

REPUBLIC OF AZERBAIJAN

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ABSTRACT

of the dissertation for the degree of Doctor of Sciences

**NEOLITHIC AND CHALCOLITHIC CULTURE OF
NAKHCHIVAN LAND OF AZERBAIJAN**

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Field of science: History

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GENERAL CHARACTERISTICS OF THE DISSERTATION

The actuality of the theme and the degree of research. The formation of ancient agricultural cultures in the Caucasus and their connection with Middle Eastern cultures have been important problems of archeology. In this regard, Pre-Asia and the regions close to it, where primary agriculture appeared, have always attracted more attention of researchers. From this point of view, Azerbaijan, including Nakhchivan, which is an integral part of it, has a great geopolitical importance.

The study of the historical and cultural development path of Azerbaijan, which is one of the most important regions of the South Caucasus, cannot be complete without taking into account the historical processes in the Nakhchivan region, which directly connects it with the Urmia basin (Southern Azerbaijan), in other words, geographically located in the center of the historical Azerbaijani lands.

Nakhchivan, one of the ancient regions of Azerbaijan, is strategically located in a very important position - at the nodal point of the Southern Caucasus-Eastern Anatolia-Middle East triangle. Currently, the Sharur plain, which forms the western part of the Nakhchivan Autonomous Republic, which has an area of 5.5 thousand square kilometers in the south-western part of the Republic of Azerbaijan, played an important role in ensuring its relations with Eastern Anatolia. Being surrounded by the Zangezur mountains from the north, the Agri mountain from the west, the Garadag range and the Araz river from the south, as well as the presence of Arpachay, Nakhchivanchay, Gilanchay and other abundant rivers allowed the settlement of ancient people and the formation of primary agriculture here from the earliest period of history. This factor is valuable in terms of investigating the origin of early agricultural cultures in the Southern Caucasus.

At the latest period, the new settlements discovered in the territory of Nakhchivan have been very important in the study of the relationship between the Neolithic and Chalcolithic cultures of the

Southern Caucasus, and have created an opportunity to determine the chronological framework and internal stages of these cultures and to chronicle them on a new level. This is one of the actual issues in terms of specifying the origin and specific characteristics of the Chalcolithic culture.

Due to the large number of Ovchulartepe, Leylatepe, Poylu I, Poylu II, Boyuk Kesik, Sioni, Tsopi, Ginchi, Berikdeebi and others belonging to the last phase of the Chalcolithic period, the lack of discovery of the monuments of the early and middle ages has not allowed systematic and phased investigation of the Chalcolithic culture until now.

In the second decade of the 21st century, new monuments from this period discovered in Nakhchivan provided rich materials that could contribute to the study of these problems. These materials are extremely valuable in filling the gap between the Late Neolithic and the Late Chalcolithic in a sequence of all phases of the Chalcolithic period and has created conditions for monitoring. The early, middle and final phases of the Chalcolithic period are reflected in this complex of monuments located mainly in the Nakhchivanchay, Sirabchay and Arpachay valleys. Their systematic study is extremely valuable in terms of filling the gap between the Late Neolithic and the Late Chalcolithic in the Southern Caucasus.

In uncovering these monuments, the state's care for our national values, which were founded during the years of independence, especially during the leadership of the National Leader Heydar Aliyev, has a great importance. The national leader emphasized the need to study the ancient monuments of Nakhchivan and said: *“The history of Nakhchivan in the ancient and late middle ages should be analyzed and written more widely.”*¹ As a result of the proper continuation of this principle by the President of the Republic of Azerbaijan, Ilham Aliyev, the scope of archaeological research in the territory of Nakhchivan has been expanded in the 21st century, as in

¹ Aliyev H.A. Collection of electronic documents. His speeches, reports, interviews, statements [Electronic resource] / – Baku: – 2002. – 184 p.

other regions of Azerbaijan. In 2008, the Decree² issued by the President of the Republic of Azerbaijan allowed archaeological research to become more intensive. This process, as in other regions of Azerbaijan, stimulated the expansion of archaeological expeditions, registration and protection of new monuments in Nakhchivan.

Beginning from 2013, the excavations carried out by the local archaeological team, including the author, under the leadership of professor V.Bakhshaliyev, in Arabyengica, Yeni Yol, Duzdag, Nakhchivantepe, as well as the Azerbaijan-France international expedition, in Kultepe I settlements, gave successful results. The discovery of Neolithic material-culture samples in the materials of Sadarak and Khalaj monuments, the discovery of dozens of new settlements such as Shorsu, Zirinjli, Osmantepe made it necessary to involve the Neolithic and Chalcolithic culture of Nakhchivan in a comprehensive study.

Extensive archaeological excavations were carried out in part of the Neolithic and Chalcolithic monuments, which are the object of our research, and the discoveries of the other part consist of surface materials. Although information about these monuments has been reported in scientific research works, there is a need for comparative research and analytical analysis of the new materials obtained.

In the study of the Neolithic and Chalcolithic culture of Nakhchivan on the basis of such rich materials, the importance of new materials as well as discoveries discovered in previous years is undeniable. Therefore, we consider it appropriate to give a general review of the works related to the excavations conducted so far and their results. A few of these monuments have been illuminated in the researches of the pre-independence period. Among them, the first exploratory excavations were conducted in 1936 by A.K.Alekbarov in Shortepe settlement, which was noted in 1934, and four layers

² Aliyev I.H. Decree of the President of the Republic of Azerbaijan on additional measures related to the financing of archaeological expeditions to be conducted by the Institute of Archeology and Ethnography of the National Academy of Sciences of Azerbaijan in 2008-2009 // Khalq newspaper. – 2008, February 5. - p. 1.

were discovered, but the period of the 4th layer, represented by graves, has not been determined.³

As a preliminary result of the excavations started in 1951 by O. Habibullayev in Kultepe I monument, the layer of the monument located at a depth of 19 to 21.5 meters was attributed to the Neolithic period, but after the excavations were completed in 1964, both layers 1a and 1b were attributed to the Chalcolithic period⁴ however, after completing the excavations, in his book published in 1982, both layers were dated to the Chalcolithic period.⁵

In the 70s of the 20th century, discoveries belonging to the Chalcolithic period were discovered by V.Aliyev in the Sadarak settlement,⁶ initial information was given about the Chalcolithic ceramics discovered by V.Aliyev and A. Seyidov in Ovchulartepe in the 1980s, and then this monument has been comparative analyzed with the other monuments in N.Aliyev's candidate dissertation.⁷

While analyzing the surface materials collected in 1982-1983 from the Khalaj settlement⁸ noted by V.H.Aliyev and A.G.Seyidov in 1982, the researchers who also found ceramics from the Chalcolithic period noted that the monument reflects the transitional phase of the Late Chalcolithic and the First Bronze Age, just like Ovchulartepe.⁹

³ Алекперов, А.К. Исследование по археологии и этнографии Азербайджана / А.К.Алекперов. – Баку: Издательство АН Азербайджанской ССР, – 1960. – с. 55.

⁴ Habibullayev, O.H. Archaeological excavations in Kultepe / O.H.O. Habibullayev. - Баку: Publishing House of the Academy of Sciences of the Azerbaijan SSR, - 1959, - 134 p.; Абибуллаев, О.А. Энеолит и бронза на территории Нахичеванской АССР / О.А.Абибуллаев. – Баку: Элм, – 1982. – 316 с.

⁵ Абибуллаев, О.А. Энеолит и бронза на территории Нахичеванской АССР / О.А.Абибуллаев. – Баку: Элм, – 1982. – с. 24

⁶ Алиев В.Г. Энеолитическое поселение Садарак // – Баку: Изв. АН. Аз. ССР (серия история, филос., права), – 1985. № 2, – с. 61-67.

⁷ Алиев Н.Г. Позднеэнеолитические памятники Азербайджана: / Автореф. На соиск. Канд. Ист. Наук. / – Ленинград, 1991. – 26 с.

⁸ Seyidov, A.G. Nakhchivan in VII-II millennium BC. / A.G. Seyidov. - Баку: Elm, -2003. - p. 29

⁹ Ашуров, С.Г. Керамика эпохи ранней бронзы Нахичевани: / автореф. диссерт. на соиск. канд. ист. наук. / – Баку, 1992, – с. 11-13; Сеидов, А.Г.

In 1984, V.Aliyev and A.Seyidov studied for the first time through exploratory excavations in the Arabyengija settlement, during the ground investigations, grainstone, grinding stone, as well as pottery were discovered, and in the years before independence, it was characterized only as an Early Bronze Age monument.¹⁰

Research has expanded since independence. In 1993, the archaeological monuments of Sharur¹¹ were published by V. Bakhshaliyev and A. Novruzlu, and in 1995, general works on the ancient history of Nakhchivan were published.¹²

The results of the research conducted in Sadarak in 2001-2002 were reflected in the reports prepared by N. Museyibli and S. Ashurov, and the stone and pottery products of the Chalcolithic and Bronze Age were reflected in the work “Ancient Sadarak” published by N.Museyibli in 2003.¹³ In the monograph published by A. Seyidov in 2003, the Chalcolithic and Bronze Age materials found in Nakhchivan monuments were analyzed.¹⁴

Beginning from the first decade of the 21st century, international archaeological expeditions have been launched in the territory of Nakhchivan. In the works published in 2009-2011, the materials of the settlement were reported¹⁵ in 2009-2011 regarding the results of

Памятники Куро-Аракской культуры Нахичевани / А.Г.Сейдов. – Баку: Билик, – 1993. – с. 19

¹⁰ Seyidov A.Q, Bakhshaliyev V.B, Mammadov S.M., Ashurov S.H. Ancient Sharur. – 2012. – pp. 72.

¹¹ Novruzlu, A.I. Archaeological monuments of Sharur / A.I. Novruzlu, V.B. Bakhshaliyev. - Baku: Elm, - 1993. - 184 p.

¹² Bakhshaliyev V.B., Seyidov A.G. Ancient history of Nakhchivan, Baku: Azerbaijan, 1995, 62 p.

¹³ Museyibli, N. A. Ancient Sadarak / N. Museyibli. - Baku: Nafta-Press, - 2003. - p. 17-22.

¹⁴ Seyidov, A.G. Nakhchivan in VII-II millennium BC. / A.G. Seyidov. - Baku: Elm, - 2003. - 339 p.

¹⁵ Marro, C. Bakhshaliyev, V. and Ashurov, S. Excavations at Ovchular Tepesi (Nakhchivan, Azerbaijan). First Preliminary Report: the 2006-2008 seasons // *Anatolia Antiqua*, – 2009. XVII, – p. 72; Bakhshaliyev, V.B. Ovchulartepesi (first results of 2006-2008 research). First Preliminary Report: the 2006-2008 seasons / V.B. Bakhshaliyev, J. Marro, S.H. Ashurov - Baku: Elm, - 2010, - p. 18.

the excavations carried out from 2006 to 2013 by the Azerbaijan-France expedition led by V. Bakhshaliyev, K. Marro and S.Ashurov at the Ovchulartepe settlement. The specific characteristics of the material-cultural samples were analyzed and identified as "Ovchulartepe culture". The jar-burials unearthed from the settlement were studied by K. Marro and Y. Yılmaz.¹⁶

In 2012 analyzed in the article of B.İbrahimli the burials of the Kultepe.

The book published by V. Bakhshaliyev and Z. Novruzov in 2010 provides information about 19 monuments in the Sirabchay valley,¹⁷ in 2010-2012, the monuments in the Arpachay valley were re-investigated and the obtained materials were reflected in the books "Khalaj", "Sadarak", "Shortepe" published by V. Bakhshaliyev and A.Seyidov.¹⁸

In 2013, researches were carried out by the expedition in the Arabyengica settlement under the leadership of V. Bakhshaliyev, in which the staff of the Branch, including the author, participated¹⁹, the overall result of the studies²⁰ and articles on Chalcolithic ceramics discovered from the settlement were published.²¹

¹⁶ Marro, C and Yılmaz, Y. The infant jar-burials from the Late Chalcolithic village of Ovçular Tepesi (Nakhchivan, Azerbaijan): A Mesopotamian tradition? // *Orientalia Lovaniensia Analecta: Context and Connection*. Peeters, (Studies on the Archaeology of the Ancient Near East in Honour of Antonio Sagona) Leuven-Paris-Bristol.ST. – 2018. – pp. 29-48.

¹⁷ Bakhshaliyev, V. Archaeological researches in Sirab / V. Bakhshaliyev, Z. Novruzov - Baku: Oskar, -2010, - p. -20.

¹⁸ Seyidov, A. Khalaj / A. Seyidov, V. Bakhshaliyev - Baku: Elm, -2010. - 220 s; Seyidov, A.G. Sadarak / A. Seyidov, V. Bakhshaliyev - Baku: Elm, - 2011. -184 p.; Seyidov, A. Shortepa (Ibadulla) / A. Seyidov, V. Bakhshaliyev - Baku: -2013. - 200 p.

¹⁹ Guliyeva, Z. New archeological researches were carried out in the Arabyengica monument // "Sharq gapisi" newspaper. – 2013, November 30. - p. 3.

²⁰ Baxşəliyev V., Seyidov A. Ərəbyengicədə 2013-cü ilin arxeoloji tədqiqatları // *Azərbaycanda arxeoloji tədqiqatlar 2013-2014*. Bakı: Xəzər Universiteti, 2015. S. 96-102.

²¹ Guliyeva, Z.K. Eneolithic ceramics of the Arabyengiche settlement // "News" of the Nakhchivan Branch of the Azerbaijan National Academy of Sciences, - 2020. No. 1. - p. 91-99.

In 2013-2018, as a result of the new research conducted by the Azerbaijan-France international archaeological expedition led by V. Bakhshaliyev and K. Marro, including the author, in Kultepe I, the monument dates back to the new materials identified and obtained as inhabited since the end of the 7th millennium BC, as well as the results of preliminary research conducted in Uchan Agil and Shorsu, are presented in the book “Archaeological excavations in Kultepe” co-authored by V.Bakhshaliyev, K.Marro, R.Berton, Z.Guliyeva and S.Sarialtun.²²

Beginning from the second decade of the 21st century, more than 20 monuments were registered during the research conducted in Nakhchivanchay and Sirabchay valley under the leadership of V. Bakhshaliyev. Preliminary information about these monuments is given in the book “Archaeological researches in Sirab” published by V. Bakhshaliyev and Z. Novruzov.²³ Among them, extensive archaeological excavations were conducted by the Azerbaijan-France international expedition led by V.Bakhshaliyev and K.Marro in Shorsu and Zirinjli, and findings from the Late Chalcolithic period were discovered.²⁴ In 2013-2014, a local expedition under the leadership of V. Bakhshaliyev carried out excavations in various monuments, including the Yeni Yol, and in 2017, the article published by V. Bakhshaliyev, Z. Guliyeva and R. Rzayeva provided information about the preliminary results of the excavations.²⁵

In 2017, under the leadership of V. Bakhshaliyev, a group of employees of Nakhchivan branch of ANAS, including the author, started archaeological excavations in the settlement of Nakhchivantepe. Dalma Tepe type ceramics were discovered and the

²²Archaeological excavations in Kultepe (2013-2016) / V. Bakhshaliyev, C. Marro, R. Berthon [etc.] - Baku: Nurlan, - 2017. - p. 77-81.

²³Bakhshaliyev, V. Archaeological researches in Sirab / V. Bakhshaliyev, Z. Novruzov - Baku: Oskar, -2010, - p. 7-20

²⁴ Бахшалиев, В.Б. Новые материалы неолита и энеолита из Нахчывана // Российская археология, – 2015. № 2, – с. 136-145.

²⁵ Bakhshaliyev, V. Archaeological investigations at the Yeni yol settlement / V. Bakhshaliyev, Z. Guliyeva, R. Rzayeva // News of Azerbaijan National Academy of Science. Social sciences series, Baku: Elm, 2017. No. 1, – p. 49-57.

obtained results were covered in 2 collective publications. In these books co-authored by V. Bakhshaliyev, Z. Guliyeva, T. Hashimova, K. Mehbaliyev and E. Bakhshaliyev in 2018-2019, it is emphasized that Nakhchivantepe is the oldest Chalcolithic monument of the Southern Caucasus²⁶, based on the analysis of the ceramics found here, it was noted that the distribution area of the Dalma Tepe culture formed in the Urmia basin included Nakhchivan and Karabakh.²⁷ In 2019 and 2022, during excavations in Nakhchivan Tepe to a depth of 3.5 meters, a Neolithic layer was discovered in the lowest layer of the settlement²⁸ and the discoveries are reported in published works.²⁹

In the monograph “Monuments of the Chalcolithic period of Nakhchivan” published by the author in 2020, the Chalcolithic monuments of Nakhchivan are periodized in 5 stages.³⁰ Another monograph entitled “Neolithic culture of Nakhchivan” analyzed the origin of the Neolithic culture of Nakhchivan.³¹

In recent years, Nakhchivan's relationship with neighboring regions has been in the focus of attention, and information on this was provided in the monograph “Economic-cultural relations of Nakhchivan in the Neolithic and Early Chalcolithic period” published by V. Bakhshaliyev in 2021,³² The period of transition from the Mesolithic to the Neolithic was studied, and in another monograph “Archeology of Nakhchivan in the light new discoveries” published

²⁶Archaeological research in the Nakhchivantepe settlement / V. Bakhshaliyev, Z. Guliyeva, T. Hashimova [etc.] - Nakhchivan: Acami, - 2018, - p. 24.

²⁷Archaeological researches of 2018 in Nakhchivantepe / V. Bakhshaliyev, Z. Guliyeva, E. Bakhshaliyev [etc.] - Nakhchivan: Acami, - 2019, - p. 21.

²⁸ Bakhshaliyev V. Archeology of Nakhchivan in the light of new discoveries / V. Bakhshaliyev. Nakhchivan: Ajami, - 2022, - 372 p.

²⁹ Bakhshaliyev, V. The origin of Dalma Tepe culture / V. Bakhshaliyev. E. Bakhshaliyev, - Nakhchivan: Ajami, - 2023, - 136 p.

³⁰ Guliyeva, Z.K.. Eneolithic monuments of Nakhchivan / Z.K. Guliyeva. - Nakhchivan: Ajami, - 2020. - 184 p.

³¹ Guliyeva, Z.K. Neolithic culture of Nakhchivan / Z.K. Guliyeva. - Nakhchivan: Ajami, - 2020, - 165 p.

³² Bakhshaliyev V. Economic-cultural relations of Nakhchivan during the Neolithic and Early Chalcolithic period / V. Bakhshaliyev. - Nakhchivan: Ajami, - 2021, - p. 29;

the following year, discoveries from different periods from the Paleolithic to antiquity in the territory of Nakhchivan were analyzed in general.³³

The influence of the Late Chalcolithic cultures of Nakhchivan and Eastern Anatolia was investigated,³⁴ in the dissertation developed by G. Acar, in the article³⁵ published by E. Bakhshaliyev and V. Bakhshaliyev in 2022 and in the monograph published in 2023, the impression ornamentation ceramics of Nakhchivantepe are related with the Neolithic monuments of Karabakh.³⁶

It should be noted that although information is given in various books and articles about the archaeological research conducted in the territory of Nakhchivan, the issues related to the Neolithic and Chalcolithic cultures of Nakhchivan, as well as the evaluation and periodization of these cultures in the light new discoveries, as well as the place of these cultures between the cultures of the Southern Caucasus and the Middle East has not been resolved.

Object and predmet of research. The object of research of the dissertation is the remains of buildings, grave monuments, ceramics, tools made of obsidian, flint and other types of stones, as well as tools made of various animal bones, and ancient material culture examples represented by ornaments, discovered from the Neolithic and Chalcolithic period monuments in Nakhchivan region. Archaeological materials discovered from the lowest layers of Neolithic monuments - I Kultepe, Sadarak, Khalaj, Nakhchivantepe, as well as surface materials of the Osmantepe settlement registered in 2020 were selected as research objects. In general, the discoveries of 29 monuments belonging to the Neolithic and Chalcolithic period

³³ Bakhshaliyev V. Nakhchivan archeology in the light new discoveries / V. Bakhshaliyev. Nakhchivan: Ajami, - 2022, - 372 p.

³⁴ Acar G.Z. Late Chalcolithic culture of Nakhchivan and Eastern Anatolia: / Ph.D. dis. / – Nakhchivan, 2021. – p. 21-25;

³⁵ Бахшалиев В.Б., Бахшалиев Э.В. Неолитический слой поселения Нахчыван Тепе // Российская археология, – 2022. № 2, – с. 186–196.

³⁶ Bakhshaliyev, V. Origin of Dalma Tepe culture / V. Bakhshaliyev. E. Bakhshaliyev, - 2023, - 136 p.

were the main objects of the research. Among them, the archeological materials of the settlements of Nakhchivantepe, I Kultepe, Yeni Yol, Arabyengija, where archaeological excavations were carried out with our direct participation, take the main place. At the same time, the materials of Uchan Agil, Uzunoba, Zirinjli, Ovchulartepe, and Shorsu monuments were included in the archaeological research, and the results of carbon analyzes taken from them, as well as from the Deyirman Yeri and Serin Bulaq settlements were also used. In order to approach the Chalcolithic culture of Nakhchivan in a complex manner and to determine its unique characteristics, the materials of the Chalcolithic period of Saderak, Khalaj, Shortepe and other settlements recorded in previous years were included in the research.

In the writing of the dissertation, the ceramics obtained during the excavations in Kultepe I as part of the Azerbaijan-France international expedition, as well as in the local expedition in Nakhchivantepe, Yeni Yol, Arabyengija and other monuments, their graphic drawings, as well as layers 1a and 1b of Kultepe I studied in the National Museum of History of Azerbaijan graphic drawings, tables and other materials of related archaeological materials were also widely used.

The dissertation referred to excavation reports preserved in the Scientific Archive of the Institute of Archeology, Ethnography and Anthropology of ANAS, archaeological materials stored in the Archaeological Fund of the National Academy of Sciences, excavation reports stored in the Scientific Archive of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch, in the “Archaeological service” department, as well as in the I and II funds of the department. , as well as the exhibits displayed in the exposition of the Museum of Archeology and Ethnography, the archaeological materials preserved in the Nakhchivan State History Museum, the museums of history and local history operating in Sharur and Sadarak regions were also used.

The subject of the research work is to reveal the characteristic features of the development technology, function and improvement process of the above-mentioned examples of material culture of the

Neolithic and Chalcolithic periods in the household and economy of ancient people, the origin and development directions of the archaeological cultures that emerged in this period, formed with each other and in the neighboring regions. It consists in revealing the main factors that determine the interaction with contemporary cultures and their spread.

The chronological framework of the study is it covers the period from the second half of the VII millennium BC to the first half of the IV millennium.

Goals and duties of research. The main goal of the research are to determine the location of the Neolithic and Chalcolithic monuments of Nakhchivan in the context of the origin, characteristics of ancient agricultural cultures in Azerbaijan and their relationship with Middle Eastern cultures. The purpose of taking the basis is to complete the gap that has prevented the discovery of the relations between the Neolithic and Chalcolithic periods in the example of the monuments discovered in the Nakhchivan region of Azerbaijan in recent times, as well as to follow the transition process between these cultures.

Researching actual problems such as the origin, characteristics, development directions and periodization of the Neolithic culture of Azerbaijan on the example of Nakhchivan monuments, as well as determining the place of this ancient land of Azerbaijan in the relations of the Southern Caucasus with the Middle East at that time. The following duties have been set for solving these issues:

- Systematization, grouping and researching of Neolithic monuments in Nakhchivan territory; Analysis of the stratigraphy of the Neolithic layers of Kultepe I by stages, comparative analysis of the “1a”, “1b” layers here with the “layer I” and “layer II” materials;
- Based on the comparative analysis of graves and equipments uncovered from layers 1a and 1b of Kultepe I, to follow the characteristics of burial customs in the early phase and middle phase of the Ceramic Neolithic;
- To comparatively analyze the origin, chronological framework of the Kultepe culture, its relationship with synchronous cultures, and

to determine the distribution area of straw-faced ceramics, which is considered one of the main attributes of this culture, as well as the factors that determine it;

- To study the process of transition from the last phase of the Ceramic Neolithic to the Early Chalcolithic period and to reveal the unique features of this process;

- Summarizing the archeological materials found in Kultepe I, Nakhchivantepe, Sadarak, Khalaj settlements and kept in museums, preparing graphic drawings and including the unpublished ones into the scientific circulation.

One of the goals of the dissertation is the question of the origin, periodization and clarification of the chronological boundaries of the Chalcolithic culture. The main tasks for solving these problems are as follows:

- Grouping of Chalcolithic monuments in the territory of Nakhchivan by phases: Early Chalcolithic period: features of the settlement, architecture and discoveries and their dating, Middle Chalcolithic period: comparative analysis of settlements, building remains and archeological materials discovered from them with their counterpart materials, Late Chalcolithic period: clarifying the boundary of the intermediate phases of this period based on settlements, architecture, grave monuments and material culture samples discovered;

- Determining the unique characteristics of each phrase; To determine the distribution area of Dalma Tepe culture and Ovchulartepe culture, the characteristic aspects of their interaction with Halaf, Ubaid and Uruk cultures formed in the Middle East;

- To investigate the characteristics and interrelationships of Late Chalcolithic cultures in the Southern Caucasus, to reveal common and different characteristics;

- To reveal the genetic links between the cultures of Kultepe, Dalma Tepe and Ovchulartepe, to investigate their relations with the Middle East and to reveal the factors that determined their spread;

- Summarizing the issues related to the formation, distribution and periodization of Neolithic and Chalcolithic cultures in Nakhchivan land of Azerbaijan, getting the final conclusion;

The methods of the research. The methodological basis of the dissertation is the ideology of Azerbaijanism, which was put forward in the decrees and speeches of the national leader of the Azerbaijani people, Heydar Aliyev, and his worthy follower, the President of the Republic of Azerbaijan, Ilham Aliyev.

Typological, summarizing and comparative analysis methods were used in the research process for the purpose of deep and comprehensive investigation of archaeological materials. The comparative analysis of material culture samples discovered during archaeological excavations, some of which are stored in museum funds, information and materials reflected in the reports was taken as the basis. At that time, traditional and modern research methods were used in parallel. Among the traditional methods, typological and morphological analysis of archaeological materials was given a wide place, analytical analysis-relation to the works of scientists, and comparative analysis methods were used. Analytical analysis method was used to determine in what form the study of Neolithic and Chalcolithic culture of Nakhchivan is reflected in the Southern Caucasian historiography, with a creative approach to scientific works written in this field, the final ideas obtained from the analysis of archaeological materials were taken as a basis. Among the modern research methods, visual, visual-technological, C 14 method, and microscopy technology have taken the main place. Visual, as well as visual-technological methods were used to determine the architectural structure and to study the technology and typology of ceramics. The stages of Neolithic and Chalcolithic culture were determined using the C14 method. Morphological analysis of ceramics was carried out using the microscopy method. Based on the analysis of the microphotographs taken under a microscope with a magnification of 40 times, the composition of the ceramic was determined.

In the research process, the method of systematization based on the comparison tables drawn up by the author is also given ample space. Grave monuments and tools belonging to the early phase of the Ceramic Neolithic, grave types, hearth types, building complexes belonging to the middle phase, 5 groups of ceramics that appeared in this period, and 7 groups of ceramics in the final phase of the Late Chalcolithic period were determined based on this method. This method was also used in the grouping of the Neolithic and Chalcolithic monuments of Nakhchivan by archaeological cultures, and in determining their location in the Southern Caucasus region. In accordance with the stratigraphy of the main monuments characterizing the Neolithic and Chalcolithic culture of Nakhchivan, the archaeological materials were compared with the discoveries of other monuments, and as a result, the phases, origins, conditions of spread of these cultures, as well as their relations with synchronous cultures were determined.

In the dissertation, excavation reports and articles written by Azerbaijani archaeologists O.O.Habibullayev, V.H.Aliyev, V.B. Bakhshaliyev, A.G.Seyidov, N.A.Museyibli, S.H. Ashurov, B.I. Ibrahimli, foreign archaeologists G.Child, J. Mellaart, M. Voigt, The works of C. Morro, A.Sagona, M.Ozdogan and others, as well as general works written by I.Narimanov, R. Munchayev, A.Iessen and others about the Neolithic and Chalcolithic monuments in the Southern Caucasus were also used.

The main provisions of the defense. The main propositions revealed in the research process are the following:

- The Nakhchivan region of Azerbaijan was one of the main and oldest centers of the Neolithic period in the Southern Caucasus, and paleogeographical and paleoecological conditions influenced the formation of ancient agricultural cultures during this period;

-In the Early Phase of the Ceramic Neolithic, the architectural structure consisting of halfdugs, hearths with stone circles, straw-faced ceramics occupied the main place, and the dead were buried in separate places;

-In the Middle Phase of the Ceramic Neolithic, circular brick buildings were used, dead people were buried inside the houses, pottery improved, mutual cultural and economic relations with neighboring regions and the Middle East increased;

Straw-faced ceramics, which are the main attributes of the Kultepe culture covering both stages, are spread in the middle and lower reaches of the Araz, in the Mil-Karabakh area, as well as in the middle reaches of the Kur and the Urmiya basin. The main factor determining its spread was the search for raw materials by the semi-nomadic local tribes;

- At the last phase, the transition from the Neolithic to the Chalcolithic culture was reflected in the simultaneous use of straw-faced ceramics with impression ornamentation ceramics in the Neolithic layer of Nakhchivantepe and in the painted ornamentation ceramics of Khalaj. During this period, the signs of a new culture formed by the influence of the southern cultures and the Neolithic culture of Karabakh appeared in Nakhchivantepe;

- In Nakhchivan, the Early and Middle Chalcolithic period was represented by the Dalma Tepe culture, and Nakhchivan was one of the centers of the formation of this culture together with the Urmia basin;

- The northward spread of the Dalma Tepe culture was caused by the migration of nomadic tribes to the obsidian, copper and other raw material deposits of the Southern Caucasus;

- At the beginning of the Late Chalcolithic period, a new culture completely different from the Dalma Tepe culture appeared in the Arpachay valley, and this culture had unique characteristics compared to the Late Chalcolithic cultures that existed in the Southern Caucasus;

- At the end of the Late Chalcolithic, a local culture was formed on the left bank of Nakhchivanchay, in the Sirabchay valley, reflecting the connections of Ovchulartepe, Leylatepe and Sioni monuments;

- In the periodization of the Neolithic and Chalcolithic culture of Azerbaijan, and at the same time of the Southern Caucasus as a whole, the recently studied settlements in Nakhchivan are very important.

- In the Neolithic and Chalcolithic periods, the presence of a mobile way of life in parallel with sedentary agriculture among the local tribes living in Nakhchivan was one of the main factors that determined relations with neighboring regions. In their occupation, beliefs and social structure, the proximity with Karabakh-Mil-Mugan, Agri valley, Urmia basin is more noticeable, which means that these areas are included in the same cultural and economic zone and therefore are part of the ancient cultures formed in the historical lands of Azerbaijan.

Scientific novelty of the research. The scientific innovations obtained as a result of the systematic study of the Neolithic and Chalcolithic period monuments of Nakhchivan are as follows:

- New discoveries related to the Neolithic and Chalcolithic periods of Nakhchivan were monographically processed for the first time, and it was determined that there was no break between the Neolithic and Chalcolithic periods;

- In the dissertation work, it was determined that the Neolithic period passed through 3 phases and the Chalcolithic period passed through 5 phases in the territory of Nakhchivan;

- It was determined based on the comparative analysis of the archaeological materials of Kultepe I and Osmanepe, where Nakhchivan is one of the oldest Neolithic sites of the Southern Caucasus, with the materials of the synchronous monuments in the region, and carbon analysis;

- The materials discovered by O.H. Habibullayev from the 1a layer of Kultepe, were involved in the research in a complex way with the discoveries of V.B.Bakhshaliyev and C.Marro and were included in the scientific circulation, based on their analysis, the characteristics of Early Ceramic Neolithic Phase were determined;

- In the Early Ceramic Neolithic Phase (ECNP) it was determined that there was a burial custom outside the houses, and in the Middle Ceramic Neolithic Phase (MCNP) inside the houses;

- It has been determined that both stages reflect the culture of Kultepe, and that this culture emerged on a local basis and developed in the conditions of relations with the cultures of the Middle East;

- It has been established that the spread of straw-faced ceramics characteristic of the Kultepe culture in the middle and lower reaches of Araz, in the Urmiya basin, and in the Middle Kura basin is related to the search for raw materials by the tribes leading a mobile lifestyle;

-During the Last Phase of the Ceramic Neolithic in the Neolithic layer of Nakhchivantepe (Nakhchivantepe 4) it was determined that along with the continuation of simple ceramics of the Kultepe type, the Dalma Tepe culture appeared. In the area where the Dalma Tepe culture spread, it has been confirmed that the presence of simple straw-faced ceramics of the Kultepe culture and impression ornamentation ceramics of Mil-Karabakh is related to the Neolithic cultures of Azerbaijan;

- It has been determined that during the Early Chalcolithic period, the Southen Caucasus-Middle East relations strengthened and this showed itself in the appearance of the Dalma Tepe culture on the border of those regions. At the level of the spread of this culture, which was formed in the historical lands of Azerbaijan, it was determined that the Nakhchivan region occupied an important place in the development of relations with the Southen Caucasus, Pre-Asia, and Eastern Anatolia the Chalcolithic period;

- It is justified that Nakhchivan is one of the main centers where the Dalma Tepe culture was formed, and it was determined that the spread of this culture is related to the raw material deposits of the Southen Caucasus;

- The Ovchulartepe culture, which emerged at the beginning of the Late Chalcolithic period, was compared with other synchronous cultures in the Southen Caucasus and analyzed. the characteristic aspects were determined and the common features between the ceramics of Yeni Yol, Mentesh-tepe monuments were determined.

- At the end of the Late Chalcolithic, it was established that a local culture was formed in the Nakhchivanchay valley, which includes some elements of Ovchulartepe and Leylatepe;

- The ceramics of the Yeni Yol settlement were divided into 7 groups and investigated based on a comparative analysis. It has been determined that there are 2 phases of settlement here, the influence of the Ovchular-tepe culture observed in the first phase, and the influence of the Leylatepe culture to a certain extent in the second phase;

- It has been determined that the monuments of Nakhchivan during the Neolithic and Chalcolithic period consistently reflect the cultures of Kul-tepe, Dalma Tepe and Ovchular-tepe and that there is a genetic connection between them;

- It has been established that the direction of the spread of these cultures is related to the sources of raw materials, and that their carriers are sedentary and nomadic farming-cattle tribes;

- While summarizing the facts obtained regarding the cultures that appeared in the territory of Nakhchivan in the Neolithic and Chalcolithic periods, it was justified that their distribution area covers the historical lands of Azerbaijan and is a part of the unified culture formed in this geography;

- It has been established that the ancient cultures spread in the Agri valley, Goycha basin and Zangazur are the continuation of the cultures in the southern region of Azerbaijan.

In the dissertation, rich archaeological materials, some of which were newly discovered and preserved in museum funds, were fully involved in the research and included in the scientific circulation for the first time. The discoveries in the museum funds of layers 1a and 1b of Kul-tepe I, as well as a large amount of new archaeological materials discovered from the settlements of Nakhchivantepe, Uchan Agil, Uzunoba, Yeni Yol, are involved in research in a complex case and included in the scientific circulation is important for the periodization of the Neolithic and Chalcolithic culture of Azerbaijan.

Theoretical and practical significance of research. The dissertation was written on the basis of the rich materials of more than 20 monuments. Since some of these materials are stored in museum funds, they were put into circulation for the first time. From this point of view, straw-faced ceramics belonging to layer 1a of

Kultepe I, groups of ceramics discovered from Yeni Yol settlement are noteworthy. They are of particular importance in the study of interregional relations. In this sense, the results of the research work can be used in writing the pre-writing history of various regions of Azerbaijan, including the land of Nakhchivan.

The archaeological materials included in the scientific circulation for the first time in the dissertation are of special importance for uncovering new pages of Azerbaijani archeology as a whole. Dalma Tepe ceramics, Halaf-type pottery, and Ubaid-type ornaments found in Nakhchivan monuments indicate connections with the ancient cultures of the Middle East. The presented archaeological materials and the results obtained from their analysis can be used during the researches related to the study of Southern Caucasus-Middle East relations.

Since the archaeological cultures of Kultepe, Dalma Tepe, Ovchulartepe, which are widely studied in the dissertation, and their distribution area covers the historical territories of Azerbaijan, the research work is of great importance in the study of the ancient history and geography of these lands inhabited by our ancestors, as well as in the preparation of publications on this topic.

The materials of the monuments studied in the dissertation and the scientific results obtained can be used in writing scientific research works on the archeology of Azerbaijan, in writing textbooks and materials on the history of Azerbaijan, as well as in writing general works on the archeology of the Caucasus.

Dissertation in the implementation of theoretical and experimental works on archeology, in the writing of diploma theses, coursework, free work in higher schools, in deeper and comprehensive research of art issues and cultural issues, in the design of the exposition of various museums, as well as in the preparation of information-guidebooks related to archeology, with museum archeology can be used in the preparation of related books. Overall, it will be useful for students, masters and the scientific community interested in studying our ancient history.

Approbation and application of the research. The topic of the dissertation was discussed and approved at the meeting of the Nakhchivan Branch of ANAS on January 8, 2016 (protocol №1) and at the meeting of the Republican Scientific Research Coordination Council on September 23, 2016 (protocol №8). The main provisions and results of the dissertation work are covered in scientific articles published by the author in various local and foreign authoritative publications. Regarding the main conclusions of the research work, reports were made at national and international scientific conferences, and at the same time, 2 monographs containing the results of the work were published. The thesis work was discussed with the participation of the employees of the “Ancient period archeology”, “Archaeological service” department and other relevant departments of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch of ANAS. The results of the research work were applied in the periodization of monuments, as well as archaeological materials, in the arrangement of exhibition halls of history museums, in the periodization of exhibits of Sadarak, Sharur region history and local history museums. The results of the research can be used in the future in the organization of archaeological tourism, in the writing of general works on the archeology of Azerbaijan, as well as in the creation of archaeological exhibitions.

Name of the organization where the dissertation work is performed. The dissertation was completed in the "Archaeological service" department of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch of ANAS.

The structure and volume of the dissertation. The thesis consists of Introduction, 5 chapters, conclusion, reference list, tables, abbreviations and illustration sections. The volume of the dissertation consists of introduction 37,848 signs, chapter I 15.448 signs, chapter II 184.731 signs, chapter III 118.986 signs, chapter IV 66.319 signs, chapter V 32.293 signs, the final part consists of 23.976 signs, and a total of 479.601 signs.

MAIN CONTENT OF THE DISSERTATION

In the **“Introduction”** part of the dissertation, the relevance of the topic is justified, the subject, object, purpose, tasks of the research are explained, the degree of investigation, chronological framework, scientific innovations of the work, practical importance and the main issues put forward for defense, as well as information about the research methods and approval of the work.

The main content of the dissertation is reflected in 5 chapters. In chapter I, called **“Natural geographical conditions in Nakhchivan during the Neolithic and Chalcolithic periods”**, the paleogeographical and paleobotanical processes that took place in the region were analyzed and it was noted that the lifestyle, cultural-economic relations, and uniqueness of the cultures created by the Neolithic tribes of Nakhchivan were conditioned by the geography of its location. The average height above sea level is 1400 meters, the highest point is 3906 meters (Kapijig peak), and the average height of along the Araz plain, which is considered the lowest area, is 800 meters³⁷. The East Arpachay, which flows from the mountainous area in the south direction, was the center of the original settlements. Based on the analysis of wild plant remains and wild animal bones remains³⁸ discovered from one of these habitats, Kultepe I, it was concluded that the fauna and flora of those areas are of particular importance in determining the characteristics of the formation of the production economy for each region.³⁹ The favorable paleogeography of Nakhchivan, especially the flora and fauna created a favorable environment for the settlement of ancient people during the Holocene.

³⁷ Babayev, S.Y. Geography of Nakhchivan Autonomous Republic / S.Y. Babayev. - Baku: Elm, - 1999. - p. 23.

³⁸ Marro, C., Bakhshaliyev V., Berton R. [et al.] New light on the Late Prehistory of the Southern Caucasus: Data from the recent excavation campaigns at Kultepe I in Nakhchivan, Azerbaijan (2012-2018), table 3-4.

³⁹ Guliyeva, Z.K. Neolithic culture of Nakhchivan / Z.K. Guliyeva. - Nakhchivan: Ajami, - 2020, - p. 75-76.

Chapter II, which is the largest section of the dissertation, is called **“Culture of the Neolithic period”**. This chapter consists of 4 main paragraphs. In the first paragraph, a topographical description of the settlements of the Neolithic period is given. According to their stratigraphic analysis and the results of carbon analysis, the Neolithic monuments of Nakhchivan are dated in 3 phases: the first layer of Kultepe and Osmantepe from the bottom to the first phase (6370-6000 BC), the layers located above these layers to the second stage (6000-5200 BC), Nakhchivantepe 4 and the lowest layer of Khalaj belong to the III phase (5209 - 4930 BC). These phases are tentatively called Early Ceramic Neolithic Phase (EPCN), Middle Ceramic Neolithic Phase (MPCN) and Late Ceramic Neolithic Phase (LPCN) and analyzed in other 3 paragraphs. In the second paragraph called **“Early Phase of the Ceramic Neolithic”**, based on the comparative analysis of the archaeological materials discovered from layer 1a of the III-V excavation sites of Kultepe I and layer I of the E area, the Kultepe culture was established. It was noted that it was formed in the Nakhchivanchay valley in the third quarter of the 7th millennium BC and was represented by pink straw-faced, yellow angobe ceramics, bowls distinguished by their archaism, bowl-type wares, hearths with stone rims and stone floors. At the same time, the features that are typical for EPCN have also been noted. These features are analyzed in 3 separate sub-paragraphs. In the first of them, under the heading **“Remains of architecture”**, it was concluded that this phase is represented by halfdug houses, and under the heading **“Graves and burial custom”**, it was concluded that burial custom existed outside the houses. In the first paragraph of the subsection **“Typological analysis of archaeological materials”**, obsidian, flint and bone tools discovered from layer 1a of Kultepe I and the lower layer of Osmantepe, and in the second paragraph, ceramics⁴⁰ discovered in Kultepe 1a and stored in the Archaeological

⁴⁰ Materials of the Archeology fund of National Museum of History of Azerbaijan of ANAS: AF 13-15.

Fund of National Museum of History of Azerbaijan , Haji Firuz,⁴¹, Kamiltepe,⁴² I Arukhlo,⁴³, Umm Dabagiyah⁴⁴ was analyzed in a comparative manner with the materials of synchronous monuments. It has been determined that the Kultepe culture, whose main attributes are pink, straw-faced ceramics, was established in the Nakhchivanchay valley in it appeared in the third quarter of the VII millennium BC.

In the third paragraph, called **“Middle Phase of the Ceramic Neolithic”**, based on the materials of the 1b and I layers of Kultepe, the unique features of this phase were analyzed under the headings of **“remains of building and architectural features”**, **“graves and burial custom”** and **“typological analysis of archaeological materials”**. It was determined that in this period, unlike the previous phase, people lived in round houses built of mud bricks and seals, the dead were buried under the floor of the houses, the demand for large-sized stone tools increased, buckles made of bone and horn increased, along with straw-faced ceramics, four ceramic groups has been used. Although there were some differences, the main characteristics of Kultepe culture continued at this stage. Some signs of this culture have been traced in dozens of monuments such as Kabirli, Kamiltepe, Shahtepe, Ilanlitepe, Chalagantepe, Bala-baharli, Adsiz tepe⁴⁵ in the

⁴¹ Voigt, M.M. Haji Firuz Tepe, Iran: The Neolithic Settlement / M.M.Voigt. – Philadelphia: University of Pennsylvania, – 1983. – p. 99.

⁴² Lyonnet , B. Ancient Kura 2010-2011: The First Two Seasons of Joint Field Work in the Southern Caucasus / B.Lyonnet, F.Guliyev, B.Helwing [et al.] // Berlin: Archaologische Mitteilungen aus Iran und Turan, – 2012. vol. 44, – p.139-140.

⁴³ Hansen S., Mirtskhulava G., Bastert-Lamprichs K. Aruchlo: a Neolithic Settlement Mound in the Republic of Georgia // Азербайджан–страна, связывающая восток и запад. Обмен знаниями и технологиями в период “первой глобализации” VII-IV тыс. До н.э.: материалы междунар. Симпозиума, – Баку: German Embassy, – 1-3 апреля, – 2009. – с.23.

⁴⁴ Mellaart J. The Neolithic of the Near East / J.Mellaart. – London: Thames and Hudson Ltd, – 1975, – p. 139-140.

⁴⁵ Иессен, А.А. Кавказ и Древний Восток в IV и III тысячелетиях до нашей эры // КСИА (Краткие сообщения Института Археологии), –1963. – Вып. 93, – с. 11-16.

Mil-Karabakh region, Mahaltepe, Khatunarkh, Tekhut settlements,⁴⁶ in the Agri valley, Haji Firuz and Yanigtepe⁴⁷ monuments in the Urmiya basin. The similarity in straw-faced ceramics, the technique of preparation of vessels, typology and ornamentation, as well as the similarity in the structure of tools and hearths with stone circles indicate that the area of this culture covers the Middle Araz basin (Nakhchivan, Mil-Karabakh region, Agri valley) and the Urmia basin. In addition, it was not an exception that there were some different characteristics in those regions.

In the fourth paragraph called **“The late phase of the Ceramic Neolithic”**, the process of transition from the Neolithic period to the Chalcolithic period was investigated based on the materials of the Nakhchivantepe 4 layer and the lower layer of the Khalaj settlement⁴⁸. In the sub-paragraph **“Structure of architecture”** of this paragraph, it is mentioned that square-oval halfdugs were used in the late phase of the Ceramic Neolithic. The remains of such houses were discovered in the A and B areas of Nakhchivantepe 4 layer. C14 analyzes of one of the hearths inside such half-excavations recorded at site B. BC. 5038-4799 years, and the other analysis showed 4941-4722 BC.⁴⁹ One of the hearths has a stone circle and creates an analogy with the group I hearths⁵⁰ of Kultepe I. The main changes are reflected in the title **“Typological analysis of ceramics”**. It was noted that the ceramics discovered from the Neolithic layer of

⁴⁶ Энеолит СССР / Ответственные редакторы тома Массон В.М., Мерперт Н.Я. – Москва: Наука, – 1982. –359 с; Palumbi, G. The Red and Black. Social and Cultural Interaction between the Upper Euphrates and Southern Caucasus Communities in the Forth and Third Millennium BC. Studi di Preistoria Orientale (SPO) 2. Rome: Universita' di “La Sapienza”, 2008. s.192.

⁴⁷ Ajorloo, B. The Early Neolithic Period in the Urmia Lake Region // jocO quarterly, – 2013: Autumn, Vol. 1. –№ 1, – p. 35.

⁴⁸ Bakhshaliyev, V.B. Characteristics of Khalaj ceramics // – Nakhchivan: Scientific Works of Nakhchivan University, – 2020. No. 2. – p. 49.

⁴⁹ Bakhshaliyev V. Archeology of Nakhchivan in the light new discoveries, 2022, p.68

⁵⁰ Guliyeva, Z. Neolithic hearths of Nakhchivan // "News" of the Nakhchivan Branch of the Azerbaijan National Academy of Sciences. - 2017. No. 1. - p. 89-97.

Nakhchivantepe were represented by 3 groups: simple ceramics, ceramics with impression ornamentation and ceramics with painted pottery. Group I, which makes up the vast majority (90%) of ceramics, reflects the Kultepe culture in terms of its heavy straw admixture and the typology of vessels. It has been determined that the Neolithic ceramics of Nakhchivantepe and Khalaj reflect the transition from the Neolithic period to the Early Chalcolithic period by sharing a common feature with the Kultepe culture with their straw-faced, painted pottery, impression ornamentation and other characteristics with the Dalma Tepe culture.

Chapter III is devoted to **“Culture of the Chalcolithic period”**. It consists of 5 main paragraphs. In the first paragraph entitled **“Early Chalcolithic period”**, the archaeological materials of the layers of Nakhchivantepe 2 and Nakhchivantepe 3, as well as the lower layer of the Uchan Agil settlement, were involved in the research. Under the headings **“Settlements”**, **“Structure of architecture”**, **“Labor tools”**, a topographical description of the residential places of this period is given, it is determined that they are represented by square buildings, and there are few obsidian and bone tools. The main characteristics of the period are explained under the title **“Technical-typological analysis of ceramics”**. Here the Chalcolithic ceramics of Nakhchivantepe, represented by simple, impression ornamentation and painted pottery were analyzed. The richest varieties of painted ceramics⁵¹ were found in Nakhchivantepe and Dalma Tepe ceramics. It has been emphasized that this type of nail and fingerprint ornaments were found in Ilanlitepe and Chalagantepe.⁵² At the same time, the similarity between the Nakhchivantepe ceramics and the Karabakh monuments is striking. Based on this feature, it was mentioned in the initial research works

⁵¹ Hamlin, C. Dalma Tepe // – 1975. Iran 13, – p. 117, fig.8.

⁵² Нариманов, И.Г. Культура древнейшего земледельческо-скотоводческого населения Азербайджана (Эпоха энеолита VI–IV тысячелетия до н. э.) / И.Г.Нариманов. – Баку: ЭЛМ, – 1987. – рис. 43; 46.

that the Dalma Tepe culture covers Nakhchivan and Karabakh⁵³, and in later publications, impression ornamentation ceramics belonging to this culture are related to the Karabakh monuments.⁵⁴ Researches shows that in the Early Chalcolithic period, Nakhchivan, the Mil-Karabakh region and the Urmia basin of Azerbaijan entered the same cultural-economic zone, and as a result, Nakhchivan became the center of Dalma Tepe culture in the Southern Caucasus.

In the second paragraph, called **“Middle Chalcolithic period”**, the archaeological materials discovered from Nakhchivantepe in the 1 layer, the upper layer of Uchan Agil, Uzunoba and Bulovgaya were analyzed. It was determined that at this phase, although Dalma Tepe traditions continued in the production of ceramics, there was a change in the typology of wares and the technique of drawing painted ornaments. At this phase, the increase in relief ornaments and varieties is more clearly observed in the Nakhchivantepe 1 layer, the emergence of impression and chertma relief belts and other elements surrounding the neck of the vessels. All this indicated that towards the end of the Middle Chalcolithic period (in the middle of the 5th millennium BC) the culture of Dalma Tepe gradually gave its place to another culture.

In the paragraph entitled **“I phase of the Late Chalcolithic”**, archaeological materials related to the I construction layer of Ovchulartepe were examined. It consists of 3 sub-paragraphs. In the sub-paragraphs **“Settlements”**, **“Structure of architecture”** and **“Typological analysis of ceramics”**, information is given about the stratigraphy of Ovchulartepe, it is noted that the architecture of the I building layer is represented by halfdugs⁵⁵ and the characteristic features of ceramics are defined. Although the ceramics is analogous

⁵³ Archaeological researches of 2018 in Nakhchivantepe / V. Bakhshaliyev, Z.Guliyeva, E. Bakhshaliyev [etc.] - Nakhchivan: Ajami, - 2019, - p. 21.

⁵⁴ Bakhshaliyev V. Archaeological researches of 2018 in Nakhchivan / V.Bakhshaliyev. Nakhchivan: Ajami, 2019.

⁵⁵ Bakhshaliyev, V.B. Ovchulartepesi. First Preliminary Report: the 2006-2008 seasons / V.B. Bakhshaliyev, J. Marro, S.H. Ashurov - Baku: Elm, - 2010, - 156 p.

according to its ornament motifs in Kechili⁵⁶, Boyuk Gullujek⁵⁷, Norsuntepe⁵⁸ monuments of Eastern Anatolia, according to its relief belts Mentesh-tepe⁵⁹, and the ornament on 2 bowls belonging to the Uruk culture according to its zoomorphic ornaments⁶⁰, they differ in its own characteristics. The I phase of the Late Chalcolithic was represented by half-dug houses, auxiliary structures consisting of farm wells, farm jars with relief ornaments with zoomorphic motifs, jugs with copper basin and bowls with sunken basin. At this phase, wares with mouth edge engravings also appeared. However, they differ from the samples from Sioni in that they are chaff tempered.

The first sub-heading of the paragraph entitled “**II phase of the Late Chalcolithic period**” provides information on the topographic description and stratigraphy of the “**Settlements**” of this phase. Under the sub-paragraph of “**Structure of architecture**” it is emphasized that the II construction layer of Ovchulartepe is represented by multi-room houses, and under the heading “**Grave monuments and burial custom**” it is emphasized that the burial custom continued in this period and that 2 graves (pot and earth) were used. Infant jar burials in jar graves are known from Leylatepe, Boyuk Kesik, II Poylu, Soyugbulag mounds, including Galayeri.⁶¹ They belong to the period after Ovchulartepe. Graves of this type have been noted in large numbers under the floor of settlements

⁵⁶ Нариманов, И.Г. Культура древнейшего земледельческо-скотоводческого населения Азербайджана (Эпоха энеолита VI–IV тысячелетия до н. э.) / И.Г.Нариманов. – Баку: ЭЛМ, – 1987. – рис. 8,1.

⁵⁷ Koşay, H. Z., Akok M. Büyük Güllücek Araştırmaları Üzerine İlk Rapor // – Ankara: Belleten, – 1948. N: XII/46, – Resim 47.

⁵⁸ Gülçür, S. Norshuntepe: die chalkolitischen Keramik Elazığ-Ost Anatolien / in C. Marro and H. Hauptmann, Chronologie des Pays du Caucase et de l’Euphrate aux IVème -IIIème Millénaires // Actes du Colloque d’Istanbul, – 16-19 decembre, 1998. Varia Anatolica XI, – Paris., – 2000. – p. 375- Abb. 38; 43.

⁵⁹ Lyonnet, B. Ancient Kura 2010-2011: The First Two Seasons of Joint Field Work in the Southern Caucasus – 2012. – p. 121.

⁶⁰ Trentin, M.C. North-Western Uruk period pottery assemblages / M.C.Trentin. – Western Asiatic Department Institute of Archaeology, – tabl. XXIIId,8; XXXId,12

⁶¹ Museyibli, N.A. Grave monuments and burial customs of Leylatepe culture / N. Museyibli. - Baku: Nafta-Press, - 2014. - photo 20-21.

belonging to the Ubaid culture of Eastern Asia.⁶² There are 2 opinions regarding the origin of such graves: in the first opinion, the Leylatepe culture child burials in earthenware vessels were brought to the Southern Caucasus by Pre-Asian tribes,⁶³ and in the second opinion, it is suggested that it is not the result⁶⁴ of Mesopotamia or migrations, but the result of mutual relations. In our opinion, this difference stems from the origin of the cultures in question. From this aspect, it can be said that the jar graves of Ovchulartepe are related to local traditions. Numerous wrapped burials attributed in Kultepe I belong to Neolithic Age show that this tradition existed in the Nakhchivan area from the ancient period. Burials in earthen graves belonging to the second group of Ovchulartepe graves confirm the above idea.

In the third title, **“Stone and metal products”**, attention was drawn to the small number of obsidian belonging to this phase from Ovchulartepe, Sadarak, and it was emphasized that the supply of obsidian decreased remarkably in the Late Chalcolithic period. Researchers at the beginning of the 4th millennium BC, the break in the obsidian supply of this region is associated with the activation of the Kur-Araz culture in the region.⁶⁵ In this period, we can agree with this opinion, taking into account the fact that obsidian products are represented by individual samples in the monuments of both Arpachay and Nakhchivanchay valleys. Another reason for this could be related to metal processing.

⁶² Массон, В.М. Средняя Азия и Древний Восток / В.М.Массон. – Москва-Ленинград: Наука, – 1964, – с.86-87.

⁶³ Museyibli, N.A. Leylatepe culture / N. Museyibli. - Baku: Science and education, -2020. - p. 265-266.

⁶⁴ Marro, C and Yilmaz, Y. The infant jar-burials from the Late Chalcolithic village of Ovçular Tepesi (Nakhchivan, Azerbaijan): A Mesopotamian tradition? // *Orientalia Lovaniensia Analecta: Context and Connection*. Peeters, (Studies on the Archaeology of the Ancient Near East in Honour of Antonio Sagona) Leuven-Paris.-Врис.тол.СТ. – 2018. – p. 47.

⁶⁵ Bakhshaliyev V. Archeology of Nakhchivan in the light new discoveries / V. Bakhshaliyev. Nakhchivan: Ajami, - 2022, - p.19.

Under the sub-paragraph of “**Typological analysis of ceramics**”, some changes in the variety, shape and ornamentation of wares during the II phase of the Late Chalcolithic were analyzed, and the noting of elements from Ovchular-tepe in the Late Chalcolithic ceramics of Sadarak, Arabyengija settlements were evaluated as belonging to the same culture. The ceramics of Arabyengija are of particular importance in the study of the transition process from the Late Chalcolithic to the Early Bronze Age. The fact that combing method, sunken and round saucers, handles, as well as jugs and bowls of the Ovchular-tepe culture find their close parallels in Arabyengija allows to attribute the monument to the middle phase of the Late Chalcolithic. At this phase, while the round reliefs decreased, the varieties in the engraving of the rim of the vessels increased.

The fact that the ornaments represented by examples such as engraving, round relief, and combing on the dishes of Ovchular-tepe find close parallels in the monuments of Mentesh-tepe⁶⁶, Anatolia's Sos Hoyuk VA, Sarigül and Chatanli, Kohne Pashgah hill and Sioni monuments⁶⁷ in northwestern Iran, indicating that its distribution area is not limited to the Arpachay valley. The II construction layer of Ovchular-tepe, represented by multi-room houses, twisted burials buried in earthen and pot graves, cylindrical wares, painted ornaments, and metalworking samples, reflects the middle phase of the Late Chalcolithic and the final II phase of the III period of Mentesh-tepe (4100-4070 BC).

The fifth paragraph of chapter III is called “**III phase of the Late Chalcolithic period**”. This phase was analyzed under 4 headings. Brief information on 19 monuments registered in the Nakhchivanchay and Sirabchay valleys under the sub-paragraph of

⁶⁶ Lyonnet, B., Quliyev F. Archeological researches in ancient settlement in Mentesh-tepe (Tovuz region), – 2011, – s. 322.

⁶⁷ Sagona, A. and Zimansky P. Ancient Turkey / A.Sagona, P.Zmansky. – 2009. – fig. 5.10,1, 164.

“Settlements” was given⁶⁸, and the topographical description and stratigraphy of the Zirinji, Yeni Yol, Shorsu settlements included in the archaeological research were explained. The boundaries of the internal phases of the Late Chalcolithic have been defined. The building remains of these monuments were studied under the subparagraph of “Structure of architecture”. The examination of the remains of buildings found from Shorsu and Yeni Yol shows that there were 2 architectural techniques at this phase. During the excavation in the Shorsu settlement, 3 light construction houses were discovered in one area, one of which is 3.8 m length and 1.6 m width.⁶⁹

The first of the 4 construction⁷⁰ layers discovered during the research conducted in the Yeni Yol settlement was represented by square houses, the second by circular ones, and the third and fourth construction layers by halfdug houses. The square buildings are analogous to the buildings discovered from Shorsu,⁷¹ from the second construction layer of Ovchulartepe, from Leylatepe, the second layer of the Boyuk Kesik settlement⁷² and Alikomektepe,⁷³ the diameter of

⁶⁸ Bakhshaliyev, V. Archaeological researches in Sirab / V. Bakhshaliyev, Z. Novruzov - Baku: Oskar, -2010, -160 p.

⁶⁹ Bakhshaliyev, V. Archaeological researches conducted in Kultepe settlement and its surroundings / V. Bakhshaliyev, C. Marro, Z. Guliyeva [etc.] // Scientific Archive of the Institute of History, Ethnography and Archeology of ANAS Nakhchivan Department / – Nakhchivan, 2016, – p. 34.

⁷⁰ Bakhshaliyev, V. Archaeological researches at the Yeni yol settlement / V. Bakhshaliyev, Z. Guliyeva, R. Rzayeva // News of Azerbaijan National Academy of Science. Social sciences series, Baku: Elm, 2017. No. 1, – p. 49.

⁷¹ Bakhshaliyev, V. Guliyeva Z. Report of the archaeological researches conducted at the Kultepe settlement / Scientific Archive of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch of ANAS / - Nakhchivan, 2015, - p.32

⁷² Museyibli, N.A. Boyuk Kesik Chalcolithic settlement / N.A. Museyibli. - Baku: Nafta-Press, - 2007. - fig. 1.

⁷³ Нариманов, И.Г. Культура древнейшего земледельческо-скотоводческого населения Азербайджана (Эпоха энеолита VI–IV тысячелетия до н. э.) / И.Г.Нариманов. – Баку: ЭЛМ, – 1987. – с.57

one of the round houses is 5.2 meters, the wall thickness is 45-50 cm. Halfdugs are represented by round and square shapes. Such houses are known from the Chalcolithic layer of Ovchulartepe, Boyuk Kesik,⁷⁴ Sioni⁷⁵ and Ginchi⁷⁶ settlements.

In the heading of “**Labor tools**”, it was mentioned that at the end of the Late Chalcolithic period, there was a sharp decrease in the amount of stone tools, especially obsidian and flint. It has been emphasized that metalworking developed in this period in the form of copper ore alloys found from Yeni Yol, Zirinjli, as well as clay and stone molds. The main characteristics of the III phase of the Late Chalcolithic period are explained in the title “**Typological analysis of ceramics**”. Although the pottery of this stage was found in Yeni Yol, Shorsu, and Zirinjli settlements, taking into account its importance in revealing the transformation between cultures, the ceramics found in Yeni Yol were involved in a wider study. They are divided into 3 main groups with straw content, sand and straw content and coarse sand addition. 7 groups have been identified according to the quality of surface treatment and cooking in the dishes of this period. Four of them are related to the Ovchulartepe culture. The 2nd, 4th and 5th groups reflect the characteristics of Leylatepe culture. Shallow pots with a round base, bowls with a rim, and pots made on a potter's wheel related to the Leylatepe culture were registered in the second construction layer of the Yeni Yol. The class to which they belong Reflecting the beginning of the IV millennium BC (3712-3622 BC), it coincides with the chronological framework of the Leylatepe culture. However, unlike the Leylatepe culture, there are no infant jar burials or flint tools found on the Yeni Yol. In our opinion, a local culture influenced by the cultures of

⁷⁴ Museyibli, N.A. Boyuk Kesik Chalcolithic settlement, p. 10.

⁷⁵ Connor, S., Sagona A. Environment and society in the late prehistory of southern Georgia, Caucasus // *Les Cultures du Caucase (VI-III millenaires avant notre ere): Leurs Relations avec le Proche-Orient / Sus la direction Bertille Lyonnet*. P.: CNRS Editions, – 2007. – p. 31.

⁷⁶ Мунчаев, Р.М. Кавказ на заре бронзового века / Р.М.Мунчаев. – М.: Наука, – 1975. – с. 110.

Ovchulartepe and Leylatepe was formed on the Yeni Yol during this period.

Chapter IV of the dissertation is called **“Relations with Southern Caucasus-Middle Eastern cultures”** and consists of 4 paragraphs. In the paragraph entitled **“Genetic relations with the Mesolithic culture”**, the similarity of the microlithic tools discovered from Kultepe I and Osmantepe with the tools discovered from the 1st and 2nd Firuz camps of Gobustan, Damjili,⁷⁷ and the Mesolithic and Neolithic monuments ⁷⁸ of the Caucasus as a whole, as well as the comparison of the bone tools of Kultepe I with the tools found in the Gazma cave⁷⁹ based on the discoveries, it was concluded that the traditions existing in the Mesolithic Age in Azerbaijan played a role in the formation of the Neolithic culture in the Nakhchivan area, and certain elements of these traditions were continued in the Kultepe culture.

In the second paragraph, **“Relations with Southern Caucasus cultures”**, mutual relations between Kultepe culture and Shomutepe culture were investigated. The remains of buildings unearthed from Kultepe I have a circular plan typical of the Southern Caucasus, and flat-shaped walls were also used to create partitions only for storing food supplies. In the ornamentation of their wares, common elements can be traced to a certain extent. Thus, in the Late Neolithic ceramics

⁷⁷ Кушнарёва, К. Х. К проблеме кавказского мезолита // – Ереван: Историко-филологический журнал, – 1984. № 3, – с.36, 51; Гусейнов, М. Древний Палеолит Азербайджана / М.Гусейнов. – Баку: Тек Нур, – 2010. – рис. 98-99.

⁷⁸ Connor, S., Sagona A. Environment and society in the late prehistory of southern Georgia, Caucasus, – 2007. – Plate 2, 10.

Nishiaki, Y. Obsidian provenance analyses at Goytepe, Azerbaijan: implications for understanding neolithic socioeconomies in the southern Caucasus / Y.Nishiaki, O.Maeda, T.Kannari [et al.] // University of Oxford, archaeometry, – 2019. – fig. 1-4.

⁷⁹ Зейналов, А.А. Мустьерская стоянка Газма в Нахчыване // Карабах в Каменном веке // Материалы Международной научной конференции, посвященной 50-летию открытия палеолитической пещерной стоянки Азых в Азербайджане, – Баку: – 3-7 октября, – 2010, – с. 153; Джафаров, А.К. Средний палеолит Азербайджана / А.К.Джафаров. – Баку: Элм, – 1999. – с.341.

of Kultepe I, round reliefs, relief belts, surrounding the rim of the wares with round holes occupied the main place, a small amount of scratching ornaments were also used. However, oval-shaped or finger-shaped relief ornaments, which are widespread in the Shomutepe culture, have also been found here, albeit in small quantities. They show that the relationship between both cultures is not one-sided. Surrounding the rim of the bowls with circular holes contains the common features for this region, finding close parallels among the materials of the Neolithic monuments⁸⁰ of Transcaucasia, such as Shomutepe, Khatunarkh, Aratashen (Mahaltepe), along with Kultepe I. The coiled burial, recorded in the Neolithic layer of Kultepe I, in the graves discovered in Chalagantepe and Alikomektepe was also observed.⁸¹ The elements emerging from such interactions gradually became common and formed the common features of the Southern Caucasian Neolithic. It was not an exception that this type of common features persisted among the Chalcolithic cultures of the Southern Caucasus.

From this point of view, relations with Sioni culture constitute one of the actual issues. Although some researchers attribute Ovchulartepe settlement to this culture, recent studies have shown that this is not true. So, in the architecture of the Sioni culture, which appeared in the 5th millennium BC, stone buildings occupy a key place. It is difficult to get complete information about the burial custom. The main characteristics are determined based on ceramics.

⁸⁰ Ахундов, Т.И. У истоков Кавказской цивилизации. Неолит Азербайджана. Шомутепе / Т.И.Ахундов. – Баку: Наука, – 2012. – табл. 203, 10-458; Badalyan, R.S. The Settlement of Akhnashen-Khatunarkh, A Neolithic Site in the Ararat Plain (Armenia): Excavation Results 2004 – 2009 / R.S.Badalyan, A.A.Harutyunyan, Ch.Chataigner [et al.] // TÜBA-AR, – 2010. N:13. – Fig. 9-2, 1-4; Palumbi, G. A Preliminary Analysis on the Prehistoric Pottery from Aratashen (Armenia) // Les Cultures du Caucase (VI–IIIème millénaires avant notre ère). Leurs Relations avec le Proche-Orient / Sous la direction Bertille Lyonnet. – P.: CNRS Editions, – 2007. – рис. 125, 2.

⁸¹ Нариманов, И.Г. Культура древнейшего земледельческо-скотоводческого населения Азербайджана (Эпоха энеолита VI–IV тысячелетия до н. э.), 1987. С. 87.

The basis of ceramics are those with mineral mixture. They consist of sand, mica (mica), obsidian remains. There are few samples with chaff tepered. In this respect, it contrasts with Ovchulartepe ceramics. Chaff tepered ceramics occupy the main place here. The research conducted in Ovchulartepe also showed the groundlessness of calling the Late Chalcolithic ceramics of Azerbaijan “Sioni culture”.⁸² It would be appropriate to consider this issue a bit more broadly on the example of the combed, rim-engraved ceramic samples discovered from Yeni Yol settlement in Nakhchivanchay valley. Some of the ceramics of the Yeni Yol settlement are chaff tepered, and some are sand and chaff tepered. The presence of individual samples (4 fragments) mixed with mica and sand tepered may be raw materials. Of course, relations with the Chalcolithic cultures of the Southen Caucasus were not an exception.

The materials of Yeni Yol settlement are also important in terms of studying the relations with Leylatepe culture. The cone-shaped bowls with rounded holes on the rim of the mouth, as well as plates, bowls with rounded rims, and kheira-type wares, found on the Yeni Yol, reflect the characteristics of the Leylatepe culture by finding similar⁸³ ones in the Boyuk Kesik materials. Such samples, which are few in number, were recorded in the II construction layer of Yeni Yol. This layer 3712-3622 BC., the Shorsu settlement reflects approximately the same date (3910-3870 BC). In our opinion, the traces of the Leylatepe culture in the Nakhchivanchay valley are in this period - it appeared in the first half of the IV millennium BC.

In the paragraph entitled **“Relations with Middle East cultures”**, the relations with Halaf, Umm Dabagiyah, Haji Firuz, and Ubaid cultures were investigated, the distribution area of the Dalma Tepe culture and the factors determining it were analyzed. The

⁸²Bakhshaliyev V. Economic-cultural relations of Nakhchivan during the Neolithic and Early Chalcolithic period / V.Bakhshaliyev. - Nakhchivan: Ajami, - 2021, - 232 p.

⁸³ Museyibli, N.A. Boyuk Kesik Chalcolithic settlement. 2007. Table. XXIII, 1-4; Table III, 9; Table I, 6-7; Museyibli, N.A. Leylatepe culture, 2020. photo 33, 1-2, 9, 14-15.

different orientations of the Late Neolithic graves of Kultepe I, the twisted burial custom, the VI layer of the Haji Firuz⁸⁴ Chatal mound, the similar ones found in the Neolithic layer of the Koshkhoyuk, as well as the al-Buhais settlement⁸⁵, indicate a similar burial custom in the Southern Caucasus, Eastern Anatolia, the Middle East, including the Urmia basin during the Neolithic period.

One of the examples showing connections with the Halaf culture was found in grave No. 71 (20.8 m) in Kultepe I. The grave in which this vessel was discovered also differs from other graves in that it is buried on its back, which is considered to be of Mesopotamian origin. The Halaf-type desert found at this stage is important in determining the period of formation of cultural and economic links with Northern Mesopotamia. This ware is similar to Arpachay ceramics due to the polychrome ornament composition on its surface.⁸⁶ The paucity of such examples indicates that they were used as a means of exchange, and indicates that mutual relations with Mesopotamia existed from the Early Phase of the Ceramic Neolithic.

In the middle phase of the Ceramic Neolithic, the expansion of these relations was evident in the partial increase in the number of burials on the back (6). Similarities with the Urmia basin were evident in elliptical, conical odor heads, pitoy-mushroom-carinated ware, obsidian trade. Although the elements belonging to the Halaf culture are few in Kultepe I, they are increased in the painted wares of Khalaj. Some of these vessels belonging to the last phase of the Ceramic Neolithic repeat the Halaf-Ubaid traditions in terms of the shape of the ornaments and the drawing technique.

In the Chalcolithic period, these relations became intensive - in the form of certain elements of the Halaf and Ubaid cultures, and began to be accompanied by small migrations, which resulted in the

⁸⁴ Voigt, M.M. Haji Firuz Tepe, Iran: The Neolithic Settlement / M.M.Voigt. – Philadelphia: University of Pennsylvania, – 1983. – p.71.

⁸⁵ Mellaart, J. Earliest Civilizations of the Near East / J.Mellaart. – London: – 1965. – p. 103; fig. 60-61; 6; 17; 11.

⁸⁶ Mellaart J. The Neolithic of the Near East / J.Mellaart. – London: Thames and Hudson Ltd, – 1975, – fig. 107.

emergence of the first common culture of the Southern Caucasus and the Middle East - the Dalma Tepe culture. In terms of the simultaneous representation of impression ornamentation and painted ceramic groups, which are the main attributes of this culture, the Nakhchivantepe settlement stands in a row with Dalma Tepe, Dava Goz, Sheh Gabi, Siahbid, Haji Firuz, Godun Tepe, Salmas, Soga Chai, Ahranjantepe monuments⁸⁷ and occupies a special place in the group of “characteristic monuments of Dalma Tepe culture”. In the Dalma period layers of Nakhchivantepe, a small number of samples similar to Kultepe I and Halaf wares were registered, as well as a certain similarity with impression ornamentation and painted pottery ceramics of Mil-Karabakh was due to the influence of Neolithic cultures. The main factor determining its spread was related to the rich raw material deposits of the Southern Caucasus. It seems that the interest in raw material deposits, starting from the Late Neolithic period, increased further in the Early Chalcolithic period, and this process stimulated the mobile lifestyle of local tribes. In our opinion, the spread of Dalma is also related to the seasonal migrations of cattle tribes. The lack of obsidian deposits has forced the tribes living in Nakhchivan and Iran to move to areas where such deposits exist. Most of Kultepe obsidian was brought from Goyhasar (50%) and Sunik (48%). The settlements located in the Urmia basin mainly used

⁸⁷ Hamlin, C. Dalma Tepe // – 1975. Iran 13, – fig. 4,A p. fig. 8; Henrickson, E.F. Ceramic styles and cultural interaction in the early and middle chalcolithic of the Central Zagros, Iran / E.F.Henrickson. – University of Toronto (Canada), –1983, – fig. 10, 2, 1069; fig.104; Abedi, A. “Excavation at Kul Tepe of (Jolfa), North-Western Iran, 2010: First Preliminary Report” / A.Abedi, K., H.Shahidi, Ch.Chataigner [et al.] // Ancient Near Eastern Studies 51, – 2014. – fig 10,5-8; 15,4; Hejebri, N. “Excavation at Lavin Tepe North-west Iran” / N.Hejebri, A.Binandeh, J.Nestani [et al.] // Ancient Near Eastern Studies 40, – 2012. – fig. 8-9; Voigt, M.M. Relative and Absolute Chronologies for Iran between 6500 and 3500 Cal BC. Chronologies in the Near East. Eds. Aurenche O., Evin J. and Hours F. // BAR International Series. Oxford, – 1987. – fig. 97; Tobler, A.Y. Excavations at Tepe Gavra / A.Y.Tobler. – // Philadelphia: University of Pennsylvania Press, vol. II, – 1950. – p.7-17.

Sunik obsidian.⁸⁸ According to the researchers, Sunik obsidian spread to Iran, as well as to the Urmia basin, passing through the territory of Nakhchivan.⁸⁹ These facts show that in the Neolithic period, the Nakhchivan and Urmia basins were included in the same cultural-economic zone, and at the same time, they were of special importance as a buffer zone in the implementation of relations between the Southern Caucasus and Front Asia.

The Ubaid pots, which appeared in the form of individual examples in the Dalma culture, can be evaluated as the result of the cultural relations of the local tribes with Mesopotamia during the Chalcolithic period. This opinion is confirmed by the discovery of a small number of Halaf-Ubaid ceramic samples⁹⁰ in Nakhchivantepe and Bulovgaya. Advances in metalworking, copper-cast axes and gold objects appear for the first time in the Ubaid culture.⁹¹ It should be noted that copper axes and gold necklaces found in Ovchulartepe showed the development of metalworking here. The Ubaid type ceramics discovered from Ovchulartepe and two more ceramic samples found from Yeni Yol can be considered as the best proofs of this. The above-mentioned facts show that Nakhchivan had contacts with Middle Eastern tribes since the Neolithic period, but in the Chalcolithic period, these contacts were further expanded in the form of small migrations.

The reasons for the migrations from Mesopotamia during the Late Chalcolithic have been explained by various factors: although

⁸⁸ Bakhshaliyev, V.B. The culture of semi-nomadic tribes in Nakhchivan / Scientific Archive of the Institute of History, Ethnography and Archeology of the Nakhchivan Branch of ANAS / - Nakhchivan, 2014, - p. 12.

⁸⁹ Khademi N.F. Provenance of prehistoric obsidian artifacts from Kultepe, Northwestern Iran using X-ray fluorescence (XRF) analysis / N.Khademi, A.Abedi, M.Glascock [et al.] // Journal of Archaeological Science, – 2013. N:40. – p.1964.

⁹⁰ Bakhshaliyev, V. Origin of Dalma Tepe culture / V. Bakhshaliyev. E. Bakhshaliyev, - Nakhchivan: Ajami, - 2023, photo 14-15.

⁹¹ Sagona, A. and Zimansky P. Ancient Turkey / A.Sagona, P.Zmansky. – 2009. – p. 130.

some tried to connect it with the “Uruk expansion”⁹² or with the supply of metal to the metropolis⁹³, these hypotheses were rejected and population density was cited as one of the main reasons for the migrations⁹⁴. Considering the metal deposits in the Nakhchivan area, one cannot disagree with the above opinion. However, during the Neolithic period, when these connections began, the tribes of the Middle East could have been attracted by another source, which could have been the obsidian deposits. It is likely that the Neolithic tribes of Nakhchivan were the main mediators in the creation of certain connections between the Neolithic hearths in other regions of Azerbaijan and the Urmia basin and Mesopotamia. This can be seen in the transfer of Caucasian obsidian from Araz to the south, bringing Halaf ceramics as an exchange product.

Although migrations from the Middle East continued during the Late Chalcolithic period, as evidenced by the discovery of Leylatepe ceramics on the Yeni Yol, signs of influence on Mesopotamia from the Southern Caucasus are also evident. Zoomorphic reliefs characteristic of Ovchulartepe culture, relief belts patterned with slanting lines, small-volume dishes of Yeni Yol, similar to those of Uruk culture can be considered as individual impulses of influence towards the south. Summarizing all this, it can be considered that the influence of cultures in the Southern Caucasus-Middle East relations was not unipolar towards the north, but mutual. Under the title **“Importance of Nakhchivan monuments in periodization of ancient agricultural cultures of the Southern Caucasus and the Middle East”**, a new periodization of the Neolithic and Chalcolithic cultures of the Southern Caucasus was carried out based on

⁹² Algaze, G. "Initial Social Complexity in Southwestern Asia: The Mesopotamian Advantage.", *Current Anthropology*, vol. 42, 2001. P. 76; Авилова Л.И. Обмен металлом на Ближнем Востоке в раннем и среднем бронзовом веке // РА, 2010. № 1, с. 9.

⁹³ Мунчаев, Р.М., Амиров, Ш.Н. Взаимосвязи Кавказа и Месопотамии в VI-IV тыс.до н.э. // Международная научная конференция (11-12 сентября 2008), Баку: Чашыюглы, – 2009. – с. 46.

⁹⁴ Museyibli, N.A. Leylatepe culture / N. Museyibli. - Baku: Elm ve Tahsil, -2020. - p. 234.

monuments with precise stratigraphy such as I Kultepe, Nakhchivantepe, Ovchulartepe, Yeni Yol. The importance of Nakhchivantepe is justified in antiquing the chronological framework of the Dalma Tepe culture, which is widespread in the Middle East.

Chapter V of the thesis is called **“Economy, social structure and ideology of Neolithic and Chalcolithic tribes”**. It consists of four paragraphs. In the first paragraph called "Agriculture", soft (*Friticum sativum* L.), hard (*Friticum Compostum* Dest), dwarf (*Friticum Com Compostum* Hest), spherical wheat varieties (*Friticum steriococum*), as well as millet, bare It was determined based on the comparative analysis of the remains⁹⁵ of grain (*Hordeum sativum* L) and bottle-shaped (*Hordeum lagunculiforme*) barley species and grain types⁹⁶ such as bare wheat (*Triticum*), barley (*Hordeum vulgare*) and lentils (*Lens culinaris*) obtained during the excavations conducted in the 21st century that agriculture was the main occupation of the Neolithic tribes of Nakhchivan. The further development of this area in the Middle Phase of the Ceramic Neolithic is also confirmed by the discovery of large-scale stone tools and sickle frames used for beating and grinding grain. The discovery of 41 samples of barley remains, 10 samples of wheat (*Triticum*) remains, and 39 samples of leguminous remains⁹⁷ from Ovchulartepe shows that agriculture continued to be the main economic field in the Late Chalcolithic period.

In the second paragraph called **“Livestock”**, the zoological remains discovered from Kultepe I, Nakhchivantepe and Ovchulartepe were analyzed. The numerous zoological remains found in Kultepe I indicate that cattle breeding played an important

⁹⁵ Абибуллаев, О.А. Энеолит и бронза на территории Нахичеванской АССР / О.А.Абибуллаев. – Баку: Элм, – 1982. – с. 211

⁹⁶ Marro, C. New light on the Late Prehistory of the South Caucasus: Data from the recent excavation campaigns at Kultepe I in Nakhchivan, Azerbaijan (2012-2018) / C.Marro, V.Bakhshaliyev, R.Berton [et al.] // *Paleorient*, – 2019. vol. 45.1, – p. 104.

⁹⁷ Bakhshaliyev, V.B. Ovchulartepesi. First Preliminary Report: the 2006-2008 seasons / V.B. Bakhshaliyev, C. Marro, S.H. Ashurov - Baku: Elm, - 2010, - p.19.

role in the economy of the Neolithic tribes of Nakhchivan, along with agriculture. However, there are some differences between the Early and Middle Phase of the Ceramic Neolithic. 85.5% of the domesticated animal bones found in the lower layer of Kultepe belonged to cattle. In our opinion, the main position of cattle was due to the fact that it was easier to take them to the pasture. The mountainous nature of Nakhchivan was also favorable for their preservation. During the Middle Phase of the Ceramic Neolithic there was an increase in the specific gravity of cattle. Their bone remains are 3 times higher than before, rising from 5.5% to 15%. The specific weight of cattle decreased from 85.5% to 80%.⁹⁸ This difference observed in the animal bones belonging to layers I and II of Kultepe indicates a gradual change in the area of occupation of people in Early Phase Ceramic Neolithic and Middle Phase Ceramic Neolithic.

Under the heading “**Other areas of employment**”, the development of pottery based on numerous ceramic samples unearthed from the monuments of this period, weaving on the basis of small caps found from Kultepe I, Nakhchivantepeah, dyeing on the basis of ochre remains from area E, and exchange on the basis of obsidian remains were discussed, as well as It has been noted that areas such as hunting and transportation, which existed since the Neolithic period, gradually decreased in the Chalcolithic period and gave way to new areas such as fishing and metalworking.

In the fourth paragraph entitled “**Social structure**”, based on the analysis of common workplaces found in areas D, E of Kultepe I, the remains of public buildings covering areas F, J of the common residential complex registered in area D, and grave equipment, the Neolithic tribes of Nakhchivan. It has been suggested that the Kultepe I settlement was a settlement belonging to a village community of about 400 people, where the primitive community structure lived in the stage of development in the VII-VI millennium BC. Such settlements consisted of small houses built by related families next to each other. Towards the end of the Chalcolithic

⁹⁸ Again there

period, social inequality appeared. The discovery of metal axes, which were very valuable for that time, in some graves discovered from Ovchular-tepe indicates the social stratification between people. The production of gold objects in this period also confirms this idea.

The fifth paragraph is devoted to the topic **“Ideology”**. It has been noted that the graves discovered in Kultepe show that the worship of the afterlife, the human soul, and the worship of ancestors occupy a central place in the ideology of Neolithic people. The discovery of this complex consisting of dog bones, red deer antlers and other bones found in graves indicates the existence of an animal cult due to their ritual use. Researches show that in the Neolithic and Chalcolithic tribes of Nakhchivan, beliefs in ancestors and heavenly bodies took the main place, and some plants and animals were also objects of worship.

In the **“Conclusion”** part of the dissertation, the facts obtained from the researches were summarized and the final conclusion was drawn and reflected in the separate points, recommendations and suggestions given at the end.

The Neolithic and Chalcolithic monuments of Nakhchivan region of Azerbaijan are of great importance in the periodization of the ancient agricultural cultures of the Middle East-Southern Caucasus. The genetic connection between Neolithic and Chalcolithic cultures in Nakhchivan is clearly visible. The specific features of each period are shown separately, the characteristic aspects of the culture they belong to, their mutual relations with neighboring regions, the area of spread and the factors determining this spread are defined. They are as follows:

- Research shows that there are several centers of formation of Neolithic culture in Southern Caucasus, one of such centers was Nakhchivan region. Among the factors determining this, the decisive role of favorable climatic conditions and the natural-geographical environment as a whole is confirmed by the botanical and zoological remains found here. The botanical remains and faunal remains found in Kultepe I also show that the vegetation necessary for living in the Neolithic period was formed. These facts show that

paleogeographical conditions and paleoecological environment had a special effect on the settlement of Nakhchivan territory by ancient farming-cattle tribes (24).

- Based on the comparative analysis of the stratigraphy, C14 analyzes and archaeological materials of the 4 layers of Kultepe I, Osmantepe and Nakhchivantepe during the research, it was determined that the Neolithic culture in Nakhchivan land passed through 3 phases: the early phase of the ceramic Neolithic (EPCN), the middle phase (MPCN) and the final phase (LPCN).

-Based on the artifacts of layer 1a and layer 1 of Kultepe I, it was determined that in Early Phase Ceramic Neolithic (6370-6000 BC), people lived in halfdug houses, microliths made of obsidian and flint occupied the main place, hearths with stone circles occupied the main place, burials were separate was carried out in places and household utensils were mainly placed in the graves in such places. Ceramics were mainly (95%) straw-faced, with a small amount (5%) painted (29).

- Middle Phase Ceramic Neolithic (6000-5200 BC) was reflected in the materials of the Osmantepe settlement in layer 1b of Kultepe I. In this period, unlike the previous period, circular and rectangular buildings appeared, and burials were carried out under the floor of houses (28).

-The examination of the archaeological materials of Kultepe I shows that although there are some differences in the changes in the way of life of people in Early Phase Ceramic Neolithic and Middle Phase Ceramic Neolithic, both phases are the continuation of each other and belong to the Kultepe culture.

- As a result of the examination of the materials of the 1a layer stored in the Archaeological Fund of the National Museum of History of Azerbaijan Kultepe I, it was determined that the pottery of this stage is mainly represented by simple asymmetric vessels made of a large amount of plant-tepered clay and straw-faced. This group of ceramics, recorded for the first time in Kultepe I, gave rise to the phenomenon of “Kultepe culture” by researchers. We agree with this opinion, but taking into account the stratigraphic concordance of

layer 1a, where it first appeared, with layer I recorded at the same depth in area E, and the fact that both layers belong to the Early Phase Ceramic Neolithic, we believe that the Kultepe culture dates back to the beginning of the Ceramic Neolithic (3rd quarter of the 7th millennium BC) appears.

-Research has shown that the Kultepe culture was formed in the Nakhchivanchay valley. Although the small number of ceramics found here show economic-cultural relations and certain migrations between Mesopotamia and Nakhchivan, the analysis of new archaeological materials shows that the Neolithic cultures of the Southern Caucasus, including the Kultepe culture, had local characteristics (26).

- In our opinion, the distribution of straw-faced ceramics in Mil-Karabakh, Agri valley, Urmiya Basin and some settlements in the middle reaches of the Kur shows that the area of Kultepe culture is wide, and the main factor determining its spread was the mobile lifestyle of local tribes (29).

- Similarity with the Kultepe culture can be observed in the architectural structure of the synchronous monuments in other regions of Azerbaijan, in straw ceramics, in the typology of some vessels and in the relief ornaments on them. but at the end of the Neolithic period, a culture with its own characteristics was formed in the Mil-Karabakh region.

-Late Phase Ceramic Neolithic The examination of the Neolithic layer of Nakhchivantepe and the Neolithic painted ceramics of Khalaj shows that at the end of the 6th millennium and the beginning of the 5th millennium BC, the transition of the Neolithic to the Chalcolithic took place here (It shows that Dalma Tepe culture developed on the basis of local Neolithic traditions (27).

-Research shows that Kultepe I was the oldest ceramic Neolithic settlement in the Southern Caucasus; Settlement in Kultepe I it has existed since the second half of the VII millennium BC (24). The periodization of the Shomutepe monuments that existed in the Southern Caucasus, as well as the Neolithic period monuments in Mil-Karabagh and Agri valley, is dated to Kultepe I historically, it

corresponds with layer II, which reflects the beginning of VI millennium BC.

-Research of Chalcolithic period monuments in Nakhchivan from the beginning of the 5th millennium BC it made it possible to continuously follow a period up to the middle of the IV millennium BC and periodize it in 5 phases (21).

- The Early and Middle Chalcolithic layer of Nakhchivantepe gave rich materials related to Dalma Tepe culture. We agree with the researchers' opinion that Nakhchivan entered the distribution area of Dalma Tepe culture in this period. Research shows that the cultures formed in the Chalcolithic period in the Southern Caucasus emerged on a local basis and developed in the conditions of relations with the countries of the Middle East (22).

-Research shows that the Early Chalcolithic ceramics of Nakhchivantepe are represented by 4 main groups: straw-faced simple ceramics, impression ornamentation ceramics, red-lined ceramics and painted-ornamental ceramics. Group I prevails in all strata. In our opinion, this group is related to Kultepe culture (30). Taking into account the similarities in the typology and ornamentation of simple ceramic vessels, we believe that the Neolithic cultures of Azerbaijan influenced the formation of the Dalma Tepe culture .

- In the territory of Nakhchivan, there are several times more monuments belonging to the Late Chalcolithic period compared to the previous stages. In our opinion, the number of settlements in this period was related to the demographic growth within the local tribes on the one hand, and to a certain extent to the migrations from the south to the north.

- The architecture of Shorsu, Yeni Yol settlements of this period, represented by halfdugs, square and round buildings, as well as houses with a simple construction, is from Leylatepe, reflecting the years 4070-3980 BC and it is contemporary with Berikldeebi, which indicates the years 3955-3778 BC. In our opinion, mutual relations with Leylatape culture developed during this period.

- C14 analyzes of the Yeni Yol reflect the phase between Ovchular-tepe and Leylatepe culture. However, there are no infant jar burials known from these monuments on Yeni Yol, and at the same time, there are no tools made of flint, which are considered the main signs of Leylatepe culture. Based on the facts obtained in the current conditions, we believe that the Late Chalcolithic culture developed here in the conditions of interaction with the culture of Leylatepe and Sioni.

- In our opinion, in the Neolithic and Chalcolithic periods, the mobile way of life prevailed in this region, and in the spread of cultures, the nomadic herding tribes, who were constantly searching for raw materials, took the main place. The presence of mutual relations with the Halaf, Ubaid and Southern Caucasus Shomutepe cultures of the Middle East was related to these factors (25).

- The researches made it possible to determine the distribution area of archaeological cultures that have genetic links with each other in the Neolithic period and the Chalcolithic period, which developed successively in the territory of Nakhchivan. Cultures of Kul-tepe, Dalma Tepe and Ovchular-tepe were formed in the historical territories of Azerbaijan covering Nakhchivan-Mil-Karabagh-Agri valley-Urmiya regions.

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

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