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«CIMMERO-SCYTHIAN» ANTIQUITIES FROM CENTRAL ANATOLIA ¹

The contribution discusses the artifacts of nomadic types from Central Anatolia which include weapons, horse equipment and objects made in the traditions of Scythian animal art style. They highlight the complex ethnic composition of the nomadic groups located here in the 7th—6th centuries BC that does not allow attributing all these archaeological materials to a single group, for example, the Cimmerians.

Keywords: Central Anatolia, Cimmerians, Scythians, 7th—6th centuries BC, bronze socketed arrowheads.

Introduction. Central Anatolia is one of Western Asia regions, where the significant concentration of archeological materials related to the Eurasian nomads of the Early Scythian period is fixed. This region is located in the middle of modern Turkey and characterized by a flat landscape with some isolated low mountain ridges. From the north, the Anatolian plateau is surrounded by the Pontic Mountains, and from the south by the Taurus Mountains. Central Anatolia is situated in the area of dry steppes and semi-deserts with thickets of low thorny bushes. The plateau is cut by a few rivers flowing into the Black Sea, such as Kızılırmak (Halys) and Sakarya (Sangarius). In the past, these rivers were natural dividing

lines between the cultural formations located within the region.

The plains of Central Anatolia had good pastures and from ancient times served for communication purposes with land routes being laid from the East to the West. The region is located between Western and Eastern Anatolia, where two large cultural-historical areas were presented: Lydia and the Eastern Greek centers on the one hand and Urartu and Assyria on the other hand. In Central Anatolia, small local, presumably Phrygian or Neo-Hittite «principalities» were localized, which did not pose a serious threat to the nomads. Mobile and well-armed nomadic units probably controlled the local population and used this territory as a base for military raids on neighboring and more distant regions, or hid here from enemies in case of danger. The materials related to the early nomads are represented in the region by various categories of inventory: weapons, horse harness and objects made in the traditions of Scythian animal art style. These finds come both from nomadic burials and local settlements. The following paragraphs set out the discussion of sites and / or burial complexes that included objects of nomadic types in Central Anatolia.

BURIALS. (1) A tomb plundered in the Amasya province. It is located somewhere between Tasova and Ladik (fig. 1: 2). The burial belonged to a nomadic warrior and contained 250 bronze arrowheads (Ünal 1982, p. 69, Abb. 3—7). This is the most numerous assemblage of nomadic arrowheads of the 7th century BC found in the Near East. It consisted of five bullet-shaped and 245 bronze socketed arrows, of which 231 had barbs and only 14 were with-

1. The article is prepared as part of a research project carried out at Cornell University with the support of the Fulbright Program (USA) in Ukraine. I would like to express sincere gratitude to A. Smith, L. Khatchadourian and N. Russell for their assistance in the realization of this project. I am also grateful to K. Yukishima, S. Takahama and S. Adali for consultations and sharing the publications about the Kaman Kalehöyük and Büklükale sites.



Fig. 1. Distribution map of nomadic type artifacts of the 7th—6th centuries BC in Central Anatolia: 1 — Sivas province; 2 — Amasya province; 3 — Imirler; 4 — Boğazköy; 5 — Kerkenes Dağ; 6 — Kaman Kalehöyük; 7 — Gordion

out a barb. Biplade arrowheads are represented by no less than four different types, among which items with oval and rhomboid heads prevail (fig. 2: 1—14; 22—33). The arrowheads differ in the width of the blades, socket length and the presence or absence of a barb. The length and the maximum width of the head of the arrows in most cases varies from 4.2×1.1 to 4.8×1.5 cm. Arrowheads with a rhomboid and laurel-shaped head, generally, belong to the so-called cross-cutting types, that were distributed in the Near East and the South Caucasus during the most of the 7th century BC, as well as, partly in the first half of the 6th century BC (Karmir Blur, Ayanis, Cavuştepe, Assur, Boğazköy, Kerkenes Dağ, Sardis, etc.).

One of the arrowheads with a rhomboid head and a long socket (dimensions: 5.1×1.4 cm) finds the analogies among the pre-Scythian Novocherkassk type of the 8th—7th centuries BC in southeastern Europe¹ (fig. 2: 33). Similar arrowheads are also known in the Early Scythian context, for example, in kurgan 1 of the Krasnoe Znamya cemetery in the Central Ciscaucasia (Петренко 2006, табл. 55: 13).

The quiver set from the Amasya province also contains biplade arrowheads with a rhomboid head with smoothed outlines. Such arrowheads are sometimes referred to as the ones with an «oval-rhomboid» head (fig. 2: 34—42). Such arrowheads are known in the Scythian burials of Eastern Europe, where they are dating to the mid — second half of the 7th century BC (Петренко 1990, рис. 1.Д: 5, 7, 8; Галанина 1995, рис. 2: 1; 3: 25).

1. For more information about the finds of arrowheads of Cimmerian types in the Near East, see: Махортых 2000, с. 190, рис. 1.

An original group is formed by so-called «syncretic» arrowheads. One blade of such arrowheads has an oval outline and another one a rhomboid form (fig. 2: 15—21). In my opinion, the term «the arrowheads with an oval-rhomboid head» suits them well. Such arrows were found in the North Caucasus: Krasnoe Znamya, kurgan 1; Zheleznodorozhny II, kurgan 2, burial 8; Novozavedennoe II, kurgan 2 (Петренко 1990, рис. 2.3: 4; 2006, табл. 55: 14; Лимберис, Марченко 2014, рис. 2: 2). Only one similar specimen comes from the forest-steppe Dnieper region — Zhabotin, kurgan 524 (Рябкова 2014, рис. 1.3: 1). The latter burial is dated to the second and / or third quarter of the 7th century BC (Махортых 2014).

In Central Anatolia, the arrowheads with «oval-rhomboid» heads were found at Boğazköy and Kaman-Kalehöyük (fig. 6: 20; 8: 13; Boehmer 1972, Taf. XXXI: 910; Yukishima 1992, fig. 1: 8). In the eastern regions of Eurasia, similar arrowheads are unknown.

It should be noted that the quiver set from the Amasya contains a representative series (more than 50 items) of biplade arrowheads with the so-called «weighted» heads. They have a prominent socket, often with a barb, and rhomboid or oval-shaped head, which is divided into two sections in its widest part. An upper, striking half of the head has a tetrahedral form, while the lower part of the head has a flat biplade shape (fig. 2: 43—58). Most exemplars vary in size from 3.5×1 to 4.6×1.3 cm. Basic area of distribution of two-bladed arrows with a «weighted» head in the Near East is Central Anatolia, where they, having undergone certain changes, existed throughout the 7th century BC. Materials from Kerkenes Dağ allow us to assume that these items were also produced in the first

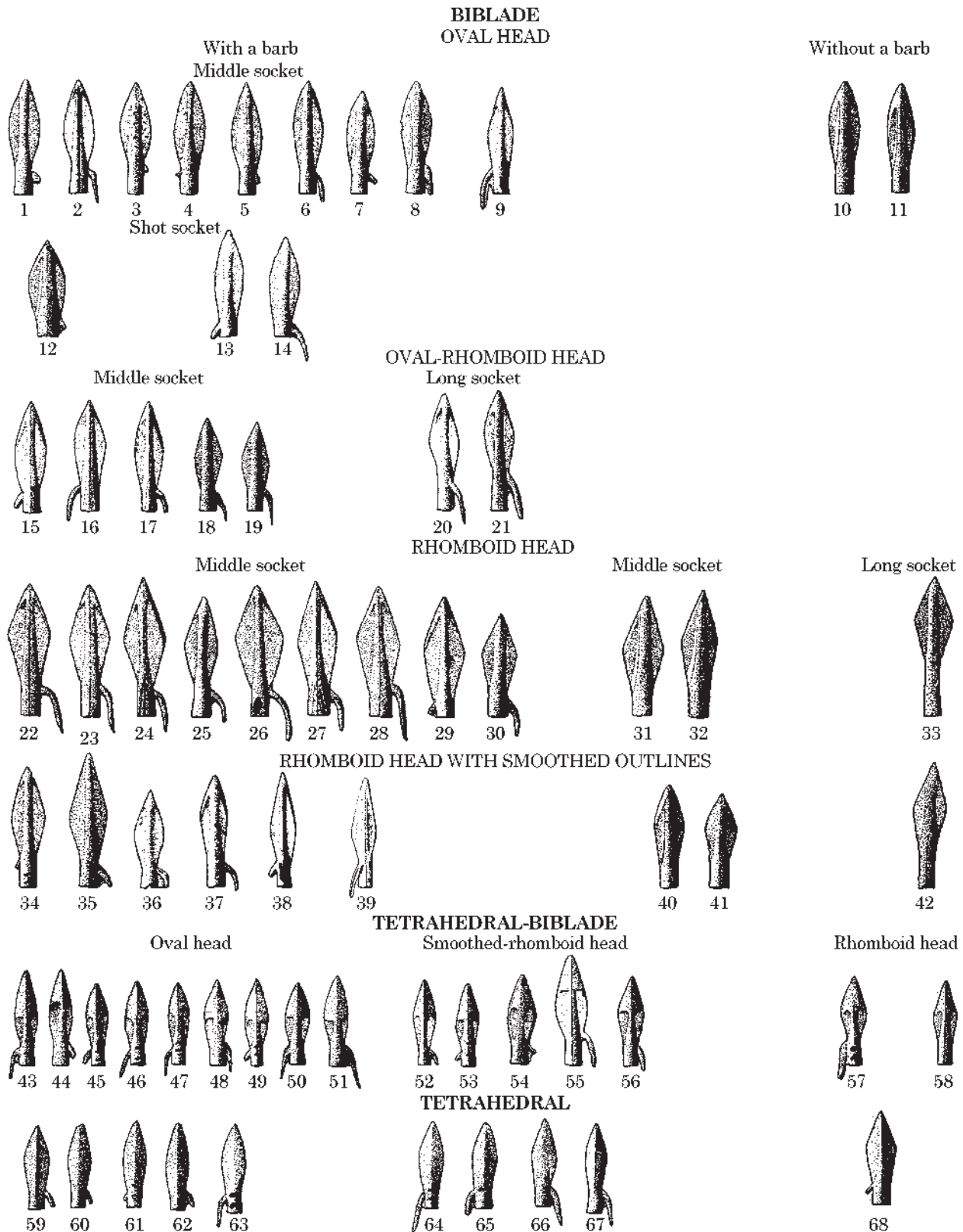


Fig. 2. Bronze socketed arrowheads from a burial in Amasya province (not to scale)

half of the 6th century BC (fig. 9: 12, 14; Summers 2017, fig. 33.5: 1, 2). A small number of biblade arrowheads with so-called «weighted» heads of various modifications are known in southeastern Europe, where they are dated to the 7th–6th centuries BC (Velikoaleksandrov-

ka, kurgan 7; Osnyagi, kurgan 1; Zhabotin, kurgan 524; Yagorlyk, etc.; Островерхов 1981, рис. 3: 17; Кореняко, Лукьяшко 1983, рис. 10: 10–14; Шрамко 1987, рис. 71: 3; Рябкова 2014, табл. 2: 23). It is supposed that their origin is connected to Central Kazakhstan and the

Aral Sea region (Рябкова 2014). It should be noted that they are also known in more eastern regions of Eurasia, for example, in Tuva (e. g., Чугунов 2019). However, the archaeological culture (Tasmolinskaya, Aldy-Belskaya, etc.) and the territory with which the origin of such arrowheads should be connected, as well as the chronological dynamics of their distribution in this vast area, remain uncertain.

In a quiver set from the Amasya province, a separate group is formed by barbed arrowheads with a prominent socket and tetrahedral heads of oval (fig. 2: 59—63), rhomboid or smoothed-rhomboid shapes (fig. 2: 64—68; Ünal 1982, Abb. 3: 20—28). Their sizes vary from 3.6×0.9 to 4.5×1.0 cm. A small number of similar items were found at other sites in Asia Minor (Kerkenes Dağ, Kaman-Kalehöyük; fig. 8: 30, 31; 9: 15, 16). The arrows with a tetrahedral head can be considered as a local feature of the Central Anatolian quiver sets in the 7th century BC.

V. Ünal dated a burial assemblage from the Amasya province to the 7th — the beginning of the 6th century BC (Ünal 1982, s. 81). A. Alekseev and A. Ivanchik restricted its date to the first half — the middle of the 7th century BC (Алексеев 2003, с. 149; Иванчик 2001, с. 49). These authors relied on the supposed chronological affinity of three arrowheads with a rhomboid head and casted relief decoration in the form of a «bird's footprint» from Amasya with an arrowhead from Boğazköy (fig. 2: 24, 27; 6: 4). However, a item from Boğazköy was found in the Büyükkale IIa/Ib layer dated to the middle of the 7th century BC (Boehmer 1972), that does not allow us to attribute it and other similar arrowheads to the first half of the 7th century BC¹. It should be pointed that the presence of relief ornamentation is characteristic of the pre-Scythian arrowheads of the 8th—7th centuries BC in the south of Eastern Europe (Vysokaya Mohyla, Malaya Tsimbalka, etc.). Relief marks on the arrowheads with rhomboid heads from Amasya and Boğazköy, probably, indicate their Cimmerian origin, which is also the case of the arrowheads of the Novoчеркасс type from the Gumarovo kurgan in the southern Urals² (Исмагилов 1988, рис. 6: 36, 40, 54).

1. An arrowhead from Amasya with a rare head form finds analogies in the above-mentioned Boğazköy layer. Its elongated, smoothed-rhombic shape reaches its maximum width in the lower part of the blades (fig. 2: 39; 6: 5).
2. It should also be noted that M. Pogrebova and D. Raevskiy argue that the burial assemblage of the Gumarovo kurgan is not indicative of the movement of the Scythians to the west, from their homeland, as in the case of grave goods from Arzhan and Chilikta, but rather one of the directions of dispersal of the Caucasian — West Asian carriers of the Early Scythian material complex after the end of the Near Eastern military raids (Погребова, Раевский 1993, с. 240, сн. 34).

The quiver set from the Amasya province is quite representative. When dating it, one should rely not on single items, but on the existing series of arrowheads inside the assemblage. This quiver set contains a significant number of barbed arrows with an oval head, as well as a number of syncretic, oval-rhomboid arrowheads and arrowheads with smoothed-rhomboid heads. These three variations of biblade arrowheads are not typical for the most archaic burial complexes of the European Scythia and the eastern regions of Eurasia dated to the beginning — the first half of the 7th century BC, as well as for quiver sets dated to the end of the 7th century BC.

These facts and the respective analogies coming from the Boğazköy layer dated to the middle of the 7th century BC allow us to attribute the Amasya complex to the second-third quarter of the 7th century BC.

The dating of Amasya complex can be further specified by biblade specimens with smoothed-rhomboid heads dated to the middle — second half of the 7th century BC and arrowheads with syncretic oval-rhomboid heads dated to the second-third quarter of the 7th century BC.

All these analogies are dated to the middle-third quarter of the 7th century BC. This probably was the time of the formation of the complex from the Amasya province, which is one of the oldest nomadic burials in Central Anatolia.

The combination of arrows with different origins is one of key features of the quiver set from the Amasya. The tetrahedral-biblade arrowheads are close to the antiquities from the eastern province of the Scythian world, while the barbed arrowheads with oval and «syncretic» oval-rhomboid heads are more characteristic for the western one.

(2) Quiver set from the Sivas province. It was found between Dogansar and Koyulhisar and probably comes from a destroyed burial (fig. 1: 1; Ökse 1994).

The set included 21 bronze socketed arrowheads, which are two-bladed and, with one exception, supplied with a barb. It includes two arrowheads 4.1—4.5 cm long with a wide rhomboid-shaped head (1.4—1.5 cm) and a short socket that finds analogies in a quiver from the Amasya province (fig. 3: 1, 2). Besides that, an arrowhead with a small rhomboidal head and a long socket was discovered (fig. 3: 3). Most of the arrows from Sivas have a narrow laurel-shaped head with slightly protruding blades and a massive socket, which is faceted or oval in cross-section (fig. 3: 4—10). Exemplars with a wider oval head are also known (fig. 3: 11—16). The length of the arrowheads varies from 3.2 to 4.7 cm with a width of 0.9—1.3 cm. Arrowheads with a smoothed-rhomboid head form a small group (fig. 3: 17—21).

In the Near East, close parallel to biblade arrowheads with a narrow oval head are coming

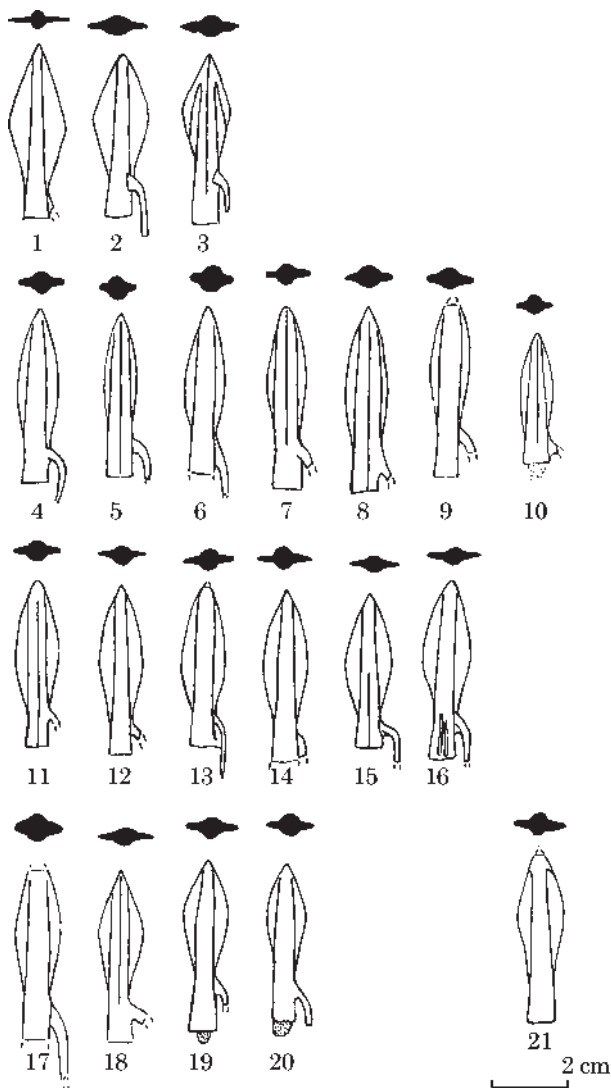


Fig. 3. Bronze biblade arrowheads from the Sivas province

from Boğazköy, Kerkenes Dağ, Kaman Kalehöyük, Carchemish and Karmir-Blur (Boehmer 1972, Taf. XXXI: 901, 913, 918, 924; Yukishima 1992, fig. 1: 1, 2; Рябкова 2009, рис. 3: 7, 25; Szudy 2015, pl. 31, Summers 2017, fig. 33.2: 11—13). According to the archaeological context, they usually dated to the second half — the end of the 7th century BC. In the south of Eastern Europe, quiver sets that include barbed biblade arrowheads with rhomboid and oval heads of various widths are known in the North Caucasus: Stavropol kurgan 1953; Novozavedenoe II, kurgan 2; Kelermes, kurgan 24; Kholm-skiy I, kurgan 4, etc. (Петренко 1990, рис. 1: Е; Василенко, Кондрашев, Пьянков 1993, рис. 5—7; Галанина 1995, рис. 3: 4—9). These complexes are usually dated no earlier than the middle — the second half of the 7th century BC. It is notable that barbed biblade arrowheads with narrow oval heads are extremely rare in the east of Eurasia in the Early Scythian time. Thus, the Near Eastern and Caucasian parallels determine the age of the quiver set from

the Sivas province as the middle — the second half of the 7th century BC.

(3) **Burial near Imirler (Amasya province)** (fig. 1: 3). One of the most informative nomadic complexes in Central Anatolia was located near Imirler. In a square burial chamber, the walls of which were covered with stone, a bronze stirrup-ended bit, a long iron sword, a bimetallic pickaxe and a bronze fluted handle associated with it were found. The complex also included 28 bronze arrowheads, of which 21 were unpublished, as well as a gold bracelet kept in a private collection (Ünal 1982, s. 65, Abb. 1; Hauptmann 1983; Kossack 1987; Derin, Muscarella 2001, p. 194; Иванчик 2001, с. 42).

The quiver set from Imiler contains biblade arrowheads with an oval head and a long socket without a barb (fig. 4: 5—7), arrowheads with a head of a similar shape and a shorter socket with a barb (fig. 4: 8), barbed arrows with a rhombic head (fig. 4: 9, 10) as well as a single item with a so-called «weighted» head (fig. 4: 11). Their sizes vary from 3.8 × 1.1 cm to 4.9 × 1.25 cm.

Some researchers dated a burial from Imirler to the middle of the 7th century BC (Дударев 1998, с. 89; Алексеев 2003). Ivanchik considers it to be more ancient and relates this burial to the early stage of the Kelermes period by dating it somewhat earlier than Kelermes kurgans discovered by V. Veselovsky (Иванчик 2001, с. 48).

Ivanchik's dating of the Imirler complex is based on the arrowheads, which, in his opinion, belong to the Kelermes type and find the closest analogies in the Kelermes kurgans.

First, it should be noted that the assumption about the existence of an early stage of the Kelermes period, preceding the burial mounds discovered by V. Veselovsky, is not supported by any archaeological evidence related to the Kelermes necropolis. According to the analysis by L. Galanina, burial mounds discovered by V. Veselovsky are associated with the oldest stage of the Kelermes period in the Kuban area, which precedes the pre-Kelermes stage, identified by A. Jessen (Галанина 1997).

Secondly, the arrowheads from Imirler are represented by several types, among which there are exemplars with rhomboid, oval, and «weighted» heads. Therefore, it's incorrect to combine them into one «Kelermes type» as A. Ivanchik does.

Moreover, arrows from Kelermes tumuli are mostly depasportized (Галанина 1995). They are not connected with certain burial complexes, which makes their chronological position unclear.

Thirdly, in Kelermes burial mounds there are no tetrahedral-biblade arrowheads with a «weighted» head, as well as the two-bladed

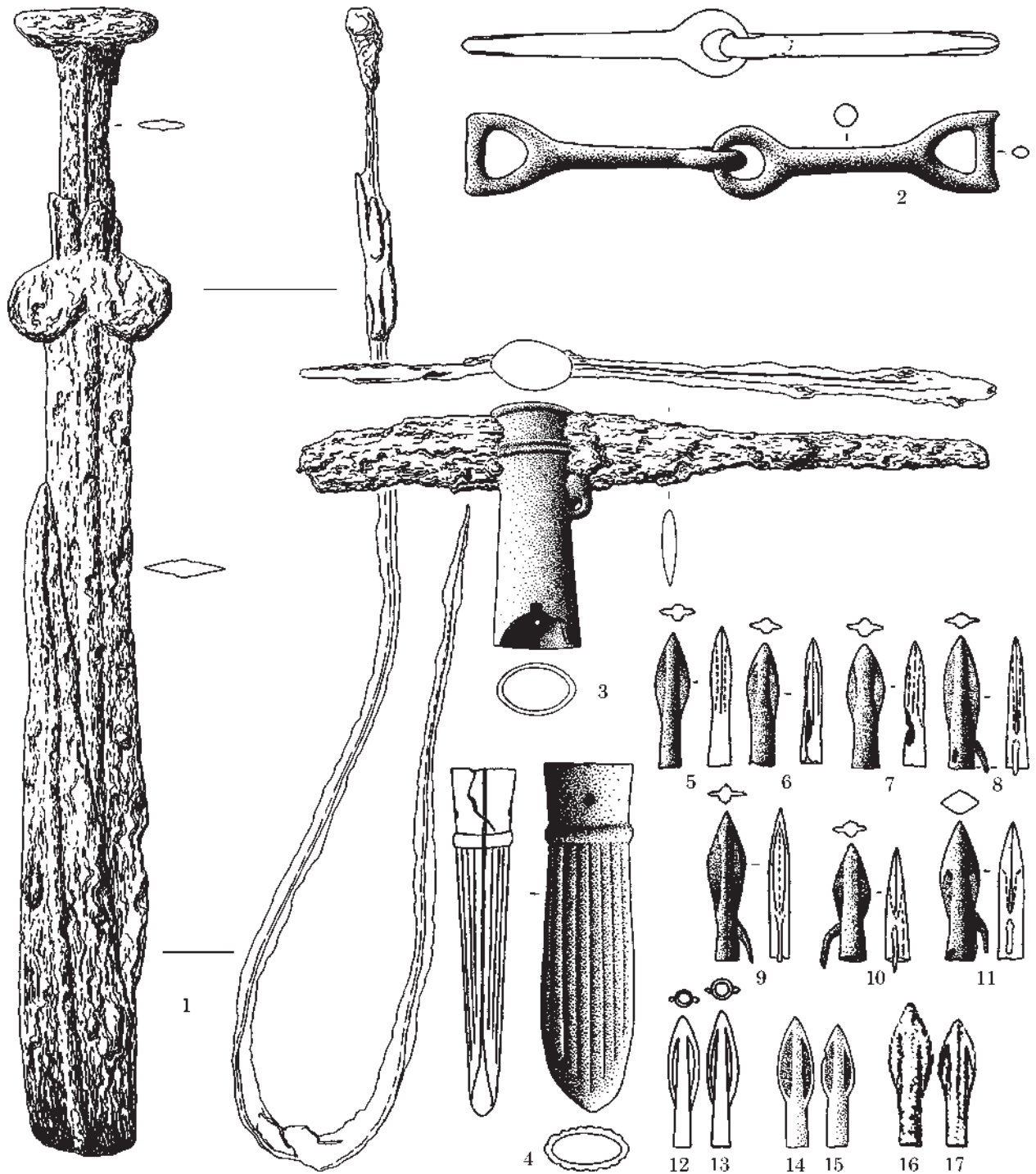


Fig. 4. Grave goods from a burial near Imirler and analogies to the bronze arrowheads found here: 1—11 — Imirler; 12, 13 — Kitaygorod; 14, 15 — Smolenice Molpír; 16, 17 — Lebedi V, kurgan 11, burial 8 (not to scale)

specimens with a long socket and oval head without a barb, which form the most numerous group in Imirler (fig. 4: 5—7). In this regard, the arrows from Kelermes cannot serve as grounds for dating the burial from Imirler. Furthermore, the arrowheads with an oval head and a long socket, that is about half the length of the entire item, are well known at the burials of the beginning — the first half of the 6th century BC in Eastern and Central Europe: Lebedi V, kurgan 11 burial 8 (Kuban area), Ki-

taigorod (Dnieper left-bank steppe), Bobritsa, kurgan 35 (Dnieper right-bank forest-steppe), Smolenice-Molpír hillfort (group IA, Slovakia) (fig. 4: 12—17; Ковпаненко 1981, рис. 10: 17, 18; Hellmuth 2006, Taf. 1: 1, 2; Мелюкова 2006, с. 28; Ромашко, Скорый, Филимонов 2014, рис. 3: 23—29; Пьянков, Рябкова, Зеленский 2019, рис. 4: 1, 2).

A bimetallic pickaxe is another important chronological indicator from Imirler burial (fig. 4: 3). Such weapons have been found in

the Caucasus in the Perkalsk, Tsaishi and Ergeta cemeteries, where they are dated no earlier than the end of the 7th — the beginning of the 6th centuries BC (Козенкова 2014; Папуашвили, Балахванцев 2016)¹. Judging by the published drawing of the pickaxe from Imirler, it can not be ruled out that the bird's head (?) in the junction of the socket and the blade is highly schematized and transformed into a simple loop that may also indicate a rather young date for this object.

The expected age is also confirmed by other objects from the Imirler complex, in particular, a long iron sword with a bar-shaped pommel and «heart-shaped guard» (according to Иванчик 2001, с. 42) or classic «bud-shaped guard» (according to Алексеев 2003, с. 149). Imirler's sword in its proportions and the shape of the pommel is close to the Scythian weapons of the 7th—6th century BC known in the Caucasus (Karmir-Blur) and in the Dnieper forest-steppe area (Starshaya Mohyla) (Пиотровский 1959, рис. 6; Ильинская 1968, табл. 1: 1).

All of the above-mentioned facts suggest that the burial from Imirler should be attributed to the end of the 7th century BC, or possibly to the beginning of the 6th century BC.

An important feature of Imirler complex is the presence of objects belonging to different cultural traditions: Eastern European (iron sword, bronze arrowheads with an oval head and long socket), Volga-Ural (bimetallic pickaxe) and Central Asian (arrowheads of tetrahedral-biblade type).

The same cultural syncretism is typical for the complex from Norşuntepe, which is another highly informative burial of the nomadic type in the Near East.

More than 60 % of its composition are Urartian, Iranian and Transcaucasian items (bits with twisted rods, fastener, axe). There are also Cimmerian (a bronze ring with a broken movable muff) and Scythian artifacts (bronze zoomorphic harness attachment). The combination of such diverse objects in one burial does not support the identity of the cultures of the Cimmerians and Scythians, but presupposes their contacts in the Near East within the framework of joint raids or actions, reliably evidenced by written sources (Махортых 1998).

(4) A burial ground located in the vicinity of the Gordion, nearby the modern Yassihüyük, about 70—80 km southwest of Ankara (fig. 1: 7). Some of the burials of this necropolis are related to the Eurasian nomads. First of all, tumulus J should be mentioned, where a non-disturbed burial was arranged in

a wooden tomb built in a sub-square pit (Kohler 1995). The poorly preserved skeleton of a man was oriented with his head to the east and laid extended on the back. The burial contained numerous grave goods. In addition to the «local» categories of inventory (bronze jug, small cauldrons with handles, bowl, various embossed appliqués, etc.), it included objects of a nomadic type: bronze arrowheads, an iron axe and a spearhead, a whetstone, pair of cult knives, as well as, presumably, fragments of bronze and iron bits (fig. 5; Kohler 1995, fig. 25—27). Such combination of multicultural artifacts in one grave is exceptional for the Gordion necropolis and it is not fixed in other burials. It suggests that not a Phrygian, but probably a Scythian warrior — a mercenary (Kohler 1995, p. 188, 213, 234) — was buried in tumulus J. It is worth noting that imported East Greek pottery was found in the burial too. Together with other artifacts, it allows to date this assemblage to the end of the 7th century BC (Kohler 1995, p. 59; DeVries 2005). This date correlates well with other objects of nomadic type, and, in particular, with bronze biblade arrowheads².

In total, six socketed arrowheads were found in tumulus J, five of which had barbs (fig. 5: 13—18). Their dimensions vary from 2.85 × 1.0 cm to 4.6 × 1.1 cm, although most of them did not exceed 4 cm in height and ranged from 3.0 × 1.05 cm to 3.8 × 1.2 cm. Arrowheads from tumulus J, find the closest parallels in the Early Scythian quiver sets of the western Ciscaucasia (fig. 5: 20; burial 2 near the Lenin khutor) and the Dnieper left-bank forest-steppe area (fig. 5: 19, 21, 22; Starshaya Mohyla) (Ильинская 1968, табл. 2: 30, 34, 35, 39; Лимберис, Марченко 2012, рис. 110: 66). According to the grave goods, these burials should be dated to the beginning — the first quarter of the 6th century BC (Махортых 2016; 2017).

SETTLEMENTS. (1) Boğazköy (Çorum province) (fig. 1: 4). The site is located near the modern village of Bogazkale east of the Kızılırmak river. On its territory, more than 50 (mainly biblade) bronze socketed arrowheads were found (Boehmer 1972, Taf. XXX; XXXI; Derin, Muscarella 2001, p. 194; Baykal-Seeher et al., 2006, Abb. 25: 13—17).

A trilobate solid arrowhead with a prominent socket and a head in the shape of a pointed leaf having an oval-shaped depression at the base of rounded edges is related to the oldest Büyükkale II layer, which is dated to the second quarter of the 7th century BC (fig. 6: 1; Boehmer

1. For more information about the origins and distribution of bimetallic pickaxes in Eurasia, see Кузьминых 1983; Müller-Karpe 1995; Алексеев 2003; Таиров 2010; Балахванцев 2014).

2. It should be also mentioned two bronze socketed arrowheads from the tumulus B, which is localized near the tumulus J and close to it in time (Kohler 1995, pl. 11: F, G). The Lydian lekythos discovered there dates the tumulus B to the 6th century BC (DeVries 2005, p. 54).

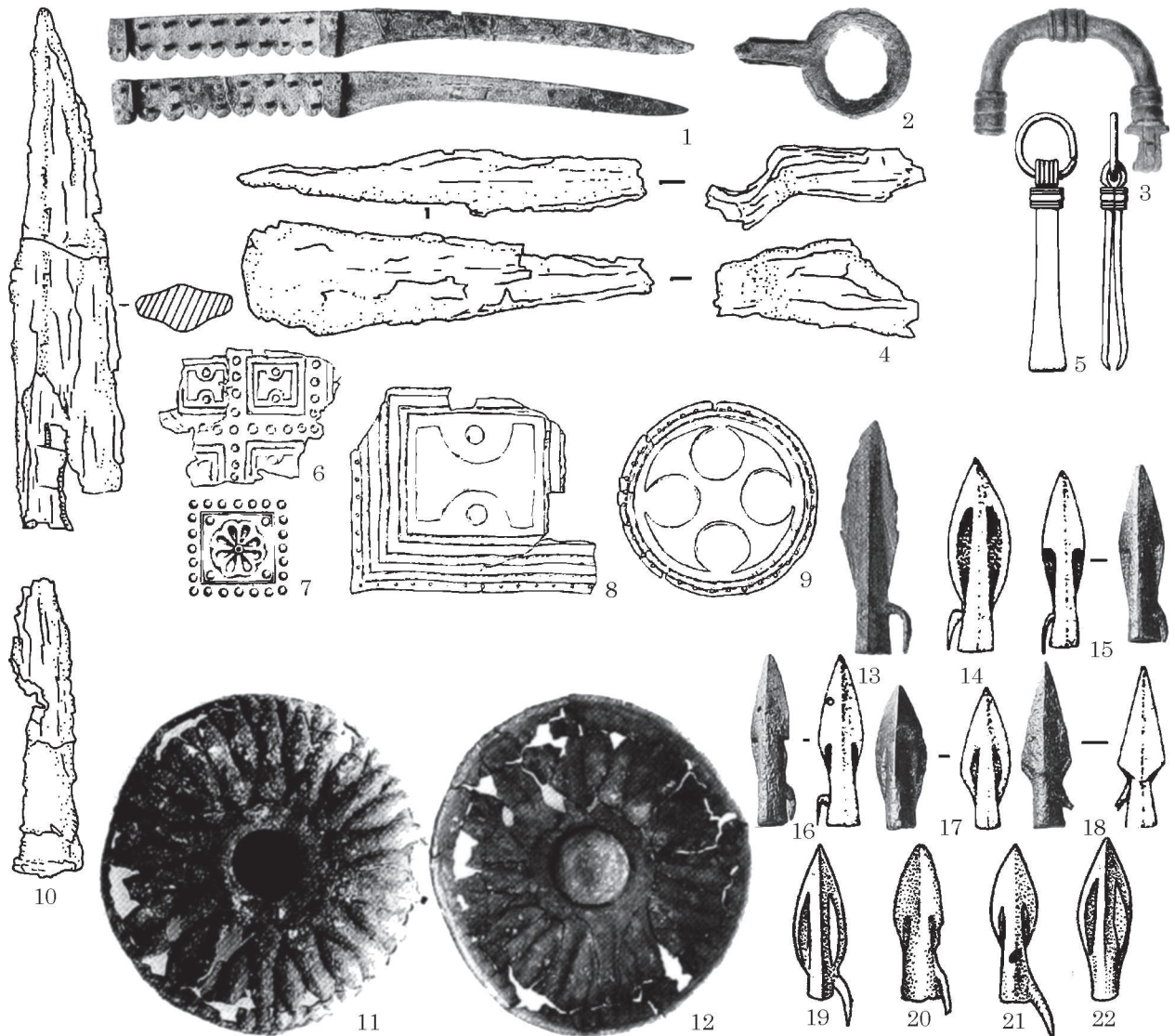


Fig. 5. Grave goods from tumulus J at the Gordion and analogies to the bronze arrowheads found there: 1—18 — tumulus J; 19, 21, 22 — Starshaya Mohyla; 20 — burial 2 at the Lenin khutor (not to scale)

1972, S. 111, Taf. XXXI: 933). The dimensions of the item are 3.9×0.65 cm. Analogies to this arrowhead are known in burial mounds of southeastern Europe, where they are mainly dated to the second half of the 7th — the beginning of the 6th century BC (Krasnoe Znamya, kurgan 1, southern tomb; Nartan, kurgan 16; Akxiutintsy, kurgan 469, etc. (Галанина 1977, табл. 19: 13; Махортых 1991, рис. 15: 20; Петренко 2006, табл. 54: 736).

Taking into account the analogies, the single nature of this find, and the probability of material being moved between the layers, noted by R. Boehmer, it cannot be excluded that this trilobate solid arrowhead originated from the younger layer (Büyükkale IIa/Ib), which is dated to the middle of the 7th century BC.

The Büyükkale IIa/Ib layer also contains nine barbed biblade arrowheads (Boehmer 1972, S. 110—114, Taf. XXXI: 901—909). Among them there are items with rhomboid and smoothed-rhomboid heads (fig. 6: 2—4, 6),

as well as the arrowheads with oval and oval-rhomboid heads (fig. 6: 7, 9). Their sizes vary from 3.7×1.2 cm to 5.25×1.4 cm.

Two rare specimens are distinguished: a barbed arrowhead with a small oval-rhomboid head and a long socket (fig. 6: 7; 4.5×1.1 cm) and an arrowhead with a narrow sub-rhomboid head and the largest width in its lower part (fig. 6: 5; 4.65×1.05 cm).

19 bronze arrowheads are related to the younger Büyükkale I layer, which is widely dated to the 7th—6th centuries BC, or even the 5th century BC (No 886—893, 910—918, 934—935)¹ (Boehmer 1972, S. 109).

Among them, there are six exemplars with a rhomboid head, without or with a barb and

1. Ivanchik's assertion that the most of the arrows of the «Scythian» type were found in the Boğazköy layer 1, which allegedly dates to the second quarter — the middle of the 7th century BC is erroneous (Иванчик 2001, с. 68).

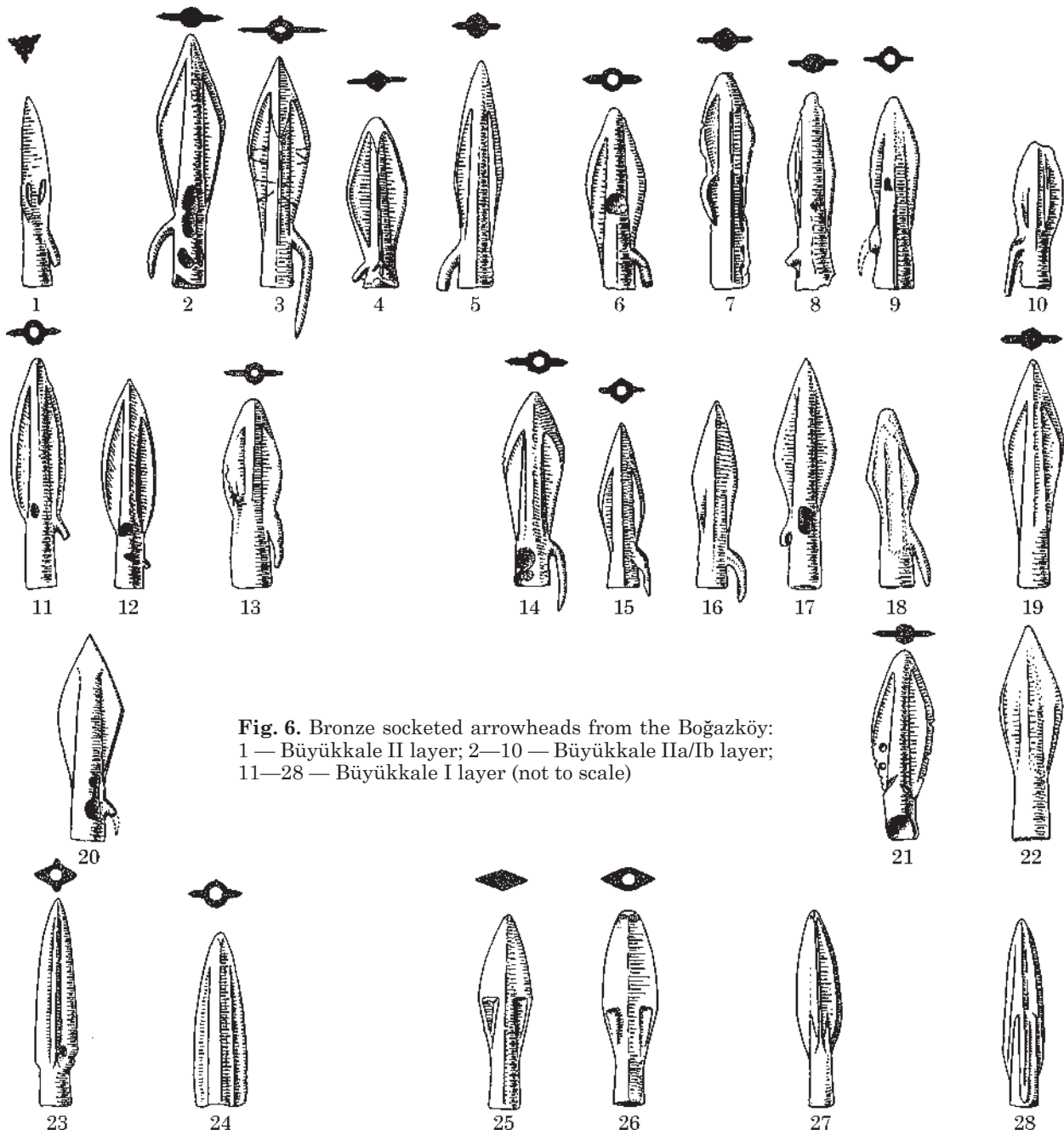


Fig. 6. Bronze socketed arrowheads from the Boğazköy: 1 — Büyükkale II layer; 2—10 — Büyükkale IIa/Ib layer; 11—28 — Büyükkale I layer (not to scale)

sizes varying from 3.4×0.9 cm to 4.8×1.25 cm (fig. 6: 17—19), as well as the two arrowheads with smoothed-rhomboid heads without a barb (fig. 6: 21, 22).

The collection in question also contains three arrowheads with an oval head and a prominent socket with a barb. Their sizes ranging from 3.85×1.2 cm to 4.75×1.15 cm (fig. 6: 11—13).

An item with a combined head was also found. One of its blades has oval and other — rhombic form (fig. 6: 20; 4.2×1.3 cm).

In addition, single barbed exemplars with an asymmetric-rhombic head (4.0×1.2 cm) and a tetrahedral head (3.9×0.95 cm) were found (fig. 6: 14, 16).

Two arrowheads had combined, tetrahedral-biblade heads and prominent sockets without

a barb (fig. 6: 25, 26; 3.95×1.15 cm and 4.0×1.1 cm).

The forms of two biblade arrowheads are extremely rare and do not find analogies in Central Anatolia. One of them has a vaulted head and a flat socket (fig. 6: 24; 3.55×1.1 cm), and another one has a narrow elongated head with a slightly prominent socket (fig. 6: 23; 4.3×0.9 cm).

Two bronze triblade arrowheads were also connected with the Büyükkale I layer. One of them has a narrow, leaf-shaped head and a prominent socket without a barb (fig. 6: 27; 4.0×0.85 cm), and another one has a narrow, vaulted head (fig. 6: 28; 3.9×0.85 cm).

Most of the biblade arrowheads from Boğazköy are not related to specific layers

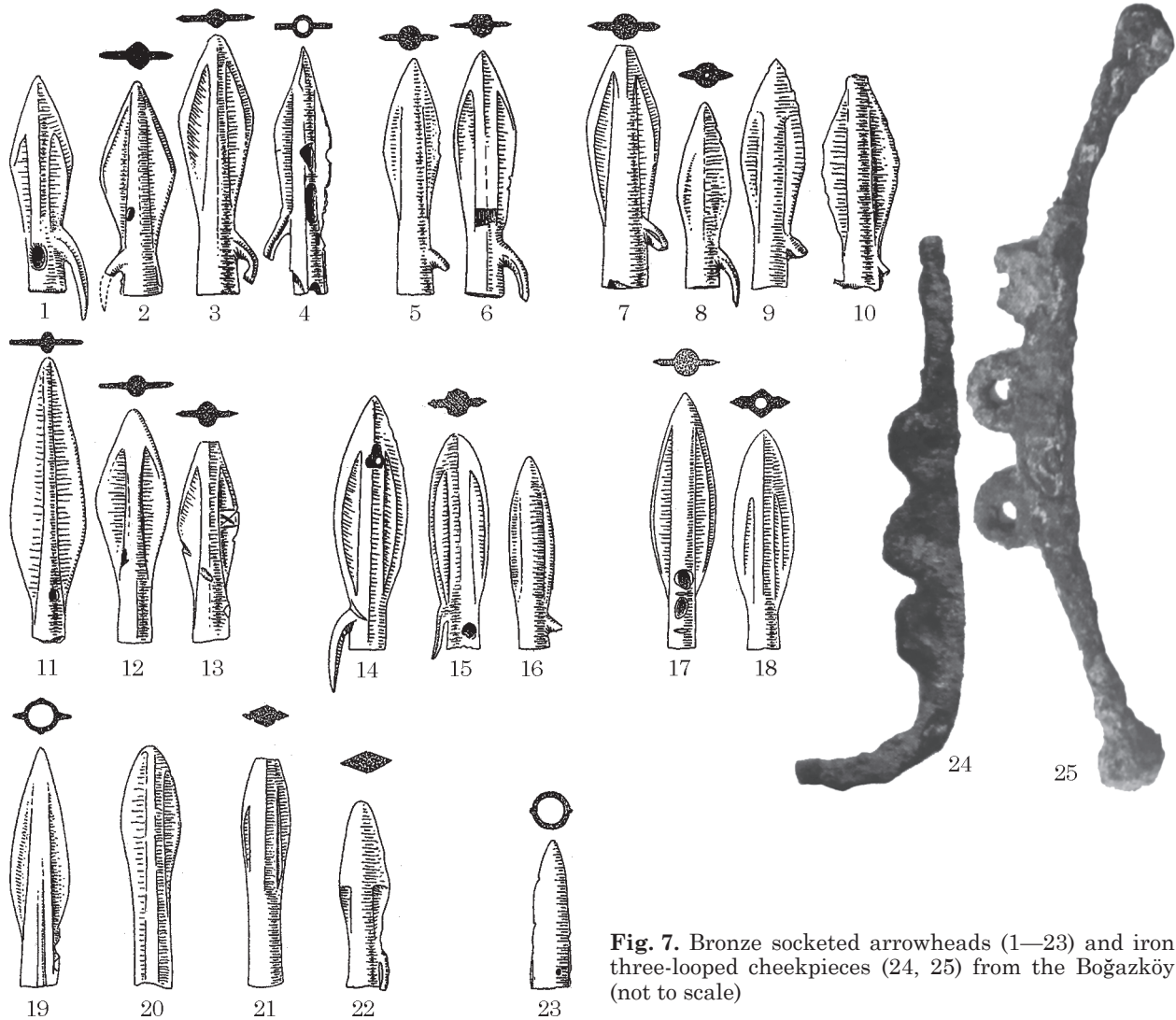


Fig. 7. Bronze socketed arrowheads (1—23) and iron three-looped cheekpieces (24, 25) from the Boğazköy (not to scale)

(22 items, fig. 7: 1—23). They belong mainly to the same types with rhomboid and oval-shaped heads as the ones discussed above (Boehmer 1972).

Besides the above-mentioned arrowheads, two Early Scythian iron three-looped cheekpieces of Г-shaped and arcuated form with bulges at their ends have been found at Boğazköy (fig. 7: 24, 25; Boehmer 1972, S. 162, Taf. LVIII: 1695, 1697). By their origin, they are connected to the North Caucasus and testify to the contacts between this region and the population of Central Anatolia in the 7th — the 6th centuries BC (Эрлих 2013). It is also worth noting that such elements of horse equipment are not known in the eastern regions of Eurasia.

(2) **Kaman Kalehöyük** site is located 3 km east of the Kaman city in the Kırşehir province (fig. 1: 6). About 100 bronze socketed arrowheads of «Scythian» types were found there and they are mainly associated with the late Phrygian layers, horizon IIa (Yukishima 1992; 1998).

Arrowheads are primarily represented by bronze biblade exemplars (at least 80 items).

Among the best preserved finds several types can be distinguished. Arrowheads with oval and rhomboid heads as well as prominent sockets with or without a barb prevail (fig. 8: 1—11, 20—28). Their sizes range from 3.85 × 0.95 cm to 5.15 × 1.45 cm.

Several exemplars with syncretic oval-rhomboid heads have also been found. Similar items were discovered at Boğazköy and in Amasya province (fig. 8: 12—14, 19). Some sites of Central Anatolia (Boğazköy, Kerkenes Dağ, etc.) offer analogues for the arrowheads with a tetrahedral and tetrahedral-biblade head as well as a prominent socket with a barb (fig. 8: 29—30).

At the same time, arrowheads of a rare type are presented at Kaman which analogies not yet unknown in Western Asia. These are barbed specimens with a flat socket and a tetrahedral head (fig. 8: 32, 33). Their dimensions are 4.0 × 1.0 cm and 4.4 × 1.25 cm. These exemplars are probably a local original modification of the bronze arrowheads with a tetrahedral head and a flat socket, which were well known in the eastern regions of Eurasia in the Early

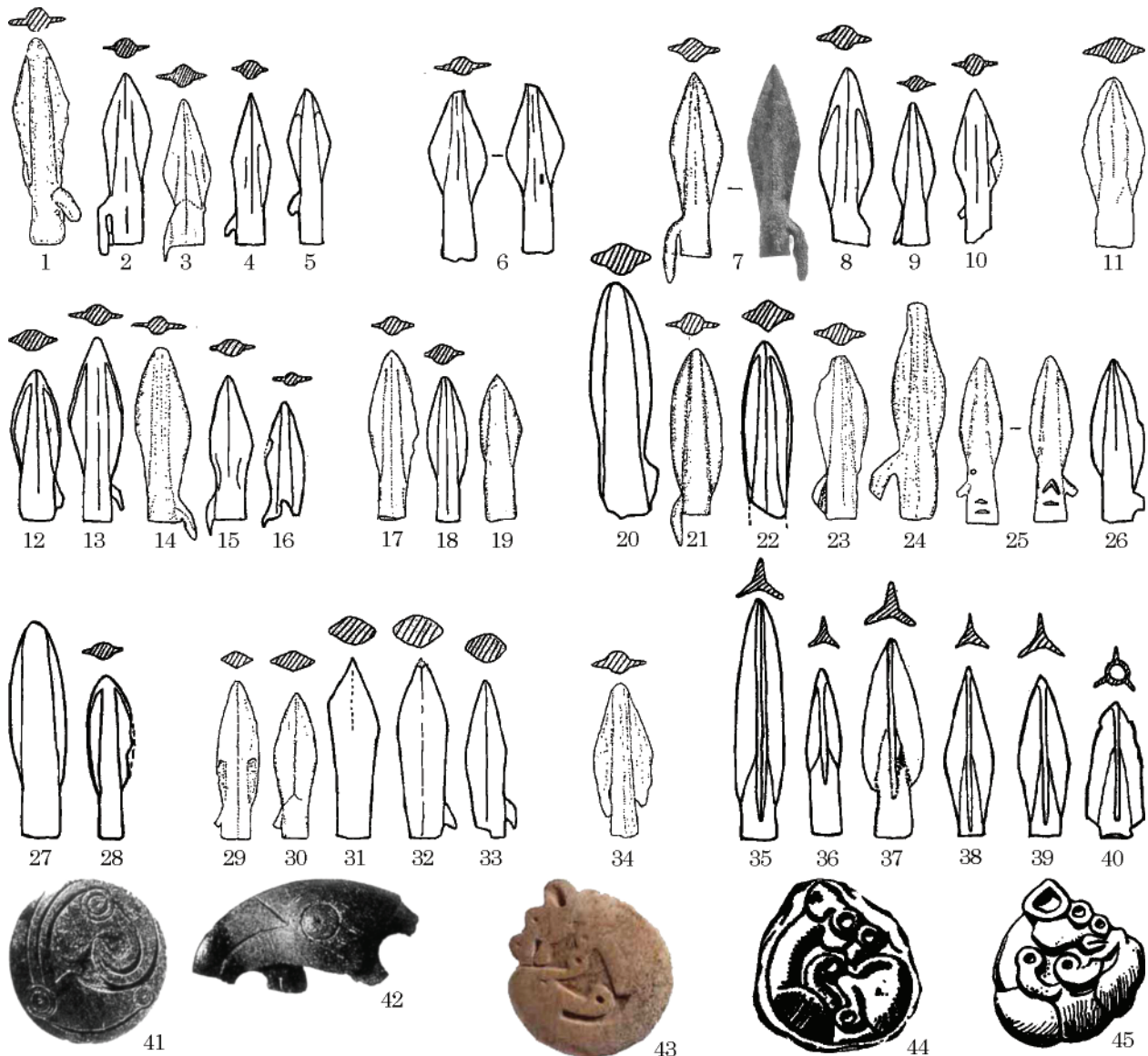


Fig. 8. Artifacts of nomadic type from Central Anatolia and their analogies: 1—42 — Kaman-Kalehöyük; 43 — Büklükale; 44, 45 — Kelermes, kurgan 2/B (not to scale)

Scythian period. Central Anatolian innovation was the addition of a barb.

It is also worth mentioning an arrowhead with a short prominent socket and a tower-like head, which is quite rare in Western Asia (fig. 8: 34; 3.65 × 1.37 cm). It is similar to the finds from the Cimmerian burials of the pre-Scythian time in the Northern Black Sea region (Yukishima 1998, p. 185, fig. 4: 1; 8: 1; Махортых 2000, с. 190). Single arrowheads of the same type were found in the Aral Sea area and in the southern Siberia (Яблонский 1996, рис. 17: 60, 61), where they can be considered a result of contacts with Eastern European nomadic groups. The existence of such contacts is confirmed by the finds from the Gumarovo kurgan (southern Urals), in particular the Novocherkassk type arrowheads, and Eastern European types of bridle accessories found in the Aral Sea area (Uigarak, kurgan 66; Махортых 2005, с. 94—95).

An original group of barbed arrowheads with a sub-rhomboid head and maximum width in its lower part is distinguished among the finds from Kaman Kalehöyük (fig. 8: 3, 4, 15). The sizes of these arrowheads vary from 3.4 × 1.1 cm to 4.0 × 1.0 cm. Similar arrows were found at Boğazköy and Kerkenes Dağ (fig. 6: 15; 9: 11), as well as in the south of Eastern Europe, for example, Napry, kurgan 25, burial 1 (Ильюков, Пашиный 1999). According to the archaeological context, this burial is dated to the first half of the 6th century BC that allows us to attribute the aforementioned group of arrowheads from Kaman Kalehöyük to the same chronological period.

It is necessary to mention two unfinished bilblade arrowheads with an oval head and remains of the funnel that suggests that they were manufactured at Kaman by nomads or for nomads (fig. 8: 24; Yukishima 1998, fig. 5: 2; 9: 10, 11).

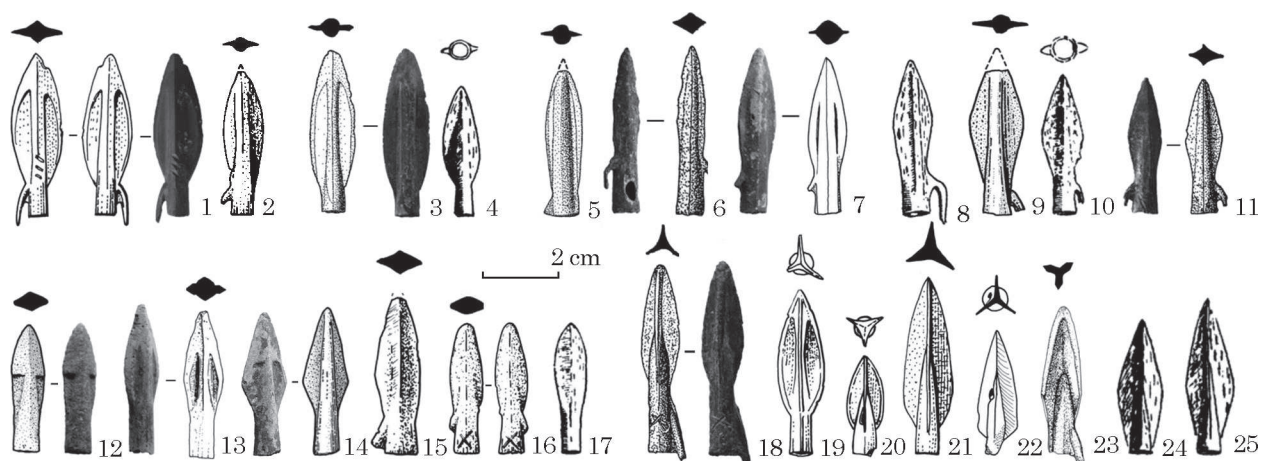


Fig. 9. Bronze socketed arrowheads from Kerkenes Dağ

Triblade arrowheads of different modifications (18 items) are rather numerous at Kaman Kalehöyük. Their sizes vary from 3.4×0.8 cm to 5.0×1.0 cm. Some of them have a long and narrow oval head, as well as a prominent socket without a barb (fig. 8: 35). Such arrowheads are known from Boğazköy (Büyükkale I layer — fig. 6: 28), where they are dated to the second half of the 7th — the 6th centuries BC as well as from Iran (Nush-i Jan), Iraq (Grd-i Tle) and the northwest Caucasus (Lenina hutor, burial 2) (Dezsó 2017, fig. 1: 1). The latter burial is dated to the end of the 7th — the first quarter of the 6th centuries BC (Лимберис, Марченко 2012, рис. 110: 2ж).

It is also worth noting a triblade arrowhead with leaf-shaped head from Kaman Kalehöyük, which probably refers to the same time (fig. 8: 37). Similar exemplars were found at Carchemich and Sardis, where they are connected with the destruction layers of these sites (end of the 7th century BC or around the middle of the 6th century BC) (Waldbaum 1983, pl. 3: 43; Szudy 2015, pl. 38: 19 Carchemish).

Most of other triblade arrowheads from the Kaman Kalehöyük, including items with a rhomboid head (fig. 8: 38, 39) are connected with the arrows of the Achaemenid types (layer 1), which are dated to the 6th — the 5th centuries BC (Yukishima 1992, p. 93, fig. 2: 9, 10).

In addition to the arrowheads, a bronze zoomorphic harness fitting as well as a bone button decorated in the Scythian animal style were found at Kaman Kalehöyük¹ (fig. 8: 41, 42; Takahama 1999, p. 178, fig. 1a; 3a; Махортых 2018, с. 39, рис. 6: 10). Striking similarity be-

tween above-mentioned bone button and a similar object from Sardis, which is associated with the Eurasian nomads (Dusinbere 2010, fig. 2), allow us to assume that an item from Kaman Kalehöyük also is of nomadic origin.

(3) Kerkenes Dağ in the Yozgat province belongs to the most monumental sites of the Early Iron Age in Central Anatolia (fig. 1: 5). It was founded by Phrygians and functioned approximately from the end of 7th to the beginning of the third quarter of the 6th century BC. Kerkenes Dağ is likely to be associated with the ancient city of Pteria mentioned by Herodotus (Summers 2018).

Elements of nomad's material culture found at this site are mainly represented by bronze socketed arrowheads (28 items; Schmidt 1929, fig. 69; Summers 2017).

Biblade arrowheads are prevailed among this category of inventory (19 items — 68%). 11 of these arrowheads have barbs. Nine triblade arrowheads were also found, three of which with a barb. Arrowheads ranged in length from 2.5 to 4.9 cm, although most were from 3.4 to 4.0 cm (Summers 2017, fig. 33.1—33.5).

Biblade arrowheads are presented by several types. The most numerous are exemplars with oval, wide or narrow, heads (8 items; fig. 9: 1—7). Many of them have a slightly prominent socket with a barb, and their length varies from 3.7—3.9 to 4.0—4.3 cm. Bronze socketed biblade arrowheads with an oval head are well-known at such Urartian sites as Ayanis, Bastam, Karmir-Blur. In Asia Minor, they have been found at Boğazköy (Büyükkale layer I) as well as in the Amasya and Sivas provinces (fig. 2: 1—11; 3: 4—16). Close parallels to the arrowheads with oval head and a barb from Kerkenes are also presented in the south of Eastern Europe, for example, in burial 2 of Repyakhovataya Mohyla, which is dated to the first half of the 6th century BC (Ильинская, Мозолевский, Тереножкин 1980, рис. 14: 16).

1. It should be also mentioned a bone harness fitting, decorated with an image of a coiled predator, discovered at the Büklükale, located near Kaman Kalehöyük (fig. 8: 43; Matsumura 2020, fig. 10). The closest parallels to it are known among the zoomorphic images presented in kurgan 2/B Kelermes cemetery in the Kuban region (рис. 8: 44, 45; Махортых 2017, рис. 11: 5, 6).

Among the biblade arrowheads from Kerkenes Dağ, there are also four exemplars with a rhomboid head. They have a barb extends from the socket behind the blades and their lengths vary from 3.2 to 4.3 cm (fig. 9: 8—11).

The aforementioned biblade arrowheads with oval and rhomboid heads belong to the so-called cross-cutting types that were used in the Near East during the most of the 7th century BC, and partly in the first half of the 6th century BC. This is also confirmed by the Kerkenes materials.

Among the examined arrowheads, there are also three items with tetrahedral heads and a prominent socket (fig. 9: 15—17). Their sizes vary from 3.2 to 3.7 cm. Such arrowheads have been mainly found in Central Anatolia (fig. 2: 59—68; 8: 30) (Amasya province, Kaman Kalehöyük, etc.), while in the other regions of the Near East they are practically unknown. This makes it possible to consider these arrowheads as the local features of the Central Anatolian quiver sets in the 7th — 6th centuries BC.

The same interpretation can be also appropriate for the two original biblade arrowheads without barbs, which have the so-called «weighted» heads (fig. 9: 12, 14). The length of these arrowheads is 2.9—3.4 cm. They represent one of the latest varieties of arrowheads of this type, which were distributed in the 7th—6th centuries BC, mainly in Central Anatolia (Amasya province, Boğazköy, Kaman Kalehöyük, etc.). It is worth noting that in the more eastern regions of Western Asia and in the Transcaucasia, such arrows were not found.

Kerkenes triblade arrowheads are quite diverse and represented by several types. Among them there are arrowheads, which are 2.5—4.2 cm long with a laurel-shaped head, short socket without a barb, as well as a exemplar with a barb and long socket, that is about half the length of the entire arrowhead (fig. 9: 18—20). A latter arrowhead finds the closest parallels in the Eastern European burial mounds of the first half of the 6th century BC: Lebedi V, kurgan 11 burial 8; Khapry, kurgan 25 burial 1; Bushujka, kurgan 2 burial 10 (Беспальй, Парусимов 1991, рис. 6: 14; Пьянков, Рябкова, Зеленский 2019, рис. 4: 13—15). This fact testifies to the existence of contacts between the East European nomads and the population of Asia Minor, not only in the 7th century BC, but in the 6th century BC too.

In Kerkenes Dağ, triblade arrowheads with a short socket, rhomboid or laurel-shaped heads with the maximum width in their lower part as well as with or without a barb have been also found (fig. 9: 21—23). Their lengths vary between 3.2—4.6 cm. These arrowheads find analogies in the south of Eastern Europe in the burial mounds of the late 7th — the first half of

the 6th centuries BC (Kelermes, kurgans 1/Sh. and 4/Sh.; Репяховатая Могила, burial 1; Lebedi V, kurgan 11, etc. (Галанина 1995, рис. 3: 36; Дараган 2015, рис. 13: 11; Пьянков, Рябкова, Зеленский 2019, рис. 4: 20, 21).

Arrowheads belonging to the Achaemenid types, which became widespread in the Near East and beyond in the 6th — 5th centuries BC, were also found at Kerkenes Dağ (fig. 9: 24, 25). Such triblade arrowheads have either a flat or a slightly prominent socket and a sub-rhomboid head. Similar specimens were also found at Kaman Kalehöyük (fig. 8: 38, 39).

Narrow chronological limit of the Kerkenes Dağ existence (the late 7th — the first half of the 6th centuries BC) make it possible to define the Scythian types of arrowheads used at that time. It also makes them an important chronological and cultural indicator.

Conclusions. Central Anatolia is one of the regions of Western Asia, where a significant concentration of archaeological materials of the 7th and partly the 6th centuries BC related to the Eurasian nomads is fixed on a rather compact territory. These materials are represented by artifacts coming both from burials (Amasya province, Imirler, Gordion, etc.) and local settlements. The latter, in contrast to the Urartian sites, are usually not connected with destruction layers. Finds of nomadic types from Central Anatolia include weapons (bronze socketed arrowheads of various types, iron sword and axe, bimetallic pickaxe) and horse equipment (bits with stirrup-shaped loops on the ends, three-looped cheekpieces, harness fittings), as well as objects made in the traditions of Scythian animal art style.

Eurasian nomadic assemblages from Anatolia are often syncretic in nature. They including, in one way or another, artifacts of the Cimmerian, Scythian and Central Asian (Saka?) types, as well as the local Near Eastern artifacts.

Being associated with various cultural traditions, both Eastern European and Central Asian, they testify the heterogeneous ethnic composition of the nomadic groups operated here in the 7th—6th centuries BC, and do not allow us to attribute all the materials found in Anatolia to one of these peoples, for example, the Cimmerians.

If we consider the culture as a complex phenomenon, covering a wide range of funeral rituals and material culture, then the question of the content and identity of the cultures of the Cimmerians and Scythians cannot be currently resolved on the materials of the Near East, *first*, because of the lack of quite informative and representative archaeological evidence here; *second*, due to the localization of the main centers of nomadic communities of the 7th—6th centuries BC on territories located to the north of the Main Caucasian Ridge.

ЛІТЕРАТУРА

- Алексеев, А. Ю. 2003. *Хронография европейской Скифии*. Санкт-Петербург: Государственный эрмитаж.
- Балахванцев, А. С. 2014. Биметаллический клевец из Бугуруслана и проблема становления раннескифской культуры. В: Лукьяшко, С. И. (ред.). *Война и военное дело в скифо-сарматском мире*. Ростов-на-Дону: ЮНЦ РАН, с. 39-48.
- Беспалый, Е. И., Парусимов, И. Н. 1991. Комплексы переходного и раннескифского периодов на Нижнем Дону. *Российская археология*, 3, с. 179-195.
- Василиненко, Д. Э., Кондрашев, А. В., Пьянков, А. В. 1993. Археологические материалы предскифского и раннескифского времени из западного Закубанья. В: Раев, Б. А. (ред.). *Понтийско-кавказские исследования*. Краснодар: Скифская галерея, с. 21-38.
- Галанина, Л. К. 1977. *Скифские древности Поднепровья*. Москва: Наука.
- Галанина, Л. К. 1995. Раннескифские стрелковые наборы из Келермесских курганов. *Археологический сборник Государственного Эрмитажа*, 32, с. 40-52.
- Галанина, Л. К. 1997. *Келермесские курганы*. Москва: Палеограф.
- Дараган, М. Н. 2015. Наконечники стрел предскифского и раннескифского времени: технология изготовления, метрология и маркировка. *Труды Государственного Эрмитажа*, LXXVII, с. 127-169.
- Дударев, С. Л. 1998. К вопросу о месте «киммерийских» комплексов из Западной Азии в системе хронологических и культурных связей Причерноморья, Кавказа и восточных районов Евразии. *Вестник древней истории*, 4, с. 77-92.
- Иванчик, А. И. 2001. *Киммерийцы и скифы*. Москва: Палеограф.
- Исмаилов, Р. Б. 1988. Погребение Большого Гумаровского кургана в Южном Приуралье и проблема происхождения скифской культуры. *Археологический сборник Государственного Эрмитажа*, 29, с. 29-47.
- Ильинская, В. А. 1968. *Скифы Днепровского лесостепного Левобережья*. Киев: Наукова думка.
- Ильинская, В. А., Мозолевский, Б. Н., Тереножкин, А. И. 1980. Курганы VI в. до н. э. у с. Матусов. В: Тереножкин, А. И. (ред.). *Скифия и Кавказ*. Киев: Наукова думка, с. 31-64.
- Илюков, Л., Папиньян, К. 1999. *На краю Меотиды*. Ростов-на-Дону: Рим V.
- Ковшпаненко, Г. Т. 1981. *Курганы раннескифского времени в бассейне р. Рось*. Киев: Наукова думка.
- Козенкова, В. И. 2014. Хронология Перкальского могильника в контексте новых материалов скифского облика в Предкавказье. В: *XXVIII Крупновские чтения*. Москва: ИА РАН, с. 160-162.
- Кореняко, В. А., Лукьяшко, С. И. 1982. Новые материалы раннескифского времени на левобережье Нижнего Дона. *Советская археология*, 3, с. 149-164.
- Кузьминых, С. В. 1983. *Металлургия Волго-Камья в раннем железном веке*. Москва: Наука.
- Лимберис, Н. Ю., Марченко, И. И. 2012. *Меотские древности VI—V вв. до н. э.* Краснодар: Кубанский университет.
- Лимберис, Н. Ю., Марченко, И. И. 2014. Новые протогеомеотские комплексы Закубанья. *Археологические вести*, 20, с. 165-182.
- Махортых, С. В. 1991. *Скифы на Северном Кавказе*. Киев: Наукова думка.
- Махортых, С. В. 1998. Киммерийцы и Древний Восток. *Вестник древней истории*, 2, с. 95-104.
- Махортых, С. В. 2000. Об актуальных вопросах раннескифской археологии. В: Гуляев, В. И., Ольховский, В. С. (ред.). *Скифы и сарматы в VII—III вв. до н. э.* Москва: Дикий сад, с. 186-193.
- Махортых, С. В. 2005. Уздечные принадлежности юга Восточной Европы в предскифский период. В: Тишкин, А. А. (ред.). *Снаряжение кочевников Евразии*. Барнаул: Алтайский университет, с. 92-95.
- Махортых, С. В. 2014. Об одной группе раннескифских памятников Днепровского лесостепного Правобережья. *Revista arheologica*, 10 (1—2), с. 69-79.
- Махортых, С. В. 2016. Скифские зеркала эпохи архаики на Северном Кавказе и в лесостепном Поднепровье. В: Байганаев, Б. А. (ред.). *Актуальные проблемы археологии Евразии*. Алматы: Институт археологии, с. 297-323.
- Махортых, С. В. 2017. Пронизи для перекрестных ремней конской упряжи на юге Восточной Европы в VII—VI вв. до н. э. *Археологія і давня історія України*, 2 (23), с. 166-184.
- Махортых, С. В. 2018. Распределители ремней конской упряжи VII—VI вв. до н. э. в Закавказье и Передней Азии. *Археологія і давня історія України*, 2 (27), с. 35-50.
- Мелюкова, А. И. 2006. По поводу скифских походов на территорию Средней Европы. В: Петренко, В. Г. (ред.). *Древности скифской эпохи*. Москва: ИА РАН, с. 25-40.
- Папуашвили, Р. И., Балахванцев, А. С. 2016. Биметаллические кловцы из могильников Колхиды. В: Балахванцев, А. С., Куланда, С. В. (ред.). *Кавказ и степь на рубеже эпохи поздней бронзы и раннего железа*. Москва: ИВ РАН, с. 199-206.
- Петренко, В. Г. 1990. К вопросу о хронологии раннескифских курганов Центрального Предкавказья. В: Мелюкова, А. И. (ред.). *Проблемы скифо-сарматской археологии*. Москва: ИА РАН, с. 60-81.
- Петренко, В. Г. 2006. *Краснознаменский могильник*. Москва: Палеограф.
- Пиотровский, Б. Б. 1959. Город бога Тейшебы. *Советская археология*, 2, с. 169-186.
- Погребова, М. Н., Раевский, Д. С. 1993. *Ранние скифы и древний Восток*. Москва: Наука.
- Пьянков, А. В., Рябкова, Т. В., Зеленский, Ю. В. 2019. Комплекс раннескифского времени кургана 11 могильника Лебеди V в Прикубанье. *Археологические вести*, 25, с. 206-228.
- Ромашко, В. А., Скорый, С. А., Филимонов, Д. Г. 2014. Раннескифское погребение в кургане у села Китайгород в Приорелье. *Российская археология*, 4, с. 107-117.
- Рябкова, Т. В. 2009. Наконечники стрел скифского типа из Тейшебаины. В: Марченко, И. И. (ред.). *Пятая Кубанская археологическая конференция*. Краснодар: Кубанский университет, с. 328-334.
- Рябкова, Т. В. 2014. Курган 524 у с. Жаботин в системе памятников периода скифской архаики. *Российский археологический ежегодник*, 4, с. 236-296.
- Таиров, А. Д. 2010. Биметаллический чекан из Южного Зауралья. *Челябинский гуманитарий*, 4 (13), с. 101-108.
- Чугунов, К. В. 2019. Классификация стрел К. Ф. Смирнова и колчаные наборы раннескифского времени восточной зоны как хронологический индикатор. В: Малышев, А. А. (ред.). *Scythia et Sarmatia*. Москва: ИА РАН, с. 31-46.
- Шрамко, Б. А. 1987. *Бельское городище скифской эпохи (город Гелон)*. Киев: Наукова думка.
- Эрлих, В. Р. 2013. Об одном трехпегельчатом псалли из Богазкея. В: Коваленко, А. Н. (ред.). *Причер-*

номорье в античное и раннесредневековое время. Ростов-на-Дону: ЮФУ, с. 46-49.

Яблонский, Л. Т. 1996. *Саки Южного Приаралья*. Москва: Наука.

Baykal-Seeher, A., Genz, G., Herboldt, S., Seeher, J. 2006. *Ergebnisse der Grabungen an den Ostteichen und am mittleren Büyükkale-Nordwesthang*, Mainz: Philipp von Zabern.

Boehmer, R. M. 1972. *Die Kleinfunde von Boğazköy aus den Grabungskampagnen 1931—1939 und 1952—1969*. Berlin: Mann.

Derin, Z., Muscarella, O. W. 2001. Iron and bronze arrows. In: Çilingiroğlu, A., Salvini, M. (eds.). *Ayanis I: Ten years excavations at Rusahinili Eiduru-kai 1989—1998*. Rome: Istituto per gli studi micenei ed egeo-anatolici, p. 189-217.

DeVries, K. 2005. Greek pottery and Gordion chronology. In: Kealhofer, L. (ed.). *The archaeology of Midas and the Phrygians*. Philadelphia: University of Pennsylvania, p. 36-55.

Dezső, T. 2017. The arrowheads from Grd-i Tle. *Disertationes Archaeologicae*, 3 (5), p. 97-112.

Dusinbere, E. 2010. Ivories from Lydia. In: Cahill, N. (ed.). *The Lydians and their world*. Istanbul: Yapı Kredi Kültür Sanat, p. 191-200.

Hauptmann, H. 1983. Neue Funde eurasischer Steppennomaden in Kleinasien. In: Boehmer, R. M., Hauptmann, H. (eds.). *Beiträge zur Altertumskunde Kleinasien: Festschrift für Kurt Bittel*. Mainz: Philipp von Zabern, S. 251-270.

Hellmuth, A. 2006. *Untersuchungen zu den sogenannten skythischen Pfeilspitzen aus der befestigten Höhensiedlung von Smolenice-Molpir*. Bonn: R. Habelt.

Kohler, E. 1995. *The Gordion Excavations (1950—1973). The Lesser Phrygian tumuli: the inhumations*. Philadelphia: University.

Kossack, G. 1987. Von den Anfängen des skytho-iranischen Tierstils. In: Franke, H. (ed.). *Skythika*. München: BAdW, S. 24-86.

Matsumura, K. 2020. Büklükale kazisi 2018. *Kazi Sonuçları Toplantıları*, 41 (3), p. 35-48.

Müller-Karpe, V. 1995. Ath Göçebelerden Kalma Anadolu'daki Kovanlı Savaş Kazmaları. In: Erkanal, A., Erkanal, H. (eds.). *Memoriam İ. Metin Akyurt Bahattin Devam Anı Kitabı. Eski Yakın Doğu Kültürü Üzerine İncelemeler*. İstanbul: Kanaat Matbaası, p. 227-232.

Ökse, T. 1994. Bronzerne Pfeilspitzen Skythischen Typus aus Sivas. *Arkeoloji ve Sanat*, 64—65, S. 28-32.

Schmidt, E. F. 1929. Test excavations in the city on Kerkenes Dag. *American Journal of Semitic Languages and Literatures*, 45, p. 221-274.

Summers, G. 2017. Iron Age arrowheads from Kerkenes. In: Maner, Ç., Horowitz, M., Gilbert, A. (eds.). *Overturning certainties in Near Eastern archaeology. A festschrift in honor of K. Aslıhan Yener*. Leiden: Brill, p. 645-664.

Summers, G. 2018. Phrygians East of the Red river: phrygianisation, migration and desertion. *Anatolian Studies*, 68, p. 1-20.

Szudy, M. J. 2015. *Archery equipment in the Neo-Assyrian period*. Vienna: Vienna university.

Takahama, S. 1999. Bone ornaments with bird head design excavated from Kaman-Kalehöyük. *Anatolian Archaeological Studies*, 8, p. 175-178.

Ünal, V. 1982. Zwei Gräber eurasischer Reiternomaden im nördlichen Zentralanatolien. *Beiträge zur Allgemeinen und Vergleichenden Archäologie*, 4, S. 65-82.

Waldbaum, J. C. 1983. *Metalwork from Sardis: The finds through 1974*. Cambridge: Harvard University.

Yukishima, K. 1992. Scythian type bronze arrowheads from Kaman-Kalehöyük. *Anatolian Archaeological Studies*, 1, p. 89-100.

Yukishima, K. 1998. Metal arrowheads at Kaman-Kalehöyük. *Anatolian Archaeological Studies*, 7, p. 183-204.

REFERENCES

Alekseev, A. Iu. 2003. *Khronografiia evropeiskoi Skifii*. Sankt-Peterburg: Gosudarstvennyi ermitazh.

Balakhvantsev, A. S. 2014. Bimetallicheskie klevets iz Buzurslana i problema stanovleniia ranneskifskoi kultury. In: Lukiashko, S. I. (ed.). *Voina i voennoe delo v skifo-sarmatskom mire*. Rostov-na-Donu: IuNTs RAN, s. 39-48.

Bespalyi, E. I., Parusimov, I. N. 1991. Kompleksy perekhodnogo i ranneskifskogo periodov na Nizhnem Donu. *Rossiiskaia arkhologiiia*, 3, s. 179-195.

Vasilinenko, D. E., Kondrashev, A. V., Piankov, A. V. 1993. Arkheologicheskie materialy predskifskogo i ranneskifskogo vremeni iz zapadnogo Zakubania. In: Raev, B. A. (ed.). *Pontisko-kavkazskie issledovaniia*. Krasnodar: Skifskaiia galereiia, s. 21-38.

Galanina, L. K. 1977. *Skifskie drevnosti Podneproviiia*. Moskva: Nauka.

Galanina, L. K. 1995. Ranneskifskie strelkovye nabory iz Kelermesskikh kurganov. *Arkheologicheskii sbornik Gosudarstvennogo Ermitazha*, 32, s. 40-52.

Galanina, L. K. 1997. *Kelermesskie kurgany*. Moskva: Paleograf.

Daragan, M. N. 2015. Nakonechniki strel predskifskogo i ranneskifskogo vremeni: tekhnologiiia izgotovleniia, metrologiia i markirovka. *Trudy Gosudarstvennogo Ermitazha*, LXXVII, s. 127-169.

Dudarev, S. L. 1998. K voprosu o meste «kimmeriiskikh» kompleksov iz Zapadnoi Azii v sisteme khronologicheskikh i kulturnykh sviazei Prichernomoria, Kavkaza i vostochnykh raionov Evrazii. *Vestnik drevnei istorii*, 4, s. 77-92.

Ivanchik, A. I. 2001. *Kimmeriitsy i skify*. Moskva: Paleograf.

Ismagilov, R. B. 1988. Pogrebenie Bolshogo Gumarovskogo kurgana v Iuzhnom Priurale i problema proiskhozhdeniia skifskoi kultury. *Arkheologicheskii sbornik Gosudarstvennogo Ermitazha*, 29, s. 29-47.

Ilinskaia, V. A. 1968. *Skify Dneprovskogo lesostepnogo Levoberezhia*. Kiev: Naukova dumka.

Ilinskaia, V. A., Mozolevskii, B. N., Terenozhkin, A. I. 1980. Kurgany VI v. do n. e. u s. Matusov. In: Terenozhkin, A. I. (ed.). *Skifiiia i Kavkaz*. Kiev: Naukova dumka, s. 31-64.

Iliukov, L., Pashinian, K. 1999. *Na kraiu Meotidy*. Rostov-na-Donu: Rim V.

Kovpanenko, G. T. 1981. *Kurgany ranneskifskogo vremeni v basseine r. Ros*. Kiev: Naukova dumka.

Kozenkova, V. I. 2014. Khronologiiia Perkalskogo mogilnika v kontekste novykh materialov skifskogo oblika v Predkavkaze. In: *XXVIII Krupnovskie chteniia*. Moskva: IA RAN, s. 160-162.

Koreniako, V. A., Lukiashko, S. I. 1982. Novye materialy ranneskifskogo vremeni na levoberezhie Nizhnego Dona. *Sovetskaia arkhologiiia*, 3, s. 149-164.

Kuzminykh, S. V. 1983. *Metallurgiiia Volgo-Kamia v ranem zheleznom veke*. Moskva: Nauka.

Limberis, N. Iu., Marchenko, I. I. 2012. *Meotskie drevnosti VI—V vv. do n. e. Krasnodar: Kubanskii universitet*.

Limberis, N. Iu., Marchenko, I. I. 2014. Novye protomeotskie komplekсы Zakubania. *Arkheologicheskie vesti*, 20, s. 165-182.

Makhortykh, S. V. 1991. *Skify na Severnom Kavkaze*. Kiev: Naukova dumka.

Makhortykh, S. V. 1998. Kimmeriitsy i Drevnii Vostok. *Vestnik drevnei istorii*, 2, s. 95-104.

Makhortykh, S. V. 2000. Ob aktualnykh voprosakh ranneskifskoi arkhologii. In: Guliaev, V. I., Olkhovskii, V. S. (ed.). *Skify i sarmaty v VII—III vv. do n. e.* Moskva: Dikii sad, s. 186-193.

Makhortykh, S. V. 2005. Uzdechnye prinadlezhnosti iuga Vostochnoi Evropy v predskifskii period. In: Tishkin, A. A.

- (ed.). *Snariazhenie kochevnikov Evrazii*. Barnaul: Altaiskii universitet, s. 92-95.
- Makhortkykh, S. V. 2014. Ob odnoi gruppe ranneskifskikh pamiatnikov Dneprovskogo lesostepnogo Pravoberezhia. *Revista arheologica*, 10 (1—2), s. 69-79.
- Makhortkykh, S. V. 2016. Skifskie zerkala epokhi arkhaiki na Severnom Kavkaze i v lesostepnom Podneprove. In: Baitanaev, B. A. (ed.). *Aktualnye problemy arheologii Evrazii*. Almaty: Institut arheologii, s. 297-323.
- Makhortkykh, S. V. 2017. Pronizi dlia perekrestnykh remnei konskoi upriazhi na iuge Vostochnoi Evropy v VII—VI vv. do n. e. *Arkheolohiia i davnia istoriia Ukrainy*, 2 (23), s. 166-184.
- Makhortkykh, S. V. 2018. Raspredeliteli remnei konskoi upriazhi VII—VI vv. do n. e. v Zakavkaze i Perednei Azii. *Arkheolohiia i davnia istoriia Ukrainy*, 2 (27), s. 35-50.
- Meliukova, A. I. 2006. Po povodu skifskikh pokhodov na territoriiu Srednei Evropy. In: Petrenko, V. G. (ed.). *Drevnosti skifskoi epokhi*. Moskva: IA RAN, s. 25-40.
- Papushvili, R. I., Balakhvantsev, A. S. 2016. Bimetallicheskie klevtsy iz mogilnikov Kolkhidy. In: Balakhvantsev, A. S., Kulanda, S. V. (ed.). *Kavkaz i step na rubezhe epokhi pozdnei bronzy i rannego zheleza*. Moskva: IV RAN, s. 199-206.
- Petrenko, V. G. 1990. K voprosu o khronologii ranneskifskikh kurganov Tsentralnogo Predkavkazia. In: Meliukova, A. I. (ed.). *Problemy skifo-sarmatskoi arheologii*. Moskva: IA RAN, s. 60-81.
- Petrenko, V. G. 2006. *Krasnoznamenskii mogilnik*. Moskva: Paleograf.
- Piotrovskii, B. B. 1959. Gorod boga Teisheby. *Sovetskaia arheologiia*, 2, s. 169-186.
- Pogrebova, M. N., Raevskii, D. S. 1993. *Rannie skify i drevnii Vostok*. Moskva: Nauka.
- Piankov, A. V., Riabkova, T. V., Zelenskii, Iu. V. 2019. Kompleks ranneskifskogo vremeni kurgana 11 mogilnika Lebedi V v Prikubane. *Arkheologicheskie vesti*, 25, s. 206-228.
- Romashko, V. A., Skoryi, S. A., Filimonov, D. G. 2014. Ranneskifskoe pogrebenie v kurgane u sela Kitaigorod v Priorele. *Rossiiskaia arheologiia*, 4, s. 107-117.
- Riabkova, T. V. 2009. Nakonechniki strel skifskogo tipa iz Teishebaini. In: Marchenko, I. I. (ed.). *Piataia Kubanskaia arheologicheskaia konferentsiia*. Krasnodar: Kubanskii universitet, s. 328-334.
- Riabkova, T. V. 2014. Kurgan 524 u s. Zhabotin v sisteme pamiatnikov perioda skifskoi arkhaiki. *Rossiiskii arheologicheskii ezhegodnik*, 4, s. 236-296.
- Tairov, A. D. 2010. Bimetallicheskie chekan iz Iuzhnogo Zauralia. *Cheliabinskii gumanitarii*, 4 (13), s. 101-108.
- Chugunov, K. V. 2019. Klassifikatsiia strel K.F. Smirnova i kolchannye nabory ranneskifskogo vremeni vostochnoi zony kak khronologicheskii indikator. In: Malyshev, A. A. (ed.). *Scythia et Sarmatia*. Moskva: IA RAN, s. 31-46.
- Shramko, B. A. 1987. *Belskoe gorodishche skifskoi epokhi (gorod Gelon)*. Kiev: Naukova dumka.
- Erlikh, V. R. 2013. Ob odnom trekhpetelchatom psalii iz Bogazkeia. In: Kovalenko, A. N. (ed.). *Prichernomorie v antichnoe i rannesrednevekovoe vremia*. Rostov-na-Donu: IuFU, s. 46-49.
- Iablonskii, L. T. 1996. *Saki Iuzhnogo Priaralia*. Moskva: Nauka.
- Baykal-Seeher, A., Genz, G., Herboldt, S., Seeher, J. 2006. *Ergebnisse der Grabungen an den Ostteichen undam mittleren Büyükkale-Nordwesthang*. Mainz: Philipp von Zabern.
- Boehmer, R. M. 1972. *Die Kleinfunde von Boğazköy aus den Grabungskampagnen 1931—1939 und 1952—1969*. Berlin: Mann.
- Derin, Z., Muscarella, O. W. 2001. Iron and bronze arrows. In: Çilingiroğlu, A., Salvini, M. (eds.). *Ayanis I: Ten years excavations at Rusahinili Eiduru-kai 1989—1998*. Rome: Istituto per gli studi micenei ed egeo-anatolici, p. 189-217.
- DeVries, K. 2005. Greek pottery and Gordion chronology. In: Kealhofer, L. (ed.). *The archaeology of Midas and the Phrygians*. Philadelphia: University of Pennsylvania, p. 36-55.
- Dezső, T. 2017. The arrowheads from Grd-i Tle. *Dissertationes Archaeologicae*, 3 (5), p. 97-112.
- Dusinbere, E. 2010. Ivories from Lydia. In: Cahill, N. (ed.). *The Lydians and their world*. Istanbul: Yapı Kredi Kültür Sanat, p. 191-200.
- Hauptmann, H. 1983. Neue Funde eurasischer Steppennomaden in Kleinasien. In: Boehmer, R. M., Hauptmann, H. (eds.). *Beiträge zur Altertumskunde Kleinasiens: Festschrift für Kurt Bittel*. Mainz: Philipp von Zabern, S. 251-270.
- Hellmuth, A. 2006. *Untersuchungen zu den sogenannten skythischen Pfeilspitzen aus der befestigten Höhensiedlung von Smolence-Molpir*. Bonn: R. Habelt.
- Kohler, E. 1995. *The Gordion Excavations (1950—1973). The Lesser Phrygian tumuli: the inhumations*. Philadelphia: University.
- Kossack, G. 1987. Von den Anfängen des skytho-iranischen Tierstils. In: Franke, H. (ed.). *Skythika*. München: BADW, S. 24-86.
- Matsumura, K. 2020. Bükülükale kazisi 2018. *Kazi Sonuçları Toplantıları*, 41 (3), p. 35-48.
- Müller-Karpe, V. 1995. Ath Göçebelerden Kalma Anadolu'daki Kovanlı Savaş Kazmaları. In: Erkanal, A., Erkanal, H. (eds.). *Memoriam İ. Metin Akyurt Bahattin Devam Anı Kitabı. Eski Yakın Doğu Kültürü Üzerine İncelemeler*. İstanbul: Kanaat Matbaası, p. 227-232.
- Ökse, T. 1994. Bronzerne Pfeilspitzen Scythischen Typus aus Sivas. *Arkeoloji ve Sanat*, 64—65, S. 28-32.
- Schmidt, E. F. 1929. Test excavations in the city on Kerkenes Dag. *American Journal of Semitic Languages and Literatures*, 45, p. 221-274.
- Summers, G. 2017. Iron Age arrowheads from Kerkenes. In: Maner, Ç., Horowitz, M., Gilbert, A. (eds.). *Overtuning certainties in Near Eastern archaeology. A festschrift in honor of K. Ashhan Yener*. Leiden: Brill, p. 645-664.
- Summers, G. 2018. Phrygians East of the Red river: phrygianisation, migration and desertion. *Anatolian Studies*, 68, p. 1-20.
- Szudy, M. J. 2015. *Archery equipment in the Neo-Assyrian period*. Vienna: Vienna university.
- Takahama, S. 1999. Bone ornaments with bird head design excavated from Kaman-Kalehöyük. *Anatolian Archaeological Studies*, 8, p. 175-178.
- Ünal, V. 1982. Zwei Gräber eurasischer Reiternomaden im nördlichen Zentralanatolien. *Beiträge zur Allgemeinen und Vergleichenden Archäologie*, 4, S. 65-82.
- Waldbaum, J. C. 1983. *Metalwork from Sardis: The finds through 1974*. Cambridge: Harvard University.
- Yukishima, K. 1992. Scythian type bronze arrowheads from Kaman-Kalehöyük. *Anatolian Archaeological Studies*, 1, p. 89-100.
- Yukishima, K. 1998. Metal arrowheads at Kaman-Kalehöyük. *Anatolian Archaeological Studies*, 7, p. 183-204.

S. V. Makhortkykh

«CIMMERO-SCYTHIAN» ANTIQUITIES FROM CENTRAL ANATOLIA

Central Anatolia is one of the regions of Western Asia, where the most significant concentration of archaeological materials connected with the Eurasian nomads of the Early Scythian period is recorded. The flat plains of Central Anatolia had good pastures and served as a space where different cultures communicated with each other since ancient times. In the 7th—6th centuries BC this territory was located between Western Anatolia with Lydia and the eastern Greek centers and Eastern Anatolia, which was the zone of interest of Urartu and Assyria. Small local «principalities» were localized here. These «principalities» were probably controlled by well-armed and mobile nomads, who used this territory as a base for raids on neighboring as well as more distant regions. Finds of nomadic types from Central Anatolia include weapons (bronze arrowheads of various types, iron sword and axe, bi-

metallic pickaxe), horse equipment (bits with stirrup-shaped loops on the ends, three-looped cheekpieces, harness fittings), and objects made in the traditions of Scythian animal art style. Most numerous category of nomad inventory coming from the region is constituted by socketed arrows found in burials in the province of Amasya, Imirler, Gordion and on the local settlements (Boğazköy, Kaman-Kalehöyük, Kerkenes Dağ). The article introduces their typology and provides analogies coming from the Eurasian monuments of the 7th—6th centuries BC. The study of early nomadic complexes from Anatolia shows their syncretic nature, which is influenced by artifacts of Cimmerian, Scythian, and Central Asian origin as well as the local Near Eastern items. It highlights the complex ethnic composition of the nomadic groups located here in the 7th—6th centuries BC that does not allow attributing all these materials to a single group, for example, the Cimmerians.

Keywords: Central Anatolia, Cimmerians, Scythians, 7th—6th centuries BC, bronze socketed arrowheads.

C. B. Makhortikh

«КІММЕРО-СКІФСЬКІ» СТАРОЖИТНОСТІ З ЦЕНТРАЛЬНОЇ АНАТОЛІЇ

Центральна Анатолія є однією з областей Передньої Азії, де фіксується найбільш значна концентрація археологічних матеріалів, пов'язаних з перебуванням тут євразійських кочівників ранньоскіфського часу. Рівнини Центральної Анатолії мали хороші пасовища і здавна були зручні для комунікацій. У VII ст. до н. е. ця область займала проміжне положення між Західною Анатолією з Лідією і східногребцькими центрами, а також Східною Анатолією, яка входила в зону інтересів Урарту та Ассирії. На цій території локалізувалися невеликі місцеві, фригійські або неохетські «князівства». Вони, ймовірно,

контролювалися добре озброєними і мобільними загонами кочовиків, які використовували цю територію в якості своєї бази для набігів на сусідні і віддалені регіони. Матеріали ранніх кочовиків представлені в Центральної Анатолії предметами озброєння і кінського спорядження, а також виробами, виконаними в скіфо-східноєвропейському звіриному стилі. Важливою і найчисленнішою категорією кочового інвентарного комплексу є бронзові втульчасті наконечники стріл, знайдені в похованнях провінції Амасья, Сиваз, Імірлере, Гордіони, а також на місцевих поселеннях регіону (Богазкей, Каман Кале Хоюк, Керкенес Даг). У статті запропонована їх типологія і наведені аналогії в євразійських пам'ятках VII—VI ст. до н. е. Вивчення кочових комплексів з Анатолії показує, що вони мають синкретичний характер, включаючи вироби кіммерійського, скіфського, центральноазійського типів, а також місцеві давньосхідні артефакти. Будучи зв'язаними з різними культурними традиціями, ці комплекси свідчать про неоднорідний етнічний склад кочівницьких угруповань, що локалізувалися в Малій Азії у VII—VI ст. до н. е. Вони також не дозволяють приписувати виявлені тут матеріали якомусь одному з цих народів, наприклад, кіммерійцям, в реальності існування якого сьогодні вже ніхто не сумнівається.

Ключові слова: Центральна Анатолія, кіммерійці, скіфи, VII—VI ст. до н. е., втульчасті наконечники стріл.

Одержано 04.05.2021

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