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ARMOR II. IN EASTERN IRAN

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By the 6th, or even 7th, century BCE, the Scythian and Northern Caucasian nomads had formed a complete complex of defensive armor (Chernenko, 1968, p. 164). A series of indirect data indicate that one can also assume a similar time frame for the formation of Central Asian armor. In the Avesta, the term for armor is *zrāδa-* (armor, breastplate). The etymology of the word is presumably connected with Old Iranian **zar–* "to cover" (cf. modern Ossetic *zğær*, *æsqær* 'coat of mail,' 'chain mail,' 'armor,' 'metal'). Similar terms are found in other Middle Iranian languages, such as Sogdian and Khwarazmian, and in modern languages like Pashto and Ormuri. Other ancient terms designated armor collectively (e.g., Av. *varəθa-* 'protection') or its separate parts, as exemplified in the list in *Vendidād* 14.9 (for instance, Av. *kuiris* 'neck protection'); this term is rendered, in that exact sense, as *grīwbān* in the Pahlavi commentary: "the neck protector [is] that which is tied from helmet back to the armor" (Malandra, 1973, pp. 272, 287; Abaev, 1989, pp. 308-9).

Classical sources seem to refer to two types of Central Asian armor. One type is scale armor. Being of Median origin (see Herodotus, 7.62), this type of armor was used in the army of Xerxes ;I (r. 486-465 BCE) by the Persians and by the Hyrcanians as well; it is described as "coats of iron scales [*kiθônas ... lepídos sidēréēs*] resembling fish scales" (Herodotus, 7.61). The other type is apparently lamellar armor (see ARMOR i), "the coat of armor made of iron

plates fastened to each other in rows" (*tegementum ... ex ferreis lamminis serie inter se conexis*, Q. Curtius Rufus, 4.9.3), which was known to the steppe peoples of Central Asia. Arrian (3.13.4) says of the Central Asian Sakas at the battle of Gaugamela: "the Scythians [that is, Sakas] themselves and their horses were protected by armor." ; A corselet (*thṓrax*) is mentioned in connection with the Sakas and the Massagetae (Litvinskiĭ and P'yankov, 1966, p. 43). It is possible, however, that all such references intend one and the same structure—that is, scale armor.

Archeological finds from Central Asia include two objects which complement each other in showing lamellar armor: a plate made of horn with the depiction of a human figure in armor (found at the Aktam burial ground near Farḡāna, 6th-5th centuries BCE), and a tiny bronze figure (from southern Kazakhstan, mid-1st millennium BCE, preserved in the Dzhambul Museum, Kazakhastan). These objects make up a short-length suit of defensive armor consisting of two parts: a cuirass tightly fitted to the chest and back, and a flared skirt protecting the thighs. The cuirass has rather large rectangular plates, while the plates of the skirt are smaller. Possibly this armor had a leather or felt base, to which the metal plates were fastened (from the outside on the Aktam depiction and from the inside on the Dzhambul depiction).

Full-length armor is also known to have existed: at Hambuz Tepe in Uzbekistan, the site of an ancient Khwarazmian settlement, a fragmentary side of a flask was found, which shows a heavily armored horseman in relief. Unfortunately, only the lower part of the human body and a part of the horse's body have remained. The rider's scale armor reaches his knees; below it, the legs are protected by transverse plates. The remaining part of the horse shows two armored horsecloths: one covers the croup (rump) with three rows of large plates; the other, which is longer, with four or five rows of smaller plates, protects the horse's sides and back beneath the rider. The horse's chest may also have been protected, but that part is not extant. The flask can be dated to the 4th-3rd centuries BCE (Mambetullaev, 1977, p. 279, fig. 1 on the insertion to page 128). This type of coat of armor was widespread later, in the Kushan period (see, e.g., the Kushan coin images, Dean, fig. 10).

Saka armor, in its most complete form, was found at Chirik-Rabat, in the Aral Sea region (4th century BCE). It is made of large rectangular and almost square plates which were fixed to the cloth backing and only secondarily fastened to each other. It includes an upright collar that protected the neck on the sides (up to the ears) and partly in front. The sleeves are made of articulated,

cylindrical plates. Individual ; components of this type of ancient armor long persisted in Central Asian and Indian usage (Gorelik, 1987, pp. 111-19, fig. 4/4; for the sleeves see Azarpay, fig. 45).

Armor of Hellenistic and post-Hellenistic periods has been found in Bactria. Excavations of the arsenal at the Hellenistic site Aï Khanum (see ĀY ḴĀNOM) yielded four large fragments from sets of armor: 1. leg covers, made of plates built up with ring segments and a broad cylindrical plate on top; 2. a three-piece shoulder protector, made up of the back part positioned on the shoulder, the upper part with an elongated plate, and the front part with a loop for fixing it to the breastplate; 3. a corselet rounded at the bottom; 4. a section of armor consisting of very narrow plates, these would have been fixed onto leather, felt, and linen backings (Bernard, 1980, p. 455; Grenet, Liger, and de Valence, 1980, pp. 60-67, pls. XXXVII-XXXVIII).

Many plates from scale armor and other large fragments were found at the Temple of the Oxus. One plate is made of bronze, while the remaining eight dozen plates and a section of scale armor are made of iron. The scale armor consists of twenty horizontal rows of rectangular plates. The rows partially overlap each other, an upper row being placed over the lower next; and the position of each plate is offset from those of adjoining plates in the neighboring rows. As a result, the thickness of the armor at every point is equal to the thickness of two or three plates. The single plates found separately are of six different shapes and relate to various parts of armor. Chronologically, these objects fall within the Hellenistic and Kushan periods, 3rd century BCE to 3rd century CE (Litvinskiĭ, 2001, pp. 296-306, tables 84-89).

Along with the scale armor, the solid cuirass was also worn during Greco-Bactrian times. Cuirasses of this type appear on some Greco-Bactrian coins, and a fragment of one such cuirass was found at Kampyr Tepe in southern Uzbekistan. Cuirasses can also be seen on terracotta statuettes (Nikonorov and Savchuk, 1992, pp. 49-50, figs. 1-2, pl. XIVV/a).

Parthian armor is mentioned by Plutarch in his account of the battle at Carrhae in 53 BCE. According to his narrative, during the battle “the Parthians, all of a sudden, threw off the covers from their armor and appeared before the enemy in helmets and armor made of glaringly shining Margian steel, their horses being in copper and iron armor” (*Crassus* 24.1; cf. 23.6). This report is corroborated by the discovery of ancient iron-making workshops (see IRON IN EASTERN IRAN). At Old Nisa (southern Turkmenistan), iron plates of a suit of

armor were found, as well as a monumental sculpture whose figures display lamellar armor (Pilipko, 1996, pp. 57, 134-136, 146). The general question of the development of defensive armor in Eastern Iran in this period is closely tied to that of the origin of the Parthian and Sasanian armored cavalry, the *cataphractarii* (for illus., see ARMOR i).

Use of the suit of armor and the cuirass continued in Bactria in the Kushan period (1st century BCE-3rd century CE), contemporary with the Parthians. One can imagine the armor of a noble Kushan warrior on the basis of the depiction on the golden fastener from Burial 3 at Tillya Tepe in northern Afghanistan (Sarianidi, 1984, p. 31, pls. 81-83). The sleeves of the cuirass probably had the shape of flattened rings. Scale armor also underwent further development in Eastern Iran. Evidences are found in the engravings on ivory plates from the Temple of the Oxus, in the depictions on bone plates from Orlat (Uzbekistan), on the sculptures of warriors and horses at Khalchayan, and in other iconographic materials, including coins (Gorelik, 1982; Litvinskiĭ, 2001, pp. 342-45 with bibliography).

At the end of the Kushan period and in the post-Kushan period (3rd-5th centuries CE), defensive armor underwent radical changes: there appeared a new type—chain mail, which, due to its flexibility and reduced weight, quickly gained popularity. The Central Asian allies of the ruler of Kuchi arrived in China from the west in 384 CE; and according to the Chinese sources (which call the Kucheans “Hu”), the Central Asians “wore armor similar to chains,” that is, chain mail (Liu Mao-tsai, 1969, p. 154). Apparently, these were Sogdian chain mails, since the Sogdian documents of the early 8th century several times mention *ʿzγr* which means “armor, chain mail” and also “large armor” (chain mail). This term also occurs in the Khwarazmian language as *zγryx* (Bailey, 1955; Livshits, 1962, pp. 39, nos. 74, 152-53, 176). As E. H. Schaefer writes (p. 261), “early in the eighth century chain mail appeared in China”; Chinese sources witness that a “link armor” was delivered from Samarqand as a present to the emperor in 718. In China, chain mail was introduced as an import and borrowing from the territory of the Iranian peoples, most likely the Sogdians. It was “the only type of armor borrowed and imported directly from a foreign country” (Laufer, 1914, p. 253).

Numerous small rings from chain mail have been found at excavation sites at Panjikant. Wall paintings at Panjikant and other Sogdian monuments contain depictions of warriors wearing chain mail and other types of armor. The ring braiding was very tight. Sogdian chain mail had the shape of a long (below the

knee) shirt (or caftan) opening in front and with long sleeves (e.g., Azarpay, fig. 60) Chain mail components were also incorporated into armor of plates that were tied together with leather laces and arranged in horizontal rows (cf. Azarpay, pp. 124-25 and ills.). Some plates were gilded (in paintings these are in yellow color), some were not (these are in blue); five plates stand out in shape and size and are shown in the paintings as two-piece plates. The upper body was covered by a tightly fitting jacket opening in front with a deep wrapover, the lower body by a bell-shaped skirt. The joining of the two parts at the waist was also often tight to the body ; (Raspopova, 1980, pp. 79-84; Marshak, fig. 100 [example of armor]).

The waistband, as a part of the armor (e.g., Marshak, figs. 67-68; Azarpay, fig. 60), was probably made separately. The upper body was also covered by shoulder protectors, sometimes upholstered with leather decorated with ornamentation (Azarpay, fig. 45), and by arm and leg protectors. Armor was manufactured in Panjikant proper; at least, chain mail rings were found at excavations of artisan workshops (Shishkin, 1963, pp. 163-64, tab. XVII; a very detailed analysis is given in Raspopova, 1980, pp. 79-86, figs. 53-60, and in Raspopova, 1998a, p. 21, fig. 18/5-9). Sometimes Sogdian warriors put on two suits of chain mail (e.g., Ṭabari, I, p. 143). Such a practice continued in Central Asia until the 16th century, but even the double chain mail did not always protect the warrior from arrows.

From the narratives of the Arabic geographers of the 9th-10th centuries, as well as from later Arabic and Persian sources of the 11th-12th centuries, it becomes evident that the manufacture of iron and steel objects, including weapons and warrior equipment, was highly developed in Central Asia. These products had wide distribution in the Muslim world, and, for example, Sogdian chain mails were famous already in the 11th century (Livshits, 1962, p. 153). In the 10th century, the province of Ḡur in western Afghanistan was celebrated for its armor (*zereh*), including chain mail (*jowšan*), and weapons (*Ḥudūd al-ʿĀlam*, p. 110). A local ruler from Ḡur arrived in 1020-21 at the court of the Ghaznavid Masʿud (r. 1031-40) with presents that included cuirasses. Ghaznavid warriors wore cuirasses; as is figuratively said by Faḵr-e Modabber (Faḵr-al-Din Mobārakšāh), they could form a solid line in battle “like a fortress” (Bosworth, 1966, pp. 39-77; Idem, 1973, pp. 119-22). In the 12th century, the local ruler of Ḡur sent to the Saljuq sultan Sanjar (r. 1118-57) armor, chain mail, steel helmets, and various weapons as annual tax. Much armor and weaponry was seized by the Ghaznavids in India during their

campaigns there.

In the 15th century, armor continued to be manufactured in Samarqand, but its quality was not high (Clavijo, 1881, p. 334). At the end of the century, several workshops remained active in the city, producing chain mails and plate armor of several types (as the terminology for it indicates). The manufacture of armor continued there, and possibly in other centers, in the 16th century. Locally made chain mails of this period are portrayed in book paintings, and examples of chain mails of the later Middle Ages are preserved in museums. These were long shirts with short sleeves. To enable the collar to stand upright, a plate made of stiff leather or fabric was inserted into it. Some warrior armor was imported from Russia, while horse armor was brought from western Europe (Mukminova, 1976, pp. 116-18).

At the end of the 16th century and beyond, the manufacture and use of warrior armor became negligible due to the spread of the firearms.

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