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ABSTRACT

of the dissertation for the degree of Doctor of Science in History

HISTORICAL AND ARCHAEOLOGICAL RESEARCH OF THE GOBUSTAN ARCHAEOLOGICAL COMPLEX (The end of the Upper Paleolithic -Bronze Age)

Specialty: 5505.02 – Archaeology

Field of science: History

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GENERAL CHARACTERISTICS OF THE DISSERTATION

Relevance and degree of development of the topic. Rock images are a very interesting and scientifically valuable source for the study of the prehistory of humankind. Currently, they are revealed on all continents of the globe and in total represent an extremely rich and deeply substantial extensive "art gallery." Within many centuries, a huge number of works by unknown artists of antiquity who have skillfully shown the different parts of life were gathered. Therefore, it is quite natural that these images constantly attract the close attention of many scientists and experts working in the field of research of a primitive culture.

The petroglyphs of Gobustan are disseminated throughout its territory and have thousands of geographically marked locations, representing in complex a valuable monument of ancient culture. The unique archaeological and historical value of these monuments located on the mountains Beyukdash, Kichikdash, and Jingirdagh of Gobustan and the natural beauty of surrounding landscapes determine their outstanding scientific and aesthetic value. Petroglyphs make one of the most important historical sources of this region. Petroglyphs of Gobustan date from 14 000 BP and cover all subsequent periods. This is the only place in the Caucasus with such a quantity of monuments — settlements, petroglyphs, sanctuaries, burials, barrows, and other objects covering all periods — from the end of the Upper Palaeolithic before the late Middle Ages and Modern times

Obviously, petroglyphs have unique content and context associated with settlements and places. They give each complex exceptional authenticity. Some of them are special and outstanding -Gobustan is unique, for which it was included in 2007 in the UNESCO World Heritage List.

Petroglyphs are not only visually attractive, well-represented, and manageable monuments, but they also have unusually promising potential, which primarily refers to the connection of rock art with other archaeological sites and thereby help to understand the meaning and significance of rock images are very important for historical reconstructions. This is another reason why Gobustan has become a UNESCO World Heritage Site¹.

As has already been noted, the Gobustan petroglyphs have been the subject of intense scientific interest among research scientists for several decades. But recently, for a deeper and more detailed study and scientific study of such important historical sources, there has been an urgent need to use the latest technologies and programs that allow for in-depth comprehensive study.

The process of studying Gobustan petroglyphs has been going on for almost 80 years. This process went on with different intensities. There were also small breaks, mainly related to objective factors. The result of all this is many publications in scientific and popular science issues, tireless debates, and discussions on the dating and interpreting of separate plots and images. The petroglyphs of Gobustan should be considered a special cultural phenomenon, the historical and geographical range of which is limited by the Great Caucasian Range, occupying its southeastern end in the Jairankechmez River basin, from the east by the Caspian Sea covering from the north the zone of the Shongardakh and Shykhgaya mountains, where small groups of petroglyphs were found in a number of places. In addition, all these petroglyphs are concentrated in the transit territory between Europe and Asia, from where large migration routes took place.

It should be noted that the dating of petroglyphs is one of the most complex and debatable topics in the field of rock art among the world scientific community. The problem of dating the Gobustan petroglyphs was raised in the works of the first researchers (I. Jafarzade, 1945; 1956-1973, 1999; J. Rustamov, F. Muradova 1965-1986, 1990, 2000, 2003)².

¹ Helskog K., 2014. Petroglyphs of boats as evidence of contact between the Caspian Sea and Scandinavia. In V. Roggen (ed.) Thor Heyerdahl's Search for Odin, Oslo, Novus Press, p. 202-219

² Джафарзаде И.Древние рисунки на скалах, газ. «Бакинский рабочий». №147 (58-54) от 29 июня 1939г., с.4.

Джафарзаде И.М. Древнейший период истории Азербайджана // - Баку: Очерки по древней истории Азербайджана, - 1956. - с. 51-61.; Рустамов Д.Н.Результаты археологических раскопок 1965 г. в Кобыстане / Тезисы докладов II научной конференции аспирантов Института истории АН Азерб.ССР, Баку, 1966 г., с.3-5(на азерб.яз.); Рустамов Д.Н., Мурадова Ф.М. Раскопки в Гобустане / Археологические открытия 1970г., М.1971г., Изд.

Regarding their absolute age, some researchers tried to find close analogies on the rock objects of other territories, often very remote (Formozov, 1969, 1980, 1987; E. Anati, 2001; D.Huyge, 2009, 2011, 2013)³. Many publications were devoted to the dating of petroglyphs of Azerbaijan (I. Jafarzade, J. Rustamov, F. Muradova, G. Ismailzade, V. Aliyev, N. Museibli, M. Farajova)⁴.

For a long time, it was believed that the monuments of Gobustan have already been sufficiently studied (I. Jafarzade, 1958, 1973,1994; J. Rustamov, F. Muradova, 1967-2004)⁵. Nevertheless, the replenishment of information and the expansion of the range of sources, the introduction of a large number of new petroglyphs into scientific

[«]Наука», с.390; Рустамов, Дж.Н. Мезолитические женские статуэтки Гобустана // Баку: Доклады АН Азерб.ССР, - 1986. том XLII, №3, - с.92-95; Muradova, F. Qobustanda Qədim sitayiş yeri // - Bakı: Tarix və onun problemləri. Nəzəri, elmi-metodik jurnal, - 1997. №1, - s.144-147; Отчеты археологических раскопок. 1961-1992 гг. / Архив Гобустанского историко-художественного заповедника. Дело №1, 2, 3, 275 с.

³ Формозов, А.А. Наскальные изображения и их изучение / А.А.Формозов - Москва: «Наука», - 1987. - 107 с.; Anati, E. Gobustan. Azerbaijan / E. Anati. – Саро di Ponte: Edizioni del Centro, - 2001. - 96 р.; Huyge, D. "Ice Age" art at Qurta// Cairo: Ancient Egypt Magazine, - 2013. No13(5).

⁴ Джафарзаде И.М. Наскальные изображения Кобыстана // Изд.АН Азерб.ССР, Труды Института Истории, т.ХІІІ, Б, 1958г., с.20-79; Рустамов Дж.Н. Гая арасы - стоянка охотников на джейранов // Баку: Археологические и этнографические изыскания в Азербайджане (1985 г.), - 1986, «Элм». - с.7-8.; Рустамов Д.Н., Мурадова Ф. Раскопки на стоянке Кяниза в Гобустане // Москва: Археологические Открытия 1975 г., - 1976. - с. 504–505.; Исмаилов Г. К историко-культурной интерпретации древних наскальных изображений на территории Азербайджана // Москва: Проблемы изучения наскальных изображений в СССР. – 1990 - с. 91-98.; Əliyev, V.H. Gəmiqaya abidələri / Əliyev V.H.-Bakı: Аzərdövnəşr, - 1992. - 77 s.; Müseyibli N. Qobustanda qayıq təsvirləri // Bakı: -Azərbaycan Arxeologiyası: uğurlar, problemlər, perspektivlər (elmi-publistik тəqalələr toplusu) - 2017. - s. 206.; Фараджева М. О датировке наскальных изображений Гобустана (Азербайджан)// Махачкала: «История, археология и этнография Кавказа», - 2021. V. 17. № 3, - с. 657-682.

⁵ Сәfәrzadә, İ.. Мәqalәlәr toplusu / Сәfәrzadә İ. – Вакı: Azərbaycan Respublikası Мәdәniyyәt vә Turizm Nazirliyi. Qobustan Milli Tarix – Вәdii Qoruğu, - 2012. – 622 s.; Рустамов Дж. Петроглифы Гобустана. Наскальные изображения Шонгардага и Шыхгая [в 2-х книгах] / Дж.Рустамов, Ф.М.Мурадова; - Баку: «Кооперация», - т.І, книга II. - 2003, - 118 с.;

circulation (M. Farajova, 2007-2016), the use of new and natural science methods (C14 analysis, including the AMS dating method) for the reconstruction and reconstruction of the archaeological landscape (M. Farajova, 2011, 2012, 2015; M. Farajova, 2016)⁶ allowed a new review of the already famous examples of rock art of Gobustan.

This dissertation was developed on the basis of funds (archaeological materials) and archival materials (inventory books, archaeological reports) of the Gobustan National Historical Artistic Reserve, field documentation of Gobustan petroglyphs (drawings and photographs, copies of rock images, 3D documentation), materials collected during field expeditions, which were organized by Gobustan Reserve with the direct supervision and participation of the author of the dissertation (1995-2015). In addition, the results of C14 and isotope analyses obtained during fieldwork, removed sketches and impressions from separate stones found from cultural levels and Stones 29 (east, south, and north side), 29A, 30, 35, 42 east and south side, in the Ovchular shelter west side of the Stone 46 on the upper terrace of Mount Beyukdash, the image of a deer in the Maral site and Stone 9 on the lower terrace of Mount Beyukdash, Stones 48, 49, 49V in the shelters of Jeyranlar, Gayaarasy - Stones 8, 9A, 9V, in the shelter Firuz - Stone 19 of Kichikdash Mountain, Stones 1, 8, 24 on Mount Jingirdag and others were used. 64 samples were used to determine radiocarbon dating and isotope analyses. In 2013-2015 geological studies were carried out and the results of geological reports were used. Some of the materials used are drawn from the publications of I. Jafarzade, J. Rustamov and F. Muradova. from I. Dzhafarzade, J. Rustamov and F. Muradova's publications. When carrying out analogies the author addressed petroglyphs and ancient settlements in the territory of Azerbaijan and

⁶ Фараджева М. Инновационный процесс в музейно-археологическом комплексе Гобустан // - Труды САИПИ. Наскальное искусство в современном обществе (к 290-летию научного открытия Томской писаницы). Материалы международной научной конференции, т.I, - Кемерово: 22-26 августа, -2011, - с.164-166; Farajova M. Historical Reconstruction of Gobustan Archaeological Complex at the end of Upper Pleistocene and Early Holocene: cultural context // Proceedings of the XIX International Rock Art Conference IFRAO 2015, - Cáceres, Extremadura: Arkeos 37, - 31 August - 4 September, - 2015, - p. 531-533.

adjacent territories: to images of Northern Dagestan (Russia), Mazandaran uplands and foot of Hill Alburz (Iran) and also more remote territories: Egypt, France, Central Asia (publications публикации В.Алиев, 1992; Г.Исмаилзаде, Н.Мусеибли, 2004, 2017; Г.Асланов, 1972; И.Алиев, 2011; K.Helskog, 2006, 2014; A.Leroi-Gouran 1965,1967; P.G.Bahn, J.Vertut 1997; E. Jacobson.2004; Huyge, 2011, 2013; A-S.Hygen, 2006; Fossati, Jaffe, Abreu, 1991; G.&H.Denzau, 1999; M.A. Devlet, 1978; E.G. Devlet, 2002, A.P. Okladnikov, V.D. Zaporizhzhya, 1959; A.I. Mazin, 1986; A. Rogozhinsky, 2011; M.D. Hlobystina, 1987; Ya.A. Sher, 2004, etc.)⁷. Materials obtained from internships and research in England and the USA at Oxford University libraries in 2006 (Bodleans, Sackler, Linacre College, Ashmolean, Radcliffe & Rodgers, Pete Rivers Museum, etc.), (T. Wilson, 1898; G.Bailey, Mellaart, 1974; 1983; Lewis Williams, 1989; W.Caruana, 1993; G.Nash, 2000; G.Nash&C.Chippindale, 2002: 2003; A.N.Goring-Morris&A.Belfer-Cohen, R.White. 2003: D.Whitley, 2005; "Voices from the Past," 1996)⁸ and at Connecticut and Harvard Universities in 2008 (R. White, 1986; D.Bruce Dickson, 1990; J.Svoboda, 1996; P.Bahn&J.Vertut, 1997; C.Gamble, 1999; Briian P.Kooyman, 2000; C.Chippindale & G.Nash, 2004; J.M.Adovasio, Olga Soffer& Jake Page, 2007)⁹ were also used. For comparative

⁷ Əliyev, V.H. Gəmiqaya abidələri / Əliyev V.H.-Bakı: Azərdövnəşr, - 1992. - 77 s.; Исмаилов, Г. К историко-культурной интерпретации древних наскальных изображений на территории Азербайджана // Москва: Проблемы изучения наскальных изображений в СССР. – 1990 - с. 91-98.; Fossati, Angelo. Messages from the Past: Rock Art of Al-Hajar Mountains (The Archaeological Heritage of Oman). - Archaeopress Archaeology, - 2019, - 304 p.; Denzau, Gertrud & Helmut. Wildesel. -Jan Thorbecke Verlag, - 1999.- 221 p.; Окладников А.П. Ленские писаницы / А.П.Окладников, В.Д.Запорожская. - М.-Л: Изд.АН СССР, - 1959. -144 с.; Шер, Я.А. Петроглифы Средней и Центральной Азии / Я.А.Шер. -Москва: Наука, - 1980, - 328 с.; Rogozhinsky A.E. Petroglyphs within the Archaeological Landscape of Tamgaly. –Almaty, -2011. - 342 p.;

⁸ Lewis-Williams. Believing and seeing// Canadian Journal of African Studies, -1983, Vol. 17 No. 2, - p. 348-350; Whitley, David S. Introduction to Rock Art Research. – Walnut Greek, California: Left Coast Press, - 2005. - 215 p.; Voices from Past. Xam Bushmen and Bleek and Lloyd Collection / Ed. By Janette Deacon and Thomas A. Dowson. – Cape Town: Witwatersrand University Press, - 1996. - 300 p. ⁹ European Landscapes of Rock Art / Ed. By George Nash and Christopher

analysis, in the dissertation, archaeological sites of ancient culture Cucuteni, the heritage of Tripolje culture were used. In work, the epic literary work - "Dede Gorgut"¹⁰, the ethnographic data collected from various regions of Azerbaijan, chanting of the famous poet of the 12th century of Nizami Gyandzhevi, works of the Persian statesman of the XIV century Rasheed-ad-Din¹¹, sacred books - Rigveda, Avesta¹², miniatures of Azerbaijan (D. Gasanzade 2000; D. Gasanzade 2013)¹³ were also used. To recreate the history of the study of Gobustan petroglyphs, archival materials of the Institute of Archeology, Ethnography and Anthropology of the National Academy of Sciences of the Republic of Azerbaijan were also used.

In the context of cultural, historical and worldview issues, rock images are the only source of their kind in many trends in the manifestation of material culture. Petroglyphs play a very important role in the reconstruction of spiritual imaginations and cultural values that developed among the population that created them in various eras.

In this regard, the current topic is also the reconstruction of the archaeological landscape, which can be represented by a survey map of the location of monuments in the territory covering the western and southern coasts of the Caspian Sea. Such a map is necessary for the reconstruction of the cultural landscape of the archaeological complex of Gobustan and nearby territories. It should cover a wide enough area to understand the hunting, fishing, and economic activities of the ancient

Chippindale. – London: Routledge. 1-st edition, - 2001, - 240 p.; Bahn, P.G. Journey through the Ice Age / P.G.Bahn, J. Vertut, - London: The Orion Publishing Group, - 1997. - 240 p.

¹⁰ Kitabi – Dədə Qorqud dastanı / Bakı: Çaşıoğlu, - 2004. - 144 s.

¹¹ Рашид-ад-Дин. Сборник летописей / Перевод с персидского А.К.Арендса. III. - М.-Л: Изд.АН СССР, - 1946. - 340 с.

¹² Ригведа. Избранные гимны. Гимн Парджаны, Гимн Вишну / Ответственный редактор П.А.Гринцер. – 2-е изд., исправленное. – Москва: Наука, -1999. – 768 с.; Авеста. Вендидад, XIX; Ясна, XXУ,4 идр. / пер. Е.Э.Бертельса, Отрывки из Авесты. – Москва -Ленинград, - 1924. – 97 с.

¹³ Гасанзаде Д. Тебризская миниатюрная живопись. Тебризская школа в контексте мусульманской миниатюрной живописи (XIV-I пол. XVI вв.) / Д.Гасанзаде. - Баку: «Oscar», - 2000. - 446 с.; Гасанзаде, Д. Низами Гянджеви. Миниатюры / Д.Гасанзаде. - Баку: Чашыоглу, - 2013. - 230 с.

inhabitants of these places.

Nowadays, the use of the latest technologies - the creation of digital databases, GIS, 2D - 3D models, and the development of new programs - is playing an increasing role in the study and documentation of archaeological sites, including rock art objects. The creation of such programs and systems on the basis of archaeological, ethnographic, architectural, natural-landscape complexes and open-air museums is the most relevant at present.

Rock images have potentially great potential as a historical source and have not been fully disclosed to date. Therefore, one of the acute questions is a versatile and detailed study of monuments of rock art, an integrated approach to fieldwork and laboratory research, clarification of the chronological framework of the identified images, stylistic analysis of petroglyphs, and their cultural and historical interpretation.

Object and subject of study. The object of research is rock art and archaeological sites. The subject of the study is the material and spiritual representations of the settlers of Gobustan by studying rock images (including their dating), and recreating and reconstructing the cultural landscape during different historical periods.

Purpose and objectives of the study. The purpose of the work is: To summarize all available materials on Gobustan rock art, to correct ideas about the chronology of petroglyphs, to reconstruct the system of material and spiritual ideas of the creators of the drawings, as well as to restore the cultural landscape of the archaeological complex Gobustan from the end of the Upper Paleolithic - Early Mesolithic to the Bronze Age.

To achieve this goal, the following tasks were set:

- 1. Classify all recorded petroglyphs by stylistic features.
- 2. Identify chronological features of Gobustan petroglyphs, starting from the end of the Upper Paleolithic era to the Middle Ages, and adjust the available dating for a number of images
- 3. Propose an author's interpretation of Gobustan's visual materials;
- 4. Conduct radiocarbon analyses of the cultural levels of caves shelters, sites, settlements and, based on the results obtained, reconstruct the historical and cultural landscape of the archaeological complex Gobustan over long historical periods.

- 5. Reconstruct the spiritual representations of the ancient settlers of Gobustan based on an analysis of the main subjects presented on the rocks;
- 6. Based on the analysis of the alleged images of dwelling plans, reproduce the appearance of individual settlements once located on the territory of Azerbaijan, determining the possible cultural ties of Gobustan with adjacent and remote territories in various historical eras;
- 7. Determine the role of rock art in the ritual practice of the population of Gobustan in different historical eras.

Research methods. The basis of the methodology in this monograph is a comprehensive study of general historical and archaeological methods, the choice of which is predetermined by the main types of sources studied. The main research methods that guided the author of the monograph are the use of the results of C14 analyses, 3D programs, and a digital database to document and study Gobustan petroglyphs.

The involvement of such disciplines as geology, ethnographic data, and laboratory analyses, as well as the use of an integrated approach has played an important role in solving some issues in the study of rock art. The integrated approach in the study of Gobustan petroglyphs was predetermined by the fact that this topic is on the verge of merging such disciplines as archeology, ethnography, geology, geography, paleontology, anthropology, and art science. Not limited by the analysis of images, typology, and dating, their interpretation, the specificity of the available sources also requires a non-standard approach, that is, attracting ethnographic data, emphasizing the search for individual archetypes of modern archaic forms and art history, assessing the aesthetic facet of rock art creativity, as well as the study of sources of ancient art.

Using the comparative historical method, logical parallels were drawn that took place in the territories nearby to Gobustan in the process of their historical development.

Besides that,

1. The results of C14 analyses (including the AMS dating) were first used to date cultural levels and petroglyphs, chronological data

from transgressions and regressions of the historical Caspian Sea, as well as the data from C14 analyses, which were important auxiliary material for dating petroglyphs and recreating the landscape in different historical periods.

- 2. The creation of an improved digital data structure, which could include the entire information based on the Gobustan archaeological complex, greatly facilitated the study of this monument. It allowed us to consider rock art in conjunction with the natural and archaeological landscape that has changed over time. Accordingly, images of the rocks, compositions, and landscape became parts of one whole story. The integrity of the documentation complex, which includes the variety of parameters characterizing the location of petroglyphs, opens a qualitatively new level of scientific analysis, generalization of the material, conservation, monitoring, preservation, and use of monuments of Azerbaijan.
- 3. With the improvement of the new information systems and programs, there is a real opportunity to create a new database, and a special documentation structure for the preservation, study, documentation, and management of the unique monument of Gobustan. In recent years, one of the topical and popular methods for documenting Gobustan petroglyphs has become 3D modeling.
- 4. 3D method, unlike traditional ones, enables quick and more accurate documentation. In the field of studying and understanding the meaning of rock images in 2015, work began in the program 3D StudioMax, which facilitated and allowed to recreate a picture of the ancient beliefs, customs and rituals of the settlers of Gobustan, as well as a cultural and historical interpretation of rock images. The use of unconventional methods of interpretation by animated fragments made it possible to study the transmission of dynamics, motion, and movement of figures in rock images.
- 5. For the first time on the petroglyphs of Gobustan, the proposed plans of dwellings were recorded.

Frameworks discussed for the defense of the dissertation:

1. The petroglyphs of Gobustan should be considered a special

cultural phenomenon, the historical and geographical range of which is concentrated in the context of the fact that Central Asia is located in the east, the Caucasus in the west, the Middle East in the south, Russia in the north and thus the complex of monuments of Gobustan is unique in the global perspective.

- 2. Studies conducted in 2013-15 in the mountains of Beyukdash, Kichikdash and Jingirdag in the field of transgressions and regressions of the Caspian Sea during the Upper Pleistocene and Holocene era, made it possible to determine the territorial formation of the Gobustan landscape during this period and identify a certain location of ancient settlements and sites relative to the levels of the Caspian Sea in the Gobustan archaeological complex. In addition, based on a scientific study of the available geological data, determine the main periods of change in the levels of the Caspian Sea and the formation of the caves and sites of Gobustan.
- 3. As a result of studying the geological and geographical characteristics of the western coast of the Caspian Sea, it was concluded that starting 15,000 years ago, the Caspian Sea basin experienced several large and prolonged transgressions that periodically flooded the upper terraces of the Greater Gobustan mountains. Changes in the levels of the Caspian Sea influenced not only the formation of the relief and outline of the landscape zones of Gobustan but also the choice of settlements and caves-shelters by primitive hunters on the territory of the mountains of Beyukdash and Kichikdash Gobustan. The oldest caves were on the upper terraces of the mountains. As the sea retreated, early hunter-gatherers gradually settled the lower terraces.
- 4. The introduction of new methods for studying rock art complexes, such as the creation of an electronic and digital database, three-dimensional scanning (3D scanning), etc., made it possible to document images at the most modern level. So, in scientific research using 3D imaging, it became possible to study the relief of the stone and identify poorly preserved petroglyphs invisible to the naked eye. Three-dimensional measurements revealed a series of new rock paintings on the upper terrace of Mount Beyukdash,

the Jeiranlar site, etc. As a result of improvements in new information systems and programs, there is a real opportunity to create a new database using 3D modeling. Unlike traditional allows rapid and more methods. this model accurate documentation. 3D modeling was carried out for Gobustan rock paintings (using Agisoft PhotoScan and 3D Studio Max programs), with the help of which 3D visualization of the stones of the Beyukdash and Kichikdash mountains was first created and the cultural landscape of Gobustan was recreated from the end of the Upper Paleolithic-Mesolithic era to the Middle Ages, which gave rise to the scientific interpretation of rock images. As a result of the use of 3D technologies, more than 300 new petroglyphs were registered. The need for a comprehensive study of rock art objects using the methods of related sciences has been determined.

- 5. The creation of an improved digital data structure, which included the database of the archaeological complex Gobustan, made it possible to consistently analyze rock art in relation to the natural and archaeological landscape that has changed over time. 6. Sampling and dating the cultural levels of Gobustan caves and shelters, using the results of the obtained C14 dating (including AMS dating) of cultural levels, where individual stones with petroglyphs were found, made it possible to conclude that individual stones with petroglyphs precede the cultural layer in time and accordingly appeared before the formation of this cultural layer. The relationship of petroglyphs on individual stones with a dated archaeological level with rock paintings on the walls of caves and shelters was revealed. The use of the night photo-fixing method of petroglyphs made it possible to identify new images.
- 7. In the course of the studies, the following types of execution techniques were determined: knocking out; wiping; painting (painted drawings); method of entry or scratching with a sharp metal object; point picket; a combination technique using the above methods collectively or individually; combined technique using the natural terrain of the rock; flooded and deepened terrain.

8. The stylistic features of Gobustan's images and the main set of compositions and characters including anthropomorphic images were revealed; animal images; signs and tamgas; compositional scenes; images of vehicles; plans or schemes of settlements and dwellings.

- 9. The dating of Gobustan petroglyphs was done by the following data: C14 analysis; analysis of biological and physical formations (study of cracks, the surface of stone, moss); analysis of fragments of stones with images found in cultural layers and break away from the walls of caves and shelters; stratigraphic analysis (sequences of overlapping images); stylistic analysis, etc.
- 10. The studies made it possible to conclude that the monuments of Gobustan form a single complex of archaeological objects of different species (settlements, caves, mounds, petroglyphs, cemeteries, burials, altars, holy places, etc.), connected by territorial and functional conjugacy, characterizing the most important aspects of the socio-cultural life of the inhabitants of the area from the end of the Upper Paleolithic era to the Middle Ages. As a result, on the basis of the studied materials, it became possible to recreate and reconstruct the cultural landscape of the archaeological complex Gobustan from the end of the Upper Paleolithic Early Mesolithic to the Bronze Age.

The scientific novelty of research.

- 1. To study Gobustan rock paintings, laboratory radiocarbon analyses of samples (including the AMS dating method) taken from cultural levels were carried out for the first time, and isotope analyses (65 samples) were carried out, which made it possible to create a chronological scale for dating petroglyphs.
- 2. The latest digital database of the Gobustan archaeological complex has been created in the Google Earth program.
- 3. To study Gobustan petroglyphs, a 3D model of planes with petroglyphs was first used.
- 4. The use of the 3D Studio Max program made it possible to reproduce some episodes of the spiritual life of the ancient settlers of Gobustan and offer a new interpretation of petroglyphs; reconstruct ritual-magical scenes and compositions, restore the

cultural landscape of the archaeological complex Gobustan and adjacent territories to different historical eras.

- 5. As a result of the studies, more than 300 new petroglyphs were discovered and registered on the upper terrace of Mount Beyukdash in the caves Ana zaga, Okuzler, Ovchular, and on Mount Kichikdash in the sites Jeiranlar, Firuz 2 and others.
- 6. For the first time in the framework of a doctoral dissertation, Gobustan rock paintings are considered on the basis of radiocarbon dating and are assessed as an exceptional phenomenon and as one of the independent types of archaeological sources.
- 7. Gobustan's petroglyphs were investigated as one of the main sources for studying the material and spiritual culture of the population of the region. Medieval epic works, literary sources, and ethnographic materials were involved in historical reconstructions. All this made it possible to recreate from the cave images of Gobustan a picture of the spiritual representations of the creators of the drawings in different historical periods.
- 8. A group of new images of Gobustan has been introduced into scientific circulation.
- 9. For the first time, on the basis of reconstruction, the cultural landscape of the archaeological complex Gobustan and the surrounding territories was recreated from the end of the Upper Paleolithic to the Middle Ages.

The theoretical and practical significance of the work: the results and conclusions of the study can be used to further investigate the problems of classification, chronology, and cultural interpretation of rock images of Gobustan, as well as neighboring regions. The results of the dissertation study can become an auxiliary resource in the preparation of research works on the issues of ancient history and chronology of Central Europe and Asia, in the study of archeology, history, and history of art. In addition, the main results of research on the chronology, periodization, and stylistic features of the Gobustan petroglyphs can be used in higher educational institutions at the faculties of history and history of art in the preparation of textbooks. Copies and prints of images can be used in the exposition of the Gobustan Museum, as well as in the exhibition activities of experts on primitive art. The results of the studied materials are used in reading reports, lectures, and presentations on primitive art and archeology not only in Azerbaijan but also abroad.

Testing and application: The main provisions of the work were reflected in the book "Rock Art of Azerbaijan" (2009, in 3 languages: Azerbaijani, Russian and English) and the monograph "The World of Rock Art of Azerbaijan" (2017)¹⁴. In addition, long-term research has been published in 58 articles, theses, catalogs, and booklets, including 3 articles published in Web of Science, Scopus, in 31 articles recommended by the Higher Attestation Commission. Research on this topic has been tested in the form of published articles, books, speeches, and reports at scientific conferences of various directions held in Azerbaijan, Ireland, Brazil, Turkey, Russia, Korea, France, England, Portugal, Spain, Italy, Austria, Belgium, Estonia, Norway, USA, South Africa, Uzbekistan, Kazakhstan, Kyrgyzstan, etc.

The name of the organization in which the dissertation work was performed - is the department "Ethnoarchaeology" of the Institute of Archeology, Ethnography and Anthropology of the National Academy of Sciences of Azerbaijan.

The total volume of the dissertation.

The total volume is 401,859 characters without spaces (excluding the list of literature, illustrations, and annexes). Title page: number of characters - 410; Table of contents: number of characters - 1090; Introduction: number of signs -24567; Chapter I: number of characters -29245; Chapter II: number of signs - 50313; Chapter III: number of signs - 103158; IV Chapter: number of signs - 41682; V Chapter: number of characters - 128069; Conclusion: number of characters - 23325.

¹⁴ Fərəcova, M. Azərbaycan qayaüstü incəsənəti / Fərəcova M. - Bakı: Aspoliqraf, -2009. - 319 s.; Фараджева М.Н. Мир наскального искусства Азербайджана / Фараджева М.Н. – Баку: издательство «Орхан» ООО, - 2017 – 143 с.

MAIN CONTENT OF THE DISSERTATION

The "**Introduction**" reflects issues such as the relevance of the topic, the purpose and objectives of the study, the chronological framework, the methodology and methods of the study, the degree of study, and the practical significance of the work.

The first chapter **"Geological and geographical characteristics of Gobustan"** gives a geological and geographical overview based on the results of geological studies¹⁵. During geological studies conducted in 2012-2015 in Gobustan, the climate, hydrogeological conditions, petrographic, mineralogical, geomorphological features, and stratigraphy of the area, where the rock images are concentrated, were studied. Separately, sections (according to cultural layers) of the Gayaarasy 1, Gayaarasy 2, Firuz 2 of the Kichikdash Mountain and the Ana zaga caves of the Beyukdash Mountain¹⁶ were described and interpreted. A distinctive feature of Gobustan from other territories of Azerbaijan are mud volcanoes and, in this regard, the classical development of relief forms of the area is observed.

The oldest caves were located on the upper terraces of the mountains. As the sea retreated, ancient hunter-gatherers gradually settled at the lower terraces.

In the second chapter "Methods of studying and scientific documentation of the archaeological complex Gobustan," various methods of maintaining scientific documentation of petroglyphs are presented and studied. The first section of the second chapter, "Methods of documenting and studying of rock art" presents the history of studying and documenting rock art, the use and testing of various methods in the removal of prints and impressions. This section describes the traditional and new methods of researchers who have made a great contribution to the development of this field. Among them are names

¹⁵ Фараджева М. Новые данные по геолого-географической характеристике Гобустан // Вакı: "AMEA Хәbәrlәr. İctimai Elmlər Seriyası", - 2018. N 3, - с.76-83.
¹⁶ Qobustan Milli Tarix-bədii Qoruğu—Böyükdaş, Kiçikdaş və Cingirdağ sahələrində geoloji işlər haqqında Hesabatlar. g.ü.f.d. R.Məmmədov. 2012-2014// Qobustan Milli Tarix Bədii qoruğunun arxivi, iş № 4, 107 s.. such as Nancy Munn¹⁷, Leroy-Guran¹⁸, David Lewis-Williams¹⁹, Levi-Strauss²⁰, Whitney Davis²¹, David Witley²², George Nash and Christopher Chippindale²³, Paul Taçon²⁴, Jean Clotts²⁵, Emmanuel Anati²⁶, Benjamin W. Smith, Knut Helskog ²⁷, Peter Mitchell ²⁸, Hygen A.-S²⁹., Bahn P.G.³⁰, Fossati Angelo³¹, Jacobson-Tepfer E.³², Loendorf

¹⁷ Munn Nancy D. Walbiri iconography. - Cornell University Press, - 1973. - 234 p.

¹⁸ Leroi-Gouhran A. Down of European Art. - Cambridge: University Press, - 1982.-77 pp.

 ¹⁹ Lewis-Williams. Believing and seeing// Canadian Journal of African Studies,
 - 1983, Vol. 17 No. 2, - p. 348-350.

²⁰ Levi-Strauss Claud. Way of the masks. - University of Washington Press. - 1988.
- 249 p.

²¹ Whitney Davis. Present and Future Directions in the study of rock art // The South African Archaeological Bulletin, - 1985, No. 141, Vol. 40, - pp. 5-10.

²² Whitley David S. Introduction to Rock Art Research. – Walnut Greek, California: Left Coast Press, - 2005. - 215 p.

²³ European Landscapes of Rock Art / Ed. By George Nash and Christopher Chippindale. – London: Routledge. 1-st edition, - 2001, - 240 p.

²⁴ Taçon Paul S.C. Theory building and model making in Australian rock art research / Oslo: Theoretical Perspectives in Rock Art Research. Ed. Helskog K., - 2001, - 330 p.

²⁵ Clottes Jean. The "Tree C's": fresh avenues towards European Paleolithic art // Cambridge: The Archaeology of Rock - Art, - 1998, - p.112-129.

²⁶ Anati Emmanuel. World Rock Art / E. Anati. - Oxford: Archaeopress Archaeology. - 2010. - 186 p.

²⁷ Working with Rock Art. Recording, presenting and understanding rock art using indigenous knowledge/ Ed. Benjamin W. Smith, Knut Helskog, David Morris. - Wits University Press, -2012.-312 p.

²⁸ The Eland's People: New Perspectives in the rock art of Maloti-Drakensberg Bushmen / Ed. Peter Mitchell and Benjamin Smith. - Johannesburg: Witwatersrand University Press, -2009, - 216 p.

²⁹ Hygen A.-S. Ethic bases of documentation, conservation and management of monuments of Rock Art. Monuments of rock art of Central Asia. – Almaty, - 2004.
- p.3-10.

³⁰ Bahn P.G. Journey through the Ice Age / P.G.Bahn, J. Vertut, - London: The Orion Publishing Group, - 1997. - 240 p.

 ³¹ Fossati Angelo. Messages from the Past: Rock Art of Al-Hajar Mountains (The Archaeological Heritage of Oman). - Archaeopress Archaeology, - 2019, - 304 p.
 ³² Jacobson-Tepfer E. The Hunter, the Stag, and the Mother of Animals. - Oxford University Press, - 2015. - 413 p.

Lawrence³³, Devlet M.A.,Devlet Y.G.³⁴, Sovetova O.C.³⁵, Miklashevich Y.A.³⁶, Cheremisin D.V.³⁷, Rogodzinskiy A.Y.³⁸ and many others. They used various methods of study - making copies from drawings to tracing paper, polyethylene film and micalent paper, using latex in copying, the method of lubricating the surface of the rock using silicone resins, conducting night photographs, using traceology, creating an electronic and digital database, three-dimensional scanning (3D scanning), photogrammetry, etc. Regarding the use of latex by experts, it turned out that it destroys the rock surface. The use of transparent polyethylene film makes it possible to remove clearer copies of the patterns on the rocks. Frankfor and Jacobson note that despite the positive results of using this method, it has drawbacks making it impossible to depict the relief of the stone and the presence of a variety of lichens in the film³⁹. Christopher Chippindale and Paul Tyson believe that before starting to study the subject of rock art, you need to know:

- What is it, what does it consist of?
- What dates it?

³³ Loendorf Lawrence. Rock art recording // In: David S. Whitley (ed.), Handbook of rock art research. Walnut Greek, California: Altamira press, - 2001. - p. 55-80.

³⁴ Дэвлет Е.Г. Сокровища наскального искусства Северной и Восточной Азии. / Дэвлет Е.Г., Дэвлет М.А. – Москва: Институт археологии РАН- 2011. - 381 с.

³⁵ Советова О.С. Наскальное искусство как источник по истории материальной и духовной культуры населения бассейна Среднего Енисея в эпоху раннего железного века: / диссертации на соискание ученой степени доктора исторических наук / - Кемерово, 2007. - 581 с.

³⁶ Миклашевич Е.А. От эстампажа к отливке. Развитие методов факсимильного копирования петроглифов // - Кемерово: Изобразительные и технологические традиции ранних форм искусства (2), - 2019. Кузбассвузиздат, - с. 211–235.

³⁷ Черемисин Д.В. Исследование петроглифов Алтая с помощью 3Dсканирования методом структурированного подсвета/ Черемисин Д.В., Казаков В.В., Ковалев В.С., Жумадилов К.Б. // Новосибирск: Алтай в кругу евразийских древностей - 2016. - с. 87-88.

³⁸ Rogodzinski A.E., E.Kh.Khorosh, L.F.Charlina. About the standard of monuments of Rock Art of Central Asia // Almaty: "Monuments of Rock Art of Central Asia", -2004, - p.156-161.

³⁹ Франкфор А.П., Якобсон Э. Подходы к изучению петроглифов Северной, Центральной и Средней Азии // - Кемерово: Археология, этнография и антропология Евразии, - 2004, № 2 (18). - с. 53–78.

• How has it been studied, and what methods did the researcher use?

• How has it been studied from the point of view of ethnography, ethnohistory?

• What conventional methods did he study?

• How has it been studied by comparative analysis?

To interpret petroglyphs, researchers propose taking into account and identifying repeated petroglyphs, signs, motives and plots. Repetitive plots can be interpreted and dated to one period⁴⁰.

Norwegian specialist J.M. Gjerde (Gjerde, J. M.) for the study of rock art and landscape offers to document not only images but also the environment (mountains, valleys, lakes, rivers). Some plots and compositions on the rocks are indications of real terrain⁴¹. Rather interesting results were obtained by Siberian researchers using facsimile copying. Under the leadership of E.G. Devlet in 2005-2008. a large collection of facsimile volume copies of stones was made on the Pegtymel River in Chukotka⁴². Dipuo W. Mokokwe, a researcher of South African rock images of San, believes that the use of digital technologies on the one hand has advantages, on the other hand, disadvantages. He considers documentation, making copies from rock images using digital technology should first undergo a critical assessment, and then be allowed to use⁴³. When working with the rock art database, Loendorf identifies 3 categories of users: researchers,

⁴⁰ The Archaeology of Rock – Art. / Ed. By Christopher Chippindale and Paul S.C.Taçon. Cambridge University Press, - 1998. - 373 p.

⁴¹ Gjerde, J. M. Knowing places. Geographic information in landscapes of rock art // Наскальное искусство в современном обществе. К 290-летию научного открытия Томской писаницы. Материалы международной научной конфренции. Том 2. Труды Сибирской Ассоциации исследователей первобытного искусства. Вып. VIII. – Кемерово: Кузбассвузиздат, - 22-26 августа, - 2011, - с.12-19.

⁴² Миклашевич Е.А. От эстампажа к отливке. Развитие методов факсимильного копирования петроглифов // - Кемерово: Изобразительные и технологические традиции ранних форм искусства (2), - 2019. Кузбассвузиздат, - с. 211–235.

⁴³ Working with Rock Art. Recording, presenting and understanding rock art using indigenous knowledge/ Ed. Benjamin W. Smith, Knut Helskog, David Morris. - Wits University Press, -2012.-312 p.

managers, and conservatives. Using the latest technologies in documenting and capturing copies of cave images, he suggests taking into account the preferences of the users themselves⁴⁴. English researcher L. L. Janik for carrying out the complex analysis of petroglyphic art of Northern Europe offers a nonconventional method of interpretation by the small video fragments representing the movement of prehistoric images. Visual "interpretation" of images on the walls of caves with the help photography technology shows how different cultures transmit movement and dynamics ⁴⁵. Thus, for the complete scientific documentation of petroglyphs, ideally, it is necessary to attract in the aggregate such sciences as geology, archeology, paleontology, geography, botany, and zoology. Practice clearly illustrates that a comprehensive study can produce significant results.

The second section of the second chapter "*Methods of studying and scientific documentation of the Gobustan archaeological complex*" is devoted to methods of studying and scientific documentation of petroglyphs in the context of the Gobustan archaeological complex. Starting from 40-50. XX century I. Jafarzade recorded and removed the tracing paper prints from more than 3,500 cave images⁴⁶, ⁴⁷ talked to archaeologists J. Rustamov and F. Muradova using the same method filmed prints from 2,500 images. The results of their painstaking and long-term work were reflected in

⁴⁴ Loendorf Lawrence. Rock art recording // In: David S. Whitley (ed.), Handbook of rock art research. Walnut Greek, California: Altamira press, - 2001. - p. 55-80.

⁴⁵ Janik, L. Accessing the Past – visual interpretation of prehistoric rock art // Наскальное искусство в современном обществе. К 290-летию научного открытия Томской писаницы. Материалы международной научной конфренции. Том 2. Труды Сибирской Ассоциации исследователей первобытного искусства. Вып. VIII.– Кемерово: Кузбассвузиздат, - 22-26 августа, - 2011, - с. 23-24.

⁴⁶ Джафарзаде И.М. Петроглифы Кобыстана // Материалы сессии, посвященной итогам археологических и этнографических исследований 1964 г. в СССР (тезисы докладов). Баку: изд - во АН АзССР, - 1965, - с. 7-10.

⁴⁷ Джафарзаде И.М. Гобустан. АН Азерб.ССР, Институт Истории. Баку: «Элм», 1973, 347 с..

publications^{48,49,50}. Since 1995, the traditional method of removing stamps on polyethylene paper has also been used to document Gobustan petroglyphs. Photos were taken from the sketches or scanned and stored in an electronic database⁵¹. As a result, the stamp model in electronic format was obtained. Currently, more than 6,000 rock images and 40 mounds, about 20 shelter caves, ancient settlements and burials, and 105,000 objects of material culture have been discovered in Gobustan. All this complex constitutes the Cultural Landscape of the Archaeological Complex of Gobustan. In 2007, the cultural property of the complex was included in the UNESCO World Cultural Heritage List: more than 6,000 rock images; shelter caves, ancient settlements and burials; places of worship - sanctuaries; many caves and shelters of different periods, indicating the consistent use of these places for approximately 14,000 years. Thus, the task of documenting the state of the object arose not only at the time of the survey but also after recording subsequent changes. In order to compile the basic documentation of the Gobustan archaeological complex, in 2004 the first digital base of the location of petroglyphs, caves, sites, settlements, mounds, and burials was created in Azerbaijan and the Caucasus. In the Map-info program, a map of the Gobustan Reserve was compiled with fixed rock images using GPS. Coordinates were taken and stones were photo fixed. An effective method of night photo fixation of petroglyphs was used. Using this interactive program, you could get information about the monument: geographical coordinates, location, description of the state of the object. For rock images in the database, his sketch, night and day photos were given⁵². Since 2007, the method of night photo recording

⁴⁸ Рустамов Дж..Петроглифы Гобустана. Гобустан – очаг древней культуры Азербайджана [в 2-х книгах] / Дж.Рустамов, - Баку: «Кооперация», - книга I. – 2003. - 103 с.

⁴⁹ Рустамов Дж. Петроглифы Гобустана. Наскальные изображения Шонгардага и Шыхгая [в 2-х книгах] / Дж.Рустамов, Ф.М.Мурадова; - Баку: «Кооперация», - т.І, книга П. - 2003, - 118 с.

⁵⁰ Rüstəmov C. Qobustan. Kiçikdaş abidələri / Rüstəmov C., Muradova F. - Bakı: "El", - 2008. - 315 s.

⁵¹ Farajova M. Gobustan Protection and Management // «World of Rock Art», -Moscow: «Grif I K» («Гриф и К»), - 6-8 October, -2005, - р. 335-336.

⁵² Фараджева М. Новые подходы и методы в изучении наскального искусства

has been used to document Gobustan petroglyphs. So, as a result of work on the stones of the Beyukdash and Kichikdash mountains, in addition to the recorded images, new petroglyphs were discovered. Currently, one of the most modern methods for documenting rock images of Gobustan has become the method of 3D modeling. With the help of the corresponding program, numerous photographs of the plane layered on top of each other are analyzed and as a result, a 3D model of the object or plane being studied is constructed. In the field of studying rock images of Gobustan in 2015, work began in the 3D Studio Max program, which made it possible to study the landscape and interpret rock images. It should be borne in mind that when studying the Gobustan petroglyphs, the author faced such difficulties as layering different-time petroglyphs on top of each other and with poor visibility of images in daylight. In order to resolve these problems, a phased and comprehensive study of Gobustan petroglyphs has become necessary.

- To more clearly document petroglyphs, it was considered advisable to use the method of night photo fixation.

- Sampling and dating (including AMS-dating) of cultural levels of caves and shelters of Gobustan.

- At the next stage of the study of petroglyphs, it became necessary to analyze and compare images on the walls of caves and shelters of Gobustan with petroglyphs on individual stones that were discovered from dated cultural layers.

- At the last stage of the study, work was started on the use of the 3D modeling method using Agisoft and 3D StudioMax programs. As a result of the study of panels with images, an additional possibility appeared to interpret entire compositions on the surface of the Gobustan rocks⁵³.

As a result of the above works, using a digital database and modeling 3D in the Ana-zaga cave on the north side of Stone 29, a whole composition was revealed: next to numerous images of female figures,

Гобустана // Ваки: "Tarix və onun problemləri", - 2018 (2), - с. 296-300.

⁵³ Фараджева М. Методы изучения и научного документирования археологического комплекса Гобустан //-Bakı: Azərbaycan Arxeologiyası və Etnoqrafiyası, - 2016. №2. – с. 4-18.

unrecorded images of boats, bulls, and hunters were discovered. Based on the radiocarbon data obtained, studies on the chronological classification of cave images on planes were initiated. The use of the programs Google Earth, Agisoft, and 3D Studio Max made it possible to recreate and reconstruct the archaeological landscape of Gobustan in different historical eras.

In the third chapter, "Archaeological characterization of the Gobustan complex", such issues as the general characterization of caves, shelters, sites, and settlements of the Beyukdash and Kichikdash mountains were reflected, osteological material discovered from cultural layers was examined, their species affiliation was determined, stylistic features and the technique of performing rock images of Gobustan were determined. In the first section of the third chapter, "Ancient caves, rocky shelters, sites and settlements," the results of radiocarbon analyses from various cultural layers for each site were given⁵⁴. According to the results of isotopic analyses, it was possible to study and determine the nutrition of the ancient settlers of Gobustan in different historical period. Thus, as a result of the analysis of the studied samples, it was possible to determine that the main lifestyle of the ancient inhabitants of Gobustan depended on such activities as hunting, fishing, and gathering. In addition, the results of radiocarbon analyses made it possible to distinguish chronological stages in the caves and sites of Ana zaga, Kaniza, Oküzler, Oküzler 2, Ovchular, Maral on Mount Beyukdash and Gayaarasy, Gaya alta, Jeyranlar, Firuz and Firuz 2⁵⁵. Eventually, the results of AMS dating, studied osteological material and changes in levels of the Caspian Sea showed the following picture:

⁵⁴ Фараджева М. Неолит Гобустана // Сборник материалов международной научной конференции "Раннеземледельческие культуры Кавказа". Институт Археологии и этнографии НАН Азербайджан. – Баку: AFPoliqrAF, 2-4 ноября, - 2012, с. 62-68.

⁵⁵ Фараджева М. Мир наскального искусства Азербайджана / М.Н.Фараджева. - Баку: «Орхан» ООО, - 2017 – 143 с.; Фараджева М. О датировке наскальных изображений Гобустана (Азербайджан)// -Махачкала: «История, археология и этнография Кавказа», - 2021. V. 17. № 3, - с. 657-682; Farajova M. About specifics of rock art of Gobustan and some innovative approaches to its interpretation ("Firuz 2" shelter) // "Quaternary International", Elsevier, - 2018, Oct. 20, Vol. 491, - p.78-98.

- At the end of the late Pleistocene -15-12 thousand years ago, the Khvalyn transgression took place. The lower terrace of Mount Beyukdash was washed by the waters of the historical Khvalyn Sea. About 11-10 thousand years ago, Homo sapiens lived on Mount Beyukdash in the Ana zaga cave, Bos primigenius Boj bulls, Equus hemionus Pallas kulans, Sus scrofa L. wild boars, Carar goats fox Vulpes vulpes L., from birds strep Otis tetrax L., birds of the order of pinnipeds, Caspian seals Pusa caspica Gmel were found in the Caspian Sea.

- About 10-9 thousand years ago in Gobustan there were bulls tours Bos primigenius Boj, kulans Equus hemionus Pallas, leopards Pantera pardus L., oar-free goats Carpa aegagrus Erxl, birds from the order of lastopods, and in the Caspian Sea 9000 to 7000 years ago, the largest and longest sea level rise occurred. Based on radiocarbon dating, presumably in the Ana zaga cave during this period, the waters of the Caspian washed the Beyukdash, Kichikdash and Jingirdag mountains, without flooding the Ana zaga cave and the rocky shelters of Kaniza, Okuzler.

- About 7-5 thousand years ago, hares of the *Rusak Lepus* europaeus Pallas 1778, foxes Vulpes vulpes L., and jackals Canis aureus were found. L., kulans Equus hemionus Pallas, bulls - tours Bos primigenius Boj, Caspian seals Pusa caspica Gmel⁵⁶. 6000 – 4000 years ago, the level of the historical Caspian Sea rose by 25-23 m.

Therefore, during this period, the lower terrace (approximately to the stone of 145 of the lower terrace of Mount Beyukdash) was washed by the sea. Thus, if we take the count from the foot of the mountain to stone 145, we can assume that there were no cave images below this level. At this time, the Ana zaga cave, the Oküzler, Oküzler-2 and Ovchular rock shelters were inhabited.

- Approximately 2000 years ago, Equus hemionus Pallas, Gazella Subgutturoza Guld, Mediterranean turtles Testudo graeka L., Acinonyx sp. Cheetahs, Pantera pardus L. leopards were found in Gobustan. and

⁵⁶ Farajova M. Gobustan Rock Art Cultural Landscape // Adoranten magazine, -2011.- p. 41–67.

fish⁵⁷. 1700 years ago, when sharp warming occurred, the melting of mainland ice and permafrost began, which caused super water in the river valleys. This process caused the level of the Caspian Sea to rise so much that water poured into the underlying lands with a huge flow. Thus, during this period, the foot of the Beyukdash, Kichikdash and Jingirdag mountains were washed by the waters of the sea.

- 1000-1200 years ago, *Gazella subgutturoza Guld.and Ovis Aries pet* sheep were found in Gobustan. At this time, the foot of Mount Beyukdash was washed by the Caspian Sea⁵⁸. Signs of vital activity were found on the lower terrace in the Maral sub-shelter.

Samples taken from the cultural levels of the cave shelters of Gayaarasy, Gaya alta, Jeyranlar, Firuz and Firuz-2 of Mount Kichikdash and the osteological composition of the bones showed the following results:

- Approximately 13000-8000 years ago, the Khvalyn transgression continued and washed the mountains of Beyukdash, Kichikdash and Jingirdag, respectively. The level of the Khvalynsky Sea did not exceed the parking place of Gayaarasy. At this time, the sites of Gayaarasy and Guy Alta were settled, as evidenced by the discovered traces of the hearth, stone equipment and individual stones with rock images. The sites of Jeyranlar, Firuz, and Firuz-2, located on the lower terrace of Mount Kichikdash, were periodically flooded, as evidenced by layers of sea sand found from cultural levels. At this time, Gazella Subgutturoza Guld jeyrans, Caspian seals Pusa caspica Gmel were found here and fish⁵⁹.

- About 8000 years ago, the Novocaspian regression occurred⁶⁰.

 $^{^{57}}$ Fərəcova M. Azərbaycan qaya
üstü incəsənəti / Fərəcova M. - Bakı: Aspoliq
raf, - 2009. - 319 s.

⁵⁸ Farajova M. About specifics of rock art of Gobustan and some innovative approaches to its interpretation ("Firuz 2" shelter) // "Quaternary International", Elsevier, - 2018, Oct. 20, Vol. 491, - p.78-98.

⁵⁹ Farajova M. Archaeological landscape of Gobustan at the end of Upper Pleistocene and early Holocene // IGCP 610 "From the Caspian to Mediterranean: Environmental change and human response during the Quartenary", - Baku: Nafta-Press, - 12-20 October, - 2014, - p.186–187.

⁶⁰ Mamedov A.V. The Late Pleistocene – Holocene History of the Caspian Sea.Quaternary International, Vol. 41/42, 1997, p.161-166; c.163.

Radiocarbon analyses and detected artifacts show that during this period, the sites of Gayaarasy, Guy Alta, Firuz, Firuz-2 and Jeyranlar were settled. Here were the kulans Equus hemionus Pallas, Caspian seals Pusa caspica Gmel. Alectoris kakelik Falk⁶¹.

- Approximately 2000-1000 years ago, regression continues - the retreat of the sea. During this period, the sites of Gayaarasy, Firuz, Firuz-2 and Jeyranlar were settled.

The second section of the third chapter of "Sanctuaries and Burials" is devoted to the description of sanctuaries and ancient burials in the vicinity of Gobustan. Ancient burials on the territory of Gobustan, discovered separately or around sanctuaries, testify to the continuation of ancient traditions and the continuous worship of these places even after the spread of Islam here. Mounds (about 40) and individual stones with rock images discovered from burials are also of great scientific interest⁶².

The third section of the third chapter of "*Petroglyphs in the context of the Gobustan archaeological complex*" is devoted to the study of Gobustan petroglyphs, which are distinguished by stylistic features, a variety of execution techniques, themes, and plots. One of the first steps in the study of rock art is the study of tools that made rock images⁶³. There are several publications on the topic of the technique of performing Gobustan petroglyphs⁶⁴. As for the variety of materials and

⁶¹ Фараджева М. Неолит Гобустана // Сборник материалов международной научной конференции "Раннеземледельческие культуры Кавказа". Институт Археологии и этнографии НАН Азербайджан. – Баку: AFPoliqrAF, 2-4 ноября, - 2012, с. 62-68.

Фараджева М. Археологический комплекс стоянки «Овчулар загасы» на верхней террасе горы Беюкдаш // - Махачкала: «История, археология и этнография Кавказа», - 2019.15 №3, - 470-484.

⁶² Фараджева М. Святилища и захоронения Гобустана. // - Bakı: "Tarix, İnsan və Cəmiyyət", Azərbaycan respublikası Təhsil Nazirliyi Bakı Pedaqoji kadrların İxtisasartırma və yenidən hazırlanma institutu, - 2018. № 1(20), - s. 60-70.

 ⁶³ Bednarik R.G. The technology of petroglyphs// - RAR, - 1998.Vol. 15(1), - p. 23-35.

⁶⁴ Рустамов Д.Н., Мурадова Ф.М. Полевые работы в Гобустане // -Баку: Археологические и этнографические изыскания в Азербайджане (1974), - 1975. - с. 4–10.

tools discovered in Gobustan, a lot of work has been done in this direction by researchers (I. Jafarzade, J. Rustamov, F. Muradova)⁶⁵. However, the topic seemed to require more extensive and in-depth analysis. To perform Gobustan petroglyphs with a deep cut, primitive artists used coarse cutting and percussion tools. Such stone tools were found in the sites of Firuz-2, Gayaalty, in the rocky refuge No. 7 of Mount Kichikdash, in the site of Okuzler, Kaniza⁶⁶. As a result of studying the rock images of Gobustan, the following types of techniques were used for applying petroglyphs: knocking out, straining, painting, the method of cutting or scratching with a sharp metal object, dotted picketing⁶⁷, combined technique using the above methods in combination or separately, combined technique using the natural relief of the rock, flooded and recessed relief⁶⁸.

With careful and detailed consideration, it becomes clear that each cave, parking and shelter in Gobustan has its inherent individual meaning. In each of them, there are places with separate plot themes related to some particular event or time. Of particular interest are images of female figures in a state of pregnancy, as well as figures engraved in a profile, usually tattooed without a head, with a slight forward tilt. In this section, the Gobustan petroglyphs are divided into groups according to their stylistic and technical features.

⁶⁵ Джафарзаде И.М. Древнелатинская надпись у подошвы г.Беюкдаш / - Баку: Доклады АН.Азерб.ССР, - 1948. т 4, №7, - с. 304-311.

Rüstəmov C. Daş dövrünün yeni tapıntıları / - Bakı: Tarix və onun problemləri, - 1997. № 2, - s 142-145.

⁶⁶ Рустамов Д.Н., Мурадова Ф.М. Археологические исследования в Гобустане // - Баку: Археологические и этнографические изыскания в Азербайджане (1973 год), - 1974. Изд-во «Элм». - с.8-11.

⁶⁷ Әliyev V.Н. Gәmiqaya abidələri / Əliyev V.Н.-Bakı: Аzәrdövnәşr, - 1992. - 77 s.; Рустамов Д.Н. Наскальные изображения Гобустана // Москва: Проблемы изучения наскальных изображений в СССР. – 1990 - с. 99-103; Исмайлов Г.С. Археологические исследования древнего поселения Баба- Дервиш / Г.С.Исмайлов. – Баку: изд –во АН Азерб. ССР, - 1977. - 48 с.; Асланов Г.М. Новый комплекс археологических памятников Апшерона // - Баку: материалы сессии, посвященной итогам археологии и этнографических исследований 1964 г. в СССР (тезисы докладов). - Изд-во АН АзССР, - 1965. - 85-86 с.

⁶⁸ Фараджева М. Культурно-исторический контекст археологического комплекса Гобустан // Москва: Российская археология, - 2015. № 4, - с.50-63.

The fourth chapter "Chronology and periodization of rock images of Gobustan" is devoted to the problems of the chronology of rock images of Gobustan. Undoubtedly, the main pillar of the chronological system today is the absolute values obtained by the radiocarbon method. Currently, 65 samples have been taken from various cultural levels of the caves and sites of Gobustan. Studies of recent years have allowed a slightly different light to consider the principle of dating rock images of Gobustan. In determining the age of individual artistic finds and in establishing their authenticity, the method of comparing individual styles, the application technique, and the applied working tools are widely used. Compared artistic manners, compositions, themes, execution techniques, etc. In addition to the radiocarbon method, dating by stratigraphic analysis (i.e., by studying the layering of petroglyphs on each other) gives us fairly reliable results. To determine the age of petroglyphs, Watchman A. proposes to carefully study the surface of a stone, since it can contain mineral crusts and films, which often contain organic substances, such as oxalate, algae, and charcoal in the form of particles. These particles can be used for radiocarbon determination by AMS dating⁶⁹. In this regard, it is considered necessary in further studies to study the rock surface of stones with petroglyphs in Gobustan and in other regions of Azerbaijan (Gemigava, Kelbajar and Absheron). The results of the conducted studies and laboratory analyses according to the Watchman method will determine a more accurate dating of Gobustan petroglyphs. Undoubtedly, the uniqueness of the Gobustan archaeological complex lies in the fact that separate stones with petroglyphs identical to rock images on the walls of caves were discovered from cultural layers. Thus, having an absolute dating of the cultural layer where the petroglyph stones were found, it can be assumed which of the images were taken earlier and precede the cultural layer. In turn, identical images made in the same style and technique can be dated to the same period. In 1977, in the Ana zaga cave, during archaeological excavations, a stone split from a rock with petroglyphs was discovered at the level of 255-270 cm

⁶⁹ Watchman A. Perspectives and potentials for absolute dating prehistoric rock paintings //Antiquity, - 1993, 67, - p.58-65.

(inv. No. 2418, GNHAR Fund). On the edge of the stone, there is a part of the anthropomorphic silhouette below the chest. It is made by the technique of recessed relief. This level gave the test radiocarbon date Cal BP 7500 to 7420 (Cal BP 7500-7420)⁷⁰. In this technique and stylistic manner, the figures of hunters on the northwestern side of the stone 29 (Figures 4, 5, 56, 57), on Stone 33 (Figure 20), 35 (Figure 2.3), and on Stone 42 of the northern side (Figure 9), on Stone 68 on the upper terrace of Mount Beyukdash are fixed. These figures are also identical to the petroglyphs of hunters on a separate stone found in the Kaniza shelter at a depth of 255-265 cm (inv. No. 1479, GNHAR funds), an image of a hunter in the Jevranlar site. Other famous finds (individual stones with petroglyphs) were found at the level of 255-290 cm (inv. No. 2453, 2454, GNHAR Foundation) in the Ana zaga cave. Thus, at this stage of research, it is advisable to rely not only on the results of radiocarbon analyses but also take into account the stylistic, and technical features of petroglyphs, taking into account the geological and geographical environment of Gobustan during the study period. Of particular interest are discovered from cultural levels of 5 separate stones with petroglyphs in Gayaarasy. Particular attention is paid to the separate stone No. 9B, which was discovered at the level of 230 cm. It should be borne in mind that petroglyphs are fixed on the upper and lateral parts of this stone. Using the simulation 3D, new images were found on this stone. Images on the southern side part of a stone are executed by the technology of pointed knocking-out that is clearly traced on a stone 9B. This technique and style are found on the walls of the sites and caves of Mount Beyukdash. Considering that the stone block 9B was stationary and during the formation of the cultural layer it was at a depth of 350 cm, then it is quite permissible that the detected petroglyphs were performed before the formation of the cultural layer 230 cm. obtained at a level of 350 cm female figures and images of hunters on the side of the stone 9V can be dated to a period of 12 200 +/- 50 BP⁷¹. Images on stones 9V and identical keyboard images on stones 5 on Mount Kichikdash of the site Gayaalta, 65, 29 (north side)

⁷⁰ BETA Analytic INC., Miami, Florida, USA, 09.01.2011, №305 139.

⁷¹ BETA Analytic INC., Miami, Florida, USA, 09.01.2011, №305 145.

of the upper terrace of Mount Beyukdash can presumably date from the same period. Another equally interesting separate stone 9A, found at a depth of 230 cm, is located across stone 9B. On the eastern side of this stone is a realistically made bullhead. Samples (coal and bone) taken from cultural levels of 218-276 cm showed a calibrated date of 7698 +/-33 BPP to $8,224 +/-37 BP^{72}$.

One of the last C14 dating in Gobustan showed the oldest date in the Gayaarasy shelter on Mount Kichikdash approximately 13,700 BP (calibrated date) from 350 cm⁷³. The next date in antiquity was obtained from the cultural layer of Ana zaga cave of Mount Beyukdash from 270 cm approximately 10,600 BP (calibrated date)⁷⁴. Given that 14,000 years ago the late Khvalyn transgression occurred and during this period the waters of the Khvalyn Sea washed the Beyukdash, Kichikdash, and Jingirdagh mountains, the interval between these dates was probably due to sea level rise. Thus, all the accumulated material allows us to distinguish a wide chronological range, covering the period from the early Mesolithic to the new era (XVIII-XIX centuries). Each period is distinguished by a number of specific features that allow them to be distinguished as petroglyphs of the Gobustan type. Thus, based on the study of the sites and caves of Gobustan and the obtained radiocarbon analyses, it was possible to distinguish the following chronological

⁷² The University of Waikato, Hamilton, New Zealand, 23.02.2011, №30004.

⁷³ Фараджева М. Неолит Гобустана // Сборник материалов международной научной конференции "Раннеземледельческие культуры Кавказа". Институт Археологии и этнографии НАН Азербайджан. – Баку: AFPoliqrAF, 2-4 ноября, - 2012, с. 62-68.

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Farajova M. Archaeological landscape of Gobustan at the end of Upper Pleistocene and early Holocene // IGCP 610 "From the Caspian to Mediterranean: Environmental change and human response during the Quartenary", - Baku: Nafta-Press, - 12-20 October, - 2014, - p.186–187.

BETA Analytic INC., Miami, Florida, USA, 9.23.2011, № 305145.

⁷⁴ Farajova M. About specifics of rock art of Gobustan and some innovative approaches to its interpretation ("Firuz 2" shelter) // "Quaternary International", Elsevier, - 2018, Oct. 20, Vol. 491, - p.78-98.

periods and stages in the rock art of Gobustan:

Period I - The oldest period - the end of 13000 – the beginning of 12 000 BC (the end of the Upper Paleolithic and Early Mesolithic). In this period, images of animals and key-shaped female figures prevail. The combined technique of flooded relief, made by point knocking out and the technique of deep entry, dominates. Images of the head of an aurochs and an aurochs in life-size (200-250 cm in length), figures of a bull in combination with a female profile without heads on the stone of the 5th shelter of Gayaalty of Mount Kichikdash. Petroglyphs of this period are found only on Mount Kichikdash in the shelters of Gaya alty, Gayaarasy, and on the upper terrace of Mount Beyukdash in the Ana zaga cave on Stone 29.

Period II. Mesolithic. 12000 - 8000 BC. When studying this period, it was possible to distinguish two stages - early and late. Petroglyphs of the Mesolithic era significantly exceed the number of images of the previous period and differ in technology, style, repertoire and localization on the territory of the Gobustan archaeological complex.

Stage I. End 12000 – 9000 BC. This stage forms a special group and is a transitional stage from the end of the Upper Paleolithic to the Epipaleolithic. Having preserved some traditions of the previous period, this stage is distinguished by the appearance of new images and motifs. The repertoire of the early stage includes profile life-size female figures in a state of pregnancy in combination with a bull or hunter (on the upper terrace of Mount Beyukdash, stone 65, 29A). This stage includes many images of aurochs deeply carved by a silhouette; profile images of male hunters made by the technique of drowned relief, including with bows and arrows as on the upper terrace of Mount Beyukdash, stone 29, 68; drawings on individual stones from cultural layers of settlements such as Ana zaga, Okyuzlyar 2 and Kaniza of the upper terrace of Mount Beyukdash, Gayaarasy of the Kichikdash Mountain and on the Shongar Mount.

Stage II. 9 000 - 8 000 BC. The repertoire of images and motifs consists of life-size images of wild bulls on the upper terrace of Mount Beyukdash on the walls of the Ana zaga caves (stone 29), Oküzler (stone 42), images of gazelles in the site Jeyranlar (stone 49), images of hunters

and hunters in a collective dance - a life-size round dance made by the technique of drowned relief, tattooed female figures in life-size in a facet and profile figures in a state of pregnancy in combination with a bull or hunter (Mount Beyukdash, upper terrace, stone 49). Images of this stage are made by deep entry technique. This stage also includes some cup recesses and lines crossing the rock images and having a connection with said petroglyphs on the panel while creating an illustrative-narrative composition (the upper terrace of Mount Beyukdash, the eastern side of the stones 29, 42, Mount Kichikdash the eastern side of the stone 49).

Period III. Neolithic - 7000 BC. This stage is distinguished by a wealth of images and motifs, including figures of boats of the Firuz shelter (stones 19 east and west side, 19a) of Mount Kichikdash, scenes of hunting wild aurochs and kulans. Ovchular cave on the upper terrace of Mount Beyukdash, Stone 45, realistic images of domesticated bulls (ibid., stone 45), in the site Jeyranlar of Mount Kichikdash (Stone 49), images of boats in the site Firuz (stone 19, 19a, 97) petroglyphs with ritual-magical meaning (dance-choir in this period, the style of the previous period is still preserved: profile images of women, hunters and boats of small sizes. Anthropomorphic figures in masks and unusual robes as on the upper terrace of Mount Beyukdash on Stone 29 on the north and east sides, Stones 30, 33.

Period IV. Chalcolithic 6000 – *beginning* 4000 *BC.* Petroglyphs of this period are heterogeneous in style and content. The brightest group of petroglyphs of this era are life-size images of animals, hunting for wild animals and battle scenes. This period is characterized by:

✓ Numerous life-size zoomorphic images: deers, goats, wild boars and pets (Mount Jingirdagh, Yazyly Hill, stones 4, 9, 92, 33, 54; Mount Beyukdash, upper terrace, Stone 46, north side of Stone 29; lower terrace, Stone 10);

✓ stylized images of people in hunting scenes, in ritual magical plots and battle scenes on a separate stone from the shelter No 5 upper terraces of Mount Beyukdash (inv. N 4930 from the cultural level 220-235 cm), on the Stone 81 of the upper terrace of Mount Beyukdash. In these images, it can be noted that most often hunter figures hold a stick-type tool in their hands. If in the images of previous periods the guns

were fixed behind the shoulders of the hunters or only one hand was involved, then during the Eneolithic period a different trend is observed: the hunter is depicted holding the gun in both hands. The settlement plan on the upper terrace of Mount Beyukdash on Stone 35 can also be attributed to this period.

Period V. The Bronze Age 4 000 - the end of 2 000 BC. The early stage of the Bronze Age includes life-size images of goats with lines crossing the middle of the body. The tradition of this style was preserved in later images of goats' figures recorded on the stones of 13,116, 267 of the lower terrace of Mount Beyukdash. This period also includes images of deer on Mount Kichikdash and goats on the Jingirdag mountains, on the upper terrace of Mount Beyukdash (southern side of Stone 42). Schematic figures of hunters with bows and arrows, collective dance - a round dance resembling the "Yalla" dance on the upper and lower terrace of Mount Beyukdash.

Period VI. The early Iron Age - the end of 2 000 - the beginning of 1000 BC. Scenes of a deer drive (Yazyly Hill, Stones 9, 38, 40, 92, 136; Beyukdash, upper terrace, Stones 103,127, scenes of sacrifice (Yazyla Hill, Stones 24, 25), images of anthropomorphic figures deprived of hands, the "Yalla" dance (Stone 9 on the lower terrace of Mount Beyukdash). This era also includes the plans of dwellings and settlements presented on the upper terrace of Mount Beyukdash on Stone 29 on the north side.

Period VII. Middle Ages. Schematic images of goats and caravans of camels (Mount Beyukdash, upper terrace Stones 101, 103, 118, lower terrace, western side of Stone 140 and Stone 155), armed with spears of horsemen, signs and tamgas, inscriptions and images with religious Islamic themes (arch-mehrab on the lower terrace of Mount Beyukdash, inscriptions in Arabic and Farsi). Note that in the caravanserai of the XV century and the sanctuary of Gara atla, petroglyphs similar to the Gobustan ones and the plan of housing on Mount Jingirdagh on Stone 1 are depicted.

Thus, the end of the Upper Paleolithic and Mesolithic settlements were mainly located on the upper terraces of the mountains. In the Neolithic with the rise of the level of the Caspian Sea, the caves retained the status of the main place of residence. At the end of the Eneolithic due to the transgression of the sea, the level rose approximately to Stone 145 on the lower terrace of Mount Beyukdash. Middle and lower terraces were inhabited by a decrease in sea level in the Bronze Age.

The fifth chapter, "Reconstruction of the archaeological landscape of Gobustan and its historical and cultural context," studied stylistic, and thematic data and revealed chronological periods of rock images that made it possible to restore the picture of the archaeological landscape of Gobustan and its adjacent territories. In the first section of the fifth chapter, "On the question of the cultural and historical interpretation of the petroglyphs of Gobustan," an interpretation of the petroglyphs is given in its historical and cultural context. According to some scientists, when interpreting rock art, it is primarily necessary to analyze the form, technique, style, location, and context of the execution of drawings and their changes over time⁷⁵. In Gobustan, the change of styles and periods is especially pronounced on the upper terrace of Mount Beyukdash on Stone 29 on the north side. On this Stone, archaeologists recorded 77 images. During the study, the number of discovered petroglyphs was increased to 176. The main part of the petroglvphs of the first period - the early Mesolithic are life-size images of bulls. In the first period, profile female figures very often adjoin the images of these animals. If you pay attention to Stone 5 on Mount Kichikdash of Guyaalty's site, you can see how the image of an aurochs crosses female figures. In this case, the klaviform images are made earlier than the bovine figure. An interesting plot looms on the Stone 65 of the upper terrace of Mount Beyukdash, which dates back to the first stage of the Mesolithic era. With the help of the program 3D StudioMax, it was possible to restore and reconstruct the composition of the Stone. The male figure drives the bull away, and the women depicted in the profile run away (maybe screaming) from him as if distracting from the man's figure. Okladnikov explains identical scenes in rock art by the fact that all members of the tribe took part in the driving hunt, to which key-shaped female figures, represented by 6-7 people on the side

⁷⁵ Taçon Paul S.C. Theory building and model making in Australian rock art research / Oslo: Theoretical Perspectives in Rock Art Research. Ed. Helskog K., - 2001, - 330 p.

of the animals, are also directly related⁷⁶. The first stage of the Mesolithic also includes a composition made on the Stone 68 of the upper terrace of Mount Beyukdash. On the rock, hunters with bows and arrows surrounded the bulls and, as it were, chased them towards a crack in a stone to a cliff. Here are real hunters. The drawing is made in a dynamic and realistic manner. According to ethnographic materials, it is known that such plots were also "a partial introduction of adolescents to the sacred secrets of the tribe, to the magical ritual of hunters."77 Anisimov notes that the ethnographic data of some peoples of the world show that if during the ritual ceremony hunters throwing spears at the depicted animal missed, then the hunt was canceled and postponed until more favorable times. If the magic ceremony was successful, then this strengthened the hunters' faith in their strength⁷⁸. Images of female figures that are stylistically different from each other are also of particular interest. Images of female figures of Gobustan are divided into 4 types and date from different periods. The first group includes, mainly, stylized images of figures in a profile with a slight forward tilt with clearly expressed bellies and buttocks, often with signs of pregnancy. The second group is characterized by images of female figures with wide hips, without hands, or simplified hands and legs. Still others are presented in a facet with wide hips, and well-developed leg edges made in the technique of recessed relief. Most of these figures are depicted with mythical instruments behind them. The fourth group includes female figures in profile with pronounced hips, breasts and a tattoo on the body. Many scientists interpret images of female figures in the position of pregnancy in the rock art of North Asia in different ways. So, the female figures of the Okunevsky period Khlobystina interprets as a totem ancestor. Like Khlobystina, Jacob Sher interprets the giving birth figure as a symbol of the mother-progenitor⁷⁹. The image of the giving

⁷⁶ Окладников А.П. Утро искусства / А.П.Окладников. - Ленинград: "Искусство", - 1967. - с. 66,97.

⁷⁷ Анисимов А. Ф. Этапы развития первобытной религии / Анисимов А. Ф. – Москва, Ленинград: Изд-во «Наука» Ленингр. Отд-е, - 1967. - 167 с., с. 31-32. ⁷⁸ The same, p. 31-32.

⁷⁹ Jacobson-Tepfer E. The Hunter, the Stag, and the Mother of Animals. - Oxford University Press, - 2015. - c.120.

birth figure in combination with the image of the animal in real size (yak, bull, elk, deer) Jacobson-Tempfer explains as a symbol of the request for prosperity in the house and fertility, citing the petroglyphs of the early Bronze Age Tsagaan Salaa from Mongolia as an example⁸⁰. On Mount Kichikdash on the site of Gayaalty on Stone 5, there are images of women crossed by the image of a bull. The bull is made in full size; women are depicted in a profile without a head. In the second stage of the Mesolithic, life-size images of wild bulls dominate. They are recorded on the upper terrace of Mount Beyukdash on the walls of the Ana zaga caves (stone 29), Oküzler (stone 42). The second period of petroglyphs is characterized by life-size images of female figures with massive obese thighs, absent or simplified arms, and legs, distinguished by breasts and large weathered bellies. Such figures can be found on the upper terrace of Mount Beyukdash on Stone 29 on the north side. The subject of particular interest is images of life-size female figures in the Ana zaga cave on Stone 29 A. This stone is located in the southeastern part of the Ana zaga cave. Here, archaeologists recorded four female figures and one image of a bull. With the help of night photo fixation, it was possible to detect the fifth figure of a woman in life-size. Thus, a whole composition is presented here: 4 female figures in the position of pregnancy, following each other and one tattooed, which is depicted a little further from the rest. A tattooed figure crosses the contours of a barely discernible bull figure. Unfortunately, the images of the women and the bull are very poorly preserved and are indistinguishable in daylight. Perhaps this camera was intended only for women or was associated with some special rituals. The tattooed figures of Gobustan surprisingly find similarities with the tattooed figures of the Neolithic Cucuteni Tripillian culture. At an early stage, through the representation of massive mature women, there was a desire to reflect fecundity, and at later times, the representation of ripe pregnant girls was associated with the seasonality of agricultural work. According to the ethnographic records of different peoples with the image of a woman, there is a large cycle of agrarian rites associated⁸¹. It is also known that the people of

⁸⁰ The same, p.121-123.

⁸¹ Рыбаков Б.А. Язычество древних славян / Б.А.Рыбаков. - М.: Наука, - 1981. -

the Ancient East had the Great Mother as the main character in the fertility cult. According to E. Jacobson-Tempfer, images of female figures are directly related to the symbol of fertility⁸². The second stage of the second period is also characterized by geometric sign No. 6 and zigzag figures No. 12, 14, 36, and 37 of the upper terrace of Mount Beyukdash on Stone 29 on the north side. Analogies to sign No. 6, although remote, are found in the Sarmyshsay Valley in Uzbekistan and on samples of decorative art of the Tukano Indians, called "yaje". Anthropologist Rachel-Dolmatoff, who collected the knowledge of the Tukano Indian tribe associated with the ritual use of the hallucinogenic plant "vaje," writes that the shaman and his fellow tribesmen, under the influence of the "yaje," enter the sacred sphere and dreams that form the traditions of their culture in mythical times. The same thing happens in the rock art of the Indians of California. They are very closely related to the visions of shamans and their sense of space purpose⁸³. A. Rozvadovsky notes that the recently discovered Asian plant has the same properties as the plant Banisteriopsis caapi, which is the main component of the sacred hallucinogenic drink of the Tukano Indians "yaje." Ornaments and zigzag figures No. 12, 14, 36, 37 on stone 29 are probably associated with the magic of rain causing. A bright series of petroglyphs from the third period are images of boats. They are represented in almost all the sites of Gobustan. Boat petroglyphs are localized mainly on the rocks of the Beyukdash and Kichikdash mountains. If in the second stage of the I Mesolithic period, only hunters with bows and arrows are represented, then in the third period the meaning of the plot changes: images of boats are presented in the center, and hunters of the second period with bows and arrows around them. In the fourth period, figures of people appear around the boats with their hands up, as if berthing boats to the shore. In the third period, there is a different trend in the representation of hunter figures: they are represented with the instrument held in both their hands as on a separate

c.47.

⁸² Jacobson-Tepfer E. The Hunter, the Stag, and the Mother of Animals. - Oxford University Press, - 2015. - c. 94, 98, 99.

⁸³ Krupp E.C. Echoes of the Ancient Skies: The Astronomy of Lost Civilizations. -New York: Dover Publications, Mineola, - 2003. - 384 p., c.140-141.

stone from the shelter of the fifth upper terrace of Mount Beyukdash, on the Stone 81 of the upper terrace of Mount Beyukdash. During the Eneolithic period, the first alleged settlement plans appear on the upper terrace of Mount Beyukdash on Stone 35⁸⁴. This image is very reminiscent of the round-plan raw brick building architecture of the Neolithic and Eneolithic eras of Azerbaijan, presented at such settlements as Geytepe, Ismailli tepe, and Ovchular tepesi⁸⁵. The largest group of petroglyphs of *the Bronze Age* are images of goats in real size with lines crossing the body. Such remnants of magical techniques were preserved in Azerbaijan until the beginning of the 20th century. They were used not only for the purpose of successful hunting but also as protective amulets for cattle from predators⁸⁶. The subject of a special study of the Early Iron Age are images of plans of dwellings on the upper terrace of Mount Beyukdash on Stone 29 on the north side and on Stone 1 of Mount Jingirdag⁸⁷. They find some similarities with the

⁸⁴ Фараджева М. Планы структур поселений и жилищ на наскальных изображениях Гобустана // Bak1: "Memar", - 2021. N30, - с.216-223.

Quliyev, F. Göytəpə neolit yaşayış yerində arxeoloji qazıntılar / Quliyev, F., Nişiyaki Y., Hüseynov F. [et al.].// Azərbaycanda Arxeoloji tədqiqatlar 2009. AMEA Arxeologiya və Etnoqrafiya İnstitutu, - Bakı: - 2010. - s. 45-54; Baxşəliyev, V. Ovçular təpəsində 2009-cu ilin arxeoloji tədqiqatları / Baxşəliyev V., Marro C., Aşurov S.// Azərbaycanda Arxeoloji təqqiqatlar 2009. - Bakı: 2010, s. 274-280; Ахундов, Т. У истоков Кавказской цивилизации. Неолит Азербайджана. Шомутепе: [Книга первая] / Ахундов Т. - Баку, - 2013. - 385 с.; Нариманов, И.Г. Лейлатепе. Поселение, традиция, этап в этнокультурной истории Южного Кавказа. / И.Г.Нариманов, Т.И.Ахундов, Н.Г.Алиев, - Баку: - 2007. - 126 с.; Marro, C. Excavations at Ovcular tepesi (Nakhchivan, Azerbaijan). Second preliminary report: the 2009-2010 seasons / C. Marro, V. Bakhshaliyev, S. Ashurov // Anatolica Antiqua, - 2011, XIX, p. 53-100.; Alməmmədov, X.İ. Qarabağın arxeoloji abidələri toplusu: [I kitab] / X. Alməmmədov. - Bakı, - 2016. - 446 s.; Nishiaki, Y. Göytepe neolithic excavations in the middle Kura valley, Azerbaijan. / Yoshihiro Nishiaki, Farhad Guliyev // Archaeopress Publishing LTD, - 2020. - 366 pp.; Nishiaki, Y. Haci Elemxanli Tepe: Excavations of the earliest Pottery Neolithic occupations on the Middle Kura, Azerbaijan / Yoshihiro Nishiaki, Farhad Guliyev, Seiji Kadowaki, Yui Arimatsu [et al.] // AMIT, - 2013. Band 45, - p.1-25.

⁸⁶ Cəfərzadə İ. Məqalələr toplusu / Cəfərzadə İ. – Bakı: Azərbaycan Respublikası Mədəniyyət və Turizm Nazirliyi. Qobustan Milli Tarix – Bədii Qoruğu, - 2012. c.563.

⁸⁷ Фараджева М. Планы жилищ на скалах Гобустана // Bakı: Milli Azərbaycan

settlement plan, which was discovered by archaeologists on top of Mount Beyukdash⁸⁸, with the medieval architecture of Gala village. *Medieval petroglyphs* of Gobustan are also found on the rocks situated in the main locations, with multi-figure compositions of different eras depicted on them. Such is the approximate historical and cultural context of the Gobustan petroglyphs, which has preserved to this day a kind of narrative that can be interpreted as stories of glorification of mythical ancestors, archaic hunters, and a few remnants of ritual rites.

In the second section of the fifth chapter, "**The cultural landscape of the Gobustan archaeological complex,**" an attempt was made to model and reconstruct the historical landscape of Gobustan through an understanding of rock art using 3D technology. The practice of studying in the field of rock art has also shown that the petroglyphs depicted on the rocks and the landscape are usually closely interconnected. The landscape plays an important and often key role at all levels of petroglyph interpretation. Places of rock art can be located near naturally defined sacred places. Firstly, often these places are concentrated on a larger scale and considered sacred landscape areas. Secondly, these places are concentrated near water sources, regardless of whether these places were inhabited by humans or not. Thirdly, for these purposes, as a rule, caves or sites with a panoramic view of a beautiful natural landscape were chosen⁸⁹.

The main component of the cult zone and the semantic center of the Gobustan archaeological complex at the end of the Upper Pleistocene were the Beyukdash and Kichikdash mountains. Petroglyphs are concentrated on the stones mainly on the direction to the sea. The compositional center of the ensemble is formed by the Anazaga cave on the upper terrace of Mount Beyukdash and Gayaarasy site on Mount Kichikdash. Based on the results of studies of the western and southern coasts of the Caspian Sea, it can be concluded that the Mesolithic monuments are confined to the coastlines and the location of

Tarixi Muzeyi, - 2018, - c. 217-225.

 ⁸⁸ Muradova F. Qobustan tunc dövründə / Muradova F. - Bakı: "Elm", - 1979. - c.18.
 ⁸⁹ Taçon Paul S.C. Theory building and model making in Australian rock art research
 / Oslo: Theoretical Perspectives in Rock Art Research. Ed. Helskog K., - 2001, - p.116.

settlements depended on the existing shores of the Caspian Sea. In the early Holocene era, the Ana-zaga and Gaya-aras caves reserve the status of a cult center, but new sites such as Okuzler, Ovchular, Jeyranlar, Firuz 2, etc appear as well. In the Bronze Age, the mountains Beyukdash, Kichikdash, and Jingirdag become the core of the complex. Therefore, some changes are observed in the landscape: the ritual zone is moved from Mount Kichikdash to Mount Beyukdash to the Ana zaga and Kaniza caves zone, and then to Jingirdag. The results of archaeological studies of recent years suggest that even at the end of the Pleistocenebeginning of the Holocene, the western and southern coasts of the Caspian Sea were inhabited by humans. It would be a misconception to claim that Gobustan has existed separately for thousands of years. The sites of the end of the Upper Paleolithic and Mesolithic were mainly recorded in Gobustan, in the Damjyli cave on Mount Avey (Azerbaijan), on the Mazandaran plateau (Iran), and in the mountainous part of Dagestan in the North Caucasus. The sites of Iran are of particular interest. They are recorded at the foot of the hill of Alburz and on the Mazandaran plain. There are 3 caves-coverings discovered in this area, named Gary-Kamarband, Khotu and Ali Tappeh (Ghar-I Kamarband, Hotu and Ali Tappeh)⁹⁰. Monument of the Mesolithic period Ali Tappeh dates from 11 300 - 10 200 BP⁹¹. In the North Caucasus, 6 Mesolithic monuments are known: Choh, Mekegi, Kozma-noho, Shau-legit, Sosruko, and Medovaya Cave 2. According to available data, the main Mesolithic monuments of rock art are concentrated in the mid-mountain part of the North Caucasus in Dagestan on the walls of the grottoes of Chuval-Khvarabnokho and Chinna-hitta, where painted images are recorded⁹². They date within VIII-VI thousand BC⁹³. Thus, starting

⁹⁰ Fisher W.B. The Cambridge History of Iran, Volume 1.- Cambridge: at the University press, -1968.- pp.403-404.

⁹¹ Mc Burney C.B. M. and Rosemary Payne. The Cave of Ali Tappeh and the Epi-Paleolithic in N.E. Iran // In Proceedings of the Prehistoric Society, -1969. Volume 34, - p. 385-413.

⁹² Нарочницкий А.Л. История народов Северного Кавказа / А.Л. Нарочницкий - Москва: «Наука», - 1988. – 422 с., с. 22-23.

⁹³ Семенов В. Первобытное искусство. Каменный век. Бронзовый век / Семенов В. - С.-Петербург: «Азбука-Классика», - 2008. - с.180.

from the 14 000 years of BP, the archaeological complex of Gobustan covered the territory of the Beyukdash, Kichikdash, and Jingirdagh mountains, Shongar and Shykhgaya lower terraces of which were washed by the Caspian (Khvalynsky) Sea. At this time, only the site of Gayaarasy was inhabited by the Homo sapiens sapiens. In the chronological framework of the end of 14 000-9 030 (BP) years ago, the caves of Ana zaga and Gayaarasy were also inhabited by Homo sapiens sapiens. Thus, dated archaeological materials discovered on the western and southern coast of the Caspian Sea suggest that settlers of the Mesolithic era in northern Iran settled caves - the shelters of Ghar-I Kamarband, Khotu, Gary-Komishan, Ali Tappeh; in the North Caucasus, Chokh, Mekegi, Kozma-noho, Shau-legit, Sosruko and Medovaya Cave - 2 approximately 12 000 - 8 000 thousand years ago; on the territory of Azerbaijan in the Kazakh region, the Damdjily settlement and in Gobustan on the upper terraces of the Beyukdash and Kichikdash mountains of the Ana zaga, Kaniza and Gayaarasy caves were settled 10500 - 9030 (BP) years ago94. People who inhabited Gobustan at the end of the Upper Paleolithic-Mesolithic were engaged in fishing, hunting, gathering, and hunting seals and jeyrans.

9000 -7800 years ago (BP), Neolithic culture in Gobustan was identified in the caves of Ana zaga, Kaniza (Dashalty VIII), Ovchular on Mount Beyukdash, Firuz, Gayaarasy and Jeyranlar on Mount Kichikdash⁹⁵. The existence of the Neolithic in Gobustan was shown by archaeological excavations carried out in the Kaniza sub-rock refuge and the Ovchular site of the upper terrace of Mount Beyukdash, radiocarbon dating in the Ana zaga cave on the upper terrace of Mount Beyukdash, in the sites - the shelters of Gayaarasy and Firuz 2 of Mount

⁹⁴ Farajova M. Reconstruction of the Archaeological Landscape of the Western Shore of the Caspian Sea at the End of Upper Pleistocene-Early Holocene// IGCP 610. Third Plenary Conference and Field Trip from the Caspian to Mediterranean: Environmental Change and Human Response during the Quaternary. Proceedings Ed: A.Gilbert, V.Yanko-Hombach, T.Yanina. Astrakhan – Moscow: MSU - 22-30 September, - 2015, - c.75-77.

⁹⁵ Фараджева М.О датировке наскальных изображений Гобустана (Азербайджан)// Махачкала: «История, археология и этнография Кавказа», - 2021. V. 17. № 3, - с. 657-682.

Kichikdash. During this period in Gobustan, starting from the 7th millennium BC., the formation and development of the productive farms are observed. Based on faunal materials (bone) and charcoal, AMS dating showed that the early settlement of Gobustan in the Neolithic era was observed in the Ana zaga cave at approximately 8 996 \pm 33 BP⁹⁶, at the Firuz site from 7 850 \pm 30 BP⁹⁷, in the cave of the Gayaarasy shelter from 7 880 +/- 30 BP⁹⁸. As a result, in the cave of Ana zaga and Kaniza, an early Neolithic is recorded, in the sites of Firuz and Gayaarasy, a late Neolithic. Note that the Neolithic settlements in Gobustan were concentrated on the upper terraces of the Beyukdash and Kichikdash mountains and at some time in the Jeyranlar site⁹⁹. Studies of the Neolithic and Eneolithic (VII-VI millennia BC) settlements of Hasansu I in the Agstafa region, Geitepe and Mentash in the Tovuz region, Polutepe, Alkhantepe in the Jalilabad region, Kamiltepe in the Agdjabedy region showed that in this area existed an early agricultural culture¹⁰⁰

A special group of monuments are Eneolithic monuments. Radiocarbon AMS dating based on faunal materials (bone) and coal

⁹⁶ The University of Waikato, Hamilton, New Zealand, 13.04.2010, № 23362.

⁹⁷ BETA Analytic INC., Miami, Florida, USA, 30.07.2014, №384887.

⁹⁸ BETA Analytic INC., Miami, Florida, USA, 30.07.2014, №386 822.

⁹⁹ Фараджева М. Реконструкция археологического ландшафта Гобустана в эпоху неолита, // Azərbaycan Arxeologiyası və Etnoqrafiyası -2015, Bakı: Nafta-Press, 2016, c.20-30.

¹⁰⁰ Alməmmədov X.I., Quluzadə N.V. "Qarabağ neolit-eneolit ekspedisiyası" nın apardığı arxeoloji tədqiqatların qısa hesabatı. //Azərbaycanda Arxeoloji tədqiqatlar//, 2009. AMEA Arxeologiya və Etnoqrafiya İnstitutu. Bakı, 2010, s.74-82 Alməmmədov X.I., Quluzadə N.V. "Qarabağ neolit-eneolit ekspedisiyası" nın apardığı arxeoloji tədqiqatların qısa hesabatı. // Azərbaycanda Arxeoloji tədqiqatlar //, 2009. AMEA Arxeologiya və Etnoqrafiya İnstitutu. Bakı, 2010, s.74-82.; Əliyev T., Helvinq B. /Azərbaycanda Arxeoloji təqqiqatlar -2009. Bakı 2010, s. 281-285.; Quliyev F., Nişiyaki Y., Hüseynov F. və b.. Göytəpə neolit yaşayış yerində arxeoloji qazıntılar / Azərbaycanda Arxeoloji tədqiqatlar 2009. AMEA Arxeologiya və Etnoqrafiya İnstitutu, - Bakı: - 2010. - s. 45-54.; N.Ə.Müseyibli, A.M.Ağalarzadə, G.K.Axundova. Neolit dövrü Həsənsu yaşayış yerində arxeoloji qazıntılar. AAT 2011, Bakı, 2012, səh.45-49; Yoshihiro Nishiaki, Farhad Guliyev. Göytepe neolithic excavations in the middle Kura valley, Azerbaijan. Archaeopress Publishing LTD, 2020, 366 pp.

showed that early settlement of Gobustan during the Eneolithic era was observed at the Gayaarasy 7,698 +/- 30 BP, at the Firuz site from 6,890 \pm 30 BP and in the Ana zaga cave in approximately 5940 +/- 40 BP. Eneolithic settlements in Gobustan were also concentrated on the upper terraces of the Beyukdash and Kichikdash mountains. During this period, on the territory of Azerbaijan, cultures of Eneolithic-early bronze existed in the Gel Yeri in Geranboy, Ovchular tepesi in Sharur, Kyamil tepe in Agdjabedy, Alkhantepe in Jalilabad, Arabengindja, Makhta I in Sharur districts¹⁰¹.

The core of the complex in the Bronze Age was the Beyukdash, Kichikdash, and Jingirdag mountains. During *the period of the Early and Middle Bronze Age*, studies record the rise of the Caspian Sea. In the Late Bronze Age, four thousand years ago (BP) when the regression had occurred, the sea retreated¹⁰² and new rocks with petroglyphs appeared¹⁰³. Here, mainly at the foot of the Kichkdash and Beyukdash mountains, ancient burials and places of worship are concentrated in the foothills of the Kanizadag volcanic mountain and Goturdag hill. During this period, round-shaped settlements arose at the foot of the mountains, and a tradition of burial in mounds appeared. In the Bronze Age, the territory of Azerbaijan was inhabited by numerous settlements. One of the Gobustan's nearby was Agdashduzu, Bendustu, and Turkan on the Absheron Peninsula; in Gabala Gala yeri-Gash yeri; in the Jalilabad district of Khudu tepesi¹⁰⁴.

¹⁰¹ Baxışəliyev V., Marro C., Aşurov S. Ovçular təpəsində 2009-cu ilin arxeoloji tədqiqatları. / Azərbaycanda Arxeoloji təqqiqatlar 2009. Bakı: 2010, s. 274-280.; C.Marro, V.Bakhshaliyev, S.Ashurov. Excavations at Ovcular tepesi (Nakhchivan, Azerbaijan). Second preliminary report: the 2009-2010 seasons. Anatolica Antiqua. XIX (2011). Pp.53-100.; Abbas Seyidov, Vəli Baxşəliyev. Ərəbyengicə. Bakı, 2009, 158 səh.; S.H.Aşurov, S.A.Hüseynova, F.A.Əliyeva. I Maxta ilk tunc dövrü abidəsi. I Kitab. Bakı, 2020, 146 səh.

¹⁰² Yanko Hombach V. The Black Sea Flood Question Changes in Coastline, Climate and Human Settlement / Yanko Hombach V., Alan S.Gilbert, Nikolae Panin [at al] // the Netherlands: Springer, Dordrecht. – 2007. - 978 p.

¹⁰³Farajova M. Reconstruction of the Archaeological Landscape of the Western Shore of the Caspian Sea at the end of Upper Pleistocene and Holocene // Torun: "Art of the Orient", - 2018, Vol.7, - c. 63-82.

¹⁰⁴ Əliyev, İ.N. Abşeronda 2013-2014-cü illərdə arxeoloji işlər / İ.N.Əliyev,

Monuments of Bronze and Early Iron in Azerbaijan were studied in the settlements of Makhta, Ashagy Dasharh, Geitepe, Gala yeri-Gash yeri, in the village of Khynalyg, the settlement of Dubendi, Sarvantepe, Yastytepe, Mingechevir, the settlement of Khudu in the Jalilabad region and on the numerous monuments of Karabakh¹⁰⁵. In the ancient period and the Middle Ages, Gobustan represented approximately the present landscape without much change. During this period, caravanserais, places of worship-sanctuaries, medieval cemeteries, and burials with tombstones covered by Arabic and Farsi inscriptions, as well as various images on stones, appear on the territory of Gobustan. Residents of the Gobustan Mountains migrate to low-lying territories, but in the mountains, there appeared "gyshlags" for seasonal use. So, let's emphasize that the uniqueness of Gobustan is that here you can find petroglyphs created over 14 thousand years, from the end of the Upper Paleolithic to the beginning of the XX century. The settlements of the end of the Upper Paleolithic and Mesolithic were mainly located on the upper terraces of the mountains. In the Neolithic and Eneolithic with the rise of the level of the Caspian Sea, the caves retained the status of the main place of residence. At the end of the Eneolithic, during the Early and Middle Bronze Ages, middle terraces were also inhabited. With a decrease in sea level at the end of the Bronze Age, the middle and lower terraces started becoming inhabited. Despite the fact that the medieval period is extremely scarce and fragmented, the existence of such monuments as the caravanserai of the XV century and sanctuaries with the same petroglyphs on the walls as in Gobustan, indicate a long

C.İ.Əliyev // AAT 2013-2014, - Bakı: - 2015. - səh.189-193.

¹⁰⁵ Асланов, Г.М. Древний Мингечаур (Эпоха энеолита и бронзы / Г.М.Асланов, Р.М.Ваидов, Г.И.Ионе – Баку: -1959. - 190 с., 47 таб.; Сәfərov, H. Qədim Qarabağ (Tarixi-arxeoloji tədqiqat: tunc və erkən dəmir dövrü) / H.Cəfərov. – Bakı: 2020. - 526 s.; Müseyibli, N. Zəyəmçay nekropolu / N.Müseyibli , Şamil Nəcəfov. – Bakı: - 2019. - 422 s.; Nəcəfov, Ş.N. Sarvantəpədə 2013-cü ildə aparılan arxeoloji tədqiqatlar haqqında // - Bakı: AAT 2013-2014, - 2015. - s.176-182; Nəcəfov Ş.N. Yastıtəpə son tunc-ilk dəmir dövrü yaşayış yerində aparılmış arxeoloji qazıntıların yekunları. Ş.N.Nəcəfov. Z.C.Hacılı // AAT 2011, - Bakı: - 2012, s.196-206; Ristvet, L. On the Edge of Empire: 2008 and 2009 Excavations at Oglanqala, Azerbaijan / L.Ristvet, H.Gopnik, V.Bakhshaliyev [et al.] // American Journal of Archaeology, - 2012/ April; Vol.116. No.2. - p.321-362.

cultural continuity.

The **"Conclusion"** of the dissertation summarizes the main results of the study. The Gobustan Rock Art Cultural Landscape (as it has been on the UNESCO list since 2007) with a huge variety of images and motifs is unique from the global perspective.

Currently, the available tested data provide the following conclusions:

The end of Upper Paleolithic - Early Mesolithic 14000 BP (12000BC).

In the initial stage of this period, there was only one site of Gayaarasy on the top of Mount Kichikdash. In the late stage, approximately 12000-8000 thousand years ago, settlers of the Mesolithic era settled in the north of Iran caves - the Ghar-I Kemerbend cover, Khotu cave, Gary-Gomishan, Ali-Tappeh¹⁰⁶; on the territory of Azerbaijan in the Kazakh region, the Damdjily site (5-th layer)¹⁰⁷ and in Gobustan on the upper terraces of the Beyukdash and Kichikdash mountains of the shelter caves of Ana zaga, Kaniza, Gayaarasy; in the North Caucasus, Chokh, Mekegi, Kozma-noho, Shau-leget, Sosruko and Medovaya Cave 2.

Mesolithic epoch - End 14000 BP - 9030 BP (end 12000 - 8000BC).

¹⁰⁶ Naderi-Beni, A. Caspian Sea-level changes during the last millennium: historical and geological evidence from the south Caspian Sea / Naderi-Beni A., H. Lahijani, R. Mousavi Harami [et al] // Climate of the Past, - July 2013. N 9, -1645-1665 p.; Farajova M. Reconstruction of the Archaeological Landscape of the Western Shore of the Caspian Sea at the End of Upper Pleistocene-Early Holocene// IGCP 610. Third Plenary Conference and Field Trip from the Caspian to Mediterranean: Environmental Change and Human Response during the Quaternary. Proceedings Ed: A. Gilbert, V. Yanko-Hombach, T. Yanina. Astrakhan – Moscow: MSU - 22-30 September, - 2015, - p. 75-76.

¹⁰⁷ Yoshihiro Nishiaki, A.Zeynalov, M.Mansurov, F.Guliyev. The Mesolithic-Neolithic interface in the Southern Caucasus: 2016–2017 excavations at Damjili Cave, West Azerbaijan. // Archaeological Research in Asia, Elsevier – 2019, September, Volum 19, 100140; Yoshihiro Nishiaki, A.Zeynalov, M.Mansurov, F.Guliyev.Radiocarbon chronology of the Mesolithic-neolithic sequence at Damjili cave,Azerbaijan,Southern Caucasus// Radiocarbon, Cambridge University Press on behalf of the University of Arizona - 2022, p 1–14.

Stage I: End 14000 BP - 10480 BP (end 12000 - 9000 BC)

During this period, the caves of Ana zaga, Okuzler on the upper terrace of Mount Beyukdash, the sites of Gayaarasy, Jeyranlar, and Firuz2 on Mount Kichikdash were inhabited.

Stage II: 10480 BP - 9030 BP (9000 - 8000 BC)

During this period, life continued in the previously developed Ana zaga refuge cave on Mount Beyukdash and the Gayaarasy shelter on Mount Kichikdash.

Neolithic -9 000 -7800 BP (7000 BC)

During this period, on the territory of Azerbaijan, there were Neolithic cultures in the caves and shelters of Ana zaga, Kaniza on Mount Beyukdash, Gayaarasy, Jeyranlar and Firuz 2 on Mount Kichikdash in Gobustan; the settlements of Polutepe, Alkhantepe in the Jalilabad district and Hasansu in the Agstafa district and Damdjily (4-th layer) in Kazakh district¹⁰⁸.

Eneolithic - 7800 – beginning 6000 BP (6000 – beginning 4000 BC)

Eneolithic sites in Gobustan were concentrated on the upper terraces of the Beyukdash and Kichikdash mountains in the caves and shelters of Ana zaga, Okuzler, Ovchular on Mount Beyukdash and Gayaarasy, Firuz 2 on Mount Kichikdash; on the territory of Azerbaijan, cultures of Eneolithic-early bronze age existed in the Gel Yeri in Geranboy, Ovchular tepesi in Sharur, Kamil tepe in Agjabedi, Alkhantepe in Jalilabad, Sirab-Nakhchevan in Babek, Mentesh tepe in Tovuz, Damdjily (3-rd layer) in Kazakh districts.

The Bronze Age - The Bronze Age - 6000 - the end of 4000 BP

¹⁰⁸ Г.М.Асланов, Р.М.Ваидов, Г.И.Ионе. Древний Мингечаур (Эпоха энеолита и бронзы). Баку, 1959, 190 стр, 47 таб.; Hidayət Cəfərov. Qədim Qarabağ (Tarixiarxeoloji tədqiqat: tunc və erkən dəmir dövrü). Bakı, 2020, 526 səh.; Nəcəf Müseyibli, Şamil Nəcəfov. Zəyəmçay nekropolu. Bakı 2019, 422 səh.; Ş.N.Nəcəfov. Sarvantəpədə 2013-cü ildə aparılan arxeoloji tədqiqatlar haqqında. AAT 2013-2014, Bakı, 2015, səh.176-182; Ş.N.Nəcəfov. Z.C.Hacılı. Yastıtəpə son tunc-ilk dəmir dövrü yaşayıç yerində aparılmış arxeoloji qazıntıların yekunları. AAT 2011, Bakı, 2012, səh.196-206; L.Ristvet, H.Gopnik, V.Bakhshaliyev, H.Lau, S.Ashurov, R.Bryant. On the Edge of Empire: 2008 and 2009 Excavations at Oglanqala, Azerbaijan. American Journal of Archaeology. Vol.116. No.2. Pp.321-362

(4000 - the end of 2000 BC)

Monuments of the Bronze Age in Gobustan are concentrated mainly on the rocks of the Beyukdash, Kichikdash, Jingirdag, Shongardag, Shykhgaya and Dashlydag mountains, the Daire settlement at the foot of Mount Beyukdash, an identical settlement is registered on Mount Kichikdash; on the territory of Azerbaijan, one of the settlements nearby Gobustan on the Absheron Peninsula was in Agdashduzu, Bendustu, Turkan; in Gabala - Gala yeri - Gash yeri; in the Jalilabad district of Khudu tepesi, Gemigaya in Nakhchevan, Damdjily (2-nd layer) in Kazakh districts.

Early Iron Age - end 4000 - beginning of 3000 BP (the end of 2000 – the beginning of 1000 BC)

During this period, the Ana zaga cave on the upper terrace of Mount Beyukdash and Firuz 2 on Mount Kichikdash were inhabited in Gobustan; on the territory of Azerbaijan, the settlements of Makhta, Ashaga Dasharh, Geitepee, Gala yeri-Gash yeri, in the village of Khynalyg in the Guba region, the settlement of Dubendi on the Absheron Peninsula, Sarvantepe, Yastytepe and the settlement of Khudu in the Jalilabad region.

Middle Ages

In the Middle Ages, Gobustan approximately represented the present landscape without much change. The ancient and early medieval period in Azerbaijan is represented on the Absheron Peninsula, in Geitepe, Garajamirli, in ancient Gabala, Galatepe, Shamkir, Agsu, and Damdjily (first layer). These are the most important of the facts characterizing changes in cultural and historical processes and the archaeological landscape of Gobustan and nearby territories from the early Mesolithic (13700 BP) to the late medieval time.

The analysis of the rock images of Gobustan allows us to conclude that they have their own, unique appearance, possessing a number of specific features, inextricably connected with the historical past of the ancient population and neighboring territories, which allow them to be distinguished as Gobustan-type petroglyphs.

The main provisions and conclusions of the dissertation were reflected in the following scientific works of the author:

- 1. К вопросу датировки наскальных изображений археологического комплекса Гобустан// Баку: "İRS Heritage" Наследие журнал. 2008, № 6 (36), с. 34-42.
- A GIS database of the Gobustan rock art cultural landscape, tezis, WAC-6 Six World Archaeological Congress. Ireland-Dublin, 29 June-4-th July 2008, p. 84.
- Movement and composition in Rock Art of Gobustan (Azerbaijan).
 // Global Rock Art Congress, Annals of the XVI World Congress of the International Federation of Rock Art Organizations, - Piau, Brazil: - 28 June - 3 July, 2009. - p.110-111.
- 4. Azərbaycan qayaüstü incəsənəti / -Bakı: "Aspoliqraf", 2009. 319 с. (на 3-х языках: азерб., англ., рус.).
- 5. Bronze Age Culture in Rock Art of Azerbaijan // 2-nd International Congress of Eurasian Archaeology. East Anatolian and Caucasian Bronze Age Cultures. Tire-Izmir, Turkey, 1-5 mart 2010, s.135-151.
- Pleistocene art of Gobustan // "Qarabağ daş dövründə", Azərbaycanda Azıx mağarasının kəşvinin 50 illiyinə həsr olunmuş Beynəlxalq elmi konfransın materialları, - 3-7 oktyabr-2010, - c. 257-269.
- Protection, Preservation and Management of Gobustan Rock Art Cultural Landscape // International Conference on petroglyphs "Petroglyphs of the World: Their Interpretation and Preservation", Seoul, Korea, - 26-27 Oktyabr 2010, - s. 225-228.
- 8. Gobustan Rock Art Cultural Landscape // "Adoranten". Scandinavian Society of Prehistoric Art, 2011. p. 41-67.
- Инновационный процесс в музейно-археологическом комплексе Гобустан 2011 // - Труды САИПИ. Наскальное искусство в современном обществе (к 290-летию научного открытия Томской писаницы). Материалы международной научной конференции, т.І, - Кемерово: -22-26 августа, -2011, - с.164-166.
- 10. Qobustan // -Bakı: Almaniya-Azərbaycan Əlaqələndirmə və

İnformasiya Jurnalı, Şərq-Qərb mətbəəsi, - Mart 2011. - s.66-69.

- Неолит Гобустана // Сборник материалов международной научной конференции "Раннеземледельческие культуры Кавказа". Azərbaycan Milli Elmlər Akademiyası Arxeologiya və Etnoqrafiya İnstitutu. "Qafqazın Erkən Əkinçilik Mədəniyyətləri" (məqalələr toplusu) Beynəlxalq elmi konfrans. – Bakı: AFPoliqrAF, 2-4 noyabr, - 2012,- c. 62-68.
- Qobustan / Azərbaycan Respublikası Mədəniyyət və Turizm Nazirliyi, "Digital Age"nəş-tı, (üç dildə: azərbaycan, ingilis, rus), - 2013. – 22 s.
- 13. Innovative Approach to the Creation of New Museum Complex in Gobustan National Historical-Artistic Reserve [Electronic resource] /E- Journal № 2. 2013.
- Pleistocene Art of Azerbaijan [Electronic resource] // Pleistocene Art of the World. Pleistocene Art in Europe. İFRAO Congress, -Foix. France: Directed by Jean Clottes, - 6-11 September 2010. -2013 № 5, p. 930- 942.
- 15. Archaeological landscape of Gobustan at the end of Upper Pleistocene and early Holocene // IGCP 610 "From the Caspian to Mediterranean: Environmental change and human response during the Quartenary". Baku: Nafta-Press, -2014, p. 186–187.
- Boats in Rock Art of Gobustan. // In V. Roggen (ed.) Thor Heyerdahl's Search for Odin. - Oslo, Novus Press, - 2014. - p. 191-201.
- 17. Археолого-этнографический музейный комплекс Гобустан // «Архаическое и традиционное искусство: проблемы научной и художественной интерпретации». Материалы Всероссийской конференции (с международным участием), -Изд-во Института Археологии и Этнографии СО РАН, -Новосибирск: 12-14 ноября, - 2014, - с.147-153.
- Archaeological Landscape of Gobustan at the end of Upper Pleistocene and Early Holocene // Geology and Geophysycs İnstitute of the Azerbaijan National Academy of Sciences, Baku: 12-20 October, - 2014, - p.186-187.
- 19. Reconstruction of Archaeological Landscape of Gobustan and the relationship with the Caspian Sea level changes at the end of

Upper Pleistocene and Early Holocene [thesis - poster] // 2-nd International Congress on Stratigraphy STRATI 2015, - Graz, Austria - 19-23 July, - 2015.

- Gobustan Rock Art Cultural Landscape in Modern Society// Proceedings of the XIX International Rock Art Conference IFRAO 2015, - Cáceres, Spain - 31 Avqust - 4 September, 2015, -p.2463-2477.
- Gobustan Rock Art Cultural Landscape in Modern Society [thesis - poster] // The Alta Conference on Rock Art III: Perspectives on differences in Rock Art, UiT Arctic University of Norway and The World Heritage center for Rock Art Alta Museum, - Tromso, Norway, - 15-18 September, - 2015.
- 22. Qobustan qayaüstü incəsənətində qayıq təsvirləri // -Bakı: "Tarix, İnsan və Cəmiyyət" jurnalı,- 2015, 1(12), s. 33-41.
- 23. Reconstruction of the Archaeological Landscape of the Western Shore of the Caspian Sea at the End of Upper Pleistocene-Early Holocene// IGCP 610. Third Plenary Conference and Field Trip from the Caspian to Mediterranean: Environmental Change and Human Response during the Quaternary. Proceedings Ed: A.Gilbert, V.Yanko-Hombach, T.Yanina. Astrakhan, Russia, -Moscow, MSU: - 22-30 September, - 2015, - p. 185 – 187.
- 24. Культурно-исторический контекст археологического комплекса Гобустан //-Москва: Российская Археология, 2015, № 4, с. 50-63.
- 25. Historical Reconstruction of Gobustan Archaeological Complex at the end of Upper Pleistocene and Early Holocene: cultural context // Proceedings of the XIX International Rock Art Conference IFRAO 2015, - Cáceres, Spain, - 31 August - 4 September, - 2015, - p. 531-538.
- 26. Комплекс археологических памятников Гобустана. // -Bakı: Avrasiya Universiteti. "Sivilizasiya" jurnalı, - 2015, № 6, - s. 184-193.
- 27. Реконструкция археологического ландшафта Гобустана в эпоху неолита // --Bakı: Azərbaycan Arxeologiyası və Etnoqrafiyası jurnalı. Bakı. – 2015, - №2, - с. 20-30.
- 28. Gobustan State Historical Artistic Reserve // The Rock Art of

Azerbaijan. Emmanuel Anati, Dj.Rustamov, F.Muradova, M.Faradjeva "Atelier Monographs", - 2015, - p. 15-25.

- 29. Методы изучения и научного документирования археологического комплекса Гобустан // Вакı: Azərbaycan Arxeologiyası və Etnoqrafiyası, 2016. №2. с. 4-18.
- Gobustan Rock Art Cultural Landscape // Guadernos de arte rupestre (Ispan, ingilis və fransız dillərində) [Electronic resource], - 2016, - №7, - p.213-232.
- Gobustan (Azerbaidjan). / L'art de la préhistoire. Sous la direction de Carole Fritz. – France: Editions CItadelles et Mazenod, - 2017. 584 p.- p. 52-67.
- Мир наскального искусства Азербайджана / М.Н.Фараджева. Институт Археологии и Этнографии Национальной Академии Наук Азербайджана. – Баку: издательство «Орхан» ООО, - 2017 – 143 с.
- 33. Святилища и захоронения Гобустана. // Bakı: "Tarix, İnsan və Cəmiyyət" jurnalı, Azərbaycan respublikası Təhsil Nazirliyi Bakı Pedaqoji kadrların İxtisasartırma və yenidən hazırlanma institutu, 2018. № 1(20), s. 60-70.
- Новые данные по геолого-географической характеристике Гобустан // -Bakı: "AMEA Xəbərlər. İctimai Elmlər Seriyası", -2018. N 3, - с.76-83.
- 35. About specifics of rock art of Gobustan and some innovative approaches to its interpretation ("Firuz 2" shelter)// "Quaternary International", Elsevier, 2018, Oct.20, Vol. 491, -p.78-98.
- 36. Reconstruction of the Archaeological Landscape of the Western Shore of the Caspian Sea at the end of Upper Pleistocene and Holocene // Torun: "Art of the Orient", - 2018, Vol.7, - c. 63-82.
- Петроглифы Гобустана как исторический источник для изучения архаических культов// -Челябинск: «Дизайн. Искусство. Промышленность» -Изд. Дом Технэ, - 2018(5), с. 62-73.
- 38. К вопросу культурно-исторической интерпретации петроглифов Гобустана // -Bakı: "AMEA Xəbərlər. İctimai Elmlər Seriyası" N 2, -2018, с. 37-51.
- 39. Новые подходы и методы в изучении наскального искусства

Гобустана //- Вакı: "Tarix və onun problemləri", - 2018 (2), - с. 296-300.

- 40. О новых петроглифах горы Беюкдаш (верхняя терраса, камень 29, южная сторона) // -Вакı: "Sivilizasiya", 2018, 37 (7) № 1, с. 141-147.
- 41. Böyükdaş dağının yeni petroqlifləri haqqında (yuxarı səki, daş 29, şərq hissəsi) // -Bakı: "H.Əliyev ad. Azərbaycan Ali Hərbi Məktəbi. Elmi Əsərlər Məcmuəsi", 2018, 2(31), s.16-18.
- 42. Гаяарасы- самая древняя из известных стоянок Гобустана // -Bakı: "Dövlət İdarəçiliyi Nəzəriyyə və Təcrübə" jurnalı. Azərbaycan Respublikasının Prezidenti yanında Dövlət İdarəçilik Akademiyası, - 2018/ 4(64), - с.277-286.
- 43. Qala Abşeronun arxeoloji və entoqrafik irsi kimi // Bakı: "Dövlət İdarəçiliyi Nəzəriyyə və Təcrübə", Azərbaycan Respublikasının Prezidenti yanında Dövlət İdarəçilik Akademiyası jurnalı, - 2018. № 1(61), - s. 203-214.
- 44. Наскальное искусство Гобустана // -Вакı: "Azərbaycan xalçaları", 2018. Том 8, № 26, с.115-129.
- 45. Святилища и захоронения Гобустана. //-Вакı: "Tarix, İnsan və Cəmiyyət",- 2018. № 1(20), s. 60-70.
- 46. Стоянка Марал на горе Беюкдаш // -Bakı:"Tarix, İnsan və сәтіууәt",- 2018. 4(23), с. 23-29.
- 47. Планы жилищ на скалах Гобустана //- Bakı: Milli Azərbaycan Tarixi Muzeyi, 2018, с. 217-225.
- 48. Роль музеев в образовательном процессе Азербайджана // "Muzeyşunaslığın tədrisi problemləri" II respublika elmi konfransın materialları, - Bakı, - 05 Aprel, - 2018, - с.90-93.
- 49. Стоянка Овчулар на верхней террасе горы Беюкдаш// -Вакı: "Azərbaycan xalçaları", - 2019. – т. 9, № 30, - с.128-135.
- 50. Археологический комплекс стоянки «Овчулар загасы» на верхней террасе горы Беюкдаш //-Махачкала: «История, археология и этнография Кавказа», - 2019.15 №3, - 470-484.
- 51. Новые концепции исторических заповедников Азербайджана: интеграция в современный мир// "Azərbaycan Muzeyi 100. Muzeyşunaslığın tədrisi problemləri" III respublika elmi konfransın materialları, Bakı, 8 Fevral, -2019.

- s. 29-37.

- 52. Наскальные изображения Кельбаджар и проблемы их изучения // -Bakı: "Memar" jurn., 2021. N29(fevral), c.162-169.
- 53. Планы структур поселений и жилищ на наскальных изображениях Гобустана // -Bakı: "Memar" jurn., 2021. N31(sentyabr), c.216-223.
- 54. На лодках по Каспию через века и тысячелетия (VIII тыс.до н.э. XII век) // -Bakı: "Dövlət İdarəçiliyi Nəzəriyyə və Təcrübə" jurnalı. Azərbaycan Respublikasının Prezidenti yanında Dövlət İdarəçilik Akademiyası, 2021. №1(73), с.189-204.
- 55. О датировке наскальных изображений Гобустана (Азербайджан)//-Махачкала: «История, археология и этнография Кавказа»,- 2021. V. 17. № 3, с. 657-682.

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