

УДК (UDC) 903 (479.24)

DOI: [https://doi.org/10.33782/eminak2023.2\(42\).639](https://doi.org/10.33782/eminak2023.2(42).639)

NEOLITHIC TRADITIONS ON THE NORTHERN PERIPHERY OF THE DALMATEPE CULTURE

Zeyneb Guliyeva

Nakhchivan branch of National Academy of Sciences of Azerbaijan (Nakhchivan, Azerbaijan)

e-mail: zeykulyeva@gmail.com

ORCID: <https://orcid.org/0000-0001-8282-5898>

ABSTRACT

The purpose of the study is to reveal the factors that determine the features of the Neolithic-Chalcolithic transition in the South Caucasus and the spread of the Dalmatepe culture in the region during this period.

The novelty of this study lies in the confirmation of the Neolithic traditions of Azerbaijan in the Nakhchivantepe layer of the Dalmatepe period, as well as the identification of the boundaries and distinctive features of the northern periphery of the Dalmatepe culture.

The results of the study indicate that Nakhchivantepe was the main center of Dalmatepe culture in the South Caucasus. Pottery samples found in the nearby settlements of Uchan Agyl, Uzunoba, Bülovğaya, as well as in the settlement of Godedzor on the territory of Zangazur, make it possible to include the Nakhchivanchay river valley and the Zangazur ridge in the northern periphery of the Dalmatepe culture.

The settlement of Nakhchivantepe is the main center of this periphery and demonstrates a transition from the Neolithic to the Chalcolithic culture in its stratigraphy. The pottery found in the settlement is divided into four main categories: simple chaff-tempered pottery, surface-manipulated pottery, red-slipped pottery, and painted pottery.

Simple chaff-tempered pottery (Group I) reflects the characteristics of the Kültepe culture (6372-5200), which appeared in the Neolithic period in the Nakhchivanchay valley. Neolithic traditions are also traced in the typology of simple ceramic vessels. Other groups of ceramics (II-IV) are similar to the materials typical for the Dalmatepe culture sites. However, in contrast to the south, ceramics with surface-manipulated ornaments are even more ancient on the northern periphery of the Dalmatepe culture. Some of the specimens are similar to the surface-manipulated ceramics of the Late Neolithic sites of Mil-Karabakh. The findings of this study confirmed the influence of the Azerbaijani Neolithic cultures on the Dalmatepe culture and identified the factors responsible for its spread.

Keywords: Dalmatepe culture, Azerbaijan, South Caucasus, periphery

НЕОЛІТИЧНІ ТРАДИЦІЇ НА ПІВНІЧНІЙ ПЕРИФЕРІЇ КУЛЬТУРИ ДАЛМАТЕПЕ

Зейнеб Кулієва

Нахчіванська філія Національної академії наук Азербайджану (Нахчівань, Азербайджан)

e-mail: zeykuliyeva@gmail.com

ORCID: <https://orcid.org/0000-0001-8282-5898>**АНОТАЦІЯ**

Мета дослідження – виявити фактори, що визначають особливості неоліто-енеолітичного переходу на Південному Кавказі та поширення культури Далматепе.

Новизна дослідження полягає у підтвердженні неолітичних традицій Азербайджану у шарі далматепінського періоду поселення Нахчівантепе, а також у виявленні кордонів і відмінних рис північної периферії далматепінської культури.

Результати дослідження свідчать, що Нахчівантепе був головним центром далматепінської культури на Південному Кавказі. Зразки кераміки, знайдені у прилеглих поселеннях Учан Агил, Узуноба, Бюловгая, а також у поселенні Годедзор на території Зангезура, дозволяють віднести долину річки Нахчіванчай і Зангезурський хребет до північної периферії далматепінської культури.

Поселення Нахчівантепе є головним центром північної периферії та демонструє у своїй стратиграфії перехід від неолітичної до енеолітичної культури. Кераміка ділиться на чотири основні категорії: проста кераміка з домішками соломи, тиснена кераміка, червоно-ангобована кераміка та розписна кераміка.

Проста кераміка (I група) відображає особливості культури Кюльтепе (6372-5200 рр.), що виникла в епоху неоліту в Нахчіванчайській долині. Неолітичні традиції простежуються і в типології простих керамічних судин. Інші групи кераміки (II-IV) аналогічні матеріалам, притаманним пам'яткам культури Далматепе. Однак, на відміну від півдня, тиснена кераміка більш давня на північній периферії далматепінської культури. Деякі зразки схожі на поверхнево-маніпульовану кераміку пізньонеолітичного поселення Міль-Карабаської території Азербайджану. Результати цього дослідження підтвердили вплив азербайджанських неолітичних культур на культуру Далматепе та виявили фактори, відповідальні за її поширення.

Ключові слова: Далматепінська культура, Азербайджан, Південний Кавказ, периферія

INTRODUCTION

The study of the transition from the Neolithic to the Chalcolithic period in the South Caucasus and the factors that caused it is one of the most important problems. The existence of numerous centers in this region during the Neolithic period suggests that the transition to the Chalcolithic period was accompanied by the emergence of diverse cultures. From this perspective, the sites discovered in Nakhchivan recently are of great importance. The research¹ that began here in 2017 made it possible to trace the process of transition from the late Neolithic to the Chalcolithic in the South Caucasus, using the Dalmatepe culture as an example.

¹ *Baxşəliyev V., Quliyeva Z., Həşimova T., Mehbalıyev K., Baxşəliyev E.* Naxçıvan yaşayış yerində arxeoloji tədqiqatlar. Hesabat AMEA Naxçıvan Bölməsi Tarix, Etnoqrafiya və Arxeologiya İnstitutunun Elmi Arxivi. Naxçıvan, 2017. 134 s.

It is known that the Dalmatepe culture is associated with the site of the same name, registered² in the Urmia basin, 5 km south of the Hasanly settlement. The site is characterized by a rectangular architecture and children's burials in a bent position. Its distinctive characteristic is reflected in ceramics with surface-manipulated and painted ornaments. This type of pottery was later found in more than a hundred sites in the area from the south of the Urmia basin to the north of Mesopotamia. These finds are represented in the South Caucasus by a small amount of terrestrial materials obtained from sites on the territory of Mil-Karabakh in the last century. Many of these finds were replenished with materials from sites registered on the territory of Nakhchivan at the beginning of the 21st century. Their comprehensive study is important for determining the northern border of the Dalmatepe culture. The settlement of Nakhchivantepe is the main center for the formation of this culture among these 14 sites. It is important for tracing the transition from the Neolithic to the Chalcolithic in the South Caucasus. The settlement is located southeast of the city of Nakhchivan. This area is located at an altitude of 853 m above sea level. There were a group of employees of the Nakhchivan branch of ANAS, including the author, on a local archaeological expedition led by V. Bakhshaliyev³, which started the first studies here in 2017. The excavations continued until 2022, and four building layers were discovered. Three of them (Nakhchivantepe 1-3) reflect the Chalcolithic period, and the lower building layer (Nakhchivantepe 4) reflects the Late Neolithic period (Table 1).

Table 1. Stratigraphy of Nakhchivantepe settlement
(The table was compiled by the author based on excavation reports)⁴.

Building horizons	Depth	C14	Period	Architecture
Nakhchivantepe I	0,2-0,7 m	-	Middle Chalcolithic	Restangular rooms
Nakhchivantepe II	0,78-2,1 m	4720-4529 BC	Early Chalcolithic	
Nakhchivantepe III	2-2,50 m	4945-4722 BC		
Nakhchivantepe IV	2,50-2,50 m	5209-4930 BC	Late Neolithic	Semi-dugout rooms

Bone, obsidian and numerous pottery items were found in these building layers. The basis of the finds are ceramic products.

The purpose of this study is to examine the Neolithic traditions that have influenced the Dalmatepe culture since the Neolithic, utilizing the Nakhchivantepe ceramics as an example.

² Нариманов И.Г. Культура древнейшего земледельческо-скотоводческого населения Азербайджана (Эпоха энеолита VI-IV тысячелетия до н.э.). Баку: Элм, 1987. С. 75.

³ Бахшалиев В., Гулиева З., Бахшалиев Е., et al. Нахчивантепədə 2018-ci ilin arxeoloji araşdırmaları. Нахчиван: Әсəми, 2019. 136 s

⁴ Бахшалиев В., et al. Нахчиван yaşayış yerində arxeoloji tədqiqatlar. Hesabat. AMEA Naхçivan Bölməsi Tarix, Etnoqrafiya və Arxeologiya İnstitutunun Elmi Arxiv. Naхçivan, 2017. S. 5-9; Бахшалиев В. Нахчиван arxeologiyası yeni tapıntılar işığında. Naхçivan: Әсəми, 2022. S. 54; Bakhshaliyev V., Guliyeva Z., Bakhshaliyev E., Hashimova T., Mehbaliyev K. Nakhchivantepe 2018-ci ilin archaeoloji tədqiqatları. Nakhchivan, «Ecemi» NPB, 2019. S. 22.

METHOD AND MATERIAL

The main object of research is the archaeological materials of the Nakhchivantepe settlement. The settlement was explored, under the guidance of prof. V. Bakhshaliyev by an archaeological expedition consisting of the author, by dividing into squares. When examining ceramics found in areas A, B, C, D, D, visual, visual-technological and comparative methods of analysis were used. According to the stratigraphy of the settlement, the pottery was divided into 4 stages and C14 analyzes were used in its dating. Ceramics were grouped according to the method of surface treatment, 4 groups were identified. In the first of them they are similar to the Neolithic pottery Kültepe. To determine the percentage distribution of plain ceramics in layers, a vertical research method was used. Their comparison was made on the basis of material sources found in the settlement of Kültepe I, graphically illustrated by the author. In comparison with the archaeological materials found around Lake Urmia and the Mil-Karabakh region, literary materials were used.

Research work is focused on ceramic products that were found in 2017-2019 in the settlement of Nakhchivantepe. These materials are stored in the I Fund of the Department of the Archaeological Service at the National Library of ANAS. There are four main groups of ceramics: simple ceramics, painted ceramics, ceramics with surface-manipulated and painted ornaments (Fig.1-4). Simple chaff-tempered pottery belonging to group I, is one of the main attributes⁵ of the Kültepe culture and is represented in a high percentage (95%). In the Neolithic layer (Nakhchivantepe 4) of Nakhchivantepe, associated with semi-dugouts. In the same layer, ceramics with Dalmatepe-type surface-manipulated ornaments were found in small amounts (Fig. 2, 8).

1286 fragments were selected to determine the distribution of 4 groups of ceramics in the layers of the Chalcolithic (Nakhchivantepe 1-3). These fragments were discovered in 2017-2018 (Table 2).

Table 2. Distribution of ceramic groups by layers.

Ceramic groups	1	2	3	Total
Plain straw-face ceramics	235	304	122	625
Surface-manipulated ceramics	121	177	52	350
Red-slipped ceramics	94	56	25	175
Painted ceramics	45	49	6	99
Total	495	586	205	1286

Approximately half of the pottery in all layers belongs to group I (625 fragments). The 19 specimens examined exhibit relief ornamentation, seven specimens exhibit an arcuate protrusion, two specimens exhibit a round hole, and nine specimens have combed ornament from the inside (7) and sometimes outside (2). The predominance of group I ceramics in all layers allows us to trace the Neolithic traditions that passed into the Dalmatepe culture from the Neolithic.

⁵ Гулієва З. Взаимосвязи Южного Кавказа с Ближним Востоком в контексте кюльтепинской и далматепинской культур. *Вопросы истории*. 2022. № 7 (2). С. 124.

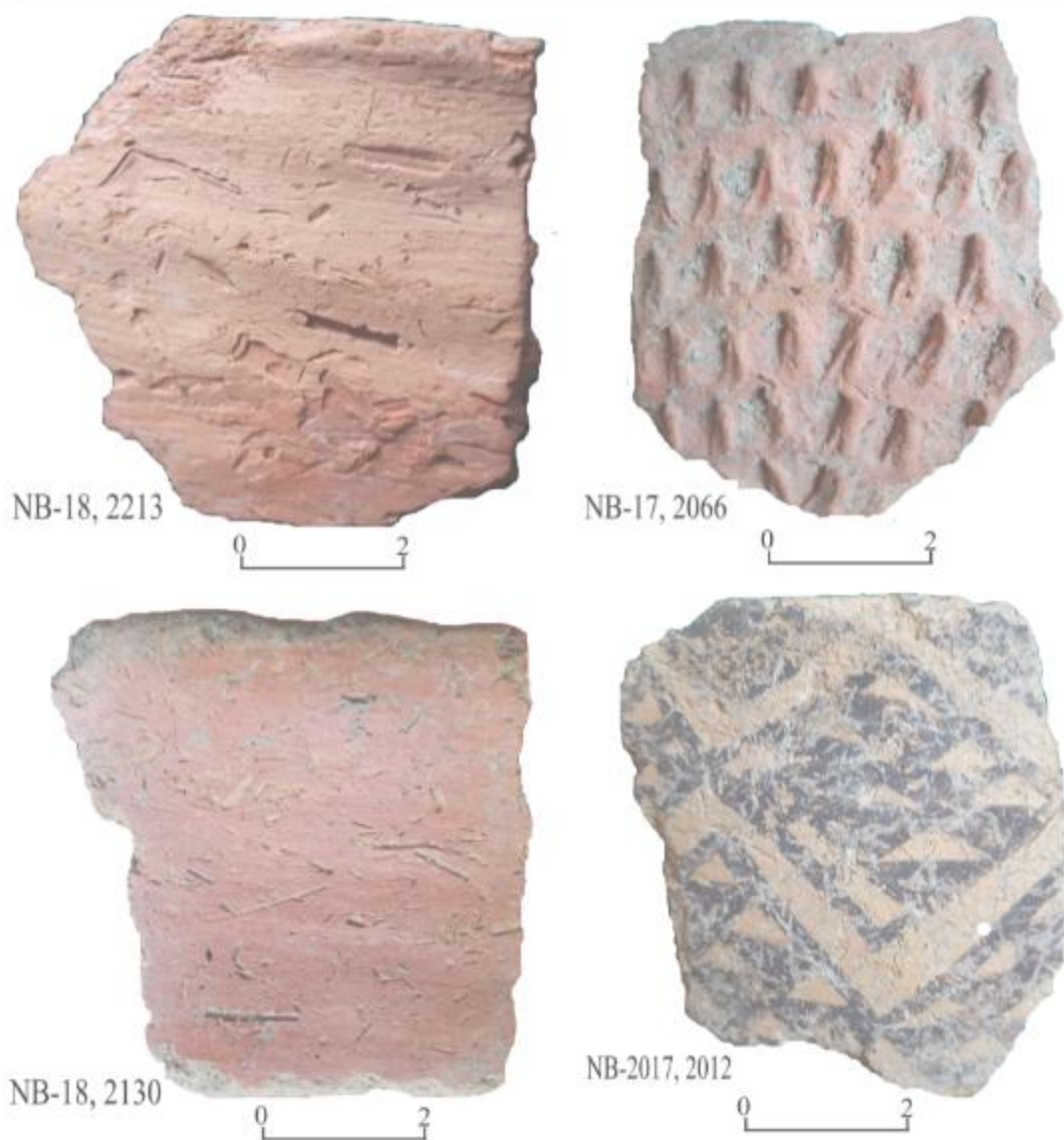


Fig. 1. The main ceramic groups of Nakhchivantepe: 1 – Plain straw-face pottery; 2 – Surface-manipulated pottery; 3 – Red-slipped pottery; 4 – Painted pottery.

SIMPLE CHAFF-TEMPERED CERAMICS OF NAKHCHIVANTEPE (I GROUP)

The method of making ceramics. Simple chaff-tempered pottery of Nakhchivantepe was made by laying clay layers on top of each other and overlapping them in a ribbon-like form. A gray layer is observed in the cross-section of some of these ceramic specimens. The vessels burned in red and orange tones, and traces of straw remained on the surface (Fig. 1, 1). Pottery with an admixture of coarse chaff was found in the Tepe Siahbid and Choga Maran⁶ sites. Dalmatepe-type pottery from

⁶ *Henrickson E.F.* Ceramic styles and cultural interaction in the early and middle chalcolithic of the Central Zagros, Iran. Toronto: University of Toronto (Canada), 1983. fig. 78-80; fig. 81.



Fig. 2. Straw-face plain pottery of Nakhchivantepe.

Lavintepete contains a significant admixture of chaff and a small amount of sand⁷. However, technologically, our samples are closer to the Late Neolithic pottery of Kültepe I. Ceramic manufacturing techniques, as well as vessels with a heel-shaped protrusion and a cylindrical base, demonstrate these features⁸. Chaff-tempered

⁷ Nobari A.H., Binandeh A., Nestani J., Nasab H.V. Excavation at Lavin Tepe in Northwest Iran. *Ancient Near Eastern Studies*. 2012. Vol. 49. P. 101.

⁸ Kuliyeva Z. Nahçıvan'ın Arazboyu Yerleşmelerinden Bulunan Neolitik Seramiği. *Tarih Ve Kültür Ekseninde Orta Aras Havzası Uluslararası Sempozyumu*. 17-19 Kasım 2016. Nahçıvan-Ankara: 2018. Fig. 3, 2-3.

ceramics were widely represented in the sites of Mil-Karabakh⁹. Some ceramic products of this group have round holes represented by individual samples (Fig. 2, 7) The tradition of using round holes to surround the neck of vessels is known from Kültepe I¹⁰, Shomutepe¹¹, and other Neolithic sites.

Typological classification of vessels. Large-sized and thick-walled braziers, pots, frying pans, and jugs are usually made of simple chaff-tempered ceramics. Some braziers are made of clay mixed with straw and a small amount of sand (Fig. 2, 1). The thickness of the walls is 1.5-2.5 cm, the diameter of the mouth varies between 35-50 cm. The surface of some samples is covered in red paint, and a 3 cm wide stripe of paint appears to be present on the inner surface of the mouth. Such a vessel, found in a pit in the NB area, is 44 cm in diameter. A simpler version, with an admixture of coarse chaff¹², was found in the early Neolithic layer of Sheh Gabi (B).

The mouth diameter of the jars is between 26 and 40 cm. They are represented by 2 types. Those belonging to the first type have a spherical body. Some of them have red-orange paint on the outside. One of these specimens has an oval relief ornament on the neck (Fig. 2, 2). Simple bowls with a convex body are sometimes found¹³ in materials of the Dalmatepe type in Sheh Gabi. Vessels belonging to the second type have a conical neck structure. A wide border along the edge of the mouth distinguishes one of them, which is gray and made of chaff-tempered clay (Fig. 2, 3). Its analogue was found in Sheh Gabi¹⁴. The Neolithic layer of Kültepe I represented¹⁵ four types of relief belts around the neck of the vessels.

Pan-type vessels are shallow inside, made of chaff- and sometimes sand-tempered clay. The surface of most of them is colored yellow, sometimes red. One such vessel was registered near a pottery kiln. The central wall of the bowl, which is undamaged, measures 29 cm, and the opposite wall measures 24 cm. This difference is caused by the narrowing of the corners at the edges. The height of the bowl is 10, the length of the side walls is 20, the thickness is 2.5 cm (Fig. 2, 4). A gray layer remained on the cross-section of some large vessels (Fig. 2, 5). Pitchers are funnel-shaped with short or long, narrow necks. Short-necked pitchers have a small volume. They are yellow-pink in color and are without ornaments. Some have a spherical handle in the neck area, while others have an upwardly directed ear-shaped protrusion on the shoulder (Fig. 2, 6). A round hole is open in the shoulder part of one specimen (Fig. 2, 7). Its analogue without a bail was found¹⁶ in the early Chalcolithic materials of Tepe Siahid. The earliest known examples of such jugs are found in the Neolithic layer of Kültepe I. The second type exhibits a high cylindrical neck. One such specimen has a cylindrical neck that is somewhat widened towards the mouth (Fig. 2, 8) Such vessels

⁹ Нариманов И.Г. Культура древнейшего земледельческо-скотоводческого населения Азербайджана (Эпоха энеолита VI-IV тысячелетия до н.э.). Баку: Элм, 1987.

¹⁰ Абибуллаев О.А. Энеолит и бронза на территории Нахичеванской АССР. Баку: Элм, 1982. Табл. X, 1, 5, 6, 12, 16; XI, 4, 7, 9, 11.

¹¹ Ахундов Т.И. У истоков Кавказской цивилизации. Неолит Азербайджана. Шомутепе. Баку: Наука, 2012. Табл. 168, 3-4.

¹² Henrickson E.F. Ceramic styles and cultural interaction... P. 239, fig. 48, 6.

¹³ Quliyeva Z. Naxçıvanın neolit keramikası üzərindəki relyef qurşaqların yayılma arealı. *Azərbaycan MEA-nın Xəbərləri. İctimai elmlər seriyası*. 2017. № 1. S. 63-71.

¹⁴ Henrickson E.F. Ceramic styles and cultural interaction... P. 235.

¹⁵ Ibid. Fig. 47, 3; 92, 5.

¹⁶ Henrickson E.F. Ceramic styles and cultural interaction... Fig. 89, 5.

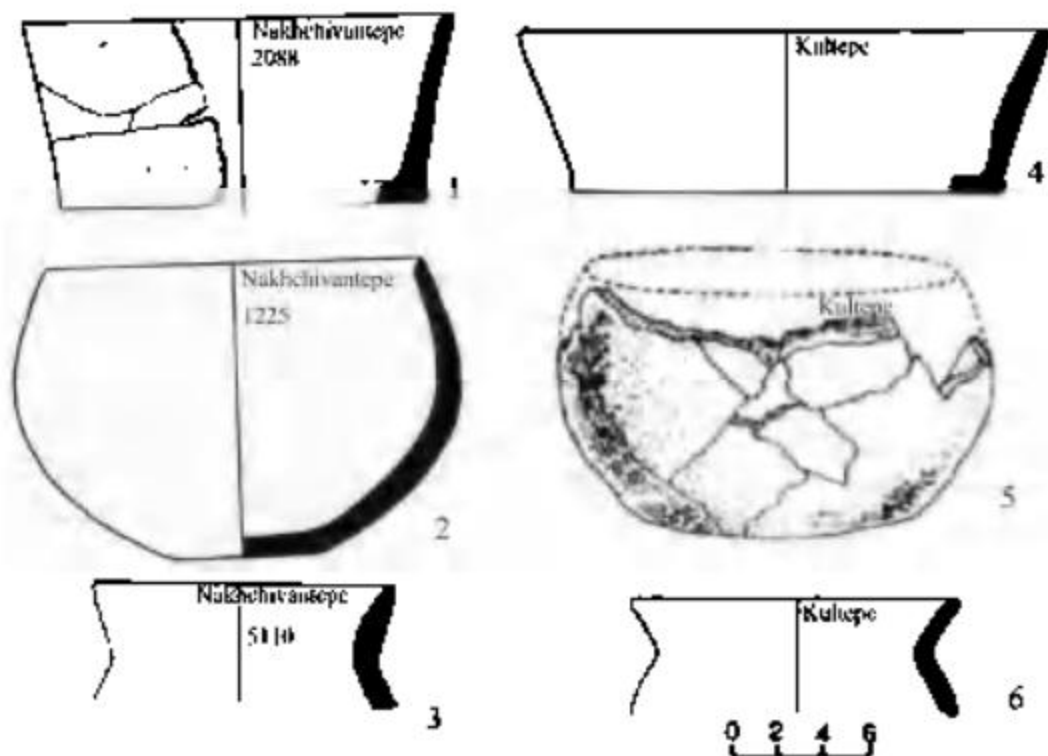


Fig. 3. The traditions of the Neolithic culture in the ceramics of Nakhchivantepe: 1-3: Nakhchivantepe; 4-6: I Kultepe.

were found¹⁷ at site A of the Lavintepė stage II. Pitchers with a funnel-shaped neck coincide in shape with the Late Neolithic jugs from Kultepe I (Fig. 3, 3, 6). Such vessels were found in Lavintepė, Tepe Siahbid¹⁸. A cone-shaped bowl with a flat base that protrudes outwards shows this similarity better (Fig. 3, 1, 4) Such types of bases are widespread in Kultepe I¹⁹. The same analogy is also confirmed in jug-type vessels with a narrow base (Fig. 3, 2-5). The South Caucasus Neolithic sites are known²⁰ for their ear-shaped protrusions, round, oval, and belt-like relief ornaments, which are found in some simple vessels (Fig. 2, 2-3, 6).

Although other ceramic groups in Nakhchivantepe exhibit characteristics similar to those of the Dalmatepe culture in terms of surface treatment and ornamentation, surface-manipulated ceramics exhibit similarities to those of the Neolithic period of Mil-Karabakh. The covering of the surface of the vessels with an ornament in the form of seeds (Fig. 4, 1, 3) can be seen as evidence of this. There is also some similarity observed in samples with fingerprints. The ornaments of light and unevenly located

¹⁷ Nobari A.H., Binandeh A., Nestani J., Nasab H.V. Excavation at Lavin Tepe... Fig. 7: 2, 396; 8: 1, 562.

¹⁸ Ibid, fig. 100, 13.

¹⁹ Baxşəliyev V., Marro K., Berton R., Quliyeva Z., Sarıaltun S. Kultepeədə arxeoloji qazıntılar (2013-2016). Bakı: Nurlan, 2017. Fig. 116, 1-4, 7-8.

²⁰ Ibid. Fig. 106, 3; 108, 3; 109,1; Ахундов Т.И. У истоков Кавказской цивилизации... Табл. 208-211; Lyonnet B., Guliyev F., Helwing B., et al. Ancient Kura 2010-2011: The First Two Seasons of Joint Field Work in the Southern Caucasus. Archaologische Mitteilungen aus Iran und Turan. Berlin: Dietrich Reimer Verlag GmbH, 2012. Vol. 44. Fig. 109.

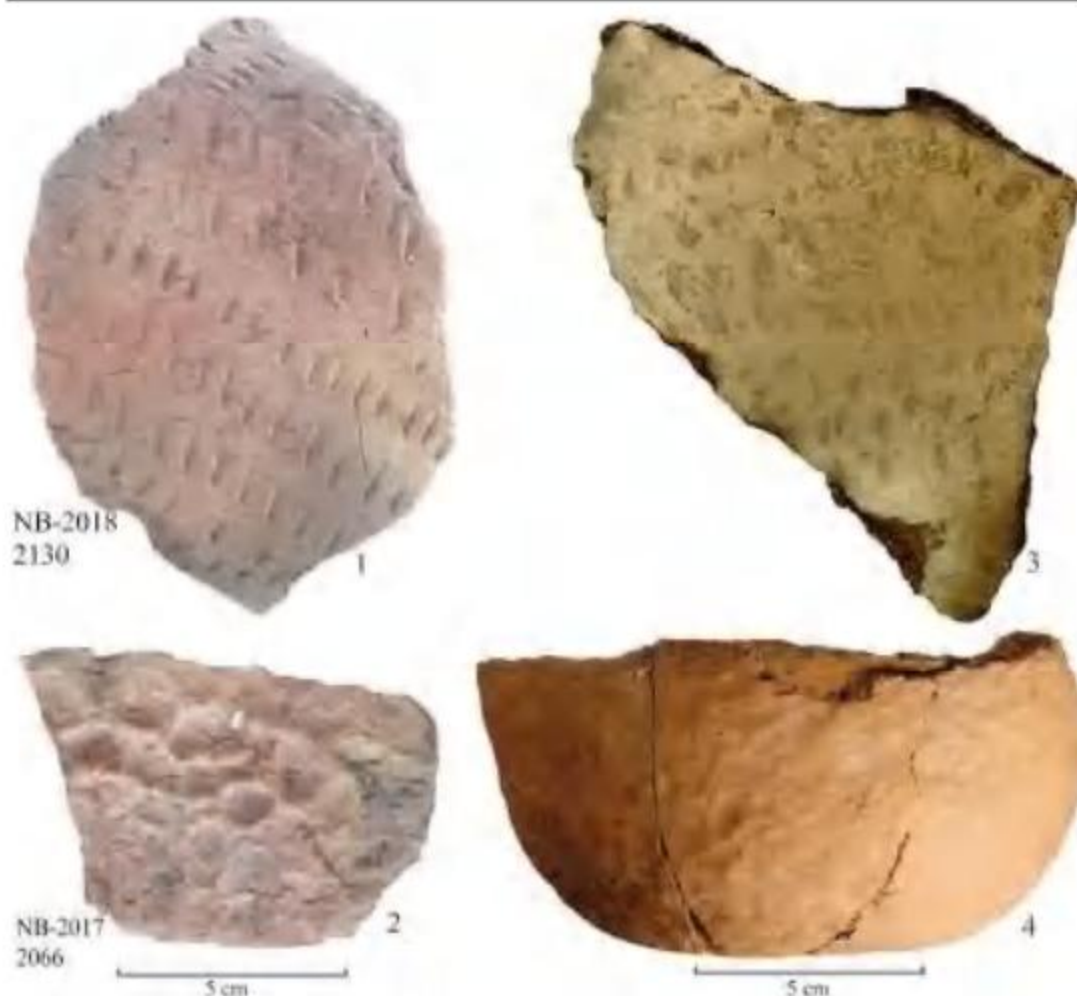


Fig. 4. Surface-manipulated ceramic samples of Nakhchivantepe and Mil-Karabagh monuments: 1-2 [Bakhshaliyev et al. 2018]; 3-4 [Lyonnet et al. 2010].

fingerprints on the surface of a bowl found in Kamiltepe are found in Nakhchivantepe ceramics in a more regular and deep form (Fig. 4, 2, 4). This type of pottery was recorded in the last century as individual samples from the sites of Mil-Karabakh. They are represented by ground materials from the sites of Khantepe, Chiraglytepe, Azginnitepe, Kültepe (in Mirashelli), Chardagtepe, Beybabalar, Ajiztepe, Ismailbeytepe. I. Narimanov, who characterized the surface-manipulated ceramics of these sites, emphasized²¹ that it is mainly represented by chaff-tempered ceramics. Some samples are engobed in dark red or light cream color, and its inner and outer surfaces are polished. Since these sites had not been excavated, the finds were restricted to ground materials. In 1967-1968, excavations were carried out only in Ilanlitepe, and rectangular and round houses were discovered. In such houses, dark red chaff-tempered ceramics were found with ornaments from oval recesses and

²¹ Нариманов И.Г. Культура древнейшего земледельческо-скотоводческого населения... С. 42-45.

triangular, trapezoid, and incised ornaments. The polished surface is covered with a light cream and dark red engobe. Although Ilanlytepe replicates the Neolithic traditions of Kültepe I, such as chaffed pottery, narrow-base²² biconical vessels, and white marble vessels, it is notable for its surface-manipulated ceramic group. Ceramics with surface-manipulated ornaments were discovered in the Mil-Karabakh sites in the 21st century. The application technique is partially similar to that of the Dalmatepe ceramics of Nakhchivantepe.



Fig. 5. Periphery and main monuments of Dalmatepe culture.

DISCUSSION

Studies indicate that the Nakhchivantepe site was one of the first and oldest centers of the Dalmatepe culture in the South Caucasus. It was previously believed²³ that the distribution area of this culture was limited to Yanıgtepe in the north and Tepe Giyan in the south. Nonetheless, studies carried out in the Nakhchivantepe site²⁴

²² Ibid. C. 48.

²³ Mellaart J. *The Neolithic of the Near East*. London: Thames and Hudson Ltd, 1975. Fig. 41.

²⁴ Baxşəliyev V. Naxçıvan arxeologiyası yeni tapıntılar işığında. Naxçıvan: Əcəmi, 2022. 372 s.

made it possible to expand the boundaries of the Dalmatepe culture by 300-400 km to the north. Traces of this culture can be found²⁵ in 3 sites of Nakhchivan: Uchan Agil (4690-4450 BC), Uzunoba (4620-4370 BC), Bülovğaya and Godedzor site in the Zangazur region. The aforementioned factors support the conclusion that these regions constitute the northern periphery of this culture.

Nakhchivantepe is different from the other sites of the northern periphery by the richness of its archaeological material and stratigraphy. The main criteria for determining the nature of the site were four groups of ceramics, which form the basis of materials. Based on a total representation of both the painted and surface-manipulated (II-IV) ceramic groups, the site of Nakhchivantepe is comparable to the sites of Dalmatepe, Dava Goz, Sheh Gabi, Siahbid, Haji Firuz, Pisdeli, Godun Tepe, Salmas, Sokha Chay, and Aranjan Tepe²⁶. It occupies a special place in the group of "characteristic sites of the Dalmatepe culture". In the sites of Julfa Kültepe, Hasanly, Gavra, Lavin, and Dinha, only one of these ceramic groups was found, and the other was missing. Additionally, ceramics with surface-manipulated ornaments were found at the Khasek-Khoük and Korujutepe²⁷ sites in Eastern Anatolia. Although there is a gradual decrease from Lake Urmia to the south. Thus, these vessels make up 68% in the Kangavar Valley and 24%²⁸ in Makhidasht located southward. All that indicates the concentration of characteristic sites of the Dalmatepe culture mainly in areas stretching from the south of Urmia to Nakhchivan (Fig. 5). Nakhchivantepe is different from others in terms of its clear traceability of stratigraphy and the thickness of the cultural layer. This is why it is only compared with Dalmatepe. A clear trace of the stratigraphic sequence in these sites and a rich assortment of pottery types suggest that they are the main centers of the origin of this culture.

The transition from the Neolithic to the Chalcolithic is continuously traced in Nakhchivantepe. The process is clearly demonstrated in the simple chaff-tempered ceramics of Nakhchivantepe. Chaff-tempered pottery, which was the main component of the Neolithic layer, continued to exist at later stages. Although J. Mellaart referred to this ceramic as an "Iranian characteristic"²⁹, we believe that Iran-Azerbaijan was meant here. The widespread distribution of this type of pottery is evident in the Urmia basin³⁰ sites and adjacent northern regions. At one time, A. Jessen, linking the

²⁵ Baxşəliyev V., Baxşəliyev E. Dalmatəpə mədəniyyətinin mənşəyi. Naxçıvan: "Əcəmi" NPB, 2023. S. 21; Chataigner C., Avetisyan P., Palumbi G., Uerpman H.-P. Godedzor, a Late Ubaid-related Settlement in the Southern Caucasus. *Beyond the Ubaid transformation and integration in the Late Prehistoric societies of the Middle East* / Edited by Robert A. Carter, Graham Philip. Papers from the Ubaid expansion? Conference held at Durham, 20-22 april 2006. Chicago, 2010. Fig. 23, 3, b.

²⁶ Hamlin C. Dalma Tepe. *Iran*. 1975. Vol. 13. Fig. 4, A; fig. 8; Henrickson E.F. Ceramic styles and cultural interaction... Fig. 10, 2, 1069; Fig. 104; Abedi A., et al. Excavation at Kul Tepe... Fig. 10, 5-8; 15, 4; Nobari A.H., Binandeh A., Nestani J., Nasab H.V. Excavation at Lavin Tepe... Fig. 8-9; Voigt M.M. Hajji Firuz Tepe, Iran: The Neolithic Settlement. Philadelphia: University of Pennsylvania, 1983. Fig. 97; Tala'i H. Pottery evidence from Ahrendjan Tepe, a Neolithic site in Salmas plain, Azerbaijan, Iran. *Archäologische Mitteilungen aus Iran*. 1983. Vol. 16. P. 7-17.

²⁷ Burney C.A. Eastern Anatolia in the Chalcolithic and Early Bronze Age. *Anatolian studies*. 1958. Vol. VIII. Fig. 87/359, 433, 693; 89/528, 563; Brandt R.W. The Chalcolithic Pottery. *Korucutepe*, 2, Amsterdam, 1978, lev. 103/30, 33-35.

²⁸ Henrickson E.F., Vitali V. The Dalma Tradition: Prehistoric Inter-Regional Cultural Integration in Highland Western Iran. *Paleorient*. 1987. Vol. 13, № 2. P. 39.

²⁹ Mellaart J. The Neolithic of the Near East. London: Thames and Hudson Ltd, 1975. P. 67.

³⁰ Voigt M.M. Hajji Firuz Tepe, Iran... P. 34.

sites of Mil-Karabakh with the culture of Kültepe, and R. Munchaev, giving a joint description of the Nakhchivan-Mil-Karabakh group, based³¹ their conclusions on the chaff-tempered ceramics. It is worth noting that older samples of chaff-tempered ceramics were found in the Neolithic layer of Kültepe I. Some studies indicate that the Dalmatepe culture was formed in Nakhchivantepe under the continuation of some Kültepe culture traditions. The predominance of chaff-tempered ceramics and the coincidence of the shapes of some vessels with the vessels of the Neolithic period of Kültepe indicate that the Neolithic and Chalcolithic traditions existed in parallel in Nakhchivantepe for a certain period of time.

The traditions that had passed into the Dalmatepe culture from the Neolithic were also evident in samples of ceramics with surface-manipulated ornaments. This is particularly noticeable in ceramics with painted ornaments. One of the two methods used in this process, the tradition of drawing patterns with black paint directly on the clay of the vessel, is widespread in the sites of the south of Urmia. In the second method, the ornament is applied to a red engobed surface and then polished. This method is widespread³² in sites north of Urmia, such as Khalaj³³, Kamiltepe, Kabirli, Alikomektepe, Chalagantepe³⁴, Julfa Kültepe³⁵. This difference is also evident in their distribution across the layers. Contrasting with the sites of the south of Urmia, Nakhchivantepe exhibits a predominant use of painted ceramics in the upper layers and surface-manipulated ceramics in the lower layers. We previously mentioned that the oldest samples of surface-manipulated ceramics were found in the Neolithic sites of Mil-Karabakh, and two copies are known from Kültepe I³⁶. Ceramics with surface-manipulated ornaments were also found³⁷ at the Neolithic and Chalcolithic sites of Devebatyrantepe in the Aghdam region, Goshatepe³⁸, Evtepe, Gabristan;gtepe (Kichikli), Chalagantepe, Gonshutepe No. 2, Imamgulubeyli, Küllütepe, Goshatepe No. 2, the settlement of Tainag, Bashirtepe in the Agjabedi region. Based on these finds, pottery with surface-manipulated ornaments of the Dalmatepe culture is currently associated³⁹ with the Late Neolithic culture of the Karabakh region of Azerbaijan. The discovery of printed ceramics from the Neolithic layer of the Mil-Karabakh sites, as well as the identification of elements similar to Kültepe I in chaff ceramics and some types of vessels, confirm the influence of the Neolithic cultures of Azerbaijan on the northern periphery of the Dalmatepe culture.

What factors could be responsible for the formation of the northern periphery of the Dalmatepe culture? First, these are the factors that contributed to the spread of the Dalmatepe culture. Some researchers attribute this spread to the movement of

³¹ Иессен А.А. Кавказ и Древний Восток в IV и III тысячелетиях до нашей эры. *Краткие сообщения Института Археологии*. 1963. Вып. 93. С. 3-14; Мунчаев Р.М. Древнейшая культура Северо-Восточного Кавказа. Москва: Изд-во АН СССР, 1961. С. 23.

³² Нариманов И.Г. Культура древнейшего земледельческо-скотоводческого населения... Рис. 37; 54; 61, 2-3.

³³ Вахсәліев V, Вахсәліев E. Dalmatəpə mədəniyyətinin mənşəyi... S. 27.

³⁴ Нариманов И.Г. Культура древнейшего земледельческо-скотоводческого населения... Рис. 46, 4; 54; 61, 2-3.

³⁵ Abedi A. et al. Excavation at Kul Tepe... P. 54.

³⁶ Гулиева З. Взаимосвязи Южного Кавказа с Ближним Востоком... Рис. 1, 3-4.

³⁷ Altıntədov X.İ. Qarabağın arxeoloji abidələri toplusu. I kitab. Bakı: Çap-Art, 2016. S. 118, 180.

³⁸ Ibid. S. 66, 142, 154, 158, 162, 228, 250, 262.

³⁹ Вахсәліев V, Вахсәліев E. Dalmatəpə mədəniyyətinin mənşəyi... S. 26.

nomadic tribes, while others rely on wider connections and rely on Mesopotamia, Kermanshah and the surrounding regions⁴⁰. Observing the location of the sites on the northern periphery, it is clear that the settlements of Julfa Kultepe, Salmas, Nakhchivantepe, Uchan Agyi, Godedzor are located along the road from Dalmatepe to the north, to the raw materials deposits of the South Caucasus (Fig. 6). In addition, the percentage of Caucasian obsidian in the sites of Nakhchivan, Mil-Karabakh and the Urmia basin is much higher than that of East Anatolian obsidian (Table 4). The use of raw material deposits played a decisive role in the economic relations between ancient civilizations, including the spread of various cultures. One of the main factors determining these relations is the deposits of raw materials in the territory of Nakhchivan⁴¹. Moreover, this South Caucasian obsidian was also transported through the territory of this region to the Urmia basin. Nakhchivan was an advantageous geographical position for transportation of Zangazur obsidian to the settlements south of the Araz, as well as to the countries of the Middle East⁴². It appears that obsidian was the predominant medium of exchange at that time. The occurrence of Khalaf-type ceramics in the South Caucasus as single samples is highly probable as a result of this exchange. These facts demonstrate that the main factor determining the spread of the Dalmatepe culture is the presence of natural raw materials.

CONCLUSION

The discovery of pottery, which is characteristic of the Dalmatepe culture, in Nakhchivantepe and surrounding sites allows for an expansion of the culture boundaries by about 300-400 km from Araz. Since extensive archaeological excavations have not yet been carried out at other sites, the samples obtained are limited. However, Nakhchivantepe stratigraphy shows that the northern periphery of the Dalmatepe culture formed in the South Caucasus. The predominant form of chaff-tempered pottery facilitates the examination of the transition from the Neolithic to the Chalcolithic. The presence of a few similar samples to the vessels of Khalaf and Kültepe I in the layers of Nakhchivantepe from the Dalmatepe period, as well as a certain similarity in ceramics with surface-manipulated and painted ornaments, suggest an influence from Neolithic cultures. Considering these factors, it is possible to conclude that the Dalmatepe culture is a unique hybrid culture formed by the ancient civilizations of the South Caucasus and the Near East during the transition from the Neolithic to the Chalcolithic. The primary factor responsible for its widespread distribution is its proximity to the abundant natural resources of the South Caucasus.

REFERENCES

- Abedi, A., Shahidi, H.Kh., Chataigner, Ch., Niknami, K., Eskandari, N., Kazempour, M., Pirmohammadi, A., Hosseinzadeh, J. & Ebrahimi, Gh. (2014). Excavation at Kul Tepe (Hadishahr), North-Western Iran, 2010: First Preliminary Report. *Ancient Near Eastern Studies*, 51, 33-167. DOI: 10.2143/ANES.51.0.3038717 [in English].
- Abibullaev, O.A. (1982). *Eneolit i Bronza na territorii Nakhichevanskoj ASSR* [Eneolithic and Bronze Age in the Nakhichevan Autonomous Soviet Socialist Republic]. Baku: Elm [in Russian].

⁴⁰ Hamlin C. Dalma Tepe...

⁴¹ Кашкай С. Полезные ископаемые Нахичеванской АССР. Баку: Нахичеванская АССР, 1975. С. 115.

⁴² Kuliyyeva Z., Bahşeliyev V. Nağçıvanın Kalkolitik Çağ Kültürü (Azerbaycan). *TÜBA-AR: Türkiye Bilimler Akademisi Arkeoloji Dergisi*. 2018. № 23. S. 51.

- Almemmedov, X.I.** (2016). *Garabaghın arkheolozihi abidälari toplusu. I kitab* [Collection of archaeological monuments of Karabakh. Book I]. Baku: Çap-Art [in Azerbaijan].
- Akhundov, T.** (2017). *U istokov Kavkazskoy tsivilizatsii. Neolit Azerbaidzhana. Book 2: Pamyatniki Karabakhskego neolita* [At the origins of the Caucasian civilization. Neolithic of Azerbaijan. Book II. Monuments of the Karabakh Neolithic]. Baku: Nauka [in Russian].
- Bakhshaliyev, V., Marro, C., Berthon, R., Guliyeva, Z. & Sarialtin, S.** (2017). *Kultepede arxeoloji qazintilar (2013-2016)* [Archaeological excavations in Kultepe (2013-2016)]. Baku: Nurlan [in Azerbaijan].
- Bakhshaliyev, V., Guliyeva, Z., Hashimova, T., Mehbaliyev, K. & Bakhshaliyev, E.** (2017). Nakhchivan yashayish yerinde arxeoloji tedqiqatların hesabati [Report of archaeological research in the settlement of Nakhchivan]. *Scientific Archive of the Nakhchivan Department of the Azerbaijan National Academy of Sciences*. Nakhchivan [in Azerbaijan].
- Bakhshaliyev, V., Guliyeva, Z., Bakhshaliyev, E., Hashimova, T. & Mehbaliyev, K.** (2019). *Nakhchivantepe 2018-ci ilin arxeoloji tedqiqatları* [Archaeological researches of 2018 in Nakhchivantepe]. Nakhchivan: "Ececi" NPB [in Azerbaijan].
- Bakhshaliyev, V.** (2022). *Nakhchivan arkheologiyasi yeni tapintilar ishigında* [Archaeology of Nakhchivan in the light of new discoveries]. Nakhchivan: "Ececi" NPB [in Azerbaijan & English].
- Bakhshaliyev, V. & Bakhshaliyev, E.** (2023). *Dalmatepe medeniyetinin mensheyi* [The origins of the Dalmatepe culture]. Nakhchivan: "Ececi" [in Azerbaijan].
- Brandt, R.W.** (1978). The Chalcolithic Pottery. In: **Van Loon, M.N.** (Ed.). *Korucutepe, 2*, 57-61 [in English].
- Burney, C.A.** (1958). Eastern Anatolia in the Chalcolithic and Early Bronze Age. *Anatolian studies*, 8, 157-209 [in English].
- Chataigner C., Avetisyan P., Palumbi G. & Uerpman H.-P.** (2010). Godedzor, a Late Ubaid-related Settlement in the Southern Caucasus. *Beyond the Ubaid transformation and integration in the Late Prehistoric societies of the Middle East* / Edited by Robert A. Carter, Graham Philip. Papers from the Ubaid expansion? Conference held at Durham, 20-22 april 2006. Chicago. P. 391-409 [in English].
- Hamlin, C.** (1975). Dalma Tepe. *Iran*, 13, 111-127. DOI: 10.2307/4300529 [in English].
- Nobari, A.H., Binandeh, A., Nestani, J. & Nasab, H.V.** (2012). Excavation at Lavin Tepe in Northwest Iran. *Ancient Near Eastern Studies*, 49, 95-117. DOI: 10.2143/ANES.49.0.2165721 [in English].
- Henrickson, E.F.** (1983). *Ceramic styles and cultural interaction in the early and middle chalcolithic of the Central Zagros, Iran*. PhD diss., University of Toronto (Canada) [in English].
- Henrickson, E.F. & Vitali, V.** (1987). The Dalma Tradition: Prehistoric Inter-Regional Cultural Integration in Highland Western Iran. *Paleorient*, 13 (2), 37-45 [in English].
- Guliyeva, Z.** (2017). Nakhchivanın neolit keramikası üzerindeki relief gurshagların yayılma arealı [Distribution area of relief belts on Neolithic ceramics of Nakhchivan]. *Azerbaijan Elmler Akademiyasının Xeberleri. İctimai elmler seriyası*, 1, 63-71 [in Azerbaijan].
- Guliyeva, Z.** (2022). *Vzaimosvyazi Yuzhnogo Kavkaza s Blizhnim Vostokom v kontekste kultepinskoy i dalmatepinskoy kultur* [Relationships between the South Caucasus and the Middle East in the context of the Kultepe and Dalmatepe cultures]. *Voprosy istorii*, 7 (2), 123-130 [in Russian].
- Iessen, A.A.** (1963). Kavkaz i Drevniy Vostok v IV i III tysyacheletiyakh do nashyey ery [The Caucasus and the Ancient East in the 4th and 3rd millennium BC]. *Kratkie Soobshcheniya Instituta Archeologii*, 93, 3-14 [in Russian].
- Kashkay, S.** (1975). Poleznye iskopaemye Nakhichevanskooy ASSR [Minerals of the Nakhichevan Autonomous Soviet Socialist Republic]. In *Nakhichevanskaya ASSR* 50, 115-138 [in Russian].
- Kuliyeva, Z.** (2018). Nakhchivan'ın Arazboyu Yerleşmelerinden Bulunan Neolitik Seramighi [Neolithic Pottery from the Settlements of Nakhchivan in the Araz Valley]. Proceedings of the Conference: *Tarih Ve Kültür Eksekinde Orta Aras Havzası Uluslararası Sempozyumu. 17-19 Kasım 2016*. Nakhchivan-Ankara, 495-517 [in Turkish].
- Kuliyeva, Z. & Bakhshaliyev, V.** (2018). Nakhchivanın Kalkolitik Chagh Kültürü (Azerbaijan) [Chalcolithic Period Culture of Nakhchivan (Azerbaijan)]. *TÜBA-AR: Türkiye Bilimler Akademisi Arkeoloji Dergisi*, 23, 29-52. DOI: 10.22520/tubaar.2018.23.002 [in Turkish].
- Lyonnet, B., Guliyev, F., Helwing, B., Aliyev, T., Hansen, S., Mirtskhulava, G. & et al.** (2012). Ancient Kura 2010-2011: The First Two Seasons of Joint Field Work in the Southern Caucasus. *Archaeologische Mitteilungen aus Iran und Turan. Vol. 44*. Berlin: Dietrich Reimer Verlag GmbH, pp. 1-190 [in English].
- Mellaart, J.** (1975). *The Neolithic of the Near East*. London: Thames and Hudson Ltd [in English].
- Munchayev, R.M.** (1961). *Drevneyshaya kultura Severo-Vostochnogo Kavkaza* [Ancient culture of the North-Eastern Caucasus]. Moskva: AN SSSR [in Russian].

- Narimanov, İ.G.** (1987). *Kultura drevneishego zemledelchesko-skotovodcheskogo naseleniya Azerbaidzhana* [Culture of the most ancient agricultural and pastoral population of Azerbaijan (Eneolithic Age of the 6th - 4th millennium BC)]. Baku: Elm [in Russian].
- Tala'i, H.** (1983). Pottery evidence from Ahrendjan Tepe, a Neolithic site in Salmas plain, Azerbaijan, Iran. *Archäologische Mitteilungen aus Iran*, 16, 7-17 [in English].
- Voigt, M.M.** (1983). *Hajji Firuz Tepe, Iran: The Neolithic Settlement*. Philadelphia: University of Pennsylvania [in English].

Надійшла до редакції / Received: 11.05.2023

Схвалено до друку / Accepted: 27.06.2023