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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

**THE LAST ENEOLITE CULTURE OF NAKHCHIVAN AND
EASTERN ANATOLIA**

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GENERAL CHARACTERISTICS OF THE DISSERTATION

The actuality of the theme and the degree of research. The location of Nakhchivan at the crossroads of ancient roads connecting the South Caucasus with the Middle East, the richness of the Zangazur Mountains with obsidian and copper deposits, and the presence of rich copper, arsenic and polymetallic deposits in Nakhchivan created favorable conditions for economic and cultural relations with the Middle East. Although archeological research has been conducted in Azerbaijan, including Nakhchivan, for many years, the study of economic and cultural relations of the ancient tribes living in Azerbaijan with the countries of the Middle East cannot be considered complete. The Nakhchivan Branch of ANAS established in 2002 was of great importance in the study of Nakhchivan archeology. The national leader of the Azerbaijani people Heydar Aliyev said in his speech at the meeting dedicated to the establishment of the Nakhchivan Branch of ANAS: “Azerbaijan is a country with a very ancient history. Our historians have done a lot in the twentieth century. However, I can confidently say that the history of Azerbaijan, the people, in general, this land, this country has not been studied at the required level. Great work must be done in this area”.¹

Indeed, after the establishment of the Nakhchivan Branch, a lot of work was done in the field of studying the Neolithic, Chalcolithic and Bronze Age cultures of Nakhchivan, a lot of ideas were put forward about the chronology and distribution area of these cultures. The order of the Chairman of the Supreme Assembly of Nakhchivan AR dated April 20, 2012 “Nakhchivan: the first city and Duzdag”

¹Aliyev H.A. Collection of electronic documents. Speeches, speeches, reports, interviews, statements [Electronic resource] / – Baku: – 2002. – 108 p.

reads: The first urban culture, which is an important element of the second civilization, was formed in the area.²

If before the end of the XX century there were only a few Chalcolithic monuments in Nakhchivan, now their number is about thirty. The Order of the Chairman of the Supreme Assembly of Nakhchivan AR dated December 6, 2005 “On the organization of protection and certification of historical and cultural monuments in the territory of the Nakhchivan Autonomous Republic” was of great importance in the discovery of these monuments. Some of the monuments located in the Arpachay, Nakhchivanchay and Sirabchay basins, which are the object of our research, have been studied by surface research, and some by extensive excavations, and most of the archeological materials have been published. Although the published articles and books discuss the relations of Nakhchivan’s Late Chalcolithic culture with the Middle East, especially with Eastern Anatolia, this topic was not directly studied in the study of Eastern Anatolian monuments, only general views on Nakhchivan's relations with Eastern Anatolia. From this point of view, it is very important to study Nakhchivan in comparison with the monuments of Eastern Anatolia. The study of Late Chalcolithic monuments allows us to study not only the economic and cultural relations between Nakhchivan and Eastern Anatolia, but also issues related to the social structure and lifestyle of society. The above-mentioned issues are one of the most important aspects that make the study of the topic urgent. Research shows that raw material sources played an important role in the formation of ancient agricultural cultures, as well as in the development of cultures and cultural ties in different regions, specifically in Nakhchivan and Eastern Anatolia. The use of Eastern Anatolian obsidian in Nakhchivan since the Late Neolithic period also shows the existence of these ties. However, these relationships have not yet been extensively studied.

²Order of the Chairman of the Supreme Assembly of the Nakhchivan Autonomous Republic on holding an international symposium on “Nakhchivan: the primary city and Duzdag” // Şərq qapısı. – 2012. – April 20. – p. 1.

The study of monuments located in the territory of Nakhchivan was possible only as a result of high state care for monuments. Touching upon the importance of studying the monuments of Nakhchivan, the national leader of the Azerbaijani people Heydar Aliyev said: “The history of Nakhchivan in the ancient and late Middle Ages should be analyzed and written more widely. We, as an independent state, define and will determine our history correctly, correctly, free from external pressures”.³ President of the Republic of Azerbaijan İlham Aliyev also signed special orders to expand the study of Azerbaijani monuments. President of the Republic of Azerbaijan İlham Aliyev also signed special orders to expand the study of Azerbaijani monuments.⁴ The monuments of the Late Chalcolithic period of Nakhchivan and Eastern Anatolia are reflected in certain books and articles. The study of Chalcolithic monuments of Eastern Anatolia began earlier. Turkish researchers H.Z.Koşay and K.Turfan have been conducting archeological excavations in Karaz, Pular and Guzelova settlements near Erzurum since 1942-1944.⁵ The importance of the research conducted by R.Whallon, S.Kantman, U.Esin, G.Arsebuk, Van Loon, H. Hauptmann, M.Frangipane, A.Sagona and others in the settlements of Eastern Anatolia since 1967, 1978-1986 was.⁶ Some archeological materials have been published by researchers.

³Əliyev, H.Ə. Müstəqilliyimiz əbədidir: [46 cilddə] / H.Əliyev. – Bakı: Azərneşr, – c. 19. – 2006. – s. 145-147.

⁴Aliyev, İ.H. Order of the President of the Republic of Azerbaijan on additional measures to finance archeological expeditions to be conducted by the Institute of Archeology and Ethnography of the Azerbaijan National Academy of Sciences in 2008-2009 // Xalq Qəzeti. – 2008, February 5. – p. 1.

⁵Koşay, H.Z., Turfan, K. Erzurum Karaz Kazısı Raporu // – Ankara: Belleten 23/91, – 1959. – s. 349-413; Koşay, H.Z., Vary, H. Pular Kazısı 1960 Mevsimi Çalışmaları Raporu // – Erzurum: Atatürk Üniversitesi yayınları, – 1964. – s. 5-16.

⁶Esin, U. Değirmentepe (Malatya) Kurtarma Kazısı // Ankara: Kazı Sonuçları Toplantısı V, 1983, – 1984. – s. 71-80; Sagona, A., Sagona C. Excavations at Sos Höyük, 1998-2000: Fifth Preliminary Report // Ancient Near Eastern Studies, – 2000. 37, – p. 56–127.

In 1985, V.Aliyev's article dedicated to the materials of Sadarak Chalcolithic settlement was published.⁷

The Order of the Chairman of the Supreme Assembly of Nakhchivan AR dated December 6, 2005 was of great importance in the study of the monuments of the Late Chalcolithic period. "Encyclopedia of Nakhchivan monuments" published in 2008 about the monuments registered in accordance with the order⁸ and "Archaeological monuments of Nakhchivan".⁹ In 2006, during the research conducted in 2006-2013 in Ovçular tepe settlement under the leadership of the international Azerbaijani-French archeological expedition V.Bakhshaliyev, K.Marro and S.Ashurov, very important archeological complexes of the Late Chalcolithic period were discovered. The results of the excavations of the authors of the excavations in 2009¹⁰ and in 2011¹¹ It is also reflected in the published articles, as well as in the book "Ovçular tepe" published in 2010. As a result of archeological excavations carried out in the Sirabchay valley under the leadership of V.Bakhshaliyev in 2010, 23 new Chalcolithic settlements were discovered, most of which belong to the Late Chalcolithic period.¹² Z.Novruzov, N.Aliyev, K.Marro and others took part in the research. Some archeological materials have

⁷Əliyev, V.H. Sədərək Eneolit yaşayış yeri // – Bakı: Azərbaycan SSR EA Xəbərləri, – 1985. №2, – s. 61-67.

⁸Encyclopedia of Nakhchivan monuments / Ed. hey. Chairman VY Talibov. – Nakhchivan: Ajami, – 2008. – 522 p.

⁹Baxşəliyev, V.B. Naxçıvanın arxeoloji abidələri / V.B.Baxşəliyev. – Bakı: Elm, – 2008. – s. 71-107.

¹⁰Marro, C, Yılmaz, Y. The Infant Jar-Burials from the Late Chalcolithic Village of Ovçular Tepesi (Nakhchivan, Azerbaijan): a Mesopotamian Tradition // Studies on the Archaeology of the Ancient Near East in Honour of Antonio Sagona, – Paris: – 2018. – p. 29-48.

¹¹Marro, C., Bakhshaliyev V. Ashurov S. Excavation at Ovçular tepesi (Nakhchivan, Azerbaijan) // Second Preliminary Report: The 2009-2010 Seasons // *Anatolia Antiqua*, XIX, – 2011. – p. 53-100.

¹²Baxşəliyev, V.B. Sirabda arxeoloji araşdırmalar / V.B.Baxşəliyev, Z.Novruzov. – Bakı: Oskar, – 2010. – s. 3-30.

been published¹³ in 2013-2014, in the settlements of Yeniyoł and Shorsu located in the Sirabchay valley, V.B.Bakhshaliyev¹⁴ under the leadership of, Zirincli, located in the Sirabchay valley, Shorsu¹⁵ in 2014-2015, an international Azerbaijani-French archeological expedition led by V.Bakhshaliyev and K.Maró conducted archeological excavations in the Uchan Agyl settlements.

However, it should be noted that the archaeological monuments of the Arpachay, Sirabchay and Nakhchivanchay basins have not been studied in comparison with the monuments of Eastern Anatolia, which once again confirms the relevance of the study of the subject. There is a great need for a generalized and monograph study of the archeological monuments of the Late Chalcolithic period of Nakhchivan and Eastern Anatolia.

Object and subject of research. The dissertation includes archeological monuments located in Arpachay, Sirabchay and Nakhchivanchay basins, as well as settlements and grave monuments, as well as materials of settlements located in the east of Anatolia. The main object of research in the dissertation was the material and cultural samples obtained during archeological research. The subject of the dissertation is the study of the ancient cultures of Nakhchivan and Eastern Anatolia in the Late Chalcolithic period, as well as the cultural ties of the ancient tribes living in this region. Among the archeological materials, ceramics predominate. During the research, the materials kept in the Nakhchivan State History Museum and the Museum of Archeology and Ethnography of the Nakhchivan Branch of ANAS, as well as in the fund of archeological expeditions were processed and generalized. During the research, the materials of the

¹³ Baxşəliyev, V.B. Sirabda Eneolit dövrünə aid yeni abidələr // – Naxçıvan: AMEA Naxçıvan Bölməsinin Xəbərləri, – 2012. № 1, – s. 107-115; Baxşəliyev, V.B. Zirincli Eneolit dövrünə aid yaşayış yerlərindən biridir // –Naxçıvan: Naxçıvan Müəllimlər İnstitutunun Xəbərləri, – 2012. № 1, – s. 68-72.

¹⁴ Baxşəliyev, V.B. Новые материалы эпохи неолита и энеолита на территории Нахчывана // – Москва: Российская археология, – 2015. № 2, – с. 136-145.

¹⁵ Baxşəliyev, V.B. Новые энеолитические памятники на территории Нахчывана // – Москва: Российская археология, – 2014. № 1, – с. 83-90.

surface researches we conducted together with Vali Bakhshaliyev in Eastern Anatolia and Nakhchivan were also used. Materials from books and articles devoted to the study of archeological materials of Nakhchivan and Eastern Anatolia were also used in the dissertation.

Scientific descriptions and reports of material-cultural samples kept in the archeological fund of Nakhchivan Branch of ANAS, Nakhchivan State History Museum, Babek region History and Ethnography Museum, Sharur region History and Ethnography Museums were involved in the research in writing the dissertation. Azerbaijani archaeologists A.K.Alakbarov, O.H.Habibullayev, V.H.Aliyev, V.B.Bakhshaliyev, A.G.Seyidov, S.H.Ashurov, B.I.Ibrahimli and V.Sevin, H.Z.Koshay, K.Turfan, R.Whallon, S.Kantman, U.Esinin, G.Arsebuk, Van Loon, H.Hauptmann, M.Frangipane, A.Sagona and others were used as sources. In general, reports, books and articles of Azerbaijani and world archeologists on the subject were widely used in writing the dissertation. Archeological materials obtained by V.B.Bakhshaliyev, K.Maró, S.Ashurov and other researchers during the study of the Arpachay, Nakhchivanchay and Sirabchay basins played a key role in writing the dissertation. Archeological materials discovered during the archeological trips in which we participated were also used in writing the dissertation.

Goals and objectives of the research. During archeological researches, many material-cultural samples were discovered in the territory of Nakhchivan and Eastern Anatolia¹⁶. During the study of archeological monuments and archeological materials found in these monuments, the following goals and objectives were mainly set:

-To give a typological and topographic description of settlements, to give a typological description of the discovered archeological materials. Comparative study of material and cultural samples of Nakhchivan and Eastern Anatolia;

¹⁶ Baxşəliyev, V.B. Sirabda Eneolit dövrünə aid yeni abidələr // – Naxçıvan: AMEA Naxçıvan Bölməsinin Xəbərləri, – 2012. № 1, – s. 107-115; Esin, U., Arsebuk G. Tepecik ve Tülintepekazısı 1971 // Ankara: Keban Projesi 1971 Çalışmaları, – 1974. – s. 111-159.

-To determine the nature of seasonal habitats that occur in the Chalcolithic period and to determine the factors that contribute to the emergence of this type of habitat;

-To reveal the general and characteristic features of the ceramics found in the monuments of Nakhchivan and Eastern Anatolia, to determine the directions of the spread of archeological cultures and their relative chronology;

-To generalize and analyze archeological materials of Nakhchivan and Eastern Anatolia of the Late Chalcolithic period, to prepare their graphic drawings and to involve unpublished ones in scientific circulation;

-To analyze the archeological materials found in the archeological monuments of Nakhchivan and Eastern Anatolia in the context of comparative analysis with the materials of Azerbaijan, South Caucasus and the Middle East, to determine the absolute chronology of archeological materials on the basis of radiocarbon analysis;

-To determine the location of archeological monuments in this region between the monuments of Azerbaijan, the South Caucasus and the Middle East on the basis of comparative and analytical analysis;

-To draw conclusions by summarizing the origin of the Late Chalcolithic cultures, the factors influencing their formation, the issues related to the spread and periodization of archeological cultures.

Scientific method of research. In the research the ideology of Azerbaijanism put forward in the orders, speeches of the national leader of the Azerbaijani people Heydar Aliyev and his successors Ilham Aliyev and Vasif Talibov has been taken as the main basis. The archaeological materials are investigated in the context of monuments of the South Caucasus, Eastern Anatolia and the Middle East. In writing the dissertation, topographic analysis was used to determine the nature of habitats, people's lifestyles, and typological and comparative analysis methods were used to evaluate archeological materials. In the evaluation of archeological materials,

the method of analytical analysis was applied to determine the place of the cultures formed in the region during the Late Chalcolithic period between the cultures of Azerbaijan, the South Caucasus and the Middle East. In the study of archeological materials during the writing of the dissertation O.H.Habibullayev, V.H.Aliyev, I.H.Narimanov, G.S.Ismayilzade, J.A.Khalilov, H.F.Jafarov, V.B.Bakhshaliyev, A.Q.Seyidov, B.I.Ibrahimli, S.H.Ashurov, K.Maro, S.Gülçür, U.Esin, G.Arsebuk and other prominent researchers were used.

The main provisions of the defense. The main provisions defended in the dissertation are as follows:

-Archaeological cultures of Nakhchivan and Eastern Anatolia of the Late Chalcolithic period were formed as a result of interaction of ancient tribes inhabiting this region and acquired specific features depending on cultural and natural-geographical factors;

-Archaeological monuments of the Late Chalcolithic period and the material-cultural samples found in these monuments are very important for studying the way of life, ideological views, economic and cultural relations of our great ancestors;

-Although the Late Chalcolithic cultures of Nakhchivan and Eastern Anatolia developed on the basis of local Neolithic and Chalcolithic cultures and had their own characteristics, the tribes lived in the neighborhood and the region's raw materials allowed for the development of intercultural relations and their interaction.

Scientific novelty of research work. As a result of comparative analysis of archeological materials of Nakhchivan and Eastern Anatolia, it was possible to determine the characteristics of the Late Chalcolithic culture formed in these regions. The scientific innovations of the research are as follows:

- Late Chalcolithic settlements of Nakhchivan and Eastern Anatolia, grave monuments and material-cultural samples found in these monuments were generalized, systematized and involved in monographic research for the first time on the basis of comparative analysis;

- Based on archeological materials, it was determined that the culture of the Late Chalcolithic period developed in Nakhchivan and

Eastern Anatolia on the basis of the traditions of the early stages of the Neolithic and Chalcolithic periods;

- Typological analysis of archeological materials, especially ceramics found in Nakhchivan and Eastern Anatolia monuments was given, relative and absolute chronology of archeological materials was determined on the basis of comparative researches, as well as carbon analysis;

- During the researches it was determined that the features characteristic of Ovçular tepe culture surrounding Nakhchivan in the Late Chalcolithic period were also spread in Igdir and Agri valleys;

- Although there are typological similarities between the pottery of archeological monuments in Malatya, Keban region of Eastern Anatolia and Late Chalcolithic pottery of Nakhchivan, the pottery of this region of Eastern Anatolia differs from Ovçular tepe culture in terms of color and is related to Anatolian Neolithic and Chalcolithic culture;

- It was determined that Ovçular tepe culture developed and formed on the basis of local Neolithic and Early Chalcolithic cultures.

Theoretical and practical significance of the research. The dissertation is based on rich archeological and literary materials. Since most of the archeological materials are involved in comparative research for the first time, they are important in the study of the ancient history of Eastern Anatolia, Azerbaijan, including Nakhchivan. The obtained results can be used in the future to study the archeological cultures of these two regions and to solve problematic issues related to their interaction and the direction of their interaction. No other region in the South Caucasus and Azerbaijan has been so close to each other during the Late Chalcolithic period. The depictions on ceramics are very important for studying the way of life and ideological views of our great ancestors, especially the inhabitants of the Late Chalcolithic period.

The generalized archeological materials in the dissertation, as well as the scientific results can be used in the preparation of generalized works on the archeology of the South Caucasus, the

Middle East and Azerbaijan, in the writing of the history of Azerbaijan, in the writing of textbooks on the history and archeology of Azerbaijan. The research work can also be used in the future to write research papers, organize museums of history and local lore and various exhibitions.

Approbation and application. The subject of the dissertation was approved by the decision of the Presidium of Nakhchivan Branch of ANAS dated January 19, 2016. Reports on the topic of the dissertation were made at international and national conferences in the Republic of Azerbaijan, scientific articles were published. The dissertation was discussed and submitted for defense in the “Ancient Archeology” department of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch of ANAS with the participation of other relevant departments and employees of Nakhchivan State University. The results of the research were used in the chronology of archeological materials, as well as in the design of exhibition halls of local history museums, especially local history museums of Sharur and Babek districts. The results of the research can be used in the future to write generalized works on Azerbaijani archeology.

Name of the organization where the dissertation work is performed. The dissertation work was carried out in the “Archeology of ancient times” department of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch of ANAS.

The structure volume of the dissertation. The dissertation consists on an introduction, three chapters, a conclusion, a list of references and illustrations. The introductory part consists 22.047, Chapter I 92.608, Chapter II 61.078, Chapter III 46.767, conclusion 11.666 characters. In total, there are 210.077 marks in the dissertation.

MAIN CONTENT OF THE DISSERTATION

In the **introduction**, the relevance of the study of the Late Chalcolithic monuments of Nakhchivan and Eastern Anatolia was substantiated, the degree of study of the topic was discussed, the goals and objectives of the research, research method, issues of defense, scientific novelty, approbation, its theoretical and practical significance.

Chapter I of the dissertation is called “**Archaeological monuments of Nakhchivan**”. This chapter consists of two paragraphs. The first paragraph of this chapter, entitled “**Settlements**”, examines the settlements and tombs of Nakhchivan belonging to the Late Chalcolithic period. The first paragraph of the first paragraph examines “**Settlements of the Arpachay Valley**”. The Late Chalcolithic culture of the Arpachay valley is mainly inhabited by Ovçular tepe¹⁷ due to the it was noted that there were two construction floors in Ovçular tepe. The first construction layer is characterized by single-storey semi-excavations, and the second construction layer is characterized by multi-room houses. Materials belonging to the Late Chalcolithic period were also found in Khalaj, Sadarak, Ashagi Dasharkh, Shortepa settlements. The second paragraph of the first paragraph examines “**Settlements of the Sirabchay and Nakhchivanchay valleys**”. These monuments include the Chalcolithic monuments Surumchek, Zirinjli, Shorsu, Serin Bulag, Yumru Surumchek, Garatepe, Chay Aghzi, Takhchali, Guney Agil, At Agil and others.¹⁸ Most of these monuments have been studied by exploratory research, and archeological excavations have been carried out in Shorsu, Yeni yol and Zirinjli settlements.

¹⁷Baxşəliyev, V. Ovçulartəpəsi / V.Baxşəliyev, C.Marro, S.Aşurov – Bakı: Elm, – 2010. – s. 4-28; Baxşəliyev, V., Marro, C., Aşurov, S. Son Eneolit və Erkən Tunc dövrünə aid Ovçulartəpəsi yaşayış yeri // – Bakı: Azərbaycanın erkən əkinçilik dövrü abidələri, – 2012. – s. 78-87.

¹⁸Baxşəliyev, V. Sirabda arxeoloji araşdırmalar / V.Baxşəliyev, Z.Novruzov – Bakı: Oskar, – 2010. – s. 15-70.

Architectural remains were found only in Shorsu and Yeniyol settlements. Very few animal bones are found in some settlements (Shorsu), and in others (Zirinjli) clay molds and copper minerals are found, indicating that people in these settlements are also engaged in metallization and metallurgy. Grave monuments of the Late Chalcolithic period are represented only by archeological materials of Ovçular tepe.¹⁹ In the third paragraph of the first paragraph, entitled “**Tomb Monuments**”, the graves found in Ovçular tepe are classified into two parts: earthen graves and pit graves.

The second paragraph of Chapter I, entitled “**Analysis of Archaeological Materials**”, provides a comparative analysis of archeological materials found in the Late Chalcolithic monuments of Nakhchivan with materials from the countries of the South Caucasus and the Middle East. The pottery of Ovçular tepe settlement was studied in two stages according to the stratigraphy of the settlement. Both stages of Ovçular tepe are characterized by a ceramic print, a finger print, a pottery-shaped convex ornament, and a pottery surrounded by an annular relief ring.²⁰

Inheritance is clearly felt in the manufacture of conical and convex bowls, jugs. The main part of the ceramic product consists of simple bowls with straight mouths or gene mouthpieces with the edges of the mouth folded outwards. However, in the second stage, three-handled, narrow-necked jugs disappear; such jugs are not known from the period of brick construction. The study of ceramics found in all construction periods of Ovçular tepe shows that there is no significant change between the early and late stage ceramics. Vessels decorated with ring-shaped relief ornaments and nipple-

¹⁹Marro, C, Yılmaz, Y. The Infant Jar-Burials from the Late Chalcolithic Village of Ovçular Tepesi (Nakhchivan, Azerbaijan): a Mesopotamian Tradition // Studies on the Archaeology of the Ancient Near East in Honour of Antonio Sagón, – Paris: – 2018. – p. 29-48.

²⁰Marro, C., Bakhchaliyev V. Ashurov S. Excavation at Ovçular tepesi (Nakhchivan, Azerbaijan) // Second Preliminary Report: The 2009-2010 Seasons // *Anatolia Antiqua*, XIX, – 2011. – p. 87, pl. I.

shaped protrusions also confirm the inheritance between the two stages.²¹ The jugs with embossed goat motifs of this period are very remarkable in terms of craftsmanship. Studies show that despite the fact that the ceramics of both stages differ in certain technological and morphological features, the ceramics of the second stage developed and formed on the basis of the traditions of the first period. From this point of view, we can say that both stages belong to the same culture. In our opinion, it is correct for researchers to call this type of ceramics Ovçular tepe culture, which is distinguished by these peculiarities. Based on the research, it can be said that the pottery found in Khalaj and Sadarak coincides with the second stage of Ovçular tepe, and the Arabic pottery coincides with the archeological materials of the Sirabchay valley.

The second paragraph of the second paragraph examines the **“Late Chalcolithic ceramics of the Sirabchay and Nakhchivanchay valleys”** and shows that the Late Chalcolithic culture spread in the region is a continuation of the Ovçular tepe culture. In general, the study of the Late Chalcolithic monuments of Azerbaijan shows that there were different cultures in this period.²² Pottery samples distributed in the Sirabchay valley, especially in the Shorsu settlement, have been found to contain elements of the Leylatapa culture, but this issue has not been extensively studied and published. Studies show that although the Late Chalcolithic pottery of Nakhchivan is typologically similar to Norshuntepe ceramics, due to its technological features, it is different from the dark colored ceramics of Norshuntepe.²³ The study of pottery of the Sirabchay and Nakhchivanchay valleys in Ovçular tepe confirms that the pottery of the Late Chalcolithic period of Nakhchivan is more closely related to

²¹Baxşəliyev, V. Ovçulartəpəsi / V.Baxşəliyev, C.Marro, S.Aşurov – Bakı: Elm, – 2010. – s. 12.

²²Алиев, Н. Культура северного Азербайджана в эпоху позднего энеолита / Н.Алиев, И. Нариманов – Баку: Агрыдаг, – 2001. – с. 80-92.

²³Hauptmann, H. Die Grabungen aus dem Norsuntepe, 1973 // – Ankara, In Keban Project 1973 Activities, Series I. № 6, – 1979. – p. 61-78.

the pottery of the Urmia basin, showing that it covers a wide area of culture formed in this region. In the third paragraph of the second paragraph, “Labor tools” are examined. Among the tools made of stone, bone and bronze, obsidian tools are especially noteworthy. The researches in the ancient settlements of Azerbaijan are mainly from Paravan, Kalbajar and Zangazur fields,²⁴ From Goycha and Zangazur fields in Nakhchivan.²⁵

It has been widely used, which shows the directions of the relations between the ancient farming and cattle tribes. The use of the Zangazur obsidian has played a role in the development of economic and cultural ties between the people living in Mil, Mugan and Nakhchivan in Azerbaijan. Based on the research, it can be concluded that the Daralayaz and Zangazur pastures were the pastures of the ancient agricultural and cattle-breeding tribes inhabiting the Nakhchivan Karabakh and Urmia basins. We believe that nomadic pastoralism played an important role in acquainting the ancients with raw materials such as copper and obsidian, which were important for ancient agricultural cultures. Probably, Nakhchivan was also involved in the formation of economic and cultural relations between the ancient agricultural and cattle-breeding tribes inhabiting the Karabakh and Urmia basins and common elements in the culture of these regions.²⁶ the importance of nomadic cattle breeding.

The fourth paragraph of the second paragraph is entitled **“Metallurgy and metallization”**. Archaeological excavations have revealed that Azerbaijan, including Nakhchivan, was one of the ancient metallurgical centers of the South Caucasus. Presence of rich

²⁴Нариманов, И.Г. Культура древнейшего земледельческого-скотоведческого населения Азербайджана / И.Г.Нариманов. – Баку: ЭЛМ, – 1987. – с. 97.

²⁵Baхşəliyev, V.B. Naxçıvanda 2018-ci ilin arxeoloji araşdırmaları / V.B.Baхşəliyev. – Naxçıvan: Əcəmi, – 2019. – s. 18.

²⁶Baхşəliyev, V. Azərbaycan’ın Son Neolitik ve İlk Kalkolitik Çağ Kəltürlerinin Kuzeybatı İran ile (İran Azərbaycanı) İlişkileri // Ankara: TUBA-AR, – 2020, 27, – s. 11-27.

copper and arsenic deposits in Nakhchivan and nearby²⁷ and the presence of rich copper deposits in the nearby Zangazur Mountains²⁸ Since ancient times, it has created conditions for the development of metallurgy on the local soil. Bronze axes found in Ovçular tepe and a mold found in Zirinjli and Gahab show the development of casting technology at the end of the Chalcolithic period. The research conducted by the international Azerbaijani-French archeological expedition in Duzdag confirms that mining in Nakhchivan was widely developed during the Chalcolithic period. During the researches in Duzdag, ceramic samples belonging to the Chalcolithic period and Kur-Araz culture were found around the ancient salt mines. Various tools used in mining were also found in Duzdag.²⁹ This confirms that mining in Nakhchivan has an ancient history. Research in the fifth paragraph of the second paragraph, entitled **“Agriculture and cattle breeding”**, shows that in the Late Chalcolithic period, agriculture and cattle breeding played a key role in the economy. Analysis of grain grains shows that there are many residues of barley [Hordeum]. Remains of wheat [Triticum] are very small. The discovery of Aegilops, panicoid grasses and Cyperaceae weeds during the study of grain grains, according to researchers, indicates that the grain belongs to local production.³⁰ In general, the study of animal bones obtained from Ovçular tepe shows that fishing and small ruminants play an important role in the economy of the

²⁷Абибуллаев, О.А. К вопросу о древней металлургии Азербайджана // – М-Л: МИА СССР, – 1965. № 125, – с. 65-73; Бахшалиев, В.Б. Металлургия и металлообработка на территории древней Нахичевани / В.Б.Бахшалиев. – Баку: Элм, – 2005 – с. 16-29.

²⁸Иессен, А.А. К вопросу о древнейшей металлургии меди на Кавказе // Известия Государственной Академии Истории Маеериальной Культуры, М.-Л: – 1935, 120, – с. 7-216.

²⁹Marro, C., Bakhchaliyev V., Sanz S. Arkhaeological investigation on the salt mine of Duzdagi (Nakhchivan, Azerbaijan) // Ankara: TÜBA-AR 13, – 2010. – p. 229-244.

³⁰Бахşəлиев, V. Ovçular təpəsi / V.Бахşəлиев, С.Марро, S.Аşуров – Bakı: Elm, – 2010. – s. 18-19.

habitat. The preference of the inhabitants of Ovçular tepe for small horned animals in cattle breeding was undoubtedly due to the development of nomadic cattle breeding. The fact that most of the Ovçular tepe obsidians were brought from the Goycha basin also indicates that there were long-distance connections during this period, and that this migration could be related to the development of cattle breeding. Research in the sixth paragraph of the second paragraph, entitled "Obsidian deposits", shows that the closest obsidian deposits to this region are located in the Zangazur Mountains. The study of archeological monuments located in the Nakhchivanchay and Sirabchay basins shows that the ancient Nakhchivan tribes widely used both Zangazur and Goycha obsidian, and ancient roads passed along the Nakhchivanchay valley.³¹ The recycling of tools at the Ovçular tepe settlement also indicates a lack of obsidian supply. Although the reason for this has not yet been fully clarified, according to researchers, this may be due to the activation of the Kur-Araz tribes in the region. We can say that obsidian raw materials have played an important role in the development of the ancient agricultural cultures of Nakhchivan and Eastern Anatolia, as well as in ensuring economic and cultural ties between the regions.

Chapter II of the dissertation “**Archaeological monuments of Eastern Anatolia**” is studied. An important period in the history of Eastern Anatolia is the Late Chalcolithic period. During this period, new settlements appeared due to population growth. Although some researchers say that migrations across the straits played a role in the formation of local cultures, the Late Chalcolithic culture of Eastern Anatolia was to some extent associated with Northern Mesopotamia, northwestern Iran, and the South Caucasus. In the first paragraph of Chapter II, entitled “**Settlements**”, Deyirmantepe, Arslantepe, Norshuntepe, Tulkutepe, Tulintepe, Tepejik, located in Eastern

³¹Kuliyeva, Z., Bahşeliyev, V. Nahçıvan’ın Kalkolitik Çağ Kültürü (Azerbaycan) // – Ankara: TUBA-AR, – 2018, 23, – s. 29-52.

Anatolia,³² Archaeological excavations in Korujutepe, Sos Hoyuk and other settlements, as well as Ashtepe, Chimen, Cholpan, Hanago, Sarigul³³ and information on surface materials obtained during the survey of other habitats. Archaeological materials found in these settlements have been extensively analyzed in the second paragraph of Chapter II, entitled “**Analysis of Archaeological Materials**”. Most of the archeological materials found in the archeological monuments of Eastern Anatolia are ceramics. Most ceramics are made of clay mixed with straw and cooked moderately well. Some of the ceramic samples are made of red and some of gray clay. An unbaked gray layer is kept between their walls. Some of the ceramics are embroidered on the outside and some on the inside with a comb. This type of pottery was mainly found in the Hanago settlement in Dogubeyazit. It should be noted that this type of ceramics is also typical for the Ovçular tepe settlement. According to researchers, this type of combing served to smooth the surface of the dishes rather than the pattern. According to S. Gulchur and K. Maron, the pots were made by placing layers of clay on top of each other, so they were made with a comb and the traces of joining of the layers were lost.³⁴

The ceramic product consists of pieces of bowls, jugs and bowls. Typological analysis of archeological materials shows that there are certain similarities between the ceramics of Eastern Anatolia and the ceramics of Nakhchivan in terms of technological and morphological form. While pink ceramics predominate in Nakhchivan monuments, black and graphite ceramics predominate in some monuments of Eastern Anatolia. From this point of view, the Late Chalcolithic

³²Esin, U. Tülintepe Excavations, 1972 // – Ankara: İn Keban Project Publications I/5. – 1976. – p. 147.

³³Özfirat, A., Marro, C. 2004 Yılı Van, Ağrı ve İğdır İlleri Yüzey Araştırması // – Ankara: Türk Arkeoloji ve Etnografi Dergisi, – 2007, – s. 16-17.

³⁴Gülçur, S., Marro C. The view from the north: comparative analysis of the Chalcolithic pottery assemblages from Norşuntepe and Ovçular Tepesi // After the Ubaid: Interpreting Change from the Caucasus to Mesopotamia at the Dawn of Urban Civilization (4500-3500 BC). –Paris: – 2012, – p. 312.

pottery of Nakhchivan is closer to the materials of Igdir-Agri lowland. Technological research of ceramics allows us to say that the Late Chalcolithic ceramics of Nakhchivan were formed on the basis of local Neolithic ceramics, and the Late Chalcolithic ceramics of Eastern Anatolia were formed on the basis of Anatolian Neolithic ceramics. However, the typological and technological similarities between Nakhchivan and the Igdir-Agri lowland allow us to say that they belong to the same culture.

Chapter III of the dissertation is entitled “**Common features and chronology of Nakhchivan and Eastern Anatolian monuments**”. Studies show that Nakhchivan and Eastern Anatolia have a number of common features in the material culture of the Late Chalcolithic period. These features are observed in both architectural remains and ceramics. The first paragraph of Chapter III examines “**Common features in architecture**”. The rectangular shape of the houses and the fact that they are built of brick are characteristic of both regions. However, in Norshuntepe the houses were built adjacent to each other, while in Ovçular tepe the houses were built in groups. As it is known, the rectangular architecture of the Late Chalcolithic period was also found in the settlement of Yeniyol.

The second paragraph of the third paragraph examines “**Common features observed in ceramics**”. A number of common features from the technological and morphological point of view were observed in the pottery of the Late Chalcolithic period of Eastern Anatolia and Nakhchivan. The first examples of this type of ceramic product are barbecues.³⁵ These types of vessels found in Ovçular tepe and Norshuntepe are almost identical in shape. Certain parts of the same type of ceramics are cube-shaped legs and strainers. This type of pottery is known from Ovçular tepe, Tulintepe and Norshuntepe. There are similarities in the motifs of Ovçular tepe and

³⁵Gülçur, S., Marro C. The view from the north: comparative analysis of the Chalcolithic pottery assemblages from Norşuntepe and Ovçular Tepesi // After the Ubaid: Interpreting Change from the Caucasus to Mesopotamia at the Dawn of Urban Civilization (4500-3500 BC). –Paris: – 2012, – p. 305-352.

Norshuntepe ceramics. Both the technique of execution of the patterns and the motifs of the pattern are similar. Patterns are executed by printing, embossing, embossing and painting. However, there are some differences in the pattern of ceramics in both regions, which is due to the fact that they are locally produced. Some of the ceramic patterns are embossed on the relief belt, and some are embroidered with fingerprints. Ovçular tepe ceramic samples are made of pink and straw mixed clay. In Norshuntepe, such ornaments lasted from the first stage to the third stage. There are few ceramics decorated with the pressure of a four- or five-toothed comb. While whole pots decorated with this type of ornament were found in Norshuntepe, this type of ornament was found in only one piece of ceramics in Ovçular tepe. These types of ornaments, as mentioned above, are widely represented in Tulintepe ceramics. In Norshuntepe, this type of ornament lasted from the first to the third stage. This type of ornament Shomutapa,³⁶ Kultepe and Nakhchivantepe³⁷ known from habitats. Some of the similar ceramics also contain relief animal drawings. In Norshuntepe and Tulintepe, animal images were found on black polished ceramics. This type of ceramics exists in Norshuntepe in both I, II and III stages. Along with relief animal images, human figures are also found in the ceramic samples of Tulintepe.³⁸ Some of the ceramics, which are similar for both regions, are embroidered on the edges of the mouth. There are few Zion-type ceramics in Ovçular tepe, the edges of which are decorated with embossed ornaments. Most of these types of ceramics are made of straw mixed clay and baked in red. Although there are some similarities between the Norshuntepe and Ovçular tepe ceramics in

³⁶Ахундов, Т.И. У истоков Кавказской цивилизации. Неолит Азербайджана. Шомутепе / Т.И.Ахундов. – Баку: Наука, – 2012. – с. 376-378.

³⁷Нахçивантәпә уағайығ yerindә arxeoloji tәdqiqatlar / V.Baxşәliyev, Z.Quli-yeva, T.Hәşimova [vә b.] – Naхçivan: Әcәmi, – 2018. – s. 124.

³⁸Esin, U. The relief decorations on the Prehistoric pottery of Tülin-tepe in Eastern Anatolia // Between the Rivers and over the Mountains. – Roma: Università di Roma “La Sapienza”, – 1993. – p.112.

terms of shape and pattern motif, both settlements have their own characteristics.

The first paragraph of the second paragraph examines **“Peculiarities of Nakhchivan ceramics”**. The peculiarities of Nakhchivan ceramics were observed in Ovçular tepe settlement. One such example is a small bowl. One of the typical examples of pottery for hunters is the lower part of the barbecue. This type of container has not been found in its entirety. Their bodies are surrounded by small circular holes. These vessels were found in various monuments of the Late Chalcolithic period in the Kura Valley, including the settlement of Boyuk Kesik.³⁹

The bowls with a convex body, the mouth is slightly folded inwards, and the seat is sunk inwards are also typical examples of the Ovçular tepe settlement. Samples of this type of ceramics are made of straw mixed clay and fixed in the ceramic products of both stages. Shargovdali two-handle or three-handle jugs are also typical examples of Ovçular tepe ceramics. They are slender and narrow-necked. The outer surface of the dishes is made with a comb. Some of the ceramic specimens are jugs with wavy edges. A group of ceramic samples typical of Ovçular tepe are ceramic samples with a "V" mark on them. This type of ceramic product is represented by only a few examples. Such signs have been found in the Tell Brak and Tell Ziyad settlements in the Khabur Basin, as well as in the Oylum Mound and Horom Mound.⁴⁰

In the second paragraph of the second paragraph, **“Peculiarities of Eastern Anatolian ceramics”** is studied. The peculiarities of Eastern Anatolian ceramics were observed in the ceramics of Tuluntepe and Norshuntepe settlements. Some pottery samples found at the Norshuntepe settlement were unique to this settlement, and no

³⁹Müseyibli, N. Böyük Kəsik eneolit yaşayış məskəni / N.Müseyibli, – Bakı: Nefta-Press, – 2007. – 228 s.

⁴⁰Özgen, E., Helwing B., Engin A., Niewenhuyse O., Spoor R. Oylum Höyük 1997-1998. Die spatchalkolitische Siedlung auf der Westterrasse // – Paris: Anatolia Antiqua VII, – 1999. – p. 19-67.

such pottery is found in other settlements. However, it should be noted that there are very few examples of this type of ceramics. One group of vessels typical of Norshuntepe is a shallow bowl with a biconical body and round seats, while others are cylindrical-conical. Well-made examples of this type of bowl are known in the settlements of Hamoukar and Tell Feres.⁴¹ Bowls with convex edges, incense-shaped ceramics with conical and biconical bodies are also typical ceramics of Norshuntepe. Studies show that Ovçular tepe and Norshuntepe ceramics have similar properties, as well as ceramic samples that are characteristic of each settlement. This shows that the Late Chalcolithic culture has its own peculiarities of development in different regions. While round-bodied pots with the edges of the mouth folded outwards are common in Norshuntepe, such vessels are rare in Ovçular tepe. On the other hand, in Ovçular tepe these types of vessels are represented by straw-mixed ceramics, while in Norshuntepe these types are seen in dark-polished ceramics and are known from earlier stages. This is probably due to the fact that the lower layers of Norshuntepe belong to an older period than Ovçular tepe. Although the relationship between the red straw ceramics of Norshuntepe and the dark polished ceramics has not yet been fully elucidated, it is very interesting that the forms characteristic of the early stage continue in the later stages in both types of ceramics. On the other hand, the exact similarity of the composition of finger prints, serpentine convex belts, nipple-shaped ornaments used on the convex belt used in the embroidery of ceramics is also very interesting.

The third paragraph of Chapter III examines issues related to the **“Chronology of materials of the Late Chalcolithic period”**. So far, different views have been expressed on the chronology of Chalcolithic monuments, and the Late Chalcolithic monuments of

⁴¹ Gülçur, S., Marro C. The view from the north: comparative analysis of the Chalcolithic pottery assemblages from Norşuntepe and Ovçular Tepesi // After the Ubaid: Interpreting Change from the Caucasus to Mesopotamia at the Dawn of Urban Civilization (4500-3500 BC). – Paris: – 2012, – p. 322.

Nakhchivan and Eastern Anatolia have been assessed differently. As we have mentioned, since Neolithic monuments belong to the Chalcolithic period, some researchers have wanted to evaluate Late Chalcolithic monuments such as Ovçular tepe as Middle and Late Chalcolithic to fill the chronological gap.⁴² However, there were some typological differences between the ceramics of Kultapa I and the ceramics of Ovçular tepe. However, after Kultapa I was assigned to the Late Neolithic period and Ovçular tepe to the Late Chalcolithic period, a certain gap was created between these periods. This gap was filled by the study of new monuments discovered by VB Bakhshaliyev in 2010-2017. Thus, the study of the Nakhchivantepe settlement discovered in the Nakhchivanchay valley revealed that this settlement e. b. It showed that it was settled at the end of the 6th millennium and in the 5th millennium.⁴³ V.B. Bakhshaliyev noted that people settled in this settlement during the Late Neolithic, Early Chalcolithic and Middle Chalcolithic periods. During the researches carried out in the Sirabchay valley, the settlements of Uchan Agyl, Uzunoba and Bulagovaya of the Middle Chalcolithic period were discovered. The ceramics of these monuments differ from the Late Chalcolithic monuments of the Sirabchay valley by certain typological features. However, there is no doubt that these cultures are constantly evolving and continuing each other. The Late Chalcolithic monuments of Nakhchivan coincide with the Sioni culture found in Georgia. However, as mentioned above, the Late Sioni Ware site of the Late Chalcolithic monuments of the South Caucasus.⁴⁴

⁴²Baxşəliyev, V. Ovçulartəpəsi / V.Baxşəliyev, C.Marro, S.Aşurov – Bakı: Elm, – 2010. – s. 6.

⁴³Baxşəliyev, V. Azərbaycan'ın Son Neolitik ve İlk Kalkolitik Çağ Kültürlerinin Kuzeybatı İnan ile (İnan Azerbaycanı) İlişkileri // Ankara: TUBA-AR, – 2020, 27, – s. 11-27.

⁴⁴Kiguradze, T. The Chalcolithic – Early Bronze Age transition in the eastern Caucasus // Chronologie des Pays du Caushape et de l'Euphrate aux IVème-IIIème Millénaires. Actes du Colloque d'Istanbul, 16-19 décembre 1998, Varia Anatolica XI, – Paris: – 2000. – p. 321-325.

The typical "Sioni pottery" found in the Sioni settlement is very rare in the South Caucasus. Unlike Sioni ceramics, which is a mixture of black and sand, the ceramics of the South Caucasus, including the Sirabchay Valley, are mixed with straw and baked in red and yellow. Archaeological monuments of the Late Chalcolithic period of the Arpachay, Nakhchivanchay and Sirabchay valleys did not contain ceramics typical of Berikldibi and Leylatapa cultures. From this point of view, we can say that the Late Chalcolithic monuments of Nakhchivan belong to the period before the cultures represented by the Berikldibi and Leylatapa monuments of the South Caucasus.⁴⁵ Based on research, we can say that Mil plain, Nakhchivan, northern part of Lake Urmia and a certain part of Eastern Anatolia e. b. At the end of the 5th millennium, it entered the area of spread of the same culture.

The researches carried out in the **“Result”** part of the dissertation are summarized. The main results of the research are as follows:

-During the research it was determined that despite some differences in the architecture of the first stage and the second stage in Ovçular tepe, no sharp difference was observed in ceramics and these stages were a continuation of each other. Both the first and second stage ceramics are similar in terms of technology, morphology, shape and ornamentation. The nipple-shaped ornament, the convex belt, the embossed pattern on the convex belt, and fingerprints, which are characteristic of Ovçular tepe, developed in Nakhchivan on the basis of traditions known from the Neolithic, Early and Middle Chalcolithic (1).

-There are close similarities in terms of shape and ornamentation between Ovçular tepe and Norshuntepe, Tuluntepe and other settlements of Eastern Anatolia, which, in our opinion, is the result of the interaction of neighboring regions (6).

-Research shows that the inhabitants of Mil, Mugan plains, as well as Urmia basin used Zangazur fields near Nakhchivan. Thus,

⁴⁵Kuliyeva, Z., Bahşeliyev, V. Nahçıvan'ın Kalkolitik Çağ Kültürü (Azerbaycan) // – Ankara: TUBA-AR, – 2018, 23, – s. 29.

people living in the Mil plain, Urmia basin and Nakhchivan used common beds. This allowed the Ovçular tepe culture to influence the cultures of Mil, Mugan, Urmia basin, Igdir and Agri lowlands;

-Although the architecture and ceramics of Ovçular tepe settlement are related to the neighboring regions, they differ in their peculiarities. From this point of view, the materials of Ovçular tepe settlement can be called Ovçular tepe culture (7).

-Metal objects found in Ovçular tepe during the research, copper ore remains, bellows tip, lead objects and other findings confirm that this settlement is an ancient metallurgical center. By this time, Ovçular tepe metallurgists were already aware of the properties of various metals, including arsenic (3);

-Ceramic products found in archeological monuments in the Sirabchay and Gahabchay basins show that people have settled in this area since ancient times. The geographical location of this area near the Nakhchivanchay valley has created conditions for abundant pastures, cool springs and rivers, where agricultural and cattle-breeding tribes live. Studies show that the Late Chalcolithic culture in the Sirabchay valley is a continuation of the Ovçular tepe culture (4; 8);

-The discovery of numerous obsidian fragments and nuclei in the settlements, the discovery of malachite and azurite, which are copper minerals in the settlements, shows that the ancient people were acquainted with the raw material resources. Undoubtedly, the desire to obtain raw materials also played a role in the spread of people over a large area (3);

-The pottery found in the monuments of the Sirabchay valley shows that these settlements were mainly inhabited during the Late Chalcolithic period. The low concentration of the cultural layer in the settlements suggests that nomadic pastoralism was the main occupation of the people. The settlement of the settlements belonging to the Late Chalcolithic period shows that this region was used intensively at that time. Habitat protection is likely to protect people from natural disasters. At the end of the Chalcolithic period, the spread of the population to a large area, in our opinion, was

associated not only with nomadic livestock, but also with the reference of people to raw materials. This is confirmed by the discovery of copper ore remains in the monuments of the Sirabchay valley, as well as traces of metal processing (4). This region was probably one of the main lines of communication connecting the tribes living in the south and north of Azerbaijan. Undoubtedly, one of the roads connecting the South Caucasus with the Middle East in ancient times passed through Nakhchivan. These roads, used to bring obsidian in the Neolithic and Chalcolithic periods, later became the main means of obtaining metal;

-Remains of an metalworking hearth found in the Yeniyol settlement, as well as molds found in Zirinjli and Gahab, confirm that metallurgy and metallization are one of the main occupations of the people living in these settlements. The discovery of stone and clay molds for casting metal axes at the site of Zirinjli and Kahab indicates the high production habits of the people living in the area and confirms the presence of skilled metalworkers in the population. The richness of Nakhchivan and Zangazur with copper deposits created favorable conditions for the development of copper metallurgy. The discovery of copper ore remains in most of the settlements also indicates this (3);

-The ceramics of Yeniyol and Shorsu settlements are closely similar to the ceramics of monuments located in the south of Azerbaijan. According to the typological analysis of ceramics, monuments such as Old Passover, Yeniyol and Shorsu belonged to the same culture. Undoubtedly, future research will further clarify the area of distribution of this culture (8);

-There are few finds confirming the connection with Northern Mesopotamia, both in Ovçular tepe and in the monuments of the Nakhchivanchay and Sirabchay valleys (8). Traces of the Ubayd culture of Northern Mesopotamia, mainly distinguished by painted pottery, were more common in the Early and Middle Chalcolithic period. Only one pottery specimen related to the Ubayd culture was found in Ovçular tepe, and two in Yeniyol. Based on the study of archeological materials, we can say that certain relations between the

Ubayd culture and the ancient tribes living in this basin were not in the form of migration, but in the form of economic and cultural relations.

-Analysis of obsidians found in Ovçular tepe, Sirabchay settlements and Marand Kultapa shows that obsidian deposits in Zangazur and Goyam mountains are widely used. Undoubtedly, the tribes inhabiting this region played an important role in the transmission of obsidian to the southern regions;

-A group of pottery found in Eastern Anatolia, especially in the Iğdir and Agri lowlands, is closely similar to the materials of the Late Chalcolithic settlements of Nakhchivan and, in our opinion, belongs to the same culture. It is also noteworthy that the Late Chalcolithic settlements in this part of Eastern Anatolia are seasonal. From this point of view, they share the same features as the monuments of Nakhchivan and confirm the development of nomadic cattle breeding (2);

-However, in the settlements of Tulintepe, Norshuntepe, Tepejik, located in the Malatya region, dark-polished ceramics, as well as black graphite ceramics prevail. This feature distinguishes the ceramics of these settlements from the ceramics of Nakhchivan monuments. Studies show that the pottery typical of the Late Chalcolithic culture of this region of Eastern Anatolia has been known here since the Neolithic and Early Chalcolithic periods. On the other hand, these settlements are multi-storied. In some of these settlements, life continued uninterrupted from the Neolithic period, and in others from the Early Chalcolithic period to the Late Chalcolithic period. We can say that the Late Chalcolithic culture of this region developed from the Neolithic and Early Chalcolithic cultures. However, the pottery of this region of Eastern Anatolia is very similar to the pottery of Ovçular tepe both in terms of form and pattern motif (2). In our opinion, this similarity was made possible by the economic and cultural ties between the peoples of the two regions;

-The influence of Khalaf and Ubayd cultures is clearly visible in the settlements of Eastern Anatolia. Khalaf dyes are found in the

Early Chalcolithic monuments of this region, and Ubayd dyes are found in the Middle Chalcolithic monuments. Although Ubayd-type dyes were found in the Late Chalcolithic period, this relationship seems to be weakening. On the other hand, settlements such as Tulkutepe and Ilandash in Eastern Anatolia are rich in painted ceramics. We accept the view that the monuments belong to the inhabitants of Northern Mesopotamia. In our view, relations with Northern Mesopotamia were carried out through colonies established in Eastern Anatolia (8);

-The occurrence of Eastern Anatolian obsidian in the settlements of Nakhchivan confirms that the relations between these two regions began in the Neolithic period and continued in the Chalcolithic period (1). However, as noted above, the low number of Ubayd dyes during this period indicates a slight weakening of relations;

-The analysis of archeological materials confirms that despite the fact that the Late Chalcolithic cultures of Nakhchivan and Eastern Anatolia are different in origin, there are close economic and cultural ties between them, and cultures influence each other (2). Undoubtedly, the regional development of the cultures of the Late Chalcolithic period was associated with rich sources of raw materials. This is confirmed by the discovery of facts related to metallurgy and metal processing in the settlements of Nakhchivan and Eastern Anatolia (3).

The content of the dissertation is reflected in the following scientific works of the author:

1. Ovçulartəpə yaşayış yerinin Son Eneolit keramikası // AMEA Naxçıvan Bölməsinin Elmi Əsərləri, İctimai və humanitar elmlər seriyası, – 2021. № 1, – s. 86-93.

2. Naxçıvan və Şərqi Anadolunun Son Eneolit dövrü keramikasının orta q xüsusiyyətləri // Naxçıvan: Mədəniyyətlərin qovuşduğu məkan. Beynəlxalq Elmi Konfransın materialları. – 22-23 oktyabr 2020-ci il. – Naxçıvan, – 2021, – s. 79-82.

3. Металлургия и металлообработка Нахчывана в эпохи позднего энеолита // – Уфа: Вестник Науки. Инновационные научные исследования, – 2021. № 5-2 (7), – с. 114-124.

4. Sirabçay və Naxçıvançay vadisinin Son Eneolit keramikası // Naxçıvan Universitetinin Elmi əsərləri, – 2021. – № 2, – s. 175-184.

5. Son Eneolit dövrü abidələrinin xronologiyası // AMEA Naxçıvan Bölməsinin Elmi Əsərləri, İctimai və humanitar elmlər seriyası, – 2021. № 3, – s. 81-88.

6. Однотипные керамические изделия Нахчывана и Восточной Анатолии // – Киев: Гилея, – 2021. вып. 162, № 5, – с. 13-15.

7. Археологическое исследование на поселении Овчулартепе // Сборник научных статей по материалам VI – Международной научно-практической конференции, – Уфа: – 13 июля 2021 г, – 2021, – с. 34-41.

8. Исследование энеолитической керамики памятников Сираба // Сборник научных статей по материалам VI – Международной научно-практической конференции, – Уфа: – 06 июля 2021 г, – 2021, – с. 35-44.

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