

THE GALAYERI SETTLEMENT: LATE CHALCOLITHIC TRADITIONS OF EASTERN ANATOLIA AND THE CAUCASUS

KALAYERI YAŞAM YERİ: DOĞU ANADOLU-KAFKASYA SON KALKOLİTİK GENELEKLERİ

Makale Bilgisi

Başvuru: 7 Şubat 2019

Hakem Değerlendirmesi: 28 Şubat 2019

Kabul: 22 Kasım 2019

Article Info

Received: February 7, 2019

Peer Review: February 28, 2019

Accepted: November 22, 2019

DOI : 10.22520/tubaar.2019.25.004

Najaf MUSEİBLİ *

Keywords: Eastern Anatolia, Caucasus, Leilatepe Culture, Late Chalcolithic, Burials, Ceramics, Metal.

Anahtar Kelimeler: Doğu Anadolu, Kafkasya, Leilatepe Kültürü, Son Kalkolitik, Mezar, Keramik, Metal.

ABSTRACT

The article summarizes the results of the excavations in the Galayeri settlement of Leilatepe culture, which is located in Gabala district of the Azerbaijan Republic. The roots of this culture are connected with the late Chalcolithic Eastern Anatolian traditions. Excavations were completed in 400 sq/ m area in Galayeri. The thickness of the cultural layer at the excavation site was 3m. The constructions were made of non-standard clay layers. Semi-dugouts, dug into the subsoil, have been revealed there. One of the semi-dugouts probably served as a sanctuary. More than 20 child burials in ceramic vessels and one catacomb with the child burial have been revealed. The pottery is divided into 4 groups according to the composition of the clay. Most of all, vessels of the first group, made of plant tempered clay and thrown on a potter's wheel, have been found. Stone products are represented by grain grinders, pestles, graters, as well as numerous obsidian and flint tools. Bone tools are few and consist of spindle whorls and awls. The metalworking items - molds for axes and ingots are of interest.

* Doctor of Historical Sciences, professor, Deputy Director at the Institute of Archaeology and Ethnography of the National Academy of Sciences of Azerbaijan. E-mail: necef_museibli@mail.ru. ORCID: <https://orcid.org/0000-0002-4228-6364>

ÖZET

Makale, Azerbaycan Cumhuriyeti'nin Kabala bölgesi topraklarında bulunan Leylatepe kültürü Kalayeri'nin kazılarının sonuçlarını özetlemektedir. Bu kültürün kökleri, geç kalkolitik dönemdeki Doğu Anadolu gelenekleri ile bağlantılıdır. Kalayeri'de kazılar 400 m² arsa üzerinde tamamlandı. Kazı alanındaki kültürel katmanın kalınlığı 3 m idi. Binalar standart olmayan kil katmanlarından yapılmıştır. Anakara gömülü yarı sığınaklar keşfedildi. Yarı sığınaklardan biri muhtemelen bir mebet olarak hizmet vermiştir. 20'den fazla keramik kaplarda çocuk gömülü küp mezar ve bir çocuk gömülü katakomb bulundu. Kilin bileşimine göre, keramikler 4 grupta bulunmaktadır. Birinci grup kaplarının çoğu, bitki katkılı kilden yapılmış ve çömlekçi çarkında kalıplanmış halde bulunur. Taş ürünler tahıl rendesi, havaneli, vapur, yanı sıra obsidien ve çakmaktaşı çeşitli araçları ile temsil edilmektedir. Kemik aletler az sayıdadır, iğ ve bızlardan oluşur. Metal işleme ürünleri olarak ingot (külçe) ve balta kalıpları ilgi çekicidir.

INTRODUCTION

During the last two decades, archaeological researches of farming culture monuments relating to the 6th-4th millennia B.C have been expanded. During this period dozens of monuments relating to these millennia have been discovered in the territory of the Republic of Azerbaijan. Most of them belong to late Chalcolithic Leilatepe culture, which, with some exceptions, was studied only in Azerbaijan. The Leilatepe culture related to the 1st half of the 4th millennium was discovered in the early 80s of the last century during the excavations of the same settlement in the Karabakh region of Azerbaijan.¹ Due to the investigations in the recent fifteen years, all features of the Leilatepe culture as an archaeological culture and its place in the Near Eastern-Caucasus Chalcolithic have been determined. Beyuk Kesik, Poylu, Galayeri and other settlements and Soyuqbulaq kurgans related to this culture were found and excavated in Azerbaijan. At the same time, it has been established that the Maikop culture in the North Caucasus, which is the northernmost point of migrations from the Near East to the Caucasus, had emerged basing on traditions of the Leilatepe culture² (Fig. 1).

Leilatepe culture had emerged in the South Caucasus as a result of merging of the late Chalcolithic cultural traditions of Eastern Anatolia and Northern Mesopotamia. Settlements of this culture are located in groups. Sometimes the distance between them is only a few hundred meters.

According to the area of distribution, these monuments in the territory of Azerbaijan form the Karabakh, Ganja-Gazakh and Mugan groups³.

The source of the Leilatepe culture is the late Chalcolithic monuments in Eastern Anatolia and North Mesopotamia. Depending on their relation to these sources, Leilatepe culture can be divided into local versions on Karabakh, Ganja-Gazakh and Mugan regions. In some of these monuments Eastern Anatolian (upper Euphrates basin) and Northern Mesopotamian (Upper Tigris basin) traditions dominate. In some monuments of the Leilatepe culture, cultural influences of both regions are observed.

Galayeri settlement in Gabala district - in the north of Azerbaijan, belonging to the Leilatepe culture is closely associated with cultural traditions (buildings, graves, ceramics) of Eastern Anatolia (Arslan Tepe VII, Amuk F, etc.).



Figure 1: Location of the Leilatepe Culture Monuments / *Leilatepe Kültürü anıtlarının Yerleşim Alanları*.

GENERAL CHARACTERISTICS OF THE GALAYERI SETTLEMENT

The Galayeri settlement of the Leilatepe culture was discovered in 2011, at the foot of the Greater Caucasus Mountains, in the northern part of Azerbaijan, during the earth works at the international airport in the area of the Gabala district.

The monument is located on plain area, at 342 m above sea level.

Its primary area was about 3 hectares. The settlement rises to a height of 3 m in the form of a hill above the present level. In the medieval ages, the hill was used as a Muslim cemetery; therefore in many places the cultural layer was destroyed to a 1-1.2 m depth.

Since 2012, large-scale archaeological excavations led by the author have been carried out in this monument. On the area of 400 sq/ m, excavations have already been carried out to the subsoil, which enables us to draw certain generalizations and preliminary conclusions. The maximum thickness of the cultural layer of the settlement at the excavation site was 3 m. (Fig. 2a).

Constructions in Galayeri settlement were built of 30-40 cm to 1.2 m long, 7-8 cm thick clay layers. They are of chestnut color, without any inclusions, and there is a 2,5-3 cm thick ash-colored fixing solution between the layers. (Fig.2b). Remains of a rectangular plan construction have been revealed. Structures of standard raw bricks have not found here yet. Close analogues of the clay layer architecture of the Galayeri settlement are known from Arslantepe VII (temple "C")⁴.

¹ Narimanov 1985

² Museibli 2005; Museibli 2007; Museibli 2015

³ Museibli 2012: 141

⁴ Frangipane 2009



Figure 2a: Excavation Site; 2b: Side View of the Wall / Kalayeri. 1 – Kazı alanı; 2 – duvar yan görünüm

In the site, where the excavations have already completed, storage pits and semi-dugouts were found in the subsoil. Since there are no remnants of constructions directly in the above-subsoil level, it is no exception that at the initial stage of the settlement people lived here in semi-dugouts as well.

One, the largest of the semi-dugouts, attracts attention with its structure. In the subsoil, at 1 m depth an oval semi-dugout with dimensions of 3.4-2.4 m was dug. In the eastern part of the pit bottom, another, but a small (1.9-1.45 m) pit, with a depth of 30 cm was dug. Presumably, in this part, in the eastern side, there was the entrance to the semi-dugout. Fragments of ceramic vessels, stone and bone tools and numerous animal bones were found in the filling of the semi-dugout. It is interesting that among the ceramic inventory there is a tubular beak from the lamp, which was first found in this monument and a candlestick saucer. The internal surface of the beak is covered with a thick layer of soot, which indicates to a long time use of the lamp. It is not exception that this semi-dugout was the sanctuary for the inhabitants of Galayeri.

CHILD BURIALS

More than 20 child graves were found at different depths of the excavation site. The burials were realized in ceramic vessels (Fig. 3). In two cases, the child corpses laid on the ground were covered with fragments of big pitchers.

The north-western-eastern alignment of burial traditions in the Leilatepe, Beyuk Kesik and Poylu settlements and Soyugbulag kurgans remains stable, unchanged. This custom was related to Northern Mesopotamian, especially to the Upper Tigris Basin (Tepe Gawra) tradition. And in Galayeri, burials were carried out in various alignments, as in Eastern Anatolia – in Arslantepe (Upper Euphrates basin). It should also be noted here that the necks of all burial jars (4 burials), dug into the subsoil are in the eastern alignment.

At square 3F of the excavation site in the Galayeri settlement, at a depth of 2.7 m, a catacomb was discovered dug in the subsoil, directly under the cultural layer. The entrance of the catacomb is of a rectangular form (1.1 x 1.2 m). The depth of the catacomb itself was 1.1 m, the length - 1.7 m, the width of the burial chamber - 70–75 cm, and the length - 1.3 m. The catacomb was dug in the



Figure 3a-b: Child Jar Burials / Çocuk gömülü küp mezarlar

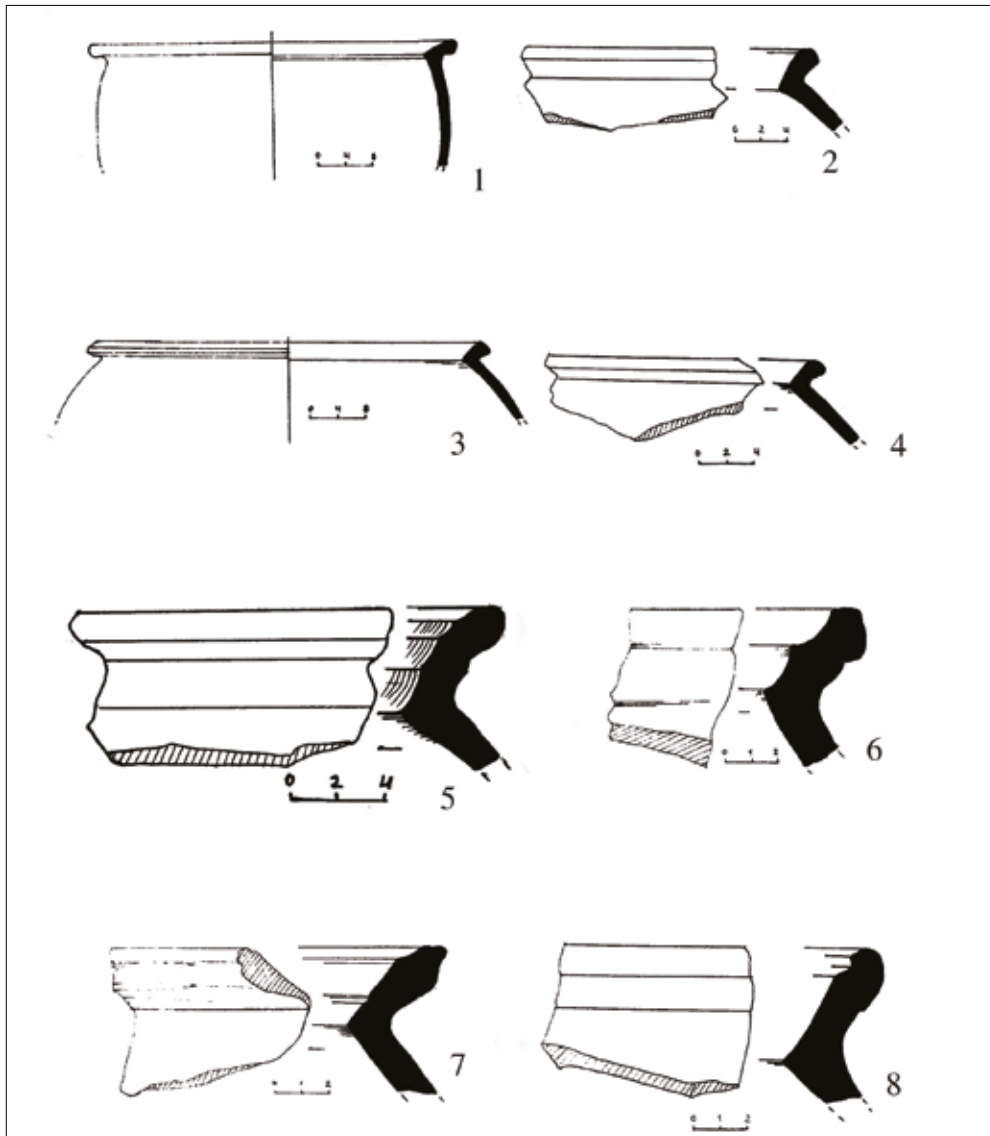


Figure 4: Pottery Vessels Failing to the First Group / *Birinci grup keramik kaplar*

north-south alignment. A child, about 4-5 years old, was buried in the grave chamber, on his right side, in a highly crouched position, with his head facing to the east. Under the pressure of the soil, the skeleton had been crushed into small fragments. The skeleton was surrounded by pieces of black solid mass. No archaeological goods were found near the skeleton and in the filling of the grave pit.

It is noteworthy that in the southwest of the same excavation square in the subsoil, a vertically set large pitcher - pithos with an infant burial was found. This jar burial No. 19 at Galayeri settlement was placed in the subsoil to the level of the rim. There was a 40-50 cm high dome-shaped space above the jar. This jar burial must have also been located in the catacomb. However, the upper part and the inlet of the catacomb were not preserved in the loose cultural layer.

The catacomb, discovered in Galayeri, has no parallels in the Neolithic and Chalcolithic monuments of the Caucasus. This type of burial is not typical for the cultures of the Caucasus, including the Leilatepe culture for the mentioned periods.

A few catacomb burials are known from the Northern Mesopotamian settlements of Yarimtepe I and II. The researchers of these monuments, attributing these burials to the Khalaf culture and dating them back to the 5th millennium B.C, point out quite rightly that the polycentrism of the occurrence of catacomb-type burial constructions on the wide territory of Eurasia is undoubted. Emergence of the catacombs separately can be assumed in various cultures of the Near and Middle East.⁵

⁵ Merpert / Munchayev 1982: 31, 46-48

ARCHAEOLOGICAL GOODS OF THE GALAYERI SETTLEMENT

The main archaeological material is represented by numerous ceramic wares. According to clay composition and the technique of production, ceramic vessels can be divided into four groups.

Vessels of the first group are made of clay with vegetable inclusion. Typologically, these are jars/ pithos of different sizes (Fig. 4; Fig. 5. 1-3), bowls (Fig. 6. 1-4), etc. Ceramics of the second group are bowls (Fig. 5. 4; Fig. 6. 5-7) and small-sized narrow-necked jugs (Fig. 6. 8-10) made of pure clay. These two types of vessels have been revealed in Galayeri more than on all the other monuments of the Leilatepe culture taken together. The vessels of the first two groups are conventionally included in the category of “high-quality ceramics”. They were thrown in the potter’s wheel and are of red, orange, ocher, pink, light yellow colors. The vessels of the first and second groups are round-bottomed. A few small narrow-necked vessels with flat bottom are exceptions.



Figure 5: Pottery Vessels Failing to the First and Second Groups / *Birinci ve ikinci grup keramik kaplar*

Jugs, the inner part of the rims of which decorated with canal-shaped lines (Fig. 4. 5-8) are often encountered, which is typical for the late Chalcolithic Eastern Anatolia and Northern Mesopotamia, from the phase of Arslantepe VII⁶, Amug F⁷,

⁶ Trufelli 1997

⁷ Braidwood / Braidwood 1960

Oylum Hoyuk 3⁸, Tell Hamoukar 4-5B⁹, etc. These types of vessels are not found in Maikop culture.

Vessels of this category with signs on the surface have been revealed there (Fig. 7). Such eye-shaped marks (fingertips) were applied on the vessels by nail before baking. Sometimes such eye-shaped concaves were accompanied by straight lines (Fig 7.4). The most numerous ceramic items with marks from all the Leilatepe culture monuments taken together were found in the Galayeri site. They are more than 100 here. The polytypic marks of Galayeri differ by their diversity. These signs are similar to those on vessels from Arslantepe VII, Amug F¹⁰, Tell Barak¹¹, Hammam at Turkman¹² and other settlements of Eastern Anatolia and Northern Mesopotamia and the Maikop monuments of the North Caucasus¹³.

During the excavations, were also revealed elements of the restoration of this category of vessels. Interstices inside and outside of the vessels were smeared with bitumen. On the fragments of the restored vessels remains of bitumen have been preserved.

The third group includes vessels made of clay tempered with vegetable and inorganic inclusion at the same time. They are thrown in the potter’s wheel and made by hand. By typology and color, they are basically identical with the vessels of the first group, but, unlike them, they are coarser. In this group covers from the vessels (Fig. 8.1-2), bowls of the “Coba bowls” type (Fig. 8. 3), vases and stands (Fig. 8.4) that are not found in a series of other groups have been revealed. Except for Galayeri, from all monuments of the Leilatepe culture vases and covers are known only from the settlement of Beyuk Kesik, where they are represented by just a few samples.

Among the ceramic production, pottery currycombs also should be mentioned (Fig 8.5). These tools are made of vegetal included clay that is from the fragments of thick-walled pottery dishes, which belong to the first group. In order to hold them easily the edges of the fragment chosen to make the tool were slightly smoothed and shaped in oval-rectangular form. Then, through tearing out this pottery piece on both sides, and sometimes on one side, was made a working edge.

Pottery currycombs have not been found in other Chalcolithic monuments of the South Caucasus yet. Toos

⁸ Helwing 2012

⁹ Ur 2010: Fig. B 13.7-9

¹⁰ Braidwood / Braidwood 1960; Trufelli 1994: 245-289; D’Anna/ Guarino 2012

¹¹ Oates 2002: fig. 7-8

¹² Akkermans 1988: Pl 107

¹³ Munchayev / Nechitaylo 1966: 141; Koronevskiy 1999

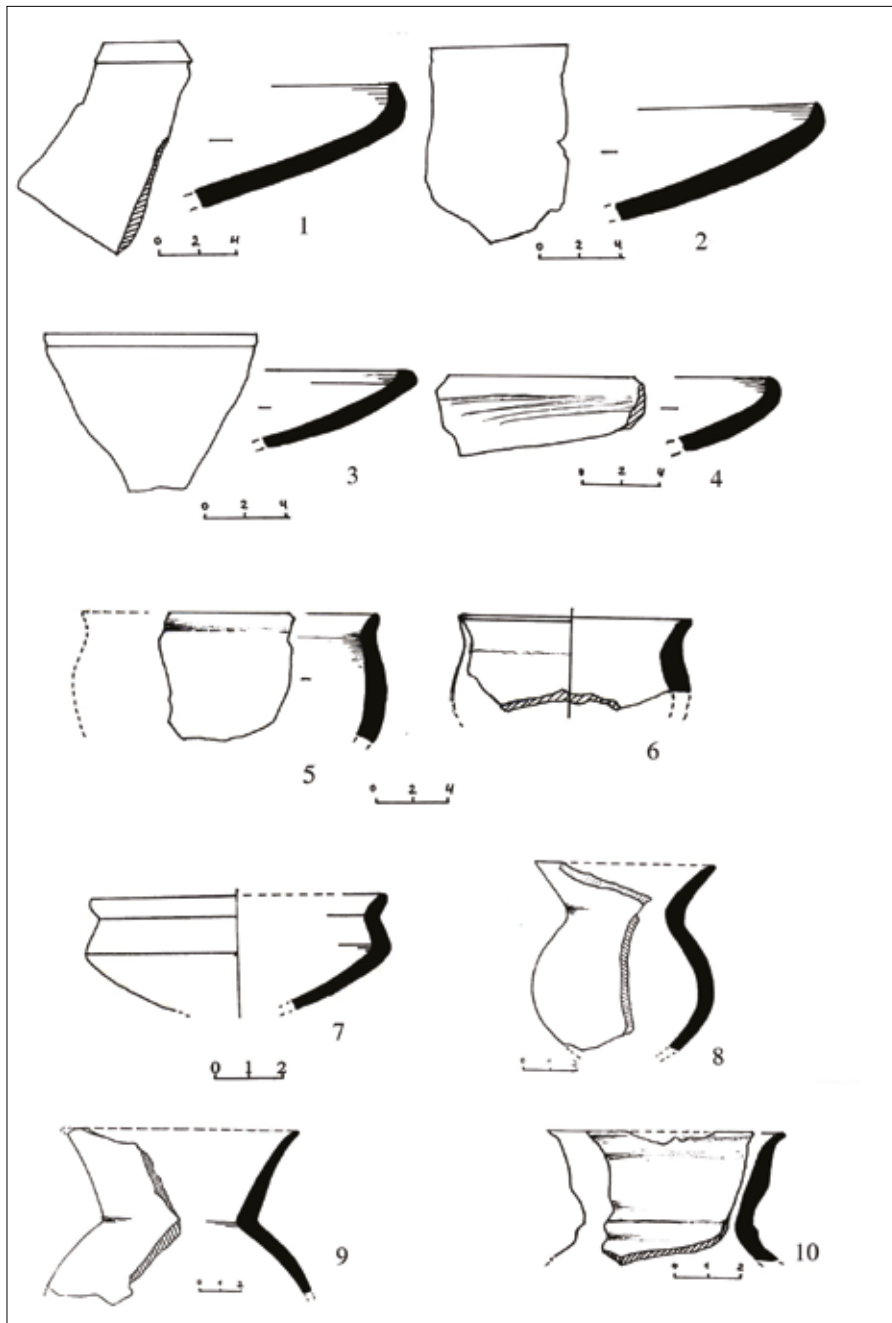


Figure 6: Pottery Vessels Failing to the First and Second Groups / *Birinci ve ikinci grup keramik kaplar*

of this type are typical for Halaf culture monuments of the North Mesopotamia. More than 100 currycombs made from the fragments of pottery vessels have been revealed in Yarimtepe II (Merpert, Munchayev 1982^A, s. 230).

Trasological analysis of the pottery currycombs found in early Bronze Age settlements of Southern Turkmenistan showed that they had been used to clean the animals' skins (Xlopina 1975, s. 248-254).

In addition, clay spindle whorls have been found in Galayeri. Some of these tools have small holes like dots made by a thin tool before their use in weaving (Fig. 8.6).

The fourth group - the category of "coarse ceramics" includes clay vessels with inorganic mixture, made only by hand. This category is represented mainly by jugs (pitchers) with a salient body and high neck of brown, sometimes grey colors. The rims of the vessels are decorated with notches or impressions on the surface are often treated with a comb-shaped tool (Fig. 9). In addition to jugs (pitchers), pans of this category were also found. The upper part of

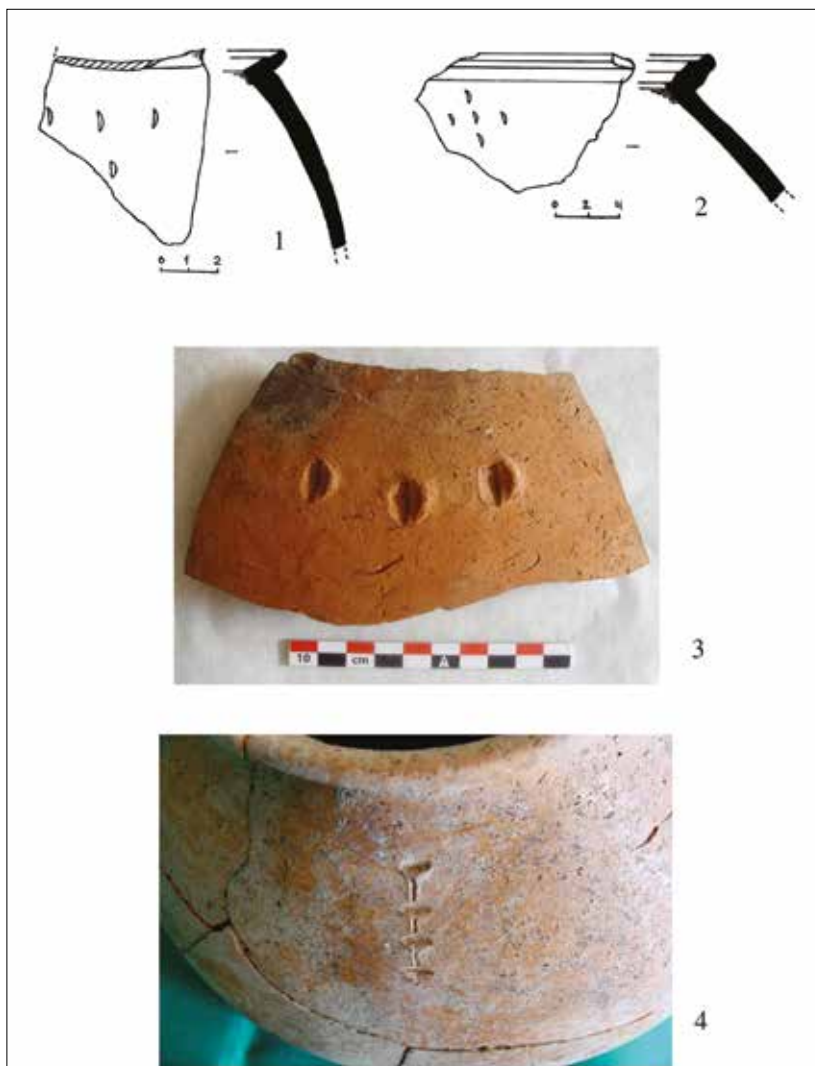


Figure 7: Marks on Pottery Vessels / *Keramik kaplar üzerinde işaretler*

many of them was decorated with a relief ornament on the outside. Through holes (open on both sides) were made on the walls of the pans before firing. In comparison with other monuments of the Leilatepe culture, the frying pans are numerous in Galayeri.

All ceramics, especially vessels with signs, are mainly associated with the late Chalcolithic cultural traditions of Eastern Anatolia (Amug F, Arslantepe VII).

The stone products of Galayeri are represented by grain graters, pestles, graters, parts from the potter's wheel, as well as numerous tools from obsidian, flint and felsite. On the working surface of it some grain graters had hallows (Fig. 10. 1). These types of grain-graters are known from Beyuk Kesik¹⁴, as well as from the Natukhayevsky settlement of the North Caucasus¹⁵.

Some cone-shaped tools made of porous stone, one side of which is smooth and the other convex with a two-sided and one-sided hollow or hole in the center are also of interest (Fig. 10. 3-4). The closest analogue of such tools is known from Beyuk Kesik and it is not exception that they are parts of the potter's wheel.

Cutting tools were made of obsidian, flint and felsite (Fig. 11). They are represented by sickle inserts, scrapers, knife-like plates, chisels, microlites, etc. Multifunction tools were made mainly of silver obsidian. Most of the tools from silver obsidian were found in Galayeri from all monuments of the Leilatepe culture taken together (Fig. 11.5). The revealed nuclei, industrial waste and retouchers prove that stone tools were made on the site.

It has been revealed bone labor tools as well. These are awls, pins, needles, spindle whorls and other items made of animal bones. Pins and needles are typologically similar. The upper end of both tools is completed with

¹⁴ Myseibli 2007

¹⁵ Shishlov / Kolpakova 2010

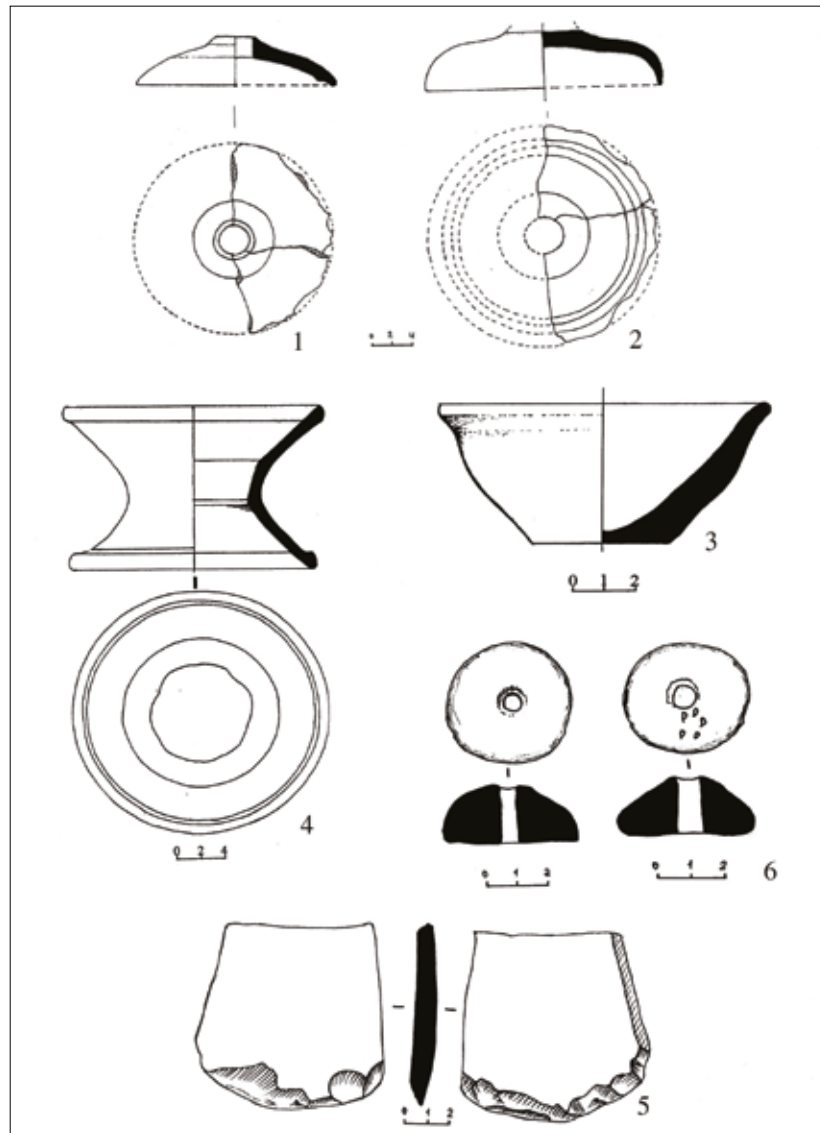


Figure 8: 1-4 Ceramic Samples Failing to the Third Group; 5-6 Ceramic Tools / 1-4 – Üçüncü grupun keramik örnekleri; 5-6 – kil aletler

a flat, triangular edge. The only difference between them is the absence of a hole in the triangular end of the pins, which functionally distinguishes these tools.

Of all the monuments of the Leilatepe culture, relatively large number of bone spindle whorls was found in Galayeri. They are about 20 here. All of them were made of the epiphysis of cattle and have a hemispherical shape in the profile. Their overall surface is well evened (Fig. 14-16).

Some well preserved polishers were found in Galayeri. All of them were made from the rib of small cattle. The working end of these tools is very smooth and even on both sides.

A 10.5 cm long object, coming from a tubular bone of small cattle with a smooth surface was found in Galayeri

(Fig.10.2). The ideal state of this intact tool, the absence of any damage on it, gives the impression that this tool was not used at all. One end of the tool is neatly cut by half; there is a hole with a diameter of 0.5 cm on the second half. To establish the exact functional purpose of the tool is very difficult. But with all its elements, we can assume its use as a musical instrument. This can be explained with such a good preservation of the object.

The closest analogues of this artifact are known from the layers XII-XV of the site Tepe Gawra. A.Tobler defined them as a musical instrument¹⁶. It can be assumed that this item from Galayeri is also an ancient musical instrument.

A few metal tools and metalworking items have been revealed there. First of all, a fragment of a two-leaved

¹⁶ Tobler 1950: 215, plates XCIX, CLXXXII

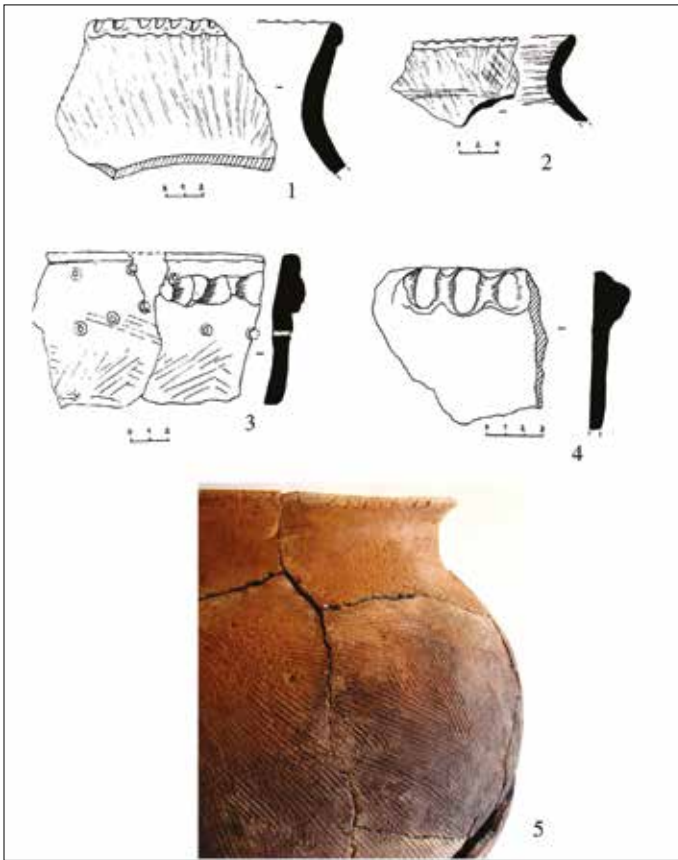


Figure 9: Pottery Vessels Failing to the Fourth Group / *Dördüncü grup keramik kaplar*

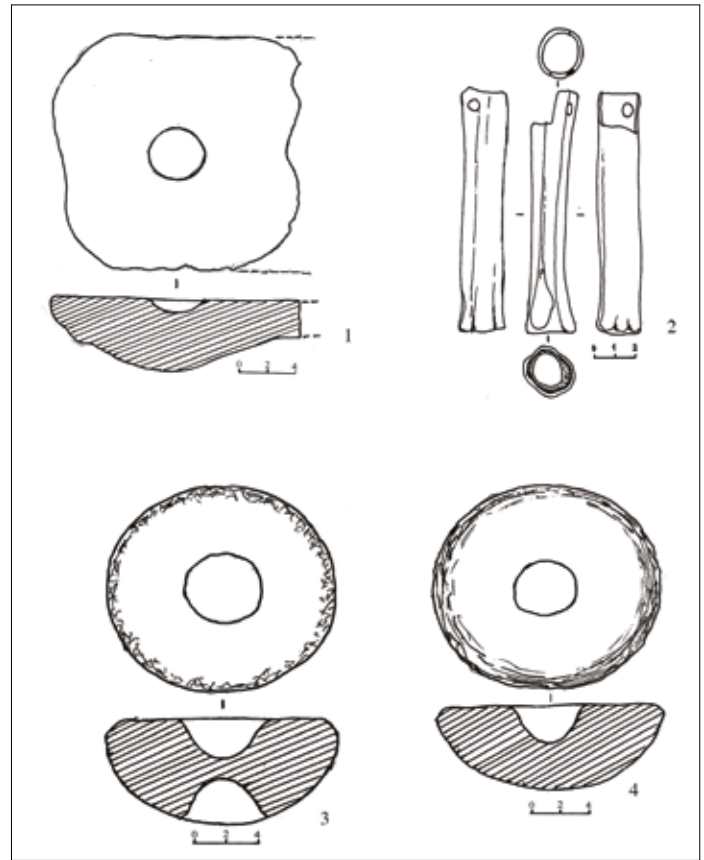


Figure 10: Stone and Bone Tools / *Taş ve kemik aletler*

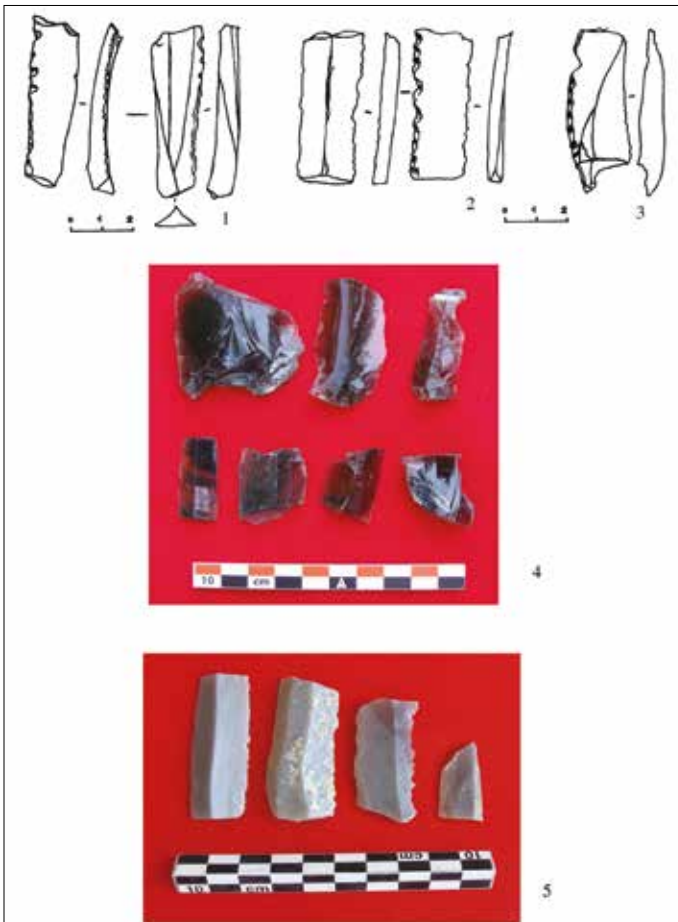


Figure 11: Obsidian Tools / *Obsidiyen aletler*

ceramic mold (consisting of two halves) for casting spigot thimble axes (Fig. 12. 1) and fragments of two open forms for casting flat axes or wedge-shaped tools (Fig. 12. 2-3) should be noted. This and similar to it form from Beyuk Kesik are the only and most ancient finds of this kind for all late Chalcolithic period of the Near East and the Caucasus from the beginning of the 4th millennium B.C. Axes, casted in such forms, in the monuments of Leilatepe culture have not been found yet.

However, the presence of these forms indicates a high probability of detecting of axes of this type in the future. Especially since, in the monuments of the Maikop culture of the North Caucasus, which is identical to the Leilatepe culture are known metal axes casted in forms similar to those from Beyuk Kesik and Galayeri.

One casting mold found during the recent excavations at Galayeri is of particular interest (Fig. 13). This form is of pink color, neatly made of vegetal tempered clay. The dimensions of the intact object are 12.5 x 11 x 3 cm. On the flat surface of this object, four parallel tubular deepenings for casting stick-shaped ingots were pressed before firing. Fragments of a few casting molds for ingots with one or two tubular depressions

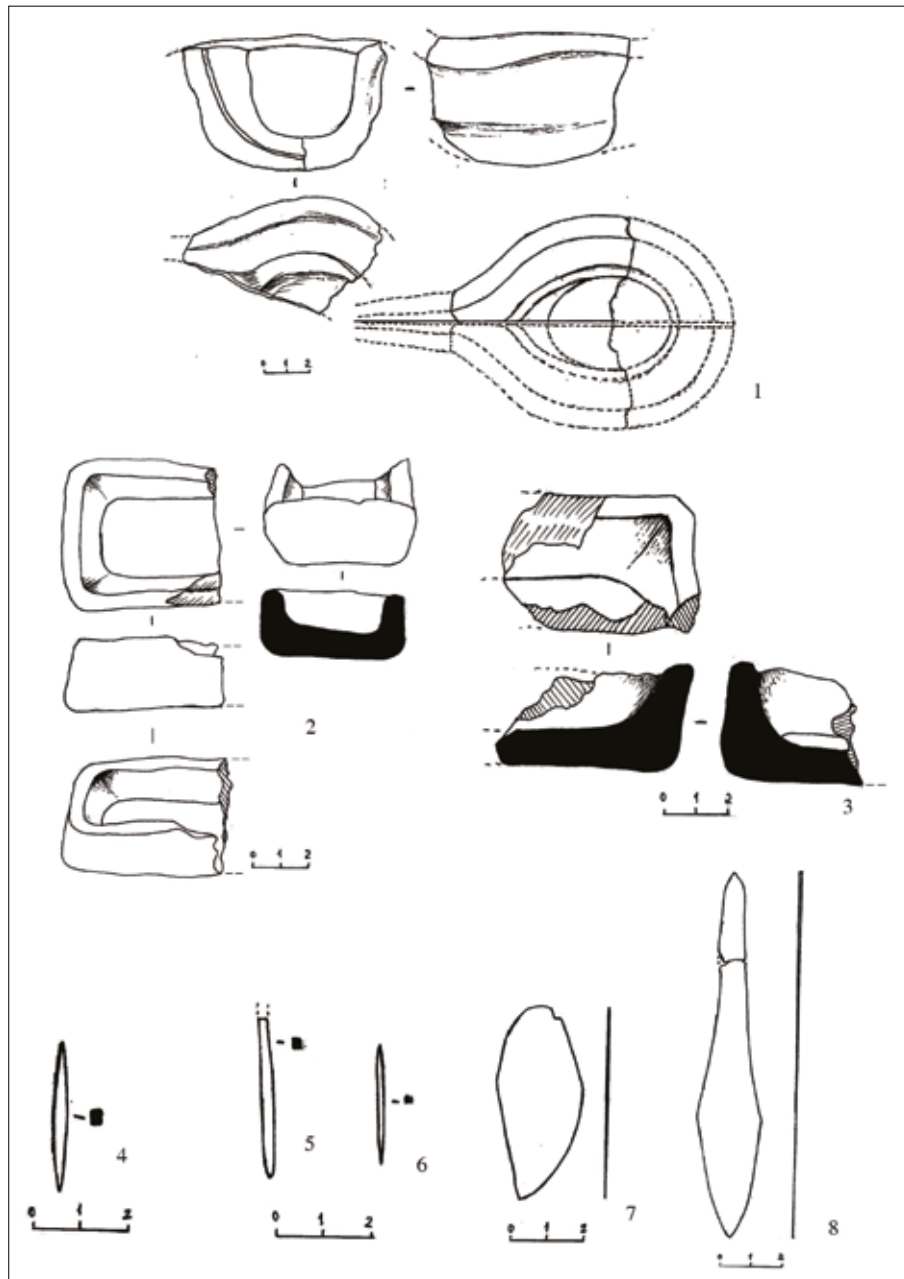


Figure 12: Clay Molds and Metal Tools / *Kil kalıpları ve metal aletler*

have been revealed from the Chalcolithic and early Bronze Age monuments of the Caucasus and Near East. Nevertheless, forms similar to those found in Galayeri are not known from the monuments of the mentioned periods of the same regions.

Parallels to open-type casting molds of the Leilatepe culture are known from the monuments of the Kura-Araz community of Azerbaijan and from the Arisman (Iran) settlement of the second half of the 4th millennium B.C.¹⁷.

Moreover, the small-size ceramic noggins (small size jugs with handles, for taking melted metal) have been found at the bottom of which residues of melted metal were preserved. On the flat working surface of one of the stone tools, identical to the grain grinders in the form, a piece of copper ore was preserved, which proves the processing of this raw material just in this settlement.

Metal items of Galayeri, made on copper basis, are represented by tetrahedral awls, knife-like and blade-like objects (Fig. 12. 4-8).

¹⁷ Helwing 2011

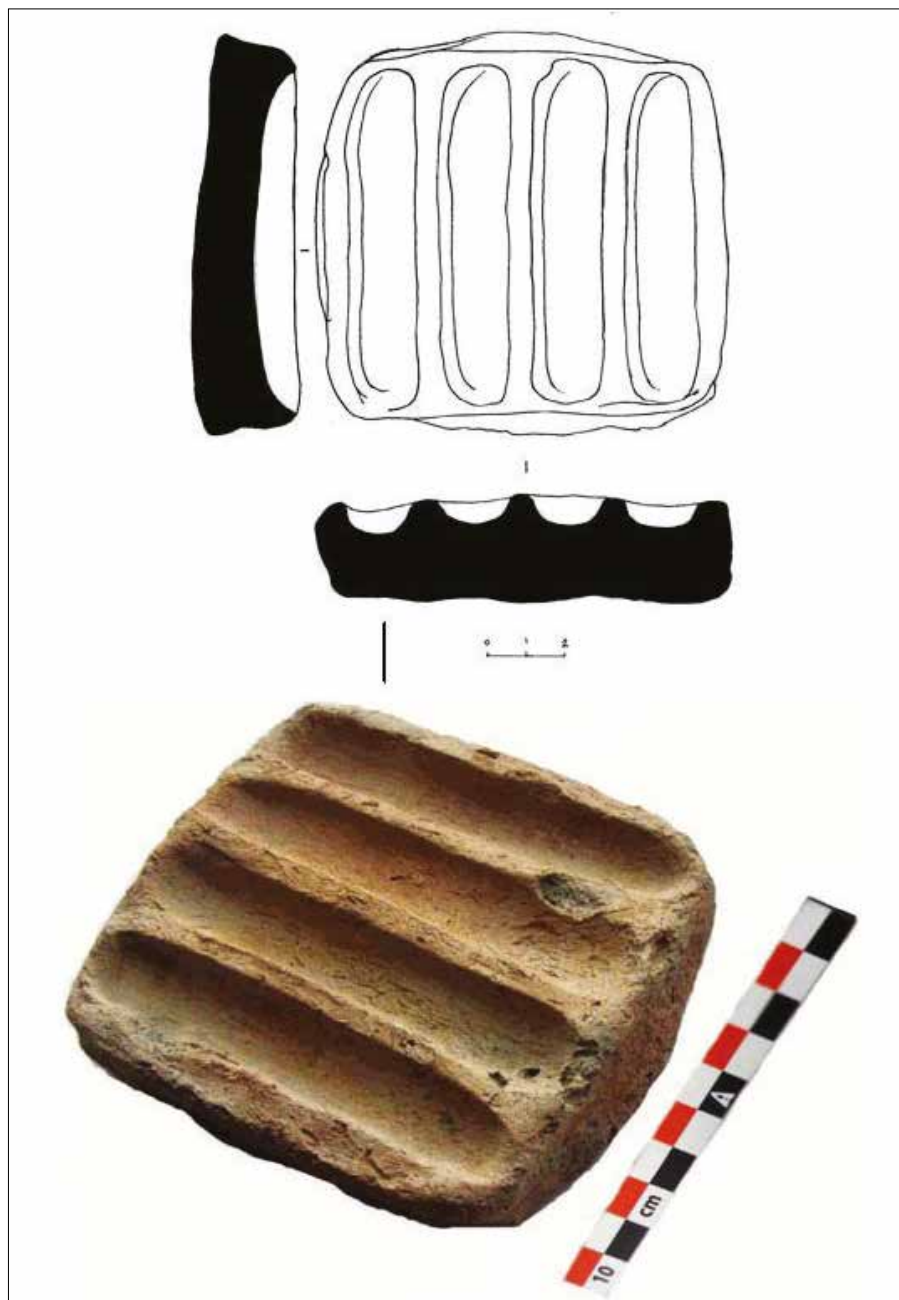


Figure 13: A Clay Mold / *Kil kalıp*

CONCLUSION

According to traditional comparative and radiocarbon analyzes, the periodization and chronology of the Galayeri site and the Leilatepe culture as a whole, is determined as the first half of the 4th millennium BC.

The reveal of specific artifacts from the settlements of the Leilatepe culture, including Galayeri, can be reliably used for the chronology and periodization of this culture. Among such finds, first of all, it should be noted “combed” ceramic vessels with a wavy design in the inner surface of the rim, “marked ceramics” which by traditional and

radiocarbon methods are dated to the first half of the 4th millenium B.C. The results of radiocarbon analysis on Galayeri (Beta 330265: Cal BC 3960 - 3780; Cal BC 3940 - 3890; Cal BC 3880 - 3800) indicate the beginning of the 4th millennium BC, which fully correspond to the artifacts of the settlement.

The archaeological material, especially the ceramics of the Galayeri settlement, is identical with the finds of Beyuk Kesik I, Poylu II and Leilatepe. It is also similar to materials from the monuments of the Near East, and the Maikop culture of the North Caucasus. As the excavations of Galayeri vividly showed, this settlement,

like other monuments of Leilatepe culture, for its origin is correlated not to the Ubaid or Uruk cultures, as it was assumed earlier, but to the local late Chalcolithic period of Eastern Anatolia - Northern Mesopotamia in the early 4th millennium BC.

Studies of Galayeri settlement clearly showed that the territory of Azerbaijan during the late Chalcolithic period was in the area where the cultural traditions of Eastern Anatolia - Northern Mesopotamia spread. The artifacts of ancient metallurgy from Galayeri justify to some extent the assumption that one of the reasons for the migration from northern Mesopotamia to the Southern Caucasus in the first half of the 4th millennium BC could have been the search for the metal sources¹⁸. The monument is located directly at the foot of the Greater Caucasus Mountains, at the entrance of the gorges leading to the high-altitude passages to the North Caucasus, where in the 1st half of the 4th millennium B.C the Maikop culture was formed. In the formation of this culture, undoubtedly, the main role was played by the migrations of the carriers of the Leilatepe culture to the North Caucasus. One of the sources of this migration was the settlement of Galayeri, whose inhabitants went northwards through the passes of the Caucasus mountain ridge. And it is not coincidence that the archaeological collection, especially the ceramics of Galayeri, is closely connected on the one side, with the Near East, and on the other with the Maikop culture. Therefore, Galayeri is an important monument for the study of the history of the Near Eastern-Caucasian cultural-historical community of the late Chalcolithic period. In our opinion, the afore-said commonness with common traditions of the ceramic production and local features occupied the territories of Eastern Anatolia-Northern Mesopotamia (the upper basin of the Euphrates and the Tigris), the eastern part of the South Caucasus and the North Caucasus.

REFERENCES

- AKKERMANS, P.M. M.G. 1988.
The period V pottery. in M.N. van Loon (ed.) // *Hammam et-Turkman I. Report on the University of Amsterdam's 1981-84 Excavations in Syria I. Nederlands Historisch-Archeologisch Instituut te İstanbul*, Pp. 287-350.
- BRAIDWOOD, R.J., BRAIDWOOD, L.S. 1960
Excavations in the Plain of Antioch. Oriental Institute Publications L.X. University of Chicago Press. Chicago: 691 p.
- D'ANNA, M.B., GUARINO, P. 2012
Pottery Production and use at Arslantepe Between periods VII and VI A. *Evidence for social and economic change // Origini XXIV, Nuova Serie V*, pp. 49-67.
- FRANGIPANE, M. 2009.
Non-Urban Hierarchical Patterns of Territorial and Political Organisation in Northern Regions of Greater Mesopotamia: Tepe Gawra and Arslantepe // *Subartu XXIII. A propos de Tepe Gawra*. Pp.133-146.
- HELWING, B. 2011
The small finds from Arisman // *Early Mining and Metallurgy on the Western Central Iranian Plateau* (Ed. by A. Vatandoust, H. Parzinger and B. Helwing). Pp. 254-327.
- HELWING, B. 2012
The Oylum Höyük western terrace post-Ubaid assemblage and its place within the late Chalcolithic of Western Asia // *Varia Anatolica XXVII. After the Ubaid: interpreting change from the Caucasus to Mesopotamia at the dawn of urban civilization (4500-3500 BC)*. Ed. by C. Marro. Paris: pp. 205-234.
- ISMAILZADE, Q. 2008.
Azerbaydjan v sisteme rannebronzovoy kulturnoy obşnosti Kavkaza. Baku. "Nafta-Press", 304 s.
- KHLOPINA L.I.
Keramicheskiye orudiya epoxi bronzı iz Yujnoy Turkmenii // *SA*, 1975, №1, s. 248-254.
- KORONEVSKIY, S.N. 1999
Znakovaya keramika Kavkaza epoxi eneolita i ranney bronzi // *Drevnosti Severnoqo Kavkaza*. M., s. 7-23.
- MERPERT, N.Y., MUNCHAYEV, R.M. 1982.
Poqrebalniy obrad plemen xalafskoy kulturi // *Arxeologiya Staroqo I Novoqo Sveta*. Moskva. s.28-49.

¹⁸ Munchayev / Amirov 2012: 24

MERPert, N.Y., MUNCHAYEV, R.M.

Poseleniye ubeydskoy kulturi Yarım-tepe III v Severnoy Mesopotamii // "Sovetskaya Arxeologiya" №4, Moskva, 1982^A, s. 133-149.

MUNCHAYEV, R.M., AMIROV, SH.N. 2012.

Nekotoriye itoqi issledovaniy rossiyskoy ekspeditsii v Sirii i problema blijnevostocno-kavkazskix vzaimosvazey v IV-III ts. do n.e // *Sbornik materialov mejdunarodnoy naucnoy konferensii "Rannezemledelceskiye kulturi Kavkaza"*. Baku. s. 21-25.

MUNCHAYEV, R.M., NECHITAYLO, A.L. 1966

Kompleksi maykopskoy kulturi v Ust-Djequtinskom moqilnike // *SA*, №3, s. 133-151.

MUSAYEV, D. 2006

Serkertepe – poseleniye epoxi ranney bronzi. Baku, "Nafta-Press", 173 s. 6.

MUSEIBLI, N.A. 2005

Pozdnoeneoliticeskiye kurqani Akstafinskoqo rayona // *Materiali mejdunarodnoy naucnoy konferensii "Arxeologiya, etnologiya folkloristika Kafkaza"*. Baku, "Nurlar", s. 135-138.

MUSEIBLI, N.A. 2012.

Mesto leylatepinskoy kulturi v sisteme pozddneeneoliticeskix kompleksov Kavkaza i Blijneqo Vostoka // *Sbornik materialov mejdunarodnoy naucnoy konferensii "Rannezemledelceskiye kulturi Kavkaza"*. Baku. s. 140-148.

MUSEIBLI, N. 2007

Chalcolithic settlement Beyuk Kesik. Baku. "Nafta-Press". 216. P.

MUSEIBLI, N. 2014

Metal of Leilatepe culture // *Ascension to the crowns of archeology. Collection of materials of "Ancient and medieval states on the territory of Kazakhstan" international scientific conference devoted to the 90th anniversary of K.A. Akishev*. Almaty. Pp. 175-192.

MUSEIBLI, N. 2015

The Leilatepe Archaeological Culture: Its Near-Eastern Roots and its Place in the Caucasus Chalcolithic. // *International Symposium on East Anatolia South Caucasus Cultures. Proceedings I*. Cambridge Scholars Publishing. Pp. 58-75.

MUSEIBLI, N. 2017

Some issues on general features of the Leilatepe culture // *Azerbaijan archaeologi and ethnografy*. 2016, № 1. Baku. Pp 15-22.

NARIMANOV, I.Q. 1985

Obeydskiy plemena Mesopotamii v Azerbaydjane / *Vsesoyuznaya arxeologiceskaya konferensiya "Dostijeniya sovetskoy arxeologii v XI pyatiletke"*. Tezisi dokladov. Baku: s. 271-272.

OATES, I. 2002

Tell Brak: the 4th millennium sequence and its implications. *Iraq archaeological reports – 5.*, pp. 111-122.

SHISHLOV, A.V., KOLPAKOVA, A.V. 2010

Poseleniye Maykopskoy kulturi u stanisi Natuxayevskoy v primorskoy casti severo-zapadnoqo Kavkaza / *Doklad na vtoroy mejdunarodniy kongress po arxeologii Evrazii, provodimiy v 2010 q.* Tire (Turciya): 13 s.

TOBLER A.I. 1950

Excavations at Tepe Gawra. Vol. II, Philadelphia: University Museum, 442 p.

TRUFELLI, F. 1994

Standardisation, mass production and potters marks in the late chalcolithic poteri of Arslantepe (Malatya). *Origini*. Roma, Vol. XVIII, pp. 245-289.

TRUFELLI, F. 1997.

Ceramic correlations and cultural relations in IVth millennium Eastern Anatolia and Siro-Mesopotamia. *SMEA* 39/1. Pp.5-33.

UR, J.A. 2010.

The Tell Hamoukar Sarvey, 1999-2001. *Oriental Institute publication. Volume 137*. Chicago. 384 p.