

AZERBAIJAN REPUBLIC

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**EARLY AGRICULTURAL CULTURES OF AZERBAIJAN
AND THEIR MIDDLE EAST PARALLELS**

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INTRODUCTION

General characteristics of the dissertation

The actuality of the subject and research degree. The study of the emergence, formation, development and spread of production economy with a history of thousands of years is one of the most actual problems of history, especially archaeology, which is an part of it.

The study of Kultapa I in Nakhchivan, which has long been considered a standard monument in the study of the Chalcolithic period and Bronze Age in the South Caucasus, showed the importance of Azerbaijan monuments in the formation of early civilizations in this region. The discovery and scientific circulation of monuments of the early agricultural cultures in Mil-Garabagh and Ganja-Gazakh regions, the artifacts obtained from these monuments proved that the territory of Azerbaijan is among the regions where ancient cultures were formed. Monuments of Azerbaijan of this period and related problems have been the subject of research in Moscow, St. Petersburg, as well as, at least in part, by local scholars. In these works, there are also considerations about the Middle East parallels of the monuments of the early agricultural period of Azerbaijan. The need to study these problems is still relevant. However, until now, a comprehensive study of the early agricultural cultures of Azerbaijan and the Middle East has not been the subject of separate research.

In the works written so far, the classification of contemporary monuments of the Middle East is given in general. Many aspects of regional and broader connections could not be

fully explored because these monuments were not presented in a comprehensive, broad classification. That is why there is a need for a comprehensive study of the problem. The urgency of the issue is further enhanced by the need to interpret the problem based on new scientific achievements in the context of interregional historical processes, natural and geographical conditions of Azerbaijan and the Middle East, global climate changes.

Another issue of relevance is the importance of clarifying the leading regional-provincial division in the Middle East-Azerbaijan tandem.

The settlements, grave monuments and, in general, the discovered material and cultural samples of the early sedentary farming tribes of Azerbaijan and the Middle East are given a certain place in the works of individual authors. Based on the obtained materials, certain opinions were expressed about the settlements of these tribes, their economic life, examples of material culture and parallels in the Middle East.

The general classification of settlements of the early agricultural tribes of Azerbaijan is given in the work of I.H. Narimanov "The culture of the ancient agricultural and cattle-breeding population of Azerbaijan" («Культура древнейшего земледельческо-скотоводческого населения Азербайджана») [229]. Classification of individual monuments related to the problem is given on G.S.Ismayilov's "Archaeological study of the ancient settlement of Baba-Dervish" («Археологическое исследование древнего поселения Баба-дервиш») [140], O.H.Nabibullayev's "Chalcolithic period and Bronze Age in the area of Nakhchivan AR" («Энеолит и бронза на территории Нахичеванской АССР») [68], N.H.Aliyev and I.H.Narimanov's

"Culture of Northern Azerbaijan in the Late Chalcolithic period" («Культура Северного Азербайджана в эпоху позднего энеолита») [75], T.I.Akhundov's "North-Western Azerbaijan in the Chalcolithic period and Bronze Age" («Северо-Западный Азербайджан в эпоху энеолита и бронзы») [89], A.G.Seyidov's "Nakhchivan in the 7th-2nd millennia B.C." («Нахçıvan b.e.ə.VII-II minilliklərdə») [57], N.A.Museyibli's "Boyuk Kesik" [54], the author of the dissertation "Graves of the first sedentary farming and cattle-breeding tribes of Azerbaijan" («Azərbaycanın ilk oturaq əkinçi-maldar tayfalarının qəbir abidələri») [40], as well as co-authored with T.I.Akhundov "Southern Caucasus in the Caucasus-Central Asia ethnocultural processes 4th millennium B.C." («Южный Кавказ в кавказско-переднеазиатских этнокультурных процессах IV тыс. до н.э.») [202], in the monograph "Khalaj" [47] and other works published by A.G.Seyidov together with V.B.Bakhshaliyev.

However, as we have noted, this topic has not been studied as a separate and complex research work. The issues of paleoecology and paleodemography of Azerbaijan in the 6th-4th millennia B.C., which is part of the research, are the first attempt in our national archaeology. At the same time, protruding based and combed ceramics, zoomorphic and anthropomorphic handles, burial in clay pots (according to the materials of all studied monuments of Azerbaijan) registered from the monuments of early agricultural culture of Azerbaijan, the cult of dog in the worldview of ancient agricultural tribes, about some aspects of the ideological views of the people, etc. issues have been elaborated as a separate research topic for the first time.

One of the main factors determining the relevance of the topic is the analysis of the remains of material culture obtained

from dozens of monuments, graves in the Middle East noting the location of them (with maps), researchers. Tables reflecting the technical and typological characteristics, material, production affiliation of the findings have been compiled. Relevant scientific conclusions were drawn on the basis of the analysis of chemical analysis of dyes on ceramic samples of Polutepe and Alkhantepe monuments registered for the first time in Mugan region of Azerbaijan. Apparently, the appeal to this topic, the comprehensive study of the monuments of the period was not accidental, but was born of objective necessity. In addition to the available material and literature, dozens of household items and graves, as well as numerous material and cultural samples directly discovered by the author, also played a key role in the study of a number of issues. Analysis of various new monuments and archaeological material obtained from them is one of the main factors that increase the relevance of the topic.

Object of research. The object of the research is the similarities and differences of the early agricultural monuments of Azerbaijan and their parallels in the Middle East, the chronological framework, the comparative analysis of the artifacts found in these monuments.

Subject of research. The main subject of research is more than 150 monuments and artifacts found in Azerbaijan and the Middle East. Research covers 6th-4th millennia B.C. The upper limit of the work is taken about 6th millennium B.C.. Classification and analysis of monuments belonging to the developed and late stages of the Neolithic period are given. The lower limit of the study is taken 4th millennium B.C. The chronological framework was determined based on radiocarbon

analysis and analysis of anthropological and osteological remains.

Objectives and tasks of the study. The scientific objectives of the dissertation are as follows:

1. To study the parallels with the early agricultural cultures of Azerbaijan and the natural-geographical conditions of the period of their formation, giving a comprehensive classification of the monuments of early agricultural culture of the Middle East;

2. To give an idea of the remnants of material culture recorded in the ancient settlements studied in Azerbaijan, their similarities and differences, economic and cultural relations with the tribes inhabiting the Middle East;

3. Systematize general information on the remains of material culture and their equipment found in the analogous monuments of Azerbaijan and the Middle East for the period under study and get concrete conclusions. To achieve this objectives, perform the following specific scientific tasks:

1. To generalize the materials on all the features of the monuments of the early agricultural period of Azerbaijan and the Middle East, to make judgments about the existing parallels;

2. Identify the means and ways of economic and cultural communication between these regions;

3. To make scientific judgments on the parallels between the archaeological monuments of Azerbaijan and the Middle East;

4. To highlight the place of the early agricultural tribes of Azerbaijan in the system of ancient cultures of the Middle Asia;

5. To observe changes in grave monuments, burial customs and funeral ceremonies;

6. To determine the chronology of monuments on the basis of comparative analysis;

7. To follow the causes and development of economic and cultural relations;

8. To generalize the scientific results of research on early agricultural tribes of Azerbaijan with a new approach;

9. To follow the development features of economic life, handicrafts and other spheres of production, to draw conclusions;

10. One of the main objectives of the dissertation was to show the global and regional climatic background of the period of the early agricultural tribes of Azerbaijan and the Middle East, to touch upon demographic processes.

The ones mentioned above was the main direction of the author's 20 years of research.

Research methods. Various research methods have been used in the research process to achieve the set goals. One of them is the typological comparison method used in world and Azerbaijani archaeology. This method was mainly used in the study of monuments related to the period of early agricultural culture, determining chronology of archaeological cultures, origin and spread of archeological cultures in Azerbaijan. During the analysis of archaeological material regional and topographic classification developed by O.H.Habibullayev, I.H.Narimanov, F.R. Mahmudov, V.H.Aliyev, G.S.Ismayilov, H.F.Jafarov, T.I.Akhundov, V.B.Bakhshaliyev, J.N.Rustamov, A.G.Seyidov, N.H.Aliyev, N.A.Museyibli and other researchers, as well as the method of typological analysis were used.

In order to achieve the set goals, a topographic classification of settlements is given.

The application of the method (classification of settlements) developed by the researcher I.H.Narimanov allowed to obtain significant results for the study of monuments and archaeological cultures belonging to the early farming tribes.

The method of comparative analysis was used to determine the relationship between the early agricultural culture of Azerbaijan and the contemporary cultures of the Middle Asia, as well as determine the place of these cultures in world archaeology. In general, the emergence, development and replacement of archaeological cultures has been observed as a cultural-historical process.

The main theses.

- The monuments of early agricultural culture of Azerbaijan and the Middle East have been extensively studied, it is shown that they have parallels in both regions (for example, Leylatepe-Uruk-Ubaid culture, Kultepe I-Halaf cultures) New monuments and found artifacts were analyzed (Alkhantepe, Polutepe, Koshk, Boztepe, Girikihacıyan, Diyarbakır)

- The inhabitants of the early agricultural culture of Azerbaijan and the Middle East had favorable natural and geographical conditions for the formation of their culture here;

- Remains of material culture recorded in the ancient settlements studied in Azerbaijan, their similar and different features showed that there were mutual exchange relations between these regions.⁹

- Concrete conclusions obtained about religious worldview, pottery production, occupation, etc. by systematizing general information about the remains of material culture and their equipment found in Azerbaijan and similar monuments of the Middle East for the period under study

- By studying the monuments of the early agricultural period of Azerbaijan, it was clarified that the number of inhabitants of Azerbaijan was not less than the number of people

living in the monuments of the Middle East; (250-400 person per 1 ha)

- Comparisons between the archaeological monuments of Azerbaijan and the Middle East show that the ancient inhabitants of Azerbaijan had their own local cultures (Leylatepe culture);

- The analysis of the issues of paleogeography and paleodemography of the early agricultural period of Azerbaijan proves that although the fauna and flora of Azerbaijan were rich in the studied period, human was still weak against nature;

- A comparative analysis of the beliefs and religious worldviews of the early farming-cattle-reeding tribes proves that there are similar and different aspects in their beliefs and temples (Alikomektepe and Polutepe, Gobekli tepe, etc.);

- The analysis of the artifacts recorded from the monuments of the early agricultural period of Azerbaijan proves that in the religious worldview of the inhabitants living here, existence the cults of dog, water, stone, ceramic, etc.

- The evolution of burial customs of the early agricultural period of both regions, their analysis and generalizations based on the relative chronology proved that the ancient farming cattle-breeding tribes had different shaded, but almost the same burial custom (burial in different directions in a more or less folded state).¹⁰

- By studying the reasons for the spread of some elements of various pottery, it is determined that there were economic and cultural relations between these tribes (combing, protruding-based ceramics)

- Chemical analysis of several pottery fragments recorded from the monuments of the early agricultural period of Azerbaijan proves that these tribes used local raw materials in the production and painting of ceramics.

- The historical and cultural contacts of the population during the period under study were kept in perspective by considering new monuments (Joba, Gritille, Abdullah's plain,

Hajinabi, Hazintepe, Gaziantepe, etc.), and it was clarified that there were effects not only from the Middle East but also from Azerbaijan and obtained artifacts shows it.

Scientific novelty of the research. The dissertation is the first generalized scientific work devoted to the study of settlements, graves, other monuments formed in the territory of Azerbaijan during the early agricultural culture and their parallels in the Middle East. For the first time, general information about more than 60 recently studied monuments of the Middle East has been collected here, and a broad classification of those more interesting in terms of scientific analysis has been given.

For the first time, graves and findings from the Middle East are grouped and analyzed, and special tables are compiled to reflect the results of the study.

Several new monuments discovered and studied by the author,(Alkhantepe and Polutepe settlements located near Uchtepe village of Jalilabad region in Mugan plain together with T.I. Akhundov (for the first time in Polutepe in 2004, and in Alkhantepe in 2006 I.Akhundov started excavation), in 2009 together with A.G.Seyidov and V.B.Bakhshaliyev in Khalaj settlement located in Sharur region of Nakhchivan (the first excavations in the monument were carried out under the direction of A.G.Seyidov and V.B.Bakhshaliyev)) found his place as the first source in the research work and early agricultural culture of Azerbaijan and its comparative analysis with the countries of Western Asia have been studied from a whole new perspective.

As the first attempt, the issues of paleogeography and paleodemography of the early agricultural period of Azerbaijan

were considered, the remains of material culture found in the settlements of early farmers of Azerbaijan and their Middle Eastern parallels were analyzed and grouped in the dissertation.

The dissertation analyzes the ways of spreading ancient agricultural cultures formed in the Middle East, migration issues, belief systems and religious worldview of the early farming tribes, their similarities and differences, and a number of new scientific conclusions are obtained. For the first time, combed and protruding based ceramic samples, zoomorphic and anthropomorphic handles found in the settlements of the early agricultural period of Azerbaijan were specially studied and their parallels in the Middle East were analyzed and relevant conclusions have been obtained.

Theoretical and practical significance of the research.

Numerous archaeological materials and scientific ideas representing the early sedentary farming and cattle-breeding tribes of Azerbaijan, as well as contemporary monuments of the Middle East, are very important for the study of the ancient history of Azerbaijan. The emergence of new economic habits of the ancient tribes inhabiting Azerbaijan in connection with the transition to agriculture and cattle breeding, their spiritual culture, systematized research is very important for the introduction of the ancient history and culture of our people to the world scientific community. This research work is very important in terms of studying the existence of factors such as the existence of people in the territory of Azerbaijan since ancient times, the emergence, spreading and development of different cultures in the region. The fact that the territory of Azerbaijan serves as a kind of bridge for the spread of cultures of the Middle Eastern in the North Caucasus and other surrounding

regions is also valuable in terms of studying many issues, such as ethnic formation and migration. The dissertation can be used to write textbooks on the history and archaeology of Azerbaijan, to study various problems of ancient history.

Approbation and application. The main results of scientific research have been published in more than 60 scientific articles, three scientific monographs and delivered to the scientific community. Reports on the main results of the dissertation were heard at international conferences in the Netherlands, Turkey, Russia, Georgia and Azerbaijan.

Name of the organization where the dissertation work is carried out. The research work was carried out in the "Chalcolithic period and Early Bronze Age archaeology of Azerbaijan" department of the Institute of Archaeology, Ethnography and Anthropology of ANAS, reports were made on different sections of the dissertation.

The total volume of the dissertation. The total volume of the dissertation is consists of 490232 symbols (except bibliography, illustrative materials, summary of abbreviated terms, tables and maps). Introduction is consist of-14748, Chapter 1 - 29943, Chapter 2 - 35377, Chapter 3 - 46823, Chapter 4 - 108384, Chapter 5 - 118853, Chapter 6 - 51536, Chapter 7 - 67955, Conclusion - 16613 symbols.

MAIN CONTENT OF THE DISSERTATION.

The dissertation consists of an introduction, seven chapters, conclusion, tables, a list of abbreviations, a list of references and illustrative materials.

The actuality of the subject and research degree, research objectives and tasks, research methods, main theses, scientific novelty of the research, theoretical and practical significance of the research, approbation and application, name of the organization where the dissertation work is carried out. total volume with sign, etc. reflected at the beginning of the dissertation.

Chapter 1. It is called "Early agricultural period in Azerbaijan and the Middle East, the history of studying the existing parallels of the period."

This chapter, which deals with the period of early agricultural culture in Azerbaijan and the Middle East, and the history of studying the existing parallels of the period, is divided into 3 subchapters:

- 1) Study of the early agricultural period in Azerbaijan.
- 2) Early production centers of the Middle East.
- 3) A brief historical essay on the study of early agricultural cultures in Azerbaijan and their parallels in the Middle East.

In the subchapters of the chapter, the classification of early agricultural cultures and parallels of Azerbaijan and the Middle East is given, the names of the works written about these monuments, their author and the main issues raised in these works are commented.

1.1. "Study of the early agricultural period in Azerbaijan". In general, the views on the emergence of early agricultural cultures in the South Caucasus, the monuments of

the period under study, as well as the settlements of the early agricultural tribes studied in Azerbaijan, their researchers and their views on the period and habitats were studied in this subchapter. In addition to the previously discovered and researched monuments, the semi-chapter also provides information about the recently registered monuments. In this sub-chapter, the main features of early agricultural culture, the formation of burial customs in the period under study are noted.

The Caucasus, including the South Caucasus, has been one of the main centers of development of production economy - agriculture and cattle-breeding. About 65 years ago, the "Kura-Araxes" culture was accepted as the first farming and cattle-breeding tribes in Azerbaijan. In the 40s of the last century, this culture was used by B.A.Kuftin as "Kura-Araxes Chalcolithic". However, later research conducted by the Institute of History and Archaeology of the Academy of Sciences of Azerbaijan clarified the period of this culture. Excavations conducted under the leadership of A.A.Iessen, as a result of special analysis of ancient materials by I.R.Salimkhanov, it became clear that the metal objects obtained from the monuments belonging to the "Kura-Araxes Chalcolithic" culture contain some artificial mixture and are not made of pure copper.

It is clear from this that these monuments do not characterize the first stage of metal formation, but a period in which metallization is more developed to a certain extent. This opinion was confirmed after the discovery of Kultepe I belonging to the first sedentary farming and cattle-breeding tribes in Azerbaijan.

1.2. Early production centers of the Middle East. This subchapter notes that Azerbaijan has been a region suitable for

human habitation since ancient times and has a culture that does not lag behind the Middle East, as evidenced by many studies by various scholars.

These authors have classified the ancient agricultural centers registered in different periods, analyzed both material and cultural remains, as well as plant and animal bones, and they scientifically studied the grounds necessary for the emergence of agricultural types (farming and cattle-breeding) which are characteristic of the new period of economic development of these regions and the changes taking place in social and spiritual life. A number of prominent researchers have tried to determine the influence of these factors and the distribution of cultures. New facts obtained in the course of the research have clarified some of these considerations and shown that some of them are baseless.

The most valuable works on these monuments and relations are G.Childe's "Ancient East in the light of new excavations" (Moscow 1956, 423 p.), V.M.Masson's "Economics and social structure of ancient societies" (Leningrad, 1976, 192 p.), R.M.Munchaev, N.Y. Merpert's "Early agricultural settlements of Northern Mesopotamia" (Moscow, 1981), A. Lukas' "Materials and handicrafts in Ancient Egypt" (Moscow, 1958), N.A.Flittner's "Culture and art of Mesopotamia" (Moscow-Leningrad, 1958), T.N.Chubinishvili's "On the ancient history of the South Caucasus" (Tbilisi 1971), G.N.Lisichina, L.V.Prishenenko's "Paleoethnic-botanical discoveries of the Caucasus and the Middle East (Moscow 1977), N.I.Vavilov's "On the agroecological review of the most important field cultures" (Moscow, Leningrad 1957), V.Gulyaev, R.Munchaev N.Bader's "The first Russian archaeologists in Mesopotamia"

(Moscow, Taus, 2013, 280 p.) and others. Dozens of others of this kind are invaluable sources in terms of studying the life and welfare of ancient agricultural tribes and their parallels in the Middle East.

1.3. A brief historical essay on the study of early agricultural cultures in Azerbaijan and their parallels in the Middle East.

Numerous researches prove that the Caucasus, including Azerbaijan as a whole, has been in close contact with the surrounding world since ancient times. The ancient tribes living in the territory of Azerbaijan, regardless of the influence of world civilization, have independently enriched their economic life and acquired new habits, as well as contributed to the formation of universal progress. Naturally, parallels were found between the early agricultural cultures of Azerbaijan and the founders of this civilization in the Ancient East.

The historical roots of the parallels between the different geographical regions date back to ancient times. Interregional relations and the mechanism of regional interaction play an important role in the formation of these parallels.

Archaeological research shows that the relations of the South Caucasus tribes with neighboring regions have been recorded since the Paleolithic period, and the object of exchange in these relations was obsidian.

The rich obsidian deposits in Azerbaijan and present-day Armenia not only met the needs of local tribes for this material, but also played a role as a means of exchange with neighboring tribes. J. de Morgan once noted that as early as the Paleolithic period, some countries of the Middle East carried obsidian from these areas.

Chapter 2. “Natural-geographical condition of Azerbaijan and the Middle East in 6th-4th millennia B.C. and development of early agricultural cultures”.

This chapter is devoted to the natural-geographical condition of Azerbaijan and the Middle East during the period under study and development of early agricultural cultures. This chapter is divided into 4 subchapters.

- 1) Azerbaijan in the period of early agricultural culture.
- 2) Review of paleogeography of the South Caucasus.
- 3) Paleodemography of Azerbaijan in the period of early agricultural culture.
- 4) Natural and geographical condition in the Middle East.

2.1. Azerbaijan in the period of early agricultural culture. Azerbaijan occupies the south-eastern part of the Caucasus, the east part of the South Caucasus. The territory of our republic includes: the south-eastern part of the Greater Caucasus, a part of the Lesser Caucasus, the Kura-Araxes lowland located between them and the Lankaran area. the territory of the Republic of Azerbaijan locates in the south of Europe, between the northern latitudes $38^{\circ}24'$ and $41^{\circ} 54'$ and the eastern longitudes $44^{\circ}46'$ and $50^{\circ}50'$, in subtropical zone, and has a favorable geographical position. Azerbaijan is bordered to the north by Dagestan, to the northwest by Georgia, to the west by present-day Armenia, to the east by the Caspian Sea, to the south by Iran and to the southwest by Turkey.

The Republic of Azerbaijan has a very complicated relief.

The modern relief of Azerbaijan is divided into 4 parts:

1. Greater Caucasus mountain range;
2. Lesser Caucasus mountain range;
3. Talysh mountain range and Lankaran lowland;

4. Kura-Araxes lowland.

As mentioned earlier, the territory of Azerbaijan has complicated natural condition. The interaction of the main climatic factors - solar radiation, atmospheric circulation and the nature of the surface cover, ie the characteristics of the surface where the rays of sun fall and the air moves in a certain area, leads to formation different climatic conditions in a small area of the republic.

2.2. Review of paleogeography of the South Caucasus.

Spectral analysis of paleobotanical studies collected from the ancient settlements of the South Caucasus, especially materials from the first agricultural centers of Azerbaijan and Georgia, showed that in these regions different types of wheat - soft, , single and double grainy, hard, etc. were grown.

Human activity has been great influence in the development and formation of modern vegetation. Although the society was formed in Pleistocene, the exchange between humans and nature was very weak in this epoch. Humans became more dependent on nature, were engaged in collecting a number of grasses, dried fruits, and hunting wild animals. In the Holocene epoch, human influence on nature expanded. At that time (8-3 thousand years ago), people not only began to use nature extensively, but also managed to change it for their own purposes. This is clearly evidenced by the plants and other remains found in five archaeological camps in Aghdam. It should be noted that the modern vegetation of the area consists of a semi-desert landscape consisting of wormwood, black currant grasses and their mixtures. However, until recently, the Gargarchay, Khachinchay and areas along their tributaries were covered with Riparian forests. The thickness of the Riparian

forest is now preserved in the village of Hindiristan. The fact that the region under study has been covered with Riparian forests in the recent past is also confirmed by pollen samples taken from camps of the region. In the vast areas between the river valleys, sparse broadleaved arid forests have developed. This is evidenced by the currently preserved Sultanabad pistachio forest.

The oldest monument of the Neolithic period is the Chalagantepe camp (8-7 thousand years ago). Eleven samples were taken from the cultural sediments section of the camp. According to the pollen spectra of this section, which corresponds to the first half of the Atlantic period, the amount of pollen from grasses is 6-100, and the amount of pollen from trees is from 5 to 50. The scale of pine pollen from wood species predominates throughout the spectrum (70-90%). The Oriental hornbeam reached its highest point in samples 30 and 33 (20-25%) and was observed in samples 27, 28 and 31. In addition, single grains of common hornbeam, walnut and hazelnut are observed. It should be noted that grasses are not found in the separate samples along the entire length of the section, but in the form of piles, partitioned pollen.

This fact proves that agriculture developed in the area during the Neolithic period. This is confirmed by the presence of buckwheat, grain and bindweed pollens in the samples. Various herbaceous plants have a high content of compositae, legumes, mallows, raspberries, pollen of the Chenopodioideae and wormwood are observed one by one. Spores are not observed.

Leylatepe is the last Neolithic is camp (6-5.5 thousand years ago). In the spore-pollen spectra of this section, which corresponds to the middle of the Atlantic period, the amount of pollen from grasses occupies an important place and reaches

100% (Figure 1B). Pine, hornbeam and elm pollens are observed separately from tree species. In the spectra of the lower part of the cut (1, 1a layers), mallow pollens from grasses reaches 60-70%, and cereals from 20%. Mallow grows mainly in weedy area, indicating that the areas where steppes and meadows develop have changed. In this part of the spectrum, a high index of moss is observed. There are no spores of wood ferns.

In the upper part of the spectrum (layers II, III, IV) there are no pollen grains and mallow, it is replaced by the Chenopodioideae. These plants grow in limestone, saline areas, as well as in landfills, mines and migratory areas. Such a sharp change in grass cover has led to a high mineralization of the soil in areas where the Chenopodioideae grow, which indicates a slight aridity of the climate at that time. From the pollens of various grasses, bindweed and knotgrass pollens are mostly observed in the spectrum, which indicates that the areas where plants grow have changed. Separate pollens of mosses is observed in the upper part of the section.

The term ecology was first used in 1866 by the German biologist Ernst Haeckel (in Greek *ékos*-house, place of residence, homeland and *logos*-science). It means the science of home, place, private life in a narrow range. In a broader range, ecology is the study of the interactions of organisms with their environment, as well as studies their multifaceted interactions with other organisms.

Paleoecology studies the relationship of primitive society with the environment. Recently, in other regions of the South Caucasus, attempts have been made to restore relations with the natural environment in this area, mainly in the Paleolithic, especially in the Late Paleolithic. In general, changes in the

natural environment and the relationship between ancient human and the environment have been clarified. Climate change, followed by formation landscape, has led to certain changes in the economy and material culture of primitive society.

V.V.Velichko shows that the transition from the Paleolithic to the Mesolithic and Neolithic took place during the Pleistocene and Holocene. During the Holocene, people's influence on nature expanded. This problem is almost still relevant for other regions where ancient human settlements have been discovered.

In general, the climate optimality of the Holocene (9000-5000 l.n.) in the development of prehistorical culture - a positive adaptation of temperature and humidity - led to the intensive development of flora and fauna. According to P.M.Dolukhanov, the development of agriculture in the foothills of the South Caucasus dates back to the beginning of the climatic optimum - it started not later than the VI millennium BC.

Azerbaijan's natural geographical climate and topography have led to the emergence and spread of early agricultural settlements in these areas., Paleogeographers studied the several settlements of ancient farming tribes paleontologically (Chalagantepe, Leylatepe, Uchoglan, Uzerliktepe in Aghdam) in order to determine the impact of the Azerbaijani population on wild plants in ancient times. They showed that the modern vegetation of these areas consists of a semi-desert landscape of wormwood, blackcurrant, cereals and their mixtures, and until recently it was covered with Riparian forests, and in the areas between the river valleys developed broadleaved sparse arid forests. Modern science speculates that the deserts of the Middle East during this period are covered not only with grass, but also with forests. Remains of cereals, such as barley and wheat, were

also found in these areas.

Paleogeographers (S.S. Valiyev, Y.N. Tagiyeva, R.M. Atakishiyev) noted the predominance of pine pollen in the spore-pollen spectrum of Chalagantepe and Leylatepe settlements. Based on the absence of cultural plant remains and pine tree pollen in the lower layers of Leylatepe, and according to I.Narimanov the possibility that the ancient inhabitants Leylatepe were potters and used pine wood in pottery production, the disappearance of pine massifs in this region is associated with this.

According to the observations of Doctor of Biological Sciences V.Hajiyev, pine trees do not sprout, so they can sometimes decreased on their own, depending on the climate or for some other reason.

The authors say that in this region there are pollens of Oriental hornbeam, common hornbeam, walnut, hazelnut, moss, bindweed, compositaes, legumes, mallows, raspberries.

This situation suggests that the flora of the region in the 6th-4th millennia BC was richer, and the impact of man on nature is still weak.

2.3. Paleodemography of Azerbaijan in the early agricultural period.

Despite the fact that the settlements of early farming and cattle-breeding tribes in each region of Azerbaijan have been sufficiently studied, the determination of paleodemography remains as a problem for researchers.

Some information is given in foreign literature about the ancient farmer population of the Middle East is given. Ancient farmer population according to Ivy (Ivy, 1933) 286-357 people located per 1 hectare, according to Frankfurt (Frankfurt, 1948) -

400 people, according to Russell (Russell. 1958) -150 people, according to Adams (Adams, 1965) -200 people.

We used their methodology to determine approximately the ancient farmer and cattle-breeder population of Azerbaijan. For this purpose, attention was paid not to the settlements belonging to early farmers as a whole, but to the regions.

Up to 80 settlements belonging to the period of early agricultural culture have been registered in the Mil-Garabagh plain. Some of them belong to the first stage of the period under study, and others to the last stage. The total area of settlements near the rivers is about 20 hectares, and the total area of other settlements is about 5 hectares.

Ilanlitepe, Chalagantepe, Leylatepe monuments studied in more detail. A large amount of pottery remains, tools, weapons and hearths were found. The diameter of the houses in Chalagantepe was 3 m.. The dense location of buildings, farm buildings, graves, remains of material culture, the remains of plant and animal bones, as well as considering that 45 of the 52 monuments studied by I.Narimanov belonging to the early Neolithic and 7 to the late Neolithic, it is confirmed that the population of this region was dense and lived here for a long time.

Although the area of settlements belonging to early farmers in this region does not exceed 0.5 ha (except for Khinitepe and Polutepe - 5-6 ha), but the monuments are located close to each other. Referring to A.P.Frankfort, R.Adams, I.Iyvin, M.Russell, A.S.Kes, V.A.Kostyuchenko, G.N.Lisichina, we can say the population of this region, which covers more than 20 hectares, at different times was not less than the population of similar settlements in the Middle East..

2.4. Natural-geographical condition of the Middle East in the early agricultural period. Asia is the largest continent. It stretches 8,200 km from north to south and 8,800 km from east to west. In the geographical literature, Asia is divided into large parts: North Asia, East Asia, Central Asia, South Asia, Western Asia.

In Western Asia, which we are interested in, the mountains form two main ranges (Northern Range Mountains and Southern Range Mountains). The mountains of the northern range are Pontus, Lesser Caucasus, Elbrus, Turkmen-Khorasan mountains and the northern parts of the Hindu Kush, the mountains of the southern range are Tavr, Zagros, Kirthar, Suleyman. Among these mountains located the Anatolian Plateau in the west and the Iranian Plateau in the east. The relief of Western Asia is formed by arid denudation and deflation, and in the high mountains by influences glaciers and permanent snow. Various geological rocks are widespread in Asia. In the Mesozoic era, the Ginkorean platform disintegrated and geosynclines formed here.

Chapter 3. It is called “Early agricultural cultures (monuments, chronology) in Azerbaijan”. The chapter gives a classification of monuments belonging to the early agricultural period registered in the territory of Azerbaijan, their researchers, and all the interesting facts are noted. The chapter is divided into 4 subchapters:

- 3.1. Kultepe monuments group
- 3.2. Monuments of Shomutepe culture
- 3.3. Monuments of Leylatepe culture
- 3.4. Unidentified monuments

3.1. Kultepe monuments group. The study of the early agricultural period in the Caucasus began with the study of the

Kultepe I, located 8 km from the city of Nakhchivan. Researchers have noted the importance of Kultepe I in the study of a number of issues of Neolithic culture and archaeology in the Caucasus. This applies, above all, to the periodization of the cultural and historical development of the Caucasus. Excavations in Kultepe I proved that the ancient sedentary farming culture existed in the South Caucasus long before the Kura-Araxes culture.

The study of Kultepe I revealed that there were monuments in Azerbaijan before the Kura-Araxes culture, reflecting the long-term settlement of sedentary tribes. Many materials of the early agricultural period, including several metal objects, were found from the bottom layer of this monument, which thickness is 9 m. However, the discovery of this new monument did not create confidence in its relevance. However, spectral examination of metal objects proves that they belong to the early agricultural period. Thus, there is no doubt about the existence of the Chalcolithic period, which is of great importance in the history of Azerbaijan. Kultepe I laid the foundation of a new archaeological culture. The main features of this culture are the discovery of circular planned, the foundation of which is made of river stones and clay mortar, residential buildings with sealed walls, agricultural buildings, the remains of hearths and furnaces, and earthen graves. The dead were buried alone, in pairs and collectively. Household appliances, tools and adornments were placed in the grave.

Obsidian and flint nucleuses, knives, sickle teeth, hammers, mortars, mace, awls, simple and painted pots, copper products, etc. and painted pots from Middle Eastern countries were found.

Kultepe culture is of great importance in the consistent study of the stratigraphy and chronology of the early sedentary settlements of the South Caucasus. Later, traces of this culture were recorded in other areas.

3.2. Monuments of Shomutepe culture. The second culture belonging to the early agricultural tribes in the territory of Azerbaijan is the Shomutapa culture, named after the settlement of the same name. The archaeological monuments discovered in the Ganja-Gazakh and Marneuli (Georgian plains) located in the middle reaches of the Kura River and dated back to 6th-4th millennia B.C. belong to this culture. The main monuments of Shomutapa culture are Toira-tepe, Gargalar tepesi, Babadervish, Ganli Toira, Arzamas tepe, Goytepe, Rustapa and others. Due to the long period of sedentary life in the settlements, in some monuments (Gargalar tepesi) more than 10 m of cultural layer was formed.

Rare copper objects indicate the population's initial acquaintance with the metal. The houses consist of round, domed buildings. Food stocks were stored in brick warehouses. Stone (grinder, mortar, grater, polished axes, mace, etc.), flint and obsidian (knife boards, cutting tools, etc.), bone (hammer, sickle, belt, needle, awl, adornments, female figurines, etc.) tools were widely used in household and agriculture. The pottery consists of simple handmade brown and gray, flat-seated, handleless primitive pots. Straw was added to the clay of a group of pots, and the surface was polished. Most of the pots are made of sand, stone, pottery mixed clay, ornamented with sticking ornaments, and some of the pots are painted with red dye.

The population of the monuments of Shomutepe culture was engaged in agriculture, cattle breeding, partly in hunting and

fishing. Cultural or wild barley, wheat flakes and grape kernels were found from the monuments of Shomutepe culture. Irrigation was used in agriculture. Shomutepe culture is one of the ancient agricultural cultures, the monuments of which show the interaction of the culture of the southern regions of Azerbaijan and the countries of Western Asia.

3.3. Leylatepe culture. The gap between the archaeological cultures of the Kultepe and Shomutepe Neolithic cultures and the Kura-Araxes culture has been bridged by the presence of monuments recently discovered under the name of Leylatepe culture. The tribes representing the Leylatepe culture are originally related to the Uruk culture of Mesopotamia and developed and enriched in the conditions of Azerbaijan, shows that the idea of denying Azerbaijan's participation in the formation of the Early Bronze Age Kura-Araxes culture is unfounded. We consider it necessary to classify some of the monuments belonging to the Leylatepe culture. Qualitative and combed pottery found in Alkhantepe, Boyuk Kesik, Poylu and other settlements and pottery technique allow to attribute these monuments to the Leylatapa culture.

The ancient inhabitants of the Alkhantepe settlement lived in round and rectangular semi-detached houses, round huts, rectangular huts made of brick or with ordinary mud walls. Household furnaces and pottery furnaces were found in the monument. Various shapes of hearths were found in all layers. Mainly oval, round, quadrangular hearths were found. Two smelting furnaces were found near each other. In the cultural layers, especially near the remains of the furnace, a large amount of metal remains, clay molds, stone hammers, etc. items were recorded.

Unidentified small squares with a diameter of 0.6 m and 1.24 m, with ceramic remains laid vertically, were found in the monument. At the same time, 13 grave were recorded from the ancient settlement of Alkhantepe. Twelve of them were found in the excavation area, and one in the survey area. The sex of the deceased has not been determined.

Burial customs are different. The children were mostly buried in pots, directions are south-west. Archaeological excavations have uncovered a large number of pottery products, bones, stones and metal objects. Researcher of the monument N.A.Museyibli gave detailed information about the Boyuk Kesik, Poylu I and other monuments, belonging to this group, in his works.

3.4. Unidentified monuments.

Another group of monuments belonging to the early agricultural tribes has been registered in Azerbaijan, which cannot be attributed to any of the cultures classified in the above chapters. One of such monuments and one of the most widely studied archaeological monuments is Ovchulartepesi settlement. Despite the fact that this monument contains some features of the Leylatepe culture, it is difficult to say whether this settlement belongs to the so-called culture. Researcher of the monument S.Ashurov believes that this settlement belongs to a completely different culture of the late Chalcolithic period. According to the researcher, the monument belongs to the culture of the transition to the Early Bronze Age

Chapter 4. It is called “Middle Eastern parallels of early agricultural cultures of Azerbaijan”. This chapter provides a classification of contemporary monuments which are known to us in the Middle East and poorly studied in Azerbaijani

archaeological literature, but are relevant to the purpose of the study. In this chapter, the monuments are studied in two directions.

1) .Includes Asia Minor parallels

2) Mesopotamia and Urmia Basin parallels

Subchapter 2 has been also studied in two directions.

a) Monuments of early agricultural culture in Mesopotamia

b) Monuments of early agricultural culture of the Urmia basin

The chapter examines the vast majority of monuments of early agricultural culture of the Middle East for the first time in Azerbaijani archaeology, describes more than 60 monuments, classifies the remains of recorded material culture, and maps added to the work. The analysis of the results of research conducted jointly with the former Soviet Union is of particular importance in the study of the most ancient human settlements, their formation, the processes of replacement of ancient cultures.

Many features that characterize the structure of ancient human societies in the South Caucasus have not yet been studied in detail. Due to the lack of work in these areas, it was impossible to characterize the changes in human societies inhabited north of the Middle Asia, as well as to compare the processes related to the development of Southern cultures of the region with these changes. Only in the late 60s of the last century, the results of scientific analysis obtained by archeological excavations with the help of the Eastern Technical University provided new scientific evidence for the development of complex societies, analyzed the materials obtained on the Upper Tigris-Euphrates area.

4.1. Parallels of Asia Minor. In recent years, under the

leadership of A. Sagona, excavations have been carried out in the territory of Erzurum in Boyuktepe, Boyuk Hoyuk and Bayburt. As a result of these excavations, new scientific evidence was obtained. As for the Van area, excavations were carried out in Karagunduz and Dilkaya, and a preliminary report on these monuments was published. The purpose of the excavations was to classify and group ancient settlements. The research was carried out in conjunction with the study of natural resources such as obsidian, metal and salt deposits, pastures and trees, which were of great importance in the economy of ancient times. The aim was to gain some information about the habitation and development of people during this period, to shed light on the interactions between human societies and the natural world. The study of the environment in which human society lives and the impact of the paleoclimate on humans is also planned.

In recent years, more than 60 settlements of early agricultural tribes discovered in Western Asia have been studied separately, and the material and cultural remains found in the monuments have been analyzed and grouped. Therefore, we did not consider it necessary to describe all the monuments in this study. However, given the value of the research and the rich number and composition of the materials found here, the dissertation provides a complete classification of some of these monuments.

4.2. Parallels of Mesopotamia.

a) Mesopotamian early agricultural monuments. The Halaf culture is one of the oldest cultures of the early sedentary agricultural tribes and and this culture named after the multi-layered site of Tell-Halaf in northern Syria. First of all, this culture is characterized by raw brick structures in a circular plan,

elegantly patterned ceramics decorated with geometric ornaments of different shapes and individual plot images. The Halaf culture belongs to the 5th millennium BC and covers the whole of Northern Mesopotamia (northern regions of Iran and Syria, south-eastern part of Turkey). Turlu, Yunus (Karkhemish), Tell-Halaf, Chagar Bazar, Tell Brak, Tell Arpachiyah (6-10 layers), Tepe Gawra (18-20 layers), Tell Hassuna (6th-10th layers), Nineveh (28 layer), Banhoyuk settlement in the Ravanduz region of Kurdistan and etc. belong to this culture.

4.3. Early agricultural monuments of the Urmia Basin.

Iran, located in Southwest Asia, was called Persia until 1935. The total area of the country is 1,644,000 km². Iran is bordered to the north by Azerbaijan, to the northwest by Turkey, to the west by Iraq, to the southeast by Pakistan, to the east by Afghanistan. Iran is a mountainous country, mountains and high hills cover more than 1,200,000 km² of its area.

Iran is divided into a number of provinces according to climatic conditions. The climate in the South Caspian lowland is humid, subtropical, unhealthy and annual precipitation is 1,300 mm. The average annual temperature is 11 °C in January and 26 °C in July. The surface of the mountains is covered with rich vegetation (large deciduous forests). A mountainous, mild warm climate is characteristic for Iran Azerbaijan and Kurdistan, and a dry subtropical climate for Khorasan in the north-east. Inside Iran (in the central and eastern provinces) - in these areas, blocked by high mountain ranges, the climate is sharply subtropical: the temperature rises to 25 °C in January in winter and 50 °C in summer in July. The largest river of country is the Terirud River, which originates in Afghanistan.

The climate of South Azerbaijan, which is currently

considered the territory of Iran, is also different. It is rich in high mountain ranges. Mount Savalan, 4821 m high, is also located in this area. Some mountain ranges as Mount Garadagh and Sabalan, located in the northern part of its territory, are a continuation of the Lesser Caucasus. The Aras River flows between these mountains. To the south of Mount Sabalan locate the Bokkush ranges, which also extend to Lake Urmia. A part of southern Azerbaijan consists of a plain rich in semi-desert vegetation. The climate here is relatively cold. Precipitation is up to 300 mm. There are no coniferous forests in the mountains because the winter is very cold in this area. Quite gray soil is widespread. Water resources allow the development of various agricultural cultures on fertile, productive plains.

The early sedentary agricultural tribes settled in such places and built a large number of hill-type settlements. Studies have been conducted Goytepe, Teppe Hasanlu, Hajji Firuz, Dalma tepe, Pijdalitepe, Yanik tepe and others at different times..

The monuments belonging to the early agricultural-cattle breeding tribes of South Azerbaijan, like the similar monuments of Western Asia, have been recorded in the form of hills with cultural layers of different periods. Many of them belong to the early stages of sedentary life.

Chapter 5 is called “The burial customs of the early agricultural tribes of Azerbaijan and the Middle East”. This chapter gives a chronological classification of the studied graves and their parallels, and shows their common and different features. The chapter is divided into 7 subchapters and studied in this direction.

- 1) Graves of the early agricultural culture of the Middle

East

2) Graves of the early agricultural period of the Azerbaijani tribes

3) Analysis of the materials accompanying the deceased in the Neolithic period

4) Development of burial customs

5) The custom of burying in clay pots of the early agricultural tribes of Azerbaijan

6) The cult of dog in the religious outlook of the early agricultural tribes of Azerbaijan

7) Trepanated skull: medical intervention or religious rite

A complete classification of graves of the period under study is given, their research history, researchers, obtained material and cultural remains are analyzed, grouped and tables are compiled in the chapter. In the end, the emergence of the burial custom, the similar and different features have been characterized and studied as a separate subchapter.

5.1. Graves of the early agricultural culture of the Middle East. A number of graves belonging to the inhabitants of this period were also recorded from the settlements belonging to the early agricultural period of the Middle East. Some information about these graves is given in the scientific literature. Dozens of Chalcolithic graves were discovered in the cultural layer of Yarimtepe II belonging to the Halaf culture. Until this monument was excavated, any graves belonging to the Halaf culture had not been registered. The registration of graves from Yarimtepe II is not an unprecedented event for the early sedentary agricultural tribes. However, this does not deny the fact that the inhabitants of the Chalcolithic had necropolises outside their settlements. It is known that there is a separate

necropolis in the north-eastern part of Yarimtepe II. More than 10 Halaf culture graves belonging to the last periods of early agriculture were found here.

Most likely, this situation was due to the fact that the population of the area had different burial customs. In general, the burial customs of Neolithic inhabitants are multifaceted and complicated. The graves found at Yarimtepe II can be divided into three groups according to the fact that the skeletons were buried:

1. Inhumation.
2. Cremation.
3. Separate burial of the skull.

The recording of broken bones in some graves suggests that another group of burial was reburied [Table 21].

Although the practice of burying the skull was found in the territory of Azerbaijan in some cases (Kultepe I № 41), cremation was not recorded. Only in some graves of Kultepe I (№ 62, № 76) custom of burying the dead in the hearth or in the place of the destroyed hearth is observed. In one grave (Kultepe I № 25), the skulls of four buried skeletons were placed separately on the south side of the pit, and the remaining bones on the north side.

Six of the examined graves belong to inhumation. 4 of them are single and 2 are collective burials. Most of the graves are equipped. No fixed direction was found. The equipment of the graves of the first sedentary agricultural and cattle-breeding tribes, discovered in Mesopotamia and Anatolia, consisted mainly of pottery and adornments. In some cases, tools and animal bones were also found. It is interestingly that most of buried in these graves are children and people aged 25-40. This facts raises two possibilities:

1. Low level of longevity in the studied period;
2. Existence of custom of burying children and young people in the settlements and the elderly outside.

5.2. Graves of the early agricultural tribes of Azerbaijan. An important issue in the research was the analysis of the compatibility of material and cultural samples found in the graves of the early agricultural period with the findings of the settlements. The fact that several groups of equipment found in the graves of the early agricultural period are not found in the cultural layers, and, conversely, the large amount of materials found in the cultural layers are very rare in the graves of the early agricultural period, and causes of this situation need to identify.

Previous research has shown that the burial customs of a part of inhabitants living in Azerbaijan during the early agricultural period differ from others. Thus, while the population of the Ganja-Gazakh plain buried their dead outside their place of residence, in Nakhchivan, Mil-Garabagh and Mugan inhabitants buried the dead directly in the settlement, in the yard. However, recent research shows that burial customs were the same for all regions. The graves, studied by us, were also discovered in the settlements of the early agricultural period.

The graves were found in the territory of Nakhchivan AR in Kultepe I, Mil-Garabagh plain, Chalagantepe located in Afatli village of Aghdam region and Leylatepe, Alikomektepesi located in the east of Uchtapa village of Jalilabad region in southeastern Azerbaijan. Only one grave was found at the Babadervish monument in Gazakh region.

5.3. Analysis of materials accompanying the deceased in the early agricultural period. As mentioned above, the graves

of the early agricultural period were found in monuments in the central and southern regions of Azerbaijan. Our grouping is based on the materials of these monuments.

Equipment was found in only 55 of the more than 160 graves discovered in the early agricultural period in Azerbaijan. They are divided into 5 groups:

1. Pottery
2. Adornments
3. Tools
4. Weapons
5. Other items

5.4. Burial custom. The study of graves and burial customs is important in the study of social issues of the period. During the Mousterian period, ancient people had tried to establish a burial custom for the first time. Although it is known that the dead were buried in caves and settlements due to a certain form of burial custom, mousterian graves have not been studied enough.

The oldest graves have been found in Belgium, Spi, France, Le Mustye, La Chapel-o-Sen, La Ferrasi, in the Middle East in the caves of Mugharat-at-Tabun, Mugharat-e-Shul

5.5. The custom of burying in clay pots of the early agricultural tribes of Azerbaijan. The custom of burying in clay pots in the territory of Azerbaijan was observed at the Chinartepe monument located southeast of Ahmadagali village of Aghdam region for the first time. A pit grave buried a small child was found here [198, p. 7-8; 229, p. 36-37].

The second monument, buried in clay pots was recorded, is Leylatepe monument located between Khindiristan and Guzanli villages of Aghdam region. The clay pots used in the burial

consist of two gray jars and two pots with a mixture of gravel. In these pots, the dead is placed wrapped position, the head is placed towards the neck of the pot, and the top is covered with pot fragments which made of high-quality clay. The most interesting of these graves is Grave 2, where two children are buried. In this grave, the dead were placed horizontally in a jar, covered with fragment of a large jar made of red clay, whitened with a white slip. The jar was surrounded by raw bricks laid next to it [76, p. 34-45; 200, p. 111-112].

The third monument recorded burial in clay pots is the Boyuk Kesik. 6 graves were found in the monument. Three of them were found in the center of the settlement, in the inter-house areas, and three were found far away from the settlement [54, p. 11-28].

Burial in clay pots were also found Poylu I [53, p. 11-17] and Poylu II [5, p. 8-17].

The jar grave belonging to the early agricultural period was discovered at the Ovchular Tepesi for the first time in Nakhchivan.

Thus, clay products allow to study the history step by step, which is closely connected with the life and economy of the ancient people, as well as with their burial customss. In addition to placing clay pots as equipment in graves in connection with the belief in the Hereafter, in ancient tribes, it was also custom to bury various ceramic products (jugs, pots, bowls, pans).

5.6. The cult of dog in the religious outlook of the early agricultural tribes of Azerbaijan

Archaeological evidence from the Paleolithic, early agriculture, and later periods (horns, skulls, bones, zoomorphic figurines, rock paintings, and paintings on objects) show that

initial beliefs remained in the form of custom or conditioned reflexes for a long time. These beliefs gave people the strength of self-confidence and led to the self-treatment of neurological diseases. The remnants of initial magic were preserved in their minds and strengthened their survival.

There are many facts about the problem we touched upon in the early agricultural period. Two graves related to dog burial were found in Kultepe I. In one of them - Grave 12, a skull of dog was buried in front of the bent knees of an adult skeleton. In another grave [Grave 41], the deceased was laid on his back, his head to the north-west, and his knees bent to the left. In addition to turquoise and limestone beads, hanging made of teeth of dog was also found in this grave. The dog was buried near the feet of the deceased. Bones of a dog were also found in Alikomektepesi, which is contemporary with Kultepe I.

In general, there was an increase in the role of dogs on the farm in the early agricultural period and their domestication was observed. Archaeological research and written sources confirm that the ancient tribes living in Azerbaijan had a special attitude to dogs. We mentioned above that we still come across dog drawings and dog burials from the Stone Age to the Middle Ages. In some of them the dog was buried with a man (Kultepe I, Shamakhi, Mingachevir), in others only the dog (Alikomektepesi, Shamakhi and Mingachevir) was buried.

These facts prove that such treatment of the dog is not accidental, it is considered a sacred animal. The facts contained in the religious books of the people living in this area also allow to say the important role of the dog in the worldview of the ancient inhabitants of Azerbaijan.

It can be assumed that the dog cult is the basis of the wolf

totem, which is considered sacred in the Turkic world today. Close involvement of dog in human life normalized it, and the wolf remained a mythical figure because it retained its terrifying nature.

As a result, we would like to note that the dog cult existed in the religious worldview of the ancient inhabitants of Azerbaijan and was able to maintain its sanctity for a long time.

The ancient tribes living in Azerbaijan adopted certain religious rites and customs from the tribes with which they exchanged and maintained economic and cultural relations.

5.7.Trepanated skull: medical intervention or religious rite. A large number of trepanated skulls have found in archaeological excavations in the Caucasus and Western Asia. They belonged to both men and women. The age of the skeletons is also different.

Only five such skulls were found in Azerbaijan. I.H.Narimanov recorded a man's trepanated skull in Grave 20 in Chalagantepe in Aghdam belong to the Chalcolithic period. Trepanation was performed by perforation, and a new thin layer of bone formed at the edges of the wound suggests that the operation was successful.

The second find belongs to the Late Bronze Age and was registered by H.Kasamanli in Dashkesan region. It is believed that the skull, which belonged to a woman, was trepaned for symbolic purposes. H.Kasamanli also gives information about the third skull belonging to the man based on E.Resler. This sample was recorded in Kurgan 4 in Pashatepe near Balchili village. It is believed to have been trepanated for ritual purposes.

The fourth trepanated skull was found from the soil grave in Sandigtepe V in the territory of Guba region belonging to V-

IV centuries BC and was registered by M.J.Khalilov. A symbolic hole was drilled in the back of the skull. The hole is oval in shape and the edges are not smooth.

The fifth trepanated skull was found (recorded by I.H.Narimanov) in Ismayilbeytepe near the village of Khindiristan in the Aghdam region. The skull was obtained during excavations carried out by the “Karabakh Neolithic-Chalcolithic Expedition led by Kh.I.Almammedov. The operation on the top of the man's skull was also successful. Based on the thin layer of bone formed at the edges of the hole, it can be assumed that the person lived up to a year after the operation.

Apparently, the operation of trepanation of the skull has been known to humans since ancient times. Archaeological evidence shows that the operation was carried out for two purposes - medical and ritual. According to Hippocrates, this operation was considered an ordinary operation by ancient surgeons. The main tool used was a drilling sting (trepan).

Except of Australia, Japan, and several other areas, trepanated skulls have been reported throughout the world, but the reasons for the operation are still controversial. Some have linked it to rites, some to intellectual development, some to the removal of evil spirits from the body, and some to providing longevity.

In our opinion, trepanation of the forehead, around the eyes, back and sides was mainly due to religious rites, and such operations on the top of the head were probably related to medical intervention.

Chapter 6 is entitled "Typological analysis of some material and cultural remains found in the monuments of

early agricultural culture of Azerbaijan and the Middle East." They mainly consist of combed ceramics, protruding based ceramic samples, zoomorphic and anthropomorphic pottery handles. The materials mentioned in the chapter are interpreted in the form of separate subchapters.

6.1. Samples of combed ceramics recorded from the settlements of the early agricultural culture of Azerbaijan and their Middle Eastern parallels. One of the main stages in the production of pottery is the technical processing of the surface of the pottery. The early agricultural and cattle-breeding tribes of Azerbaijan also remained faithful to this tradition. Studies of painted or painted-patterned pottery have revealed that most of these pots are perfectly glazed and slipped. The most important achievement of the early agricultural and cattle-breeding tribes of Azerbaijan in the production of pottery was the use of slip. This is shown by the results of atomic absorption analysis of the ceramics of the studied monuments. At the same time, the chemical analysis carried out in the Laboratory of Physico-Chemical Methods of the Institute of Petrochemical Processes of ANAS proved that this slip was obtained by adding natural pigments, especially iron oxides.

The black colour observed in the painting of the dishes was found to be the remains of bitumen, a local raw material. The analysis shows that the bitumen contains more than 10% manganese. According to the head of the Laboratory of Physicochemical Research of the Institute of Petrochemical Processes of ANAS A.D.Guliyev, the chemical element manganese [Mn] is naturally present only in Azerbaijani oil. This element is added to oil produced in other parts of the world in the form of artificial additives.

The pottery of this period differs from the ceramics of earlier periods. Mainly divided into 3 groups:

- 1) Plant mixed
- 2) Made of pure clay
- 3) Sand and wood mixed.

Almost all ceramics of the period contain a mixture of plants and sand. While the pottery samples recorded from the northern regions consist of lightly polished, flat footed bowls, jug typed, cylindrical and jar typed protruding – handled unpatterned pots, most of the samples from the southern region are patterned. Among these patterns, combed patterns are of great interest. Among the samples found in Ovchular tepesi, Khalaj, Khojakhan, Leylatepe monuments, combed patterned pottery samples were recorded.

6.2. Protruding based pots found in the monuments of the early agricultural culture of Azerbaijan and their Western Asia parallels. More than seventy years have passed since the discovery of early agricultural monuments in the northern Azerbaijan. The number of monuments discovered during this period is more than 200. The monuments have been recorded and studied by various researchers. These monument complexes are grouped according to period and cultural affiliation, the characteristic features of each period and culture are analyzed. Many problems related to the early agriculture period still need to be investigated. Among them, the analysis of some ceramic samples is more important. We are talking about protruding based pottery, which is of great scientific importance, although in small quantities. We have tried to show a brief grouping of the monuments in which these protruding based pots were found, their division into types, indicating the main features

of the protruding based pottery found in these monuments, and their parallels in Western Asia.

Protruding based pots have been found in six of the known monuments. These monuments cover two stages of the early agriculture period (developed and late).

6.3. Zoomorphic and anthropomorphic handles found in Polutepe.

The basis of archaeological material in Mugan monuments is pottery found in large quantities. Among them, it was possible to distinguish dishes and household items of different sizes, shapes, purposes and artistic features.

Among the interesting pottery findings, the fragments of lids and handles are especially noteworthy. Numerous ordinary, round, zoomorphic and anthropomorphic handles were found in Polutepe.

M.A.Miller noted that the ancient inhabitants put lids on pots without handles to prevent evil forces from entering the pot. In this regard, the analysis of pottery samples recorded from the Polutepe allows to say the following conclusions.

1. Zoomorphic handles reflect some aspects of the religious worldview of the period:

a) Zoomorphic handles reminiscent of ox and dog can be associated with the worship of ox, dog and various animals by the ancient inhabitants of that period.

b) The sedentary lifestyle and the formation of agricultural habits increase the need for these animals and make them an important attribute of human life.

c) At the same time, the desire of ancient people to describe these animals, which they were in contact in everyday life, could also play a role.

2. Anthropomorphic handles allow to say the following considerations:

a) The existence of the mother cult.

b) Ancient people had ideas about human physiognomy and anatomy.

c) Formation of sculptural and painting habits in the Neolithic inhabitants of Polutepe.

d) Increasing the role of men in sedentary lifestyles and the transition to agriculture, taking an important position in daily life and making them the main individual of the family.

6.4. Statues and figurines. The most interesting findings among the graves equipment are statues and figurines. Such figurines were found in the monuments of the period of early agricultural culture recorded both in the Middle East and in the Caucasus - Azerbaijan.

Numerous statues and figurines were also found in several settlements belonging to the early agricultural tribes in Azerbaijan. In contrast to the residential and agricultural buildings in the Alikemek tepesi located in the Mugan region, a building was recorded which walls were plastered with clay and whitewashed, and various geometric figures and semicircular patterns drawn on the walls. The fact that this building differs from other buildings found in the cultural layer in terms of construction techniques and architecture, and at the same time being unique, drawing the paintings on the walls, finding clay figurines in the room allow to say that this room was used as a temple.

Among the materials obtained from the Polutepe and Alkhantepe settlements of Mugan, clay animal and female figurines are of interest. One of the animal figurines is very

interesting. Although the legs and head of the figurine are broken, it can be said that it is a gazelle figurine. This finding is the fifth figurine found in Polutepe settlement. Numerous clay female figurines were also found in Polutepe. In our opinion, this related to the rites that reflected the fertility and reproduction.

During the excavations in Alkhantepe, rich material culture samples were obtained. The findings are represented by a large number of different animal figurines made of clays and objects of unknown purpose.

There are two types of statues of women from the settlements.

1. Straight, upright and round female statues.
2. Sphere-shaped female statues.

In our opinion, the first group of statues represents the Mother Goddess, a symbol of fertility and power, and the second group of statues represents the "mother", the symbol of procreation and the protector of the family.

From the earliest period of early agricultural culture, clay statues of gods were made in a special way.

These statuettes, which depict the mother goddess and are believed to be associated with the symbol of fertility, are the initial form of the mother goddess symbols and idols of the Early Bronze Age.

Chapter 7 is entitled "Azerbaijan- the Middle East relations (parallels, directions, chronology) in the period of early agricultural culture." This chapter consists of two sub-chapters. Here, as a result of the analyzes of the previous chapters, Azerbaijan's relations with neighboring territories during the early agricultural culture, some similarities as a result of interactions and the formation of local cultures as a result of

local traditions are reflected in chronological order.

7.1. The ideology of the inhabitants of early agricultural culture. This subchapter covers comparative analysis of the monuments of the same period in both regions, the exchange relations between the tribes living in each region, economic and cultural relations are described in chronological order.

The countries of Western Asia played a very important and irreplaceable role in the formation of the cultures of the ancient East. Scientific acquaintance with Western Asia began for the first time with Mesopotamia. Herodotus called Egypt "the gift of the Nile", and N.D.Flittner called Mesopotamia "the gift of the Tigris-Euphrates".

In general, the study of the ideological worldview of the ancient inhabitants is important in the study of archaeological cultures, the study of economic life.

Burial customs are very valuable in terms of learning these connections. About 200 graves were found from the monuments of the early agricultural culture of Azerbaijan.

The ancient tribes living in Azerbaijan have further enriched their culture by maintaining economic and cultural relations with neighbours and distant lands. As a means of exchange, semi-precious stones of different types, salt, obsidian, cattle, wool, metal, and ceramics, weapons, jewelry as ready-made materials were used. Exchanges and relations has become traditional since the 6th-5th millennia BC.

Ancient Nakhchivan, known as one of the cultural centers of Azerbaijan, played the role of a bridge between these countries thousands of years ago, as it is located in a favorable geographical location - at the junction of important trade routes connecting the Middle East and the Caucasus. This, in turn,

played a major role in the establishment and development of Nakhchivan's economic and cultural relations with the Middle East.

The relations of Nakhchivan's ancient agricultural tribes with the Middle East have very ancient historical roots. Still, in the early agricultural period, i.e. in the 6th millennium BC, the sedentary agricultural and cattle-breeding tribes of Nakhchivan attracted the attention of their close neighbors due to their level of economic and cultural development. This is evidenced by the comparison of local and foreign items found from both settlements and graves.

We mentioned earlier that burial customs are very interesting in terms of studying the early agricultural culture of Azerbaijan and their parallels in the Middle East. The inhabitants of this period of Azerbaijan had interesting burial customs. Due to belief in the hereafter, the dead were buried in the houses, often in the courtyards of their homes, along with household appliances, tools, weapons and adornments.

The ancient people believed that the soul of the dead could be transferred to another body. In the ancient tribes of Azerbaijan, there was a belief that the human soul passed on things, especially stones. For example, if a person was suffering and could not die, he was given a stone. This custom is also found in the epic story "Dede Korkut". The proverb that is still used today, "His hand did not reach the bread, his head hit the stone," can be related to this custom. Stones or broken jars fragments are found under buried dead heads in most of the graves. This custom has been observed in all graves found in Western Asia and Egypt.

Along with weapons and tools, adornments most common

near the dead in the graves. Among them beads dominate. Beads made of turquoise, agate, clay, seashells, bone, limestone, chalk and paste contain both local and imported patterns. Such examples are also found in a number of contemporary monuments in the Middle East.

Undoubtedly, adornments were one of the main means of exchanging the ancient agricultural and cattle-breeding tribes of Azerbaijan with the countries of the Middle East and the South Caucasus.

From ancient times, Azerbaijan has had close economic and cultural relations with the countries of Western Asia. These relations have had a positive impact on the enrichment of local cultures.

The production of pottery in the early agricultural period was mainly based on women's labor. These examples, which consist mainly of household dishes, are very simple in shape, pattern and colour.

The irreplaceable role of women in the economy leads to their deification in the society. This is evidenced by the large number of female figurines found in the monuments. Copper is already found in the settlements of the early stages of this culture.

7.2. Relationships, parallels, directions. It is known that farming played a leading role in the establishment of production agriculture. The existence of endemic forms of cereals and productive plants in the region was the basis for the emergence of agriculture in the Caucasus. For this reason, the South Caucasus, as well as Azerbaijan, is considered one of the first centers of emergence of agriculture. Settlements and many remains of material cultural belonging to ancient farmers were

found in this area. Anatolia is also one of the areas where early agricultural culture was found along the Tigris-Euphrates Valley.

The analysis shows that the pottery is a product of local production and painted with bitumen paint. Oil ("napatum" in ancient Akkadian, meaning "smelling, flammable") is a flammable liquid with a specific odor, consisting mainly of a complicated mixture of hydrocarbons and other organic compounds. The weight of hydrocarbons in the mixture varies widely. In light (low specific gravity and low density) oils, this figure can be reduced to 97%, and in heavy oils and bitumen - up to 50%. The hydrocarbons in the oil are mainly represented by alkanes, cycloalkanes and various different aromatic hydrocarbons. In addition, the oil contains nitrogen, oxygen, sulphur compounds and very small amounts of iron, nickel, copper and vanadium metals.

Analyzes show that the used bitumen contains more than 10% manganese. According to head of the Laboratory of Physicochemical Research of the Institute of Petrochemical Processes of ANAS A.D.Guliyev, the chemical element manganese [Mn] is naturally present only in Azerbaijani oil. This element is added to oil produced in other parts of the world in the form of artificial additives.

CONCLUSION. Thus, the research and analysis of artifacts reveal the following results.

In the Middle East, the Caspian region and the Caucasus, there have been several centers of ancient agricultural culture with different development ways and local traditions, sometimes formed as a result of influences.

G.N.Lisitsyna, based on archaeological and paleobotanical materials obtained from the settlements of sedentary farming and cattle-breeding tribes, commented on the problems related to agricultural centers, and clarified the scheme of N.N.Vavilov. According to her, the ecological situation and natural resources of the Middle East created conditions for the emergence of seven major centers during the formation of early agriculture: Southern Anatolia, Eastern Mediterranean, Eastern Anatolia, Zagros, South Caucasus, Mesopotamia and the Caspian Sea.

The natural and geographical conditions of both Azerbaijan and the Middle East were favorable for life during the emergence and development of early agricultural culture. In particular, the favorable paleoecological situation in Azerbaijan has led to the settlement of early farming tribes in the region. Analyzes conducted by various researchers show that in both regions, pollen of Oriental hornbeam, common hornbeam, walnut, hazelnut, bindweed, moss, compositae, legumes, mallows, raspberries are found.

Research suggests that the flora of the region was richer in the early agricultural period, but human impact on nature was still weak.

A large group of settlements of agricultural and cattle-breeding tribes in the Middle East and the South Caucasus have been studied. The systematic study of these monuments, especially in Azerbaijan, began in the 1950s and continues to this day. As a

result, it was found that there are dozens of settlements in the mountainous and lowland areas of the Caucasus, especially in Azerbaijan, which reflect the stages of development of early agricultural culture. A number of material-cultural remains recorded from the settlements of early farmers found in the territory of Azerbaijan - ceramic samples, adornments, copper objects to some extent reflect the influence of Hassuna, Halaf and Ubaid cultures [234, p. 198-224].

Studies show that painted clay pots belonging to the Halaf culture from the monument to Kultepe I, combed ceramics from Khojahan, Leylatepe, Khalaj and other settlements, adornments made of turquoise, flint and other semi-precious stones, pearl, seashell found in almost all settlements and graves allow to comment on the parallels between the monuments of Azerbaijan and Western Asia. Round-planned, single roomed, tolos type houses made of raw bricks and adjacent rectangular buildings, typical of the monuments of the Halaf culture recorded in Mesopotamia, are also found in similar monuments in Azerbaijan. Since these houses were built at the same time, it is difficult to say which of them affected the others.

A comparative analysis of early agricultural settlements in mountainous and lowland areas revealed very interesting facts. It is known that the emergence of new production farms began in the 10th-9th millennia B.C. in the mountainous areas. The process of settlement in the plains belongs to the 8th millennium B.C. The composition of domesticated animals (sheep, goats) and plants (wheat, barley, and later soybeans), types of tools, house building habits, etc. almost continued at the same level until the 8th, 7th and middle of the 6th millennium B.C. The 6th millennium BC was a turning point for the early agricultural tribes of the Zagros region.

During this period, many innovations occur, which ultimately determine the further development of agricultural culture: the transition to artificial agriculture, the construction of irrigation canals, resulting in the enrichment and reproduction of agricultural products, the spread of large areas, the domestication of the cattle and most likely their use in labor-intensive work, the emergence and development of metallurgy, weaving, the discovery of raw bricks and pottery, the emergence of temples and special buildings, the creation of clay statues and various handicrafts, and so on, these are main aspects of development

There is enough material about the fact that the tribes inhabiting the Middle East were still engaged in agriculture in the 7th-6th millennia BC. Paleobotanical remains of this large region of Iraq - Karim-Shahir, Carne, Zagros, Kani-Sur, Khorannamig, Kharaba Karechivan and dozens of such monuments, which show that several types of wheat and barley were grown in these areas during the early agricultural period. During this period, the early agricultural cultures of the Middle East entered a new stage of development. This was primarily due to the transition to an artificial irrigation system, which stimulated the development of agriculture in the foothills and lowlands due to the dry climate, and as a result, increased productivity.

Of particular interest are the samples of combed and protruding based ceramics, anthropomorphic, zoomorphic handles from the monuments of the early agricultural period of the regions under study. Samples of such type of pottery were also obtained from monuments of the same period in the Middle East. Among them, examples of protruding based ceramics should be especially noted. Protruding based pots were also found in Shomutepe and Babadervish settlements, which belong to the first and middle ages

of early agriculture. Different examples, as well as round low and high protruding based pots, as well as rectangular low and high protruding based pots, were found from the monuments of the Late Neolithic-Early Bronze Age - Ovchulartepesi, Boyuk Kesik, Khalaj and Leylatepe. Samples of a similar type were found in the Goytepe and Arslantepe monuments of the Middle East, which existed at the same time with these monuments. Only in Arslantepe was the whole protruding base of the pot found.

Among the pottery products, the fragments of the lids and handles should be especially noted. Researchers of Middle East archaeology have come up with interesting ideas about handles and lids found in pots. We have also mentioned above our opinions on handles.

Various graves belonging to the early agricultural period of Azerbaijan and the Middle East have also been recorded. Numerous material and cultural remains have been found in these graves. Among the many pieces of examples, a special place is occupied by adornments made of various materials. The fact that they are not found in the settlements increases their importance in the comprehensive study of the culture of the period. On the other hand, the fact that some grave equipment is similar to the settlement findings shows they belong to the local population. Some of the grave equipment is not compatible with a large number of local products. This fact is of particular importance in the study of cultural and economic exchange with the population of neighboring areas. At the same time, a comparative analysis of the equipment found in the graves plays an important role in studying the character of the social and economic relations of the period.

Although the burial customs of the early agricultural tribes of Azerbaijan were monotonous, ie the burial of the dead was more or

less wrapped in soil graves, the equipment accompanying the deceased was different.

Burial customs in the Middle East were varied. There are cases of inhumation, cremation, and only the burial of the skull. The similarities between the burial customs of the two regions are that the position and direction of the dead, content of the equipment found in the grave are the same. These facts are the result of the interaction Azerbaijan and regions of the Middle East in the early agricultural period.

In addition, the custom of burying in clay pots can be said:

- Burying children in clay pots was done to protect them from evil spirits and evil forces;

- Because of the belief in the Hereafter and the second life, the heads of the dead were buried in jars towards the mouth of the pot;

- The clay pots used for burial did not differ from other pottery used in the household due to the feature of production. Apparently, special burial vessels were not produced;

- It is believed that the burial was performed at the place of residence in some monuments due to the idea of increasing of generation

- The burial outside the residence shows that the ideological views of the inhabitants of early agriculture already developed. This could also be due to the idea of gaining more territory due to population growth;

- Placing pottery in the grave could also be associated with productivity. It is known that jars were used to store cereals and food;

- Such a widespread usage of clay pots in burials could be related to the cult of water. Probably, the ancient humans, who knew

that water was the source of life, kept it in clay pots. Early agricultural tribes, who believed in the Hereafter, used to bury these vessels together with the deceased, believing that the deceased would need water when he came back to life.

The red ocher found in the children's graves of Kultepe I is not found in jar graves. Since the role of the red ocher in the Hereafter is expressed by clay vessels, it is likely that there was no need for such a burial there.

We have recently mentioned that one of the interesting facts observed in the settlements belonging to the early agricultural tribes is the question of the worldview of these tribes. For example, dog burial, trepanated skull, etc. is found. For dog burial, we can say that in the minds of the ancient humans, human and animal were understood as one being. This idea has been the basis of myths living in many nations until now.

It can be assumed that the cult of dog is the basis of the wolf totem of the ancient Turks. Thus, the dog has become accustomed to being constantly involved in human life and economic life, and the wolf has become a totem for man because it retains its terrible nature.

As a result, we would like to note that the cult of dog existed in the religious worldview of the ancient inhabitants of Azerbaijan and was able to maintain its sanctity for a long time.

Early agricultural tribes of Azerbaijan also adopted some religious customs, rituals and cults from the tribes with which they maintain economic and cultural relations.

These ideas could be ascribed to the large number of trepanated skulls of men and women of different ages found in the Caucasus and the Middle East. Many of these skulls show traces of postoperative regeneration, which proves the success of trepanation.

It can be said that the operation of cranial trepanation was performed mainly for two purposes. The first of these operations was performed for medical purposes, and the second was performed for cult purposes, and in our opinion, trepanation of the forehead, around the eyes, back and sides was mainly associated with religious rites, and such operations on the top were associated with medical intervention.

We have noted that any monuments have not been found in the South Caucasus that date back to the early agricultural cultures of the Middle East. The monuments of the highly cultured farming tribes here coincide with the developed and final stage of monuments in the Middle East. The use of raw bricks as a building material, the digging of irrigation ditches around settlements, the possession of various herds of animals, qualitative pottery, clay sculptures, developed metallurgy indicate that there were also highly developed centers of agricultural culture in this region.

In particular, the abundance of monuments of the period studied in Azerbaijan compared to other regions of the Caucasus, chronological classification of materials found in the monuments, some features of early agricultural culture allow us to say that Middle East-Caucasus relations pass mainly through Azerbaijan - Mugan, Karabakh plain, Kura-Araxes lowland. .

The analysis of material and cultural remains obtained from the settlements of the early agricultural and cattle-breeding tribes of Nakhchivan proves that the parallels of the early agricultural period of this region are in the Middle East and the culture was formed under the interaction with the Middle East. The influence of the early agricultural cultures of the Middle East spread to Nakhchivan and the Mil-Karabakh plain through settlements along the Aras.

Against the background of such interactions, it is interesting that the pottery production techniques of the Ubaid-Uruk culture did not spread to these areas. Although these regions are very rich in raw materials. It is clear from the results of the research that Mugan potters used simple methods and local materials in the production of ceramics, its painting. Therefore, the art of Mugan pottery has local features.

Thus, it is proved by chemical analyzes that the pottery-producing inhabitants of Mugan kept and developed their craft traditions on the basis of local culture. While the community in which they lived had all the raw materials for pottery production and painting, it was neither convenient nor acceptable to bring raw materials or paints from a distance.

As long as there are migrations, as exchange relations arise the effects are inevitable. From time to time, people have adopted what they see and tried to apply it in their lives. But there are also manifestations of inevitable development, and this is unavoidable. Not all similarities can be explained as effects.

It is clear that while ancient cultures have replaced each other, the new culture retains certain features of the previous culture. The construction techniques, the similarities in the production of tools, weapons, pottery and adornments, the motifs of patterns on painted ceramics of the monuments of early agricultural culture of Azerbaijan, can be seen in similar materials of other cultural centers of the Middle East. We can evaluate all of this not only as a direct impact, but also as a result of technological exchange, which took place the background of mutual cultural relations, as parallels.

**THE FOLLOWING SCIENTIFIC WORKS
HAVE BEEN PUBLISHED ON THE
DISSERTATION:**

1. Украшения из бирюзы и сердолика в энеолитических погребениях Нахичивенского Кюлтпе // Международная научная конференция «Археология и этнография Кавказа». Баку: Элм,- 2000,- с.117-118.
2. Azərbaycanın qədim əkinçi-maldar tayfalarının mədəni əlaqələri // -Bakı: Pedaqoji Universitet Xəbərləri. Humanitar, pedqoji-psixoloji elmlər seriyası,- 2001,- s. 34-36.
3. Eramızdan əvvəl IV-VI minilliklərdə Azərbaycanın paleoekologiyasına dair // -Bakı: Azərbaycan arxeologiyası, - 2002. №1-2,- s.127-129.
4. E.ə.v. VI-IV minilliklərdə Azərbaycanın paleodemografiyası haqqında// -Bakı: Mədəniyyət dünyası. Elm,- 2003,- s. 199-201.
5. Azərbaycanın oturaq əkinçi–maldar tayfalarının qəbir abidələri / - Bakı: Elm,- 2003.- 175 s.
6. Azərbaycanın Ön Asiya ölkələri ilə iqtisadi-mədəni əlaqəsinə dair. [Anadolu əyalətləri abidələri üzrə]. / “Dünyada yeni inkişaf meylləri istiqamətində türk dünyası, Azərbaycan və Türkiyə” beynəlxalq elmi-praktik simpoziumun materialları,- Bakı,- 2004,- s. 164-165
7. Погребальные памятники эпохи энеолита и их параллели в сопредельных районах. // Историко-культурные и экономические связи народов Кавказа: прошлое, настоящее, будущее,- Махачкала,- 2004,- с. 7-8.
8. Энеолитические погребальные памятники Азербайджана, их параллели в сопредельных районах// Археология, этнология, фольклористика Кавказа,- Тбилиси: Некери,- 2004,- с.92-93.
9. Azərbaycanın eneolit mədəniyyətləri, onların topoqrafiyası və regional xüsusiyyətləri. // -Bakı: Elmi axtarışlar,- 2005. XIV toplu,- s. 425-429.
10. Azərbaycanın eneolit qəbirələrindən qeydə alınan daranmış keramika nümunələri və onların bəzi Ön Asiya paralelləri

- haqqında // 2003-2004-cü illərdə aparılmış arxeoloji və etnoqrafik tədqiqatların yekunlarına həsr olunmuş elmi sessiyanın materialları,- Bakı: “Xəzər Universitetinin” nəşriyyatı,- 2005,- s. 18-20.
11. “Azərbaycan əlaqələr sistemində və miqrasiya məsələlərinə dair” Azərbaycan Arxeologiyası // - Bakı, “Xəzər Universitetinin” nəşriyyatı,-2005,-s. 19-24.
 12. Azərbaycanın eneolit qəbir abidələrinin iqtisadi-mədəni əlaqələrin öyrənilməsində rolu.// -Bakı: Arxeologiya və Etnoqrafiya jurnalı,- 2005. №2,- 9-12.
 13. B.e.ə. VI-IV minilliklərdə Azərbaycanın və Ön Asyanın qədim eneolit sakinlərinin dəfn adətləri // “Ortaq türk keçmişindən orta q türk gələcəyinə. IV Uluslararası Folklor konfransının materialları-Bakı:- 24-25 aprel- 2006,- s.472-476.
 14. Azərbaycanın eneolit qəbir abidələri və onların Ön Asiya paralelləri. //-Bakı: Elmi axtarışlar,- 2006. XIX toplu,- s.120-127.
 15. Azərbaycanın qədim sakinlərinin dini dünyagörüşündə it kultu// - Bakı: Azərbaycan Arxeologiyası və Etnoqrafiyası. Elm,- 2007,№ 2.- s.30-41.
 16. Azərbaycanın eneolit dövrü abidələrindən tapılmış dabanlı qablar və onların Ön Asiya paralelləri// -Bakı: AMEA Xəbərlər, Tarix, Fəlsəfə, Hüquq. Elm, -2008. №9,- s.107-116.
 17. Azərbaycanın eneolit dövrü gil qablarda dəfn etmə adəti // -Bakı: AMEA Məruzələr,-2008. LVIII cild, № 6,- s.176-185.
 18. Baxşəliyev, V.B., Seyidov, A.Q. Ərəbyengicə qədim yaşayış yeri. // Azərbaycanda arxeoloji tədqiqatlar// -Bakı: “ Xəzər Universiteti” nəşriyyatı,- 2009,- s.26-29. (Həmmüəlif)
 19. Ахундов, Т.И. Южный Кавказ в кавказско-переднеазиатских этнокультурных процессах IV тыс. до н.э./ Т.И.Ахундов. - Баку: Элм,- 2008.- 199 с. (Соавтор)
 20. Axundov, T.İ., Alməmmədov, X.İ. və b. Muğanda neolit-eneolit dövrünün öyrənilməsi və “Muganın neolit-eneolit ekspedisiyasının”- nın gördüyü işlər haqqında. Azərbaycanda

- arxeoloji tədqiqatlar// -Bakı: “ Xəzər Universiteti” nəşriyyatı,- 2009,- s.38-45. (Həmmüəlif)
21. Seyidov, A.Q., Baxşəliyev, V.B. Xələc/ A.Q. Seyidov, V.B. Baxşəliyev. – Bakı: Elm,- 2010.- 220 s. . (Həmmüəlif)
 22. Погребальный обряд раннеземледельческих племен Азербайджана.Киевский НУ им. Г.Шевченко Литературознавчистуди Киев.2010, 29-cu buraxılış, s.79-83.
 23. Axundov T.İ. və b. “Muğan neolit-eneolit ekspedisiyası”nın 2010-cu ildə gördüyü çöl tədqiqatları // -Bakı: Azərbaycanda arxeoloji tədqiqatlar,- 2011, - s.46-51. (Həmmüəlif)
 24. Металлопроизводство и металлические предметы в древних памятниках Азербайджана (VI-IV тысяч. до н.э.). Науковы записки Историчны науки. Кировоград.2011, 14-cu buraxılış, s.16-24.
 25. Этнокультурная принадлежность и хронология памятников культуры Лейлатепе Азербайджана. Науучернальная академии наук Украины. Институт филология. Центр памяткознавства. Kiev,2012,s.41-48.
 26. Trepanasiyalı kəllə: tibbi müd ax ilə və ya dini ayin. Azərbaycanın arxeoloji materialları əsasında etno-arxeoloji tədqiqat // Azərbaycanın Arxeologiya və Etnoqrafiya elmləri müstəqillik illərində. Beynəlxalq elmi konfrans materialları, - Bakı:-10-14 noyabr,- 2013,-s.131-133.
 27. Naxçıvanın Xələc yaşayış yerinin saxsı məmulatı haqqında // - Bakı: Azərbaycan Arxeologiya və Etnoqrafiya elmlərinin inkişafında Naxçıvan məktəbinin rolu,- 2014,- s.84-86.
 28. Погребения древнейшего населения Муганской равнины. Дагестан в Кавказском историко-культурном пространстве // Материалы междурадной научной конференции, посвященной 90- летию Института истории, археологии и этнографии Дагестанского научного центра Российской Академии Наук,- Махачкала,- 21-22 октября,- 2014,- с.111-112.
 29. Axundov, T.İ., Gasanova, A.M. и др. Археологические

- исследования 2015-2016 гг. Муганской неолит-энеолитической экспедиции Джалилабадский район // -Bakı: Azərbaycanca arxeoloji tədqiqatlar 2015-2016,-2017, - - 81-87 s. (Coavtor)
30. Polutərəpdən aşkar edilmiş zoomorf və antropomorf qulplar haqqında. // -Bakı: Tarix, insan və cəmiyyət. ADPIU-nun nəşriyyatı,- 2018,- s.67-75.
31. Azərbaycanın neolit-eneolit sakinlərinin Ön Asiya ölkələri ilə iqtisadi-mədəni əlaqələri.-Bakı:- Afpoliqraf,- 2018. 22 ç/v.
32. The burial of the ancient population of «Mugan Plain» of Azerbaijan// Kiyev: Науковий вісник «Гілея»,- 2019. 143-cü buraxılış, №4,- s.102-107.
33. Azərbaycanın erkən əkinçi-maldar tayfalarının dəfn ibadətgahları və onların Cənubi Qafqazda paralelləri. // Qafqazşünasların II Beynəlxalq Forumu,-Bakı:- 23-24 may,- 2019 ,- s. 475-483.
34. Machmudova V.A. Religious beliefs of Azerbaijani tribes in the era of early cultivation“// -Москва: Вопросы истории,- 2020. № 4,- с.121-129.
35. Machmudova V.A. Antik dönm ayak giysilerini yansıtan figürler, Çizme-kaplar ve semantikleri // VIII Uluslararası Van gölü havzasi sempozyumu, -Bitlis, -23 iyun, 2021-ci il,- <https://vangoluhavzasisempozyumu.beu.edu.tr/>
36. Mahmudova V.Ə. Nizami Gəncəvinin əsərlərində daş kultu.”Nizami Gəncəvi dövrü maddi-mədəniyyətinin işığında” AMEA Arxeologiya, Etnoqrafiya və Antropologiya İnstitutunun N.Gəncəvinin 880 illiyinə həsr olunan elmi Konfransın materialları.Bakı, 23 dekabr 2021-ci il. Bakı, Afpoliqraf, 2022, s.11-15.

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