pp. 113-114, pl. 46; D. S h e p h e r d, *op. cit.*, pp. 1096-1097, pl. 103, b.

<sup>87</sup> D. N i c o l l e, *op. cit.*, pp. 64-65, Fig. 33 e, b; T. Z h u, *loc. cit.*

<sup>88</sup> D. N i c o l l e, *op. cit.*, pp. 60-61; A. M. B e l e n - i c k i y, *Monumentalnoe iskusstvo Padzhikenta. Zhivopis. Skulptura*, Moskva 1973, *pass.*; A. M. B e l e n i z k i, *Kunst der Sogden*, Leipzig 1980, *pass.*

<sup>89</sup> *Crassus*, 24.

<sup>90</sup> *Aethiopica*, IX, 15.

<sup>91</sup> *Oratio* LIX, 69.

<sup>92</sup> *Oratio* I, 30.15-28.

<sup>93</sup> *Res Gestae*, XXIV, 2, 5, XXIV, 6, 8, XXIV, 7, 8.

*Historian. Theophylact Simocatta on Persian and Balkan Warfare*, Oxford 1988, pp. 303-304.

<sup>83</sup> A. H y l a n d, *Equus: the Horse in the Roman World*, London 1998, p. 149.

the same combat situation. It is known that often metallic reinforcements were sewn between textiles and padded protection<sup>94</sup>. It must be said that both Sasanian-related art and later examples depict armour coverings made in the style of clothes worn in the period. However, sleeveless tunics which reach to just below the waist are unknown between 3<sup>rd</sup> and 7<sup>th</sup> centuries in Persia or Bactria. One of Bamiyan frescoes shows the sun or moon deity wearing a tunic reaching to the belt with mail shirt visible from below. This, however, might be a form of padded or even scale protection<sup>95</sup>.

Hardened leather and other organic materials were often employed by the Iranians for armour production. They are certainly attested in use by the Sarmatians. In his report on the battle of Carrhae Plutarch mentions "rawhide" as one of the materials for Parthian armour together with "Margian" steel<sup>96</sup>. Parthian leather was as highly valued by Romans as Parthian steel<sup>97</sup>. Ammianus Marcellinus mentions the leather caparisons of Persian heavy horse<sup>98</sup>. This suggests that hide was mostly used for the manufacture of horse armour. In Islamic times leather was a popular material for armour production<sup>99</sup>. It was light, cheap and only slightly inferior to metal. That is why any representation of leather coverings should be treated with caution or disbelief. Royal personages must have been depicted in armour which only the

wealthiest could afford. If Persian cavalry shone in the sun then the king was the army's most glittering part. The description of the Iranian king beneath the walls of Amida and Bezabde suggests this clearly. There is strong symbolism of light in royal titlature, the royal gold monopoly which seems descendant of ancient Iranian mythology connecting king, with the sky and with gold. Finally, light and metal were a symbol in the religious, Mazdean dimension<sup>100</sup>. The Sasanian king was to glitter and not to cover the shining parts of his armament with "rawhide".

## Conclusions

Despite different opinions among scholars or it is highly probably that metallic breast and back plates were employed by Sasanian warriors. Such armour was part of the Hellenistic heritage in Asia. Generally, plate armours are attested in the first half of the Sasanian period and might be associated with eastern influence. Perhaps political changes in the region caused a decline in the employment of plate armour. However Iranian military inspiration reached further East and remained alive in Chinese warfare. In later periods Persian warriors employed certain elements of plate armour which may well have taken their form as preservation of remote Persian traditions.

*Translated by Richard Brzezinski*

<sup>94</sup> R. R. Robinson, *op. cit.*, pass.; A. S. Melikian-Chirvani, *Bargostvân*, [in:] *Encyclopaedia Iranica*, p. 796.

<sup>95</sup> D. Nicolle, *op. cit.*, pp. 64-65, Fig. 33 e, b; T. Zhus, *loc. cit.*

<sup>96</sup> *Crassus*, 25.

<sup>97</sup> O. Kurz, *loc. cit.*

<sup>98</sup> *Res Gestae*, XXIV, 6, 8.

<sup>99</sup> D. Nicolle, *Leather Armour in the Islamic World: A Classic Problem*, [in:] *Military Archaeology. Weaponry and Warfare in the Historical and Social Perspective*, St Petersburg 1998, pp. 321-323.

<sup>100</sup> M. Boyce, *Zarartusztrianie*, Łódź 1988, pass.; J. K. Choksy, *Sacral Kingship in Sasanian Iran*, "Bulletin of the Asia Institute", 2, 1988, 41-43; M. Składanek, *Mitologia Iranu*, Warszawa, 1989, pp. 22, 224-227, 300-301, 312-313; eadem, *Zrozumieć Iran. Ze studiów nad literaturą perską*, Warszawa 1996, pp. 43, 54-56, 60-62; M. Whitty, *Persian King at War*, [in:] *Roman and Byzantine Army in the East*, Kraków 1992, pp. 232-235.

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