

SOME URARTIAN BRONZE ARTIFACTS FROM DİYARBAKIR MUSEUM

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The Kingdom of Urartu ruled the region around Lake Van between the 9th and 6th centuries B.C. Its territories stretches northward to Tarnscaucasia, eastwards into

northwest Iran, westward to Euphrates southeast Toros Mountains¹. The Land of Urartians consisted of plains, which were surround by high and rocky mountains,



Figure 1
Bracelet with Decorated Surface
Bronze
Diameter: 7.5 cm.
Diyarbakır Museum Inv. No: 7/29/86
Well preserved round profile. Terminals are formed in rectangular shape and decorated with relief triangular motives filled with dots. Motives are made as engrave. Dots and double horizontal lines on the body of the bracelet.
Savaş-Estetik: 2004, 169.



Figure 2
Bracelet with Decorated Surface
Bronze
Diameter: 6.9 cm
Diyarbakır Museum Inv. No. 1/36/90
Well preserved round profile. There are notches on the body. Terminals are without any decoration and marked with small notches.
Savaş-Estetik: 2004, 169.



Figure 3
Bracelet with Ridged Surface
Bronze

Diameter: 6.9 cm

Diyarbakır Museum Inv. No: 7/7/78

Bracelet with ridged surface. The kind of animal depicted in terminal is not very clear. The face is long, large nose is distinct and even though the ears are indistinct, it resembles a panther or adradon with its general structure.

Barnett: 1963, Fig. 32.7.

plateaus, narrow and deep valleys. Urartians, who had to adopt the difficult natural conditions of East Anatolia, were successful in agriculture and stock-breeding. The region East as well as having plains suitable for agriculture and rich mine resources. Mesopotamian people had noticed the natural wealth of that region for a long time. Because of that Urartian land was attacked many times by Assyrians².

Eastern Anatolian region, the main area of the Urartians, has all conditions required for the development of mining. Especially the rich mineral reserves of the region provided Urartians to be more powerful than its many contemporary kingdoms.

Thanks to the richness of the sources and their extraordinary skills, metal artists developed themselves in metal working field and ensured the Urartian metal artifacts spreaded to a wide area, and preferred and demanded in foreign markets. In the hands of their craftsmen metals were transformed into strong weaponstods, jewelry of dazzling beauty and elegant artefacts. Urartian smiths were skilled at tempering iron to create steel, and decorating gold silver and other metals³.



Figure 4
Bracelet with Terminals in the Shape of
Dragon Heads
Bronze

Diameter: 6.2 cm

Diyarbakır Museum Inv. No: 16/11/79

Roid profile and flat body. Facing terminals are formed in shape of animal heads with distinct details. The head is flat, the mouth is depicted with deep lines, the eyes are hollow and the ears are relief. The animal formed looks like a dragon.

Öz fırat 2001: Fig. 7/7

Barnett 1963: Fig.10

Sevin - Öz fırat: 2000, Fig. 7

Taşyürek 1975b: Fig.3



Figure 5
Bracelet with Terminals in the Shape of
Dragon Heads

Bronze

Diameter: 6.1 cm

Diyarbakır Museum Inv. No: 12/244/77

Non decorated and round profiled body. There is an animal head shape on the terminals. Details are not very distinct but some details such as flat head and eyes can be noticed. The mouth section is round. The animal formed looks like a dragon.

Özfirat 2001: Fig. 7/6.



Figure 6
Bracelet with Terminals in the Shape of
Dragon Heads

Bronze

Diameter: 4.7 cm

Diyarbakır Museum Inv. No: 15/19/83

Round profile without any decoration. A stylized dragon head can be identified on the terminals. The head is flat; the nose is distinct and pointed. The details of the face are not clear, but engraved mouth can be noticed.

Özfirat 2001: Fig. 7/1-3

Some bronze artifacts obtained by Diyarbakır Museum through the way of purchasing, proves the competency and diversity of Urartian metal working art. These artifacts consist of a group of bronze bracelets, armlets and horse bells. The first group of these bronze artifacts reflecting the superior taste, talent and aesthetic feelings of Urartian metal artist is the bracelet group.

The bracelets produced by Urartian craftsmen are technical masterpieces and reflects a sophisticated artistic taste. In general, it is found that Urartian bracelets were made of gold, silver, iron and bronze.

These bracelets not only drew attention with their qualified workmanship, but also inspired many other cultures who were watching Urartians⁴. As it was so plenty and easy to work on, the most preferred metal had become bronze and here, in this article we will be discussing the bronze bracelets.

It is understood from bronze votive plaques that bracelets were used in daily life of Urartians by both men and women. While humans wearing one or two bracelets on their each arms, it is also seen that gods, goddesses and winged demons were painted with bracelets on their arms⁵. Urartian figurative scenes worked on bronze, men



Figure 7
Bracelet with Terminals in the Shape of
Panther Heads
Bronze
Diameter: 7.4cm

Diyarbakır Museum Inv. No:13/42/77

Body is without any decoration. Terminals facing each other were formed in cubic panther. Entire face of the panther can be identifiable. The ears and nose are big, eyes and half open mouth are distinct and all details of the head were lively pictured.

Özfirat 2001: Fig. 7/5

Barnett 1963: Fig.9

Taşyürek 1975b: Fig. 5.

Kohlmeyer 1991: Fig. 10.

are shown wearing single bracelet whereas women wear two or three. Both men and women wear bracelets on both wrists. God, goddesses and winged demons are also depicted wearing bracelets. Some of the Urartian bracelets are found by controlled excavations while most of them are obtained by plunder digs. This situation makes the dating of bracelets very difficult. Most of the samples found by excavations come from graves. Finding plenty of bracelets in Urartian graves shows that these bracelets were used as grave goods. Some of those were put in the graves in a folded way as it was the case for other Urartian grave

goods⁶. It was also detected that they were placed in urns as well⁷.

There are various decorations seen on bronze bracelets produced by the technique of solid casting and these decorations add a very elegant and nice appearance to the bracelets. The terminals in the shape of animal head face each other in some of the samples, while they pass over each other in other samples. Terminal parts of the bracelets with round profile were usually decorated with animal heads. These are generally the shape of wild and poisonous animals such as lion, panther, dragon and snake. Lion symbolised power and strength and were the sacred animal of the Urartian national deity Haldi. The tips of the hoop-shaped bracelets are either parted or overlapping. While those dating from the 9th century B.C have ovoid-shaped projections, these are not found on those dating from the 8th century B.C. The lions head on the metal bracelets of both the 8th and 9th centuries are vividly portrayed in fine detail. From the mid 7th century B.C onwards, these heads become increasingly stylised. These animals that represent the power must have been used for the purpose of protecting the user. In addition, using this type of animal heads on handles of silver buckets also shows the religious importance of figures⁸. This type of bracelets started to be used in the region in early Iron Age before the Urartian Kingdom, continued to be used after Urartians by Persians and other cultures in Eastern Anatolia region. However, the bracelets became thinner and the animals more stylized⁹.

Eight bronze bracelets found in Diyarbakır Museum vary in terms of their terminals that were made in different ways. Bracelets, all of which produced by solid casting technique, are in excellent condition. These artifacts have been examined on the basis of their decorations.

The first group of these bracelets is bracelets with decorated surfaces. The common feature of this group is that there is not any animal decoration on their terminals and the surfaces are engraved with geometrical shapes. This group is represented by two samples. The first is well preserved round profile bracelet (Figure 1). Terminals are formed in rectangular shape and decorated with relief triangular motives filled with dots. We can see dots and double horizontal lines in parallel to each other on the body of the bracelet. All these motives are made as engrave. These types of bracelets are not found much in Urartian art. A sample situated in Van Museum is similar to the bracelet we examined in terms of its decoration and helps us to explain

its Urartian origin¹⁰. The second sample is smaller and thinner than the previous one (Figure 2). There are notches on the body of the round profile bracelet. Terminals are without any decoration and again marked with small notches. There is not so much but one similar sample comes from Urartian art. Bronze bracelet from Van Museum with its decoration and shape similar to figures 1 and 2.

The third sample is a bracelet with ridged surface (Figure 3). The most distinguishing feature of this sample is its ridged surface. Aesthetic became important in shaping the body. Even though the facing terminals of the bracelet with a flat inner part are not very explicit, it may be noticed that they were formed as an animal head. The kind of the animal depicted in this section is not very



Figure 8
Bracelet with Terminals in the Shape of
Panther Heads

Bronze

Diameter: 6.9 cm

Diyarbakır Museum Inv. No: 1/22/78

The body is in round, thin and without decoration. The panther head depicted on terminals is different. All details of the head were engraved. Small but characteristic ears on each side of the head. Eyes are in the shape of a line. Mustache situated in the upper section of the mouth.

Biscione 1994: Fig. 12.

Sevin et al. 2001: Fig.7

Savaş-Estetik 2004: 167

Kohlmeyer 1991: 182, Fig. 11.



Figure 9-10

Bracelet or Armlet with Terminals in the Shape of Snake Heads

Bronze

Diameter: 8 cm

Diyarbakır Museum Inv. No: 21/2/75

A shape snake body was given by decorating the surfaces with with notches in lunate shape. Terminals are in the shape snake head. The head is flat and rectangular. Mouth is emphasized as relief and large eyes are placed on each side of the head as linear details.

Biscione 1994: Fig. 12/1

Sevin et al. 2000: Fig. 7

Savaş-Estetik 2004: 167

clear. The face is long, large nose is distinct and even though the ears are indistinct, it resembles a panther or a dragon with its general structure. These types of bracelets in this form can be seen in many Near East Cultures besides Urartians. They were used in Hasanlu IV in early ages and in Luristan and Late Achaemenid arts in First Millennium B.C.¹¹ Additionally, there are some samples in the same form found among the Azerbaijan bronze bracelets¹². These types of bracelets were not widely used in Urartian culture. A similar form of this sample is situated in

Iğdir-Melekli Cremation cemetery¹³. This proves that this type of bracelets exist, even if not much, in Urartian art.

Bracelet with terminals in the shape of dragon heads constitutes another group of the samples examined and these are represented by three samples (Figure 4-6). The first sample of this group is a bracelet with round profile and flat body (Figure 4). Facing terminals are formed in the shape of animal heads with distinct details. The head is flat, the mouth is depicted with deep lines,



Figure 11
 Bracelet or Armlet with Terminals in the Shape of Panther Heads
 Bronze
 Diameter: 7 cm
 Diyarbakır Museum Inv. No: 1/10/78.
 The body is flat and irregular and bears no decoration. Terminals were formed as plump snake head. There is not any incise details found on the head of snake.
 Kohlmeyer 1991: Fig. 11-12.

the eyes are hollow and the ears are relief. The animal formed here looks like a dragon, a fantastic creature. Bracelets with dragon heads are very typical and used intensely in Urartian art and similar examples also come from Mus-Goztepe cemetery¹⁴. Iğdir-Melekli cremation cemetery¹⁵, Van-Altıntepe¹⁶ and Adana Museum¹⁷.

The second sample of this group is similar to the previous one with its non-decorated and round profile body structure and its size (Figure 5). However, the terminals were shaped in a more different way. There is an animal head shape on the terminals facing each other. Details are not very distinct. Nevertheless, some other details such as flat head and eyes can be noticed. The mouth

section is round. Even though it is not as identifiable as the previous sample, it may be said that it was similar in terms of its form and a dragon head was shaped here as well. We find bracelets very similar to this sample, which shows the variety of bracelets with dragon heads in Urartian culture, in Mus-Goztepe cemetery¹⁸. The last sample of the group is relatively smaller in size (Figure 6). Its round profile body is without any decoration. A stylized dragon head shape can be identified on the facing terminals. The head is flat; the nose is distinct and pointed. The details of the face are not very clear, but engraved mouth section can be noticed under the eye. There are samples proving that this bracelet is an artifact of the Urartian art. A similar one, especially in terms of the size and decoration, is found in Mus-Goztepe cemetery¹⁹. Heads of dragons, a fantastic creature, were used intensely on terminals of the Urartian bronze bracelets as a variation of panther figures and these three samples provide variety to the bracelets known as dragon head bracelets.

Another group of the bronze bracelets found in Diyarbakır museum is bracelet with terminals in the shape of panther heads. This group is represented by three groups. The first one is a very well-preserved bracelet with a thick and round body (Figure 7). The body is without any decoration. Terminals facing each other were formed in the shape of cubic panther heads. Entire face of the panther can be identifiable. The ears and nose are big, eyes and half open mouth are distinct and all details of the head were lively pictured. Numerous similar samples, as for the bracelets with dragon heads, prove that this type was also produced intensely in Urartian culture. Other bracelets similar to this sample introduced here were obtained from the excavations of Mus-Goztepe

cemetery²⁰ and Iğdir-Melekli Cremation cemetery²¹. There are also similar ones found in Adana Museum²² and various collections²³. All these parallel samples help to explain the Urartian identity of this artifact.

Another bronze bracelet with terminals in the shape of panther heads constitutes the second and the last sample of this group (Figure 8). The body is in round shape, without any decoration and is thinner. The panther head depicted on terminals is different than the previous sample, as this one is flat and more stylized. All details of the head were engraved lively. There are small but characteristic ears on each side of the head and the eyes are in the shape of a line. A linear drop motive is placed in the middle section of the head. In addition, the mouth is distinct. Especially the mustache situated in the upper section of the mouth is very distinctive and carries great importance in identifying the kind of the animal. When looked at the similar samples in Urartian art, it is understood that this figure was also preferred and used intensely on bracelet terminals. The sample obtained from Ereven cemetery area is very similar, especially with its head structure²⁴. Samples from Van-Altintepe²⁵ and Van Museum reflect common features, especially with their decoration details²⁶. As it is seen in many other samples, drop motive became a traditional feature in the decoration of panther heads²⁷.

The last group consists of two armlets which are different than others in terms of their forms and decoration features (Figure 9-11). Especially their spiral forms cause us to think that they were used as armlets. The first sample of these type formed as bracelet or armlet with terminals in the shape of snake heads has a round profile body (Figure 9-10). A shape of snake body was given by decorating the surface with notches in lunate shape. Terminals are in the

shape of snake head. The head is flat and rectangular and the details of the face are distinct. Especially the mouth is emphasized as relief and large eyes are placed on each side of the head as linear details. This bracelet also has parallel examples that help us to explain the Urartian identity and they usually come from Erevan Necropolis²⁸ Van-Altintepe Necropolis²⁹ and Van Museum³⁰.

The second and the last sample of the group is a spiral armlet formed in the same way of thought (Figure 11). The body is flat



Figure 12

Horse Bell

Bronze

10X8 cm

Diyarbakır Museum Inv. No: 1/43/93

Inner part of the horse bell is broken. The round suspension loop on the upper part in good shape. Rectangular openings on the body. There are horizontal ridges around the body.

Biscione 1994: Fig. 14

Piotrovski 1967: Fig. 60

Seidl 1994: Fig. 56-59

Savaş-Estetik 2004: 242-244

Belli 1976/77: Pl. VI, Fig. 23; Pl. VIII, Fig. 9-10

profiled and irregular and bears no decoration on it. Terminals were formed as a plump snake head. However, there is not any incise details found on the head of the snake like the previous sample. We come across with samples similar to these in terms of their forms among the Urartian silver armlets³¹.

The dating of 10 bronze bracelets and armlets, defined in the basis of similar samples which are part of Urartian art, is very important. Samples obtained by systematical excavations prove that these



Figure 13

Horse Bell

Bronze

3.2X2cm

Diyarbakır Museum Inv. No: 5/19/79

On its body, there are incise lines parallel to each other and triangle opennings. The suspension loop of the bell is elliptical. Clapper that must be located in the inner part of the horse bell has been preserved. Savaş-Estetik 2004: 245.

kinds of accessories were used in Urartians starting from ninth century B.C until the fall of the Kingdom. The fact that Diyarbakır Museum's bracelets and armlets, which were widely produced and used samples of the Urartian art, were acquired by the museum through purchasing which keep us from performing a healthy aging work, it is a real fact that they will provide a variety to existing Urartian samples.

Another group of the bronze artifacts of Diyarbakır Museum is the horse bells. These horse bells were used at horse harness of the horses ridden with war chariots that were an indispensable element of the Urartian army. Horses were important for the Urartians on their daily life. Horses were widely used in war by the Urartians who attached great importance to horse breeding. Extremely fine bronze artifacts produced for their harness, including bells were not only functional but a vehicle for decoration. The warlike Urartians were so attached to their horses that they adorned them with bronze ornaments.

It is a well-known fact that horse bells were often used at horse harness in Ancient Near Eastern cultures since Second Millennium B.C³². We see that Urartians, who were quite competent in horse breeding, also dressed their horses with horse harnesses produced with a superior proficiency and mastership. It is known that the production of horse bells were high in parallel with the use of horses in wars. Excavations and findings indicate that the Urartians were the people who used horse bells the most. Latest findings make us think that the homeland of horse bells would be Urartian land³³. Urartian horse bells were used in Eastern Anatolia, Transcaucasia and Northwestern Iran during First Millennium B.C. Moreover, finding some horse bells in Samos Island

shows us that they were spreaded to off-shore countries³⁴. Of the artefacts belonging to horse harness discovered in excavation of Urartian fortresses and burial sites, horse bells.

Urartian bronze plates, as well as Assyrian relieves and fresks show that the horse bells were used as a garment at horse collars³⁵. Urartians tried to give an aesthetic appearance to their war chariots by using this type of garments on their horses. Besides, the sound of the horse bells must have given a harmony in parallel with the use of war chariots. Urartian bronze belts are another proof showing the types of use of horse bells. It is thought that the objects hanging under the necks of the animals pictured on some Urartian bronze belt are probably horse bells³⁶.

Even though the Urartian horse bells differ from each other in terms of shape and size, it is known that they are same technologically. All horse bells, which reflect the competency of the Urartian bronze casting technique, were produced by the lost wax technique³⁷. The body of the Urartian horse bells is made of bronze while the clapper and the rod are made of iron³⁸. The most distinguishable characteristic of these horse bells is the inscriptions on top³⁹. From one single line inscription located especially on top, it is possible to find out under which king's inventory it was recorded. Based on these inscriptions, the development stages of horse bells could be determined. The earliest examples belong to king Menua era. It is also thought that animal heads on the body of horse bells such as lion, bull and mountain goat probably represent the mark of the work shop.

Horse bells have been found in many Urartian centers. Cities of Alisar and Karmir

Blur as well as other examples came to the museums through the way of purchasing prove the use of horse bells in the Urartian culture.

3 bronze horse bells that are subject to our research and located in Diyarbakir Museum carry typical Urartian features despite the places they came from are not known. The first sample is crushed (Figure 12). When we look at the samples of the Urartians, it is seen that these bells were put into the graves as crushed in purpose⁴⁰. Leaving crushed grave goods into the graves is interpreted as a burial custom in ancient Near East civilizations⁴¹. It is possible that this kind of belief could exist in the Urartian culture.

In spite of the fact that the clapper that must be located in the inner part of the horse bell is broken, its place is obvious. The round suspension loop on the upper part is in good shape. There are rectangular openings on the body of the horse bell. These openings must have been opened by cutter strokes after the casting, as the marks could be seen when looked carefully. In addition, there are horizontal ridges around the body. These types of rectangular openings and horizontal ridges exist on many Urartian samples and may be defined as the common decoration feature of the Urartian horse bells. This decoration feature is seen on the samples found in Erevan⁴² and Alişar⁴³ as well as in Museums and other collections⁴⁴ and on the horse bells acquired and published from plunder digs⁴⁵.

The second horse bell differ from others with its incise decoration found on top (Figure 13). On its body, there are incise lines parallel to each other and triangular openings. The suspension loop of the bell is elliptical. The clapper that must be located in the inner part of the horse bell has been preserved.

This sample should be evaluated separately from the previous group with regard to its form and decoration features. When other existing Urartian examples are examined, it is found that there are few horse bells that have triangular openings on top⁴⁶. As it can be seen in many other examples, Urartians preferred using rectangular openings. The difference of this sample we examined is the incise decoration on top. Plant motives have been determined on many Urartian horse bells and no incise decoration was encountered. Having an elliptical suspension loop is another distinctive feature of this sample. It is known that Urartian horse bells often have round or oval shaped suspension loops. As a result, even though there are some differences in the form, its production technique, form and the openings on top cause us to think that this horse bell was used by the Urartians.

The third and the last sample catches our attention with its simple form (Figure 14). The horse bell is made of cast bronze and its body is in the shape of a cone. There is no triangular or rectangular opening on the body as well as no relief or incise decoration. Right under the round suspension loop of the simple horse bell, a ribbed decoration exists. The clapper that must be located in the inner part of the horse bell is broken. This type of horse bells were not used as much as others with decorations but there are some examples which proves their usage⁴⁷. Especially the sample obtained from Eastern Anatolia region is very similar to the sample we described here in terms of its form and production understanding⁴⁸.

It is seen that Urartian horse bells similar to Caucasian horse bells with regard to their forms and decorations were used mostly in eighth and seventh century B.C⁴⁹.

However, given the fact that the horse bells situated in Diyarbakir Museum do not have any inscription and the place they come from is not known, we can still say that they add new varieties to known Urartian samples.



Figure 14
Horse Bell
Bronze
3X4.3 cm

Diyarbakır Museum Inv. No: 3/15/89

Body is in the shape of a cone. There is no opening or relief decoration on the body. Right under the round suspension loop of the horse bell, a ribbed decoration exist. The clapper that must be located in the inner part of the bell is broken.

Piotrovski 1967: Fig.60

Belli 1976/77: Fig. 27-28

Biscione 1994: Fig. 15

Özgen 1984: Fig.35.

In conclusion bronze was used extensively for works of art, and in fact well-made bronze objects constitute a primary source for our knowledge of Urartian art. The Urartian state was particularly skilled in metal working, perhaps due the fact that incontrolled abundant natural resources involved in metallurgy⁵⁰ Of course the Urartian state was known for its metal work an metal is in no short supply in this case. Whether it's elements of horse bells and bracelets of Urartian metalwork is well represented. The objects that the Diyarbakır Museum has are well preserved and displayed well.

ÖZET

Urartu maden sanatçıları bol hammaddeye sahip olmaları ve üstün becerileri sayesinde maden işleme alanında kendilerini geliştirerek, Urartu madeni eserlerinin geniş bir alana yayılmasını ve Urartu eserlerinin dış pazarlarda beğeniyle aranmasını sağlamışlardır. Satın alma yoluyla Diyarbakır Müzesine kazandırılmış olan bazı tunç eserler de Urartu maden işleme sanatının yetkinliğini ve çeşitliliğini ortaya koymaktadır. Bunlar bir grup tunç bilezik, pazubent ve at çingırağıdır. Urartu sanatının bir parçası oldukları, benzer örnekleri ışığında tanımlanan 10 adet bronz bilezik ve pazubentinin Urartu sanatının yoğun ve beğeniyle üretilmiş ürünleri durumunda oldukları ve var olan Urartu örneklerine çeşitlilik kazandırdıkları görülmektedir. Masif döküm tekniği ile üretilmiş tunç bileziklerin üzerinde görülen bezeme oldukça vurgulayıcıdır ve bileziğe zarif bir görünüm kazandırmaktadır. Diğer kültürlerle esin kaynağı olan Urartu tunç eserleri arasında at çingırakları da bulunmaktadır. Bu çingıraklar Urartu ordusunun vazgeçilmez parçası olan ve savaş arabalarına koşulan

atların koşum takımlarında süsleme elemanı olarak kullanılmıştır. Masif döküm tekniği ile biçimlendirilmiş olan ve Diyarbakır Müzesinde yer alan 3 adet at çingırağı bilenen özgün Urartu örneklerinin çeşitlemeleri durumundadır.

NOTES

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1 Çilingiroğlu 1997:4

2 Erzen 1986: 24; Çilingiroğlu 1997: 18

3 Belli 1987: 89

4 Çilingiroğlu 1997: 107

5 Kohlmeyer 1991: 177

6 Biscione 1994: 129

7 Kohlmeyer 1991: 178

8 Merhav 1991: 218, Fig. 20a

9 Ghirshman 1964: 249

10 Savaş-Estetik 2004: 169

11 Muscarella 1988: 34

12 Sadıkhade 1971: Tab. XXII

13 Barnett 1963: Fig. 32.7

14 Özfırat 2001: Fig.7/7

15 Barnett 1963: Fig.10

16 Sevin-Özfırat 2000: Fig.7

17 Taşyürek 1975b: Fig.3

18 Özfırat 2001: Fig. 7/6

19 Özfırat 2001: Fig. 7/1-3

20 Özfırat 2001: Fig.7/5

- 21 Barnett 1963: Fig.9
 22 Taşyürek 1975b: Fig.5
 23 Kohlmeyer 1991: Fig.10
 24 Biscione 1994: Fig 12
 25 Sevin et al, 2001: Fig. 7
 26 Savaş-Estetik 2004: 167
 27 Kohlmeyer 1991: 182, Fig.11
 28 Biscione 1994: Fig. 12/1
 29 Sevin et al 2000: Fig. 7
 30 Savaş-Estetik 2004: 167
 31 Kohlmeyer 1991: Fig. 11-12
 32 Belli 1976/77: 198
 33 Özgen 1984: 109
 34 Muscarella 1978: 61; Özgen 1984: 109
 35 Belli 1976/77: 207
 36 Taşyürek 1975: Fig. 37-47, 49, 53
 37 Belli 1976/77: 206
 38 Özgen 1984: 109
 39 Özgen 1984: 109
 40 Belli 1976/77: 207
 41 Özgüç 1948: 117-118
 42 Biscione, 1994, Fig.14
 43 Piotrovski 1967: Fig.60
 44 Seidl 1994: Fig.56-59; Savaş-Estetik 2004: 242-244;
 45 Belli 1976/77, Pl. VI, Fig.23, 24; Pl. VIII, Fig.9-10
 46 Savaş-Estetik 2004: 245
 47 Piotrovski 1967: Fig.60; Belli, 1976/77, Fig. 27-28; Biscione, 1994, Fig. 15).
 48 Özgen 1984: Fig.35
 49 Belli 1976/77: 206
 50 Zimansky 1998: 37

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