

Some Remarks on Urartian Horse Harnesses

Manuel Castelluccia and Roberto Dan

1. Introduction¹

There is no doubt that metalwork production is the most distinguished aspect of Urartian art. This circumstance was certainly favoured by the presence in Urartian territory of rich deposits of metal ores (generally lacking in Mesopotamia), as well as important trade routes running from the Iranian plateau and the Caucasus. Ambition regarding the direct ownership and exploitation of these mineral deposits was certainly one of the main reasons for the conflict between Assyria and Urartu.

The purpose of this study is to analyse the series of metal objects which can be considered components of horse harnesses. Items belonging to war-chariots are not included, since they will be the subject of a further specific study. This article—after a series of detailed studies—is devoted to a general review of Urartian metalwork production.²

The kingdom of Urartu expanded greatly in a rather brief period, between the 9th and 7th centuries BC. Notwithstanding this limited chronological span, the amount of metal artifacts ascribed to the Urartian culture is far larger than any other cultural sphere of the Ancient Near East, except probably the well-known and much discussed corpus of the “Luristan Bronzes”.

Numerous studies have been devoted over the years to metalwork production and its artistic features; today this constitutes the most developed field of Urartian studies.³ Despite the richness of this specific literature, several problems still limit our understanding of Urartian metalwork production.

These problems mainly depend on the lack of a sufficient number of well documented excavation reports regarding Urartian sites. Moreover, numerous objects are of unknown provenance, since they have come to notice via the antiquities

¹ The contents of this article are the work of both authors. Specifically, Manuel Castelluccia wrote s **YYY**, while Roberto Dan wrote pages **YYY**.

² Castelluccia / Dan 2011; 2013; 2013–2014; 2014a; 2014b; in press.

³ On this topic see especially Merhav 1991 and Seidl 2004.

market. Many previous studies concerning Urartian metalwork production were thus mainly based on the analysis of such objects, which cannot offer reliable data concerning chronology and artistic development, since there are also many doubts about their authenticity.

The present article, on the contrary, is mainly based on material from documented contexts. Only a few items without provenance are considered, and only for the purpose of comparison.

In order to properly identify objects belonging to horse harnesses, we have taken as basis for comparison the highly detailed Assyrian reliefs, since no available Urartian art reaches such a level of detail.

The objects considered in this study can be divided into eight main categories: bits, bells, frontlets, blinkers, collars, breastplates, shoulder ornaments and discs on straps. It should be noted that some of these categories are not known from regular archaeological excavations. In general, with respect to material from the antiquities market, there are but few objects from regular excavations. Moreover, some of the items considered in this article bear cuneiform inscriptions, usually short inscriptions bearing only the name of the king.

Most of the artifacts included in this study come from excavations of fortresses in Turkey, Iran and Armenia. Few of them have previously been fully published. The most important site is the fortress of Karmir-blur, located on the outskirts of the capital of present-day Armenia, Yerevan, where most of the material presented in this article was discovered.

Few objects come from graves. Funerary evidence regarding the Urartians is quite abundant, but few cemeteries have been fully published. Urartian burial customs are characterized by their diversity. Both cremation and inhumation are known, sometimes even found together within the same grave. Rock-cut and underground chamber tombs constitute the most elaborate structures, but many simple pit and cist graves are also attested. Despite the richness of the grave goods from Urartian tombs, especially weapons, the custom of burying horses together with their owner is not found in the Urartian culture, although several examples are known involving contemporary native cultures of the Iranian plateau and the Caucasus.

2. Bits

A bit is part of horse tack that is placed in the animal's mouth in order to give the rider greater control over it by means of pressure and leverage and rests on the lower jaw in the interdental region between the incisors and molars. It may have various components; the bit itself, the mouthpiece, is usually composed of two independent horizontal rods joined in the middle by rings. At the outer ends of the rods there are other rings through which the reins passed. Additionally, there were two sidebars, which rested on the horse's cheeks. These might be fused with the mouthpiece or fixed to it through two holes. Each sidebar is equipped with loops or holes for the attachment of bridle cheek straps. Urartian sites have yielded

several metal bits of various shapes. One bit from an archaeological excavation, found in Karmir-blur in Room 36,⁴ bears two royal inscriptions of King Minua (CTU IV B 5–3).

The first type consists of simple plain bits, characterized by two undecorated mouthpiece rods joined at their inner ends by intersecting loops. Such bits do not necessarily require the use of cheek pieces for controlling the horse, but they provide a lesser degree of maneuverability. Urartian sites have yielded only five bits of this shape, all made of iron. They come from three sites, all located in the Republic of Armenia: Karmir-blur/Teišebai URU, Davti-blur/Argištiḫinili and an underground chamber-grave in Yerevan (Fig. 2a–b). Their length ranges from 13 to 20 cm. It is interesting to note that in Karmir-blur such objects were generally associated with typical Scythian bone cheek-straps.

The second group has H-Shaped bits with rigid sidebars. The form is a typical H-shape, with the sidebars fused to the mouthpiece elements; the sidebars are thus not flexible. There is a variety of different types, all of which share a twisted decoration of the rods and the presence of animal protomes at the lateral extremities (Fig. 2c). Four bronze exemplars of this type are known and they were all discovered in Grave III, Room 1, in Altıntepe, Eastern Turkey.⁵

Another important corpus is composed of H-shaped bits with flexible sidebars: cheekpieces pass through perforations in the centre of each sidebar, making the joints flexible. The most distinguished piece comes from Karmir-blur, where an inscribed bit was found in Room 36. It bears an inscription of King Minua that reads: “(object) of (belonging to) Minua” (Fig. 3a). A similar piece was found during construction work in the village of Makarašen,⁶ near Vanadzor, in northern Armenia, well beyond the limit of Urartian domination in Transcaucasia (Fig. 3b). Along with this bit, half of a similar item was also recovered, belonging to the same category but of different shape, plus two round bronze plaques, probably also pertinent to horse equipment.

Another very interesting item comes from the cemetery of Nor-Areš, located near Arin-berd/Erebuni (Fig. 3c). It is distinguished by a grooved decoration at the end of each extremity, associated with a cylindrical termination. Several bits of this type have been found in various cemeteries of local Transcaucasian cultures.⁷

The most distinguished collection of horse bits was found in a chamber grave in the village of Geghovit, on the southern shore of Lake Sevan, dated to the second half of the 7th century BC. Several individuals were placed in the rock-cut chamber, some of whom even seem to have been slaughtered as a sacrifice for the high-ranking person buried in the grave. The richness of the burial is further increased by the presence of several pieces of bronze chariot equipment. Four horse

⁴ Barnett 1959, 15, fig. 12.

⁵ Özgüç 1969, 68.

⁶ Martirosjan 1964, 212.

⁷ Kuftin 1941, 58, fig. 56; Aslanov et al. 1959, pl. 34

bits were recovered, one (decorated) in bronze (Fig. 4a) and three in iron (Fig. 4b). Another item was found in the Astchadzor cemetery (Fig. 4c) near Martuni, on the southern shore of Lake Sevan.⁸

Along with the horse bits, some cheekpieces were also found. At least two items from Altuntepe have the shape of a horse's head (Fig. 4d). Two others found in Karmir-blur were undecorated bars with loops for suspension. More common are bone cheekpieces, found in Karmir blur in association with the "Scythian-type" iron bits,⁹ as well as decorated examples from Çavuştepe.¹⁰ Part of a Scythian cheekpiece made of bone (Fig. 4e), typical of the late seventh century, was discovered during the excavation of a storeroom in Yukarı Anzaf.¹¹

3. Bells

Metal bells are generally associated with horse harnesses. Neo-Assyrian orthostates show these objects fixed to the harness under the horse's jaw or on the neck. Metal bells can be divided into two main categories: the first is that of so-called "open-cage", "bird-cage" or "rattle" bells. These are small, mostly just a couple of centimeters in height, and globular, with a series of parallel vertical slits from top to bottom; shapes vary and a small metal or stone ball with the function of clapper is usually still present inside.

The upper part finishes in a ring, through which passed a chain. The second group consists of the "closed" type bells. These are conical or polygonal in shape, with an opening at the bottom and an iron clapper inside. In some cases one or more slits may be present on the body.

Only a few items have been found on Urartian sites, whereas many more are known from the antiquities market. They come from Alişar, Karmir-blur, Yerevan, Bastam, Dizginkale and around the city of Patnos and Van. Apart from two "open-cage" bells found in a grave of the early Urartian period near Karmir-blur,¹² they all belong to the "closed" category with a typical octagonal shape. Most of items were again discovered in Karmir-blur (Fig. 5).

The only inscribed bells found in definitely Urartian contexts date to the reigns of kings Sarduri II¹³ and Argišti I.¹⁴

⁸ Martirosjan 1964, 213.

⁹ Piotrovskij 1950, 94–95, figs. 61–62.

¹⁰ Erzen 1988, pl. 47.

¹¹ IV No.lu Pithoslu Depo Odası; Belli / Ceylan 2002, 277, pl. 4.

¹² Martirosjan 1956, 71, fig. 10.

¹³ CTU IV B 9–29; Seidl 2004, 115, fig. 87.b.

¹⁴ Seidl 2004, 115, fig. 87.c; CTU IV B 8–22. There are many bells recorded from the antiquities market; see Seidl 2004, Minua (C.49, C.50), Argišti I (E.25, E.26), Sarduri II (F.186), Rusa I (H.4).

4. Frontlets

Only a few frontlets have been discovered during archaeological excavations. They were found in Karmir-blur, Aznavurtepe, Giyimli and in the “Yerevan Columbarium”.

An unknown number of bronze frontlets (Fig. 6a–d) bearing cuneiform inscriptions comes from Karmir-blur.¹⁵ These specimens bear inscriptions of Minua (CTU IV B 5–1)¹⁶ and Sarduri II (CTU IV B 9–26A–X; B 9–33).

At least two of these pieces were discovered in Room 36 of the fortress alongside other horse harness items.¹⁷ One has a decoration of two rows of dots that run parallel along the edges of the frontlet.

Another three frontlets were probably discovered in proximity to the Aznavur Tepe fortress; all bear an inscription of Sarduri II (Fig. 6e–f).¹⁸ These have a simple embossed decoration, with twin parallel lines running inside the frontlet’s outer margin. From Giyimli come two specimens discovered during salvage excavations conducted by Afif Erzen on the site, after the appearance on the antiquities market of the famous bronze plaques.¹⁹ One is in a fragmentary condition and is decorated with a single bud-garland band and a stylized tree of life in the centre (Fig. 6g). The second is decorated with rows of repoussé dots and a repoussé human face in the middle (Fig. 6h). It is highly probable that all the decorations made in repoussé were made after the defunctionalisation of the original object, as attested for many other plaques from the Giyimli hoard.

A fragmentary bronze frontlet was discovered in the so-called “Yerevan Columbarium”, a multiple cremation burial in an underground stone chamber found by chance in the centre of Yerevan (Fig. 6i). The frontlet is trapezoidal in shape and is decorated with ridges, two horizontal and one vertical.²⁰

The majority of Urartian frontlets are of thin bronze sheet and typically T-shaped, and may be further divided into two main variants:²¹ the first group consists of items from Karmir-blur. They have an elongated T-shape with two symmetrical rounded lateral projections located at the mid-point of the frontlet (Fig. 7a, c). The second type has symmetrical rectangular lateral projections positioned immediately beneath the horizontal part of the frontlet (Fig. 7b). Both

¹⁵ A critical discussion of some of these specimens from Karmir-blur is given by Sevin (1979, 128), who considered them to be blinkers. This hypothesis was discussed and refuted by Pecorella (1980, 193).

¹⁶ Piotrovskij 1955, fig. 33.

¹⁷ Piotrovskij 1955, 43–44.

¹⁸ Taşyürek 1975, 151, 154, fig. 32b, 33c; Pecorella 1980, 193. This inscribed specimen is not present in CTU IV.

¹⁹ Erzen 1974, figs. 27–28, 38–39.

²⁰ Esajan et al. 1995, pl. VII.11.

²¹ Pecorella (1980, 193–194, fig. 1) gave three types, but one is only known from the antiquities market.

possess holes for hooks to secure the frontlet to the bridle straps.²²

A detailed analysis of the decoration is impossible due to the small number of items known. Those found are decorated with the tree-of-life motif with bud-garland, rows of dots or other patterns. The inscribed exemplars all date to the 8th century BC.

5. Blinkers

The only archaeological site in which Urartian blinkers were discovered is Karmir-blur²³. Unfortunately not all of them have been fully published. It is known that nineteen blinkers have been found (Fig. 7a–d).²⁴ At least three of these bear inscriptions of Sarduri II (CTU IV B 9–25A–X; B 9–28A–X); one is fragmentary (CTU IV B 18–11). They are spade-shaped, which is typical of most such objects in the Near East. The few published items are undecorated, but due to the lack of images and descriptions of the other blinkers discovered in Karmir-blur it remains unknown whether some of them were decorated. In fact the specimens from the antiquities market usually feature hunting or combat scenes.²⁵

6. Collars

No collars have been discovered during excavations of Urartian archaeological sites. Unfortunately, our knowledge of these objects is therefore entirely based on material from the antiquities market.²⁶ These bronze collars were equipped at their centre with a hinge mechanism which gave some flexibility to them. The decorations show vertical ridges terminating in snakes' heads or figurative motifs.²⁷ As with many other metal objects from the antiquities market, these too often possess royal inscriptions.

7. Breastplates

Contemporary Neo-Assyrian specimens probably inspired Urartian breastplates. Most of the items known today come yet again from the antiquities market. These, all richly decorated, sometimes even bearing royal inscriptions, can be divided into two main categories: those composed of two parts, an upper gorget to which

²² Azarpay 1968, 10.

²³ For example, we cannot consider the blinkers published by Ghirshman (1964–1965), discovered in a tomb in a mountainous region in the south-western part of the Caspian region, on the origin of which Muscarella had many doubts (Muscarella 2000, 214).

²⁴ Salvini 2012, 54.

²⁵ Seidl 1991, 79.

²⁶ On these materials from the antiquities market see Seidl 1991, 80, pl. 55.

²⁷ Seidl 1991, 80, fig. 12, pls. 45bis, 55.

was fixed a panel with a curved trapezoidal base. The second type, more common, has a typical curved shape.²⁸ To date, the only specimens from regular excavations were all found in Room 48 in Karmir-blur.²⁹

Unfortunately, neither images of these objects nor information about their dimensions are available. We only know that both bear inscriptions of Argišti I (B 8–23A–B) and one of the two exemplars has a bull's head under the inscription.³⁰

8. Shoulder Ornaments

No discoid ornaments were discovered during excavations of Urartian archaeological sites. A few objects are once again known only from the antiquities market. These ornaments consist of three sections of bronze sheet: a loop for suspension, an intermediate tongue and a disc of about 25 cm in diameter.³¹

9. Discs on Straps and Knobbed Bosses

These discs, of various dimensions and shapes, were fixed to leather straps and fastened to the bit's cheek-pieces, holding them in place.³²

Many of these kinds of discs have been discovered on Urartian archaeological sites.

The discs may be undecorated, or have decorations on the outer, visible side. Several such discs have been discovered in Karmir-blur, some of them bearing inscriptions of Argišti I (CTU IV B 8–25A–X). They have diameters ranging from 6.4 to 9.5 cm. These discs are mainly of two types: the first is a plate with small projecting parts in the centre of the circle (Fig. 9d–e); the second has a more conical shape, with an additional circular component fixed to the end of the cone, which may be flat or rounded. The cones are not decorated or had two rows of triangles crossing the entire bronze disc (Fig. 9a–c).³³

Nine items were also discovered in the Yerevan Columbarium, in association with other horse harness elements (Fig. 9g–f). Three discs are flat, and from 4.2 to 6 cm in diameter. Two of them are decorated with embossed concentric lines and a band of dots.³⁴

The five knobbed bosses are conical in shape with conical heads, and usually arching loops on the back.³⁵

²⁸ Seidl 1991, 80, tabs. 43–44, 71–74.

²⁹ Piotrovskij 1956, 80; Piotrovskij 1960, 108.

³⁰ Seidl 2004, 33.

³¹ Seidl 1991, 80.

³² Seidl 1991, 79.

³³ Piotrovskij 2011, figs. 1055–1058, 1060–1069.

³⁴ Esajan et al. 1995, pl. 9.1–2, 9.

³⁵ Esajan et al. 1995, pl. 9.3–8.

Another item, with a rare inscription of Inušpua (CTU IV B 7), was discovered in the fortress of Dizginkale near Patnos³⁶. Twelve bronze discs with diameters of 18–19.5 cm were discovered in a grave in the necropolis of Lori-Berd, near a bronze helmet (Fig. 9h). These discs, decorated with rosettes with eight angular petals, surrounded by a few concentric circles in relief, have a central hole that is 0.5 cm in diameter.³⁷

From the Urartian grave of Ališar³⁸ come two further specimens of knobbed bosses, cylindrical in shape and with cylindrical terminations.³⁹ One was decorated with triangular and circular holes, 5.1 cm in diameter and 4.2 cm high, while the second bore an incision depicting a tower with a curved spear on top. The diameter of this specimen is 5.8 cm and the height 4.5 cm (Fig. 9j).

10. Conclusions

In general, few horse harness components have been found in Urartian archaeological excavations with respect to the quantity of material known from the antiquities market. This lack might be partially explained by the fact that few burial grounds have been fully investigated, for metal horse bits are quite common among the grave goods accompanying the deceased. The key site for the study of these materials appears to be Karmir-blur, where most of the specimens discussed in this article were found. Karmir blur was well excavated by a Soviet team led by Piotrovskij, starting in 1939. Despite the presence of four monographs, several aspects of the excavations – as well as photographs, drawings and descriptions of all objects – have not been completely published. Information regarding other sites is, though, often even less detailed.

However, it is possible to draw some conclusions. The most well known part of the horse harness is the metal bit. Bronze bits are usually decorated with animal protomes in the shape of birds and horses, whereas those in iron have simple standardized forms, mostly related to the Scythian type. The bronze bits date mostly to the 7th century BC. It is interesting that the type with animal protome decorations shows clear similarity to the contemporaneous “Scythian”-type bits. Strongly associated with the bits, and thus well attested, are the discs on straps found in both fortresses and tombs.

Blinkers and frontlets are represented by several finds, while there is information about only two breastplates. These objects might have been used to give further protection to the horse during combat. The fact that some are however

³⁶ Sevin 1981.

³⁷ Devedžjan 2010, 79, fig. 8, pl. XV.

³⁸ The burial chamber of Ališar, on the River Araxes, was discovered in 1859. The tomb yielded interesting artistic metalwork, including a bell inscribed with a short text of Argišti I (CTU IV B 8–22).

³⁹ Piotrovskij 2011, fig. 6–7.

decorated or bear royal inscriptions might suggest that they were merely parade objects. The usage of decorating horses for ceremonial purposes is well known through its portrayal on Assyrian reliefs. We do not know, however, if the horses were mainly used to pull war-chariots or belonged to cavalry, two military corps both known to have been present in the Urartian army.

Despite the existence of some items of unknown provenance, no collar or shoulder ornaments have actually come from documented excavations. Their dating, as well as their authenticity, remains in doubt.

The presence of several royal inscriptions identify some of these objects as property of the king. This is a typical custom within Urartian culture, in which numerous items of metalwork bear royal dedications; these have been mainly found within temples and sacred areas.

An increase in the circulation of these objects seems discernible after the first half of 7th century, the time of the foundation of Karmir-blur; naturally enough, this increase seems in some cases to have led to a standardization of production. It is interesting to note the increase in Scythian-style objects, mostly indeed related to horse harnesses, which represents one of the oldest attestations of the presence of the Scythians in Transcaucasia and the Near East.

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- 2011, fig. 1046–1048); E–F) Aznavurtepe (Taşyürek 1975, pl. XXXIII); G–H) Giyimli (Erzen 1974, figs. 27, 39); I) Yerevan Columbarium (Esajan et al. 1995, pl. VII.11).

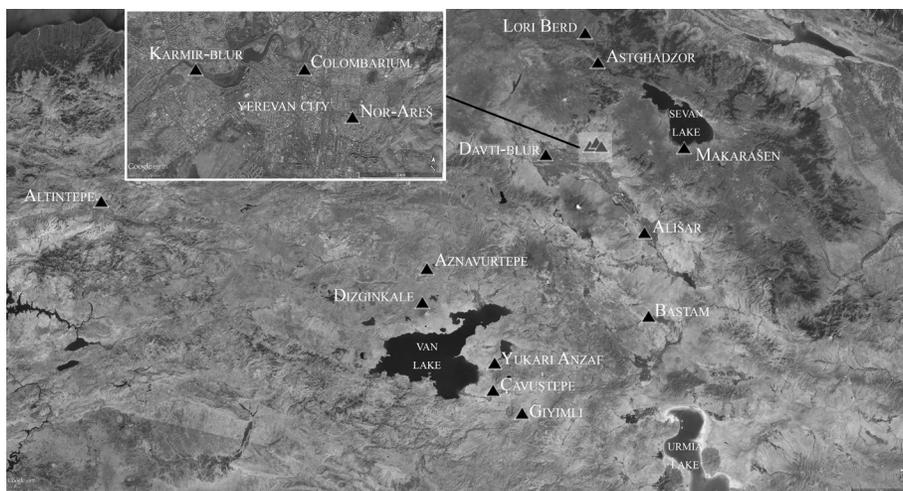


Fig. 1. Distribution map of the sites quoted in the text.

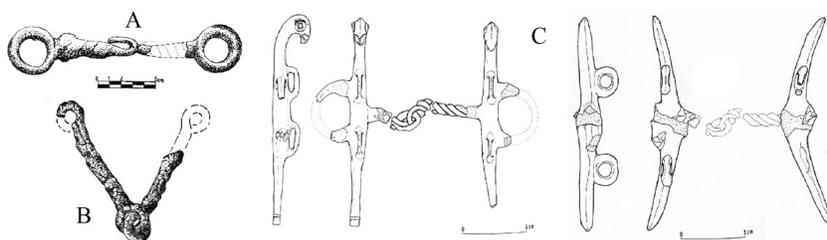


Fig. 2. Bits from A) Davti-blur (after Martirosjan 1974, 140, fig. 87a); B) Yerevan Columbarium (after Esajan et al. 1995, pl. VII.17); C) after Özgüç 1989, pls. 3–4.

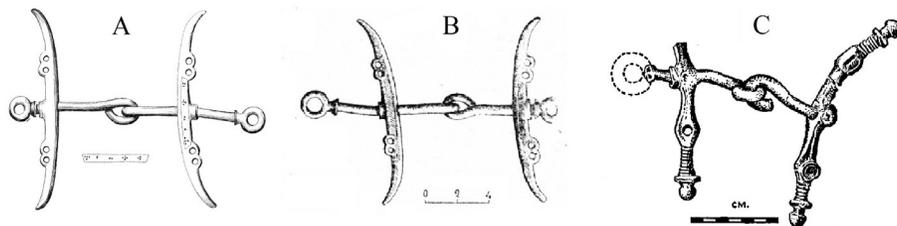


Fig. 3. Bits from A) Karmir-blur (after Barnett 1959, 14, fig. 12); B) Makaraşen (after Martirosjan 1964, 212, fig. 84); C) Nor-Areş (after Barnett 1963, 196, fig. 45).

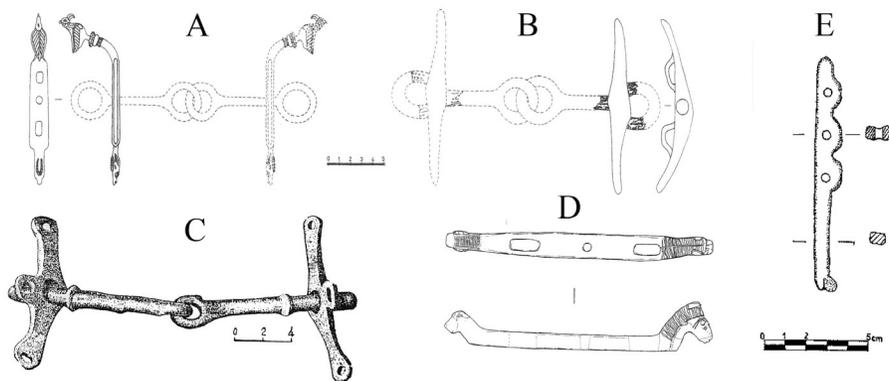


Fig. 4. Bits from A–B) Geghovit (Piliposyan / Mkrtchyan 2001, pl. 15); C) Astchadzor (after Martirosjan 1964, 228, fig. 87); D) Altıntepe (after Özgüç 1989, pl. 5); E) Yukarı Anzaf (Belli 2002, 277, pl. 4).

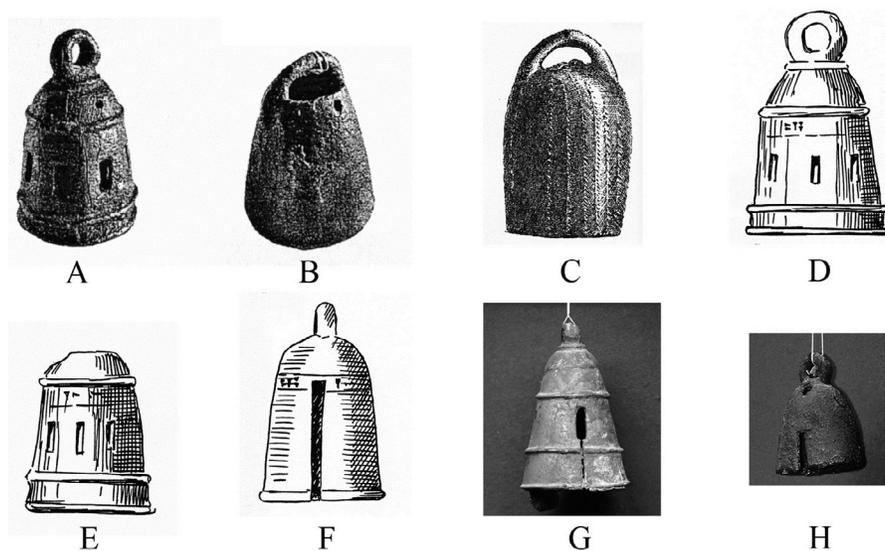


Fig. 5. Bells from Karmir-blur: A–B) after Piotrovskij 2011, 643, figs. 1058, 1059; C) after Piotrovskij 1955, 46, fig. 35; D–E) after Seidl 2004, 115, fig. 87, a–c; **F–G)** courtesy of Erebuni Museum.

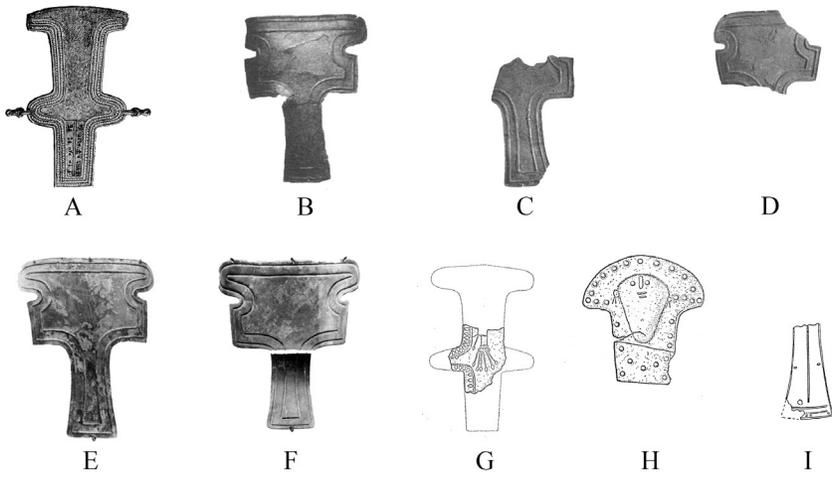


Fig. 6. Frontlets from A–D) Karmir-blur (Piotrovskij 1955, fig. 33; Piotrovskij 2011, fig. 1046–1048); E–F) Aznavurtepe (Taşyürek 1975, pl. XXXIII); G–H) Giyimli (Erzen 1974, figs. 27, 39); I) Yerevan Columbarium (Esajan et al. 1995, pl. VII.11).

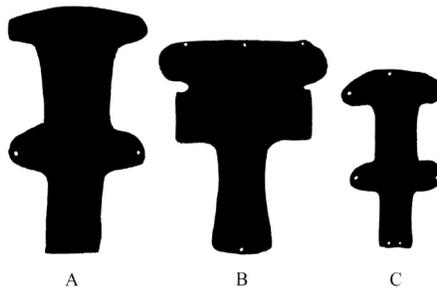


Fig. 7. Urartian frontlets (after Pecorella 1980, fig. 1).



Fig. 8. Blinkers from Karmir-blur (after Piotrovskij 2011, figs. 1049–1052).

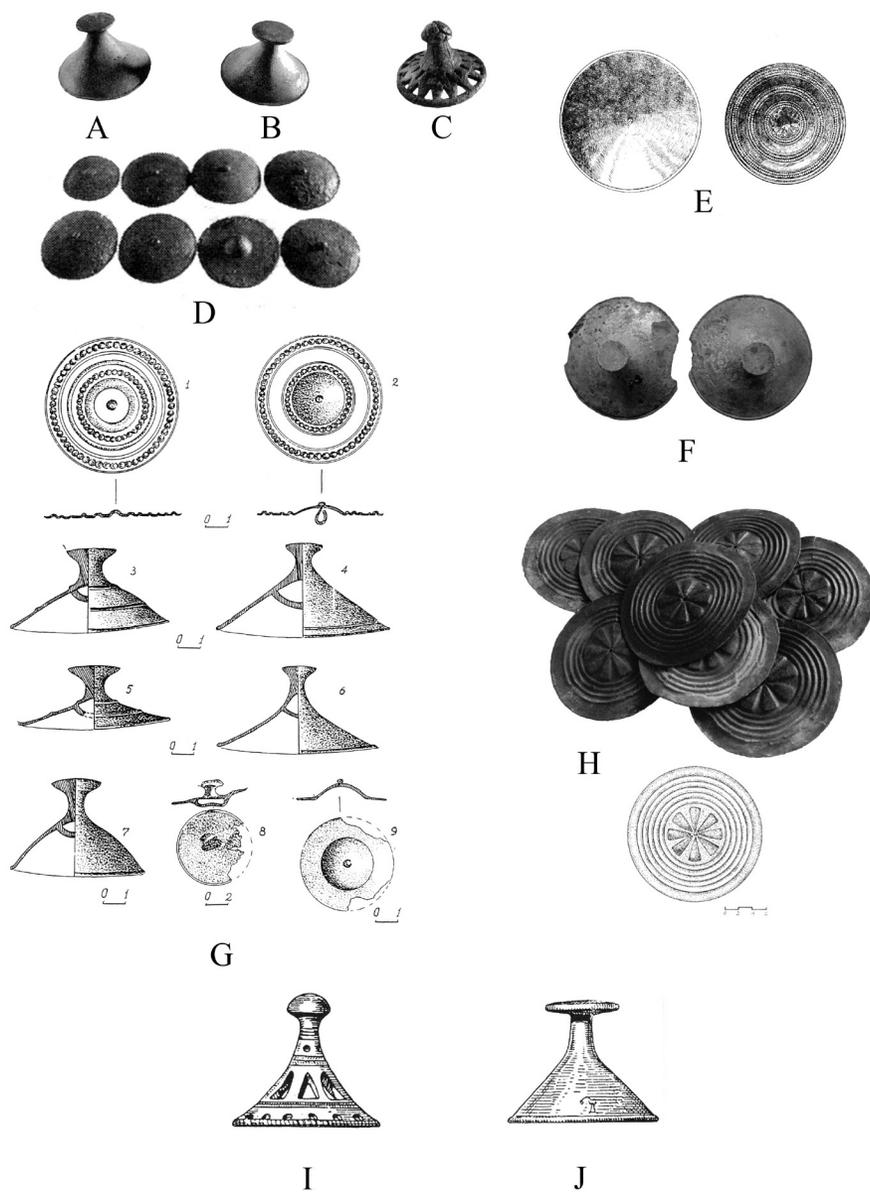


Fig. 9. Disc on straps and knobbed bosses from A–E) Karmir-blur (A–D: Piotrovskij 2011, figs. 1055–1057, 1069; Piotrovskij 1955, fig. 36); G–F) Yerevan Columbarium (Meshinyan 2014, 13, 125/23–125/24; Esayan et al. 1995, pl. IX); H) Lori-berd (Devdžjan 2010, fig. 8, pl. XV.1); I–J) Ališar (Piotrovskij 2011, figs. 6–7).