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**SOME PROBLEMS OF RESEARCH
OF THE LATE STONE AGE MONUMENTS
IN THE SUBURBS OF THE NORTH- EAST ARAL**

The article was considered on the geographical location of the North-East Aral region and archaeological research of monuments held at each stage of the late Stone Age. Paleolithic monuments are especially important in the solution of the urgent problems of the Stone Age epoch of the Paleolithic Aral (the development of the Stone Age cultures, labor tools, etc.). In addition, there were scientifically analyzed the definition of the Neolithic era of the later Stone Age, its location, the discovery and study of the Kelteminar culture, and research about dating and periods of S.P. Tolstov and A.A. Formozov. Also, the results of excavations and prospecting works were conducted in the parking of I, II Sekseuil by A.V. Vinogradov.

Key words: North-East Aral area, parkings, stone tools, ceramics.

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**Солтүстік-Шығыс Арал маңындағы кейінгі
тас ғасыры ескерткіштерінің зерттелу тарихнамасы**

Мақалада Солтүстік-Шығыс Арал маңының географиялық орналасу аймағы және ашылған кейінгі тас ғасырының ескерткіштерінде әр кезеңде жүргізілген археологиялық зерттеу жұмыстары қарастырылды. Ең алдымен Арал маңы палеолит тұрақтарының тас дәуіріндегі өзекті мәселелерін (тас дәуірі мәдениеттерінің дамуы еңбек құралдарының эволюциясы т.б.) шешуде палеолиттік ескерткіштердің алар орны ерекше. Сонымен қатар кейінгі тас ғасырының неолит дәуірінің анықтамасы, орналасу аймақтары, Кельтеминар мәдениетінің ашылуы мен зерттелуі және С.П. Толстов пен А.А. Формозовтың берген мерзімдеулері мен кезеңдеулері ғылыми тұрғыдан талданады. Сондай-ақ А.В. Виноградовтың Сексеуіл I, II тұрақтарында жүргізілген қазба және барлау жұмыстары нәтижелері сараланады.

Түйін сөздер: Солтүстік-Шығыс Арал маңы, тұрақтар, тас құралдар, керамика.

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История изучения памятников позднего каменного века в Северо-Восточном Приаралье

В статье рассмотрены вопросы географического расположения Северо-Восточного Приаралья и археологического исследования, проведенного в разные периоды на памятниках позднего каменного века. Особое место в решении актуальных проблем палеолита Приаралья (развитие культуры каменного века, эволюция орудий труда и др.) занимают стоянки каменного века. Кроме того, с научной точки зрения проанализированы определения эпохи неолита позднего каменного века, зоны дислокации, изучение и открытие Кельтеминарской культуры и т. д. Анализируются с научной точки зрения археологические периодизации и хронологии С.П. Толстова и А.А. Формозова. А также рассмотрены результаты разведывательных и раскопочных работ А.В. Виноградова на стоянках Саксаул I, II.

Ключевые слова: Северо-Восточное Приаралье, стоянки, каменные орудия, керамика.

Introduction

Research on the monuments of the late Stone Age monuments of the North-East Aral region was not sufficiently studied, it was limited by exploration. Many of the major parking of the late Stone Age – the Neolithic era have been identified in these regions. Among them was the Sekseuil parking, which was opened in 1944. As a result of the collection of stones gathered from the open ground surface of this parking, the investigator A.A. Formosov referred it to the monument of the Kelteminar culture (Formozov, 1945: 3-5). The materials collected from the parkings in the suburbs of the North East Aral in Neolithic epic Kontu, Zhelgi-Zagem (nowadays single stream), Tampi, Sholkum, Kara-sandyk, Akespe parkings and groups of parkings were similar to Sekseuil parking (Vinogradov, 1955: 76-81).

In 1954-1958 exploring work of Khorezm archaeological and ethnographic expedition on the initiative of A.V. Vinogradov research group (the head of the expedition S.P.Tolstov) discovered the monuments of Zhalspak 1-6, Esentobe in Zhana Darya and the Syrdarya river channel, monuments of Kosmola 1-6, Aimora, Talas 1 between 1963 and 1973 (Vinogradov, 1963: 91-97). The collection of found stone tools were similar to the stones found in the monuments of Sekseuil I, II which found in the proximity of the stone blades such as blades, slit plates, sharp edges with vertical and blunt faces made of local, quartzite and imported raw materials (Vinogradov, 1979: 3-10). The arrowheads are flat, most of them were taken from the surface; their length is 3-5 cm. The complex of ceramic vessels

is flat, the edges of the vessels are straight, slightly thick, sometimes cut by the edge, and the wedge is not clearly carved. Additives in clay is: wood and organic. Ornamental patterns were decorated by: hollow zigzags, horizontal and recurring vertical, scratched waves, and short with stamp imprints (Tazhekeyev, 2012: 102-108).

Geographical location of the region of the Aral Sea considered to be the fourth largest lake in the Eurasian continent, and it is referred as a lake in the scientific circulation, but having a small salty water is considered as a sea (Berg, 1908: 24).

The Aral Sea is located in the territory of Uzbekistan and Kazakhstan (now Kyzylorda and Aktobe region) in the desert of the Turan lowland, on the eastern edge of the Ustyurt Plateau. People populated by ancient times in the banks of the Amu Darya and Syr Darya rivers flowing into the Aral Sea and it is rich in plants and animal habitat (Andrianov, 1960: 3-8).

The Ustyurt plateau and the plains occupy the most part of the Aral Sea area. The western part of the region is surrounded by the Ustyurt Plateau, surrounded by deserts, surrounded by vertical hills, dry cliffs and ravines. In the northern part of the territory is located the Mugalzhar Mountains, the southern ridge of the Ural Mountains. They stretch from the north to the south and the slopes are like a circular ceiling with fine stones and stone peaks.

The Syr Darya River, which flows into the Aral Sea, crosses the territory of four Central Asian states (Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan) and has 497 permanent streams that the length is about 10 kilometers in its arena. The total length of this river is 14750 km.

The southern part of the Aral Sea is occupied by the Kyzyl Kum desert, a large part is surrounded by sandy massifs, some parts are surrounded by various vegetation, they stretch to the north with near Karakum of Aral, Big and Small Borsuk sands (Andrianov, 1960: 201-204).

2002-2005 and 2008-2010 there were done complex study to determine the life of the Aral Sea by researchers of Siberian Branch of the Russian Academy of Sciences of the Institute of Geology and Mineralogy named after V.S.Sobolev and foreign scientists by organizing hemorphological and geo-archeological studies on the dried bottom of the Aral Sea (Krivonogov, 2012: 46-53).

Methodology and Methods of Research

During the international expeditions, the age of the sea was determined by the methods used in geo-archeology, the methods used by the natural sciences, the method of radiocarbon that is by drilling and by applying this method was defined the age of the medieval Aral asar town and Kerder Mausoleum that found in the dried bottom of Aral Sea.

The results of the received radio-meter method were analyzed at the Arizona University of the USA, concluding that the age of the Aral Sea was based 18 to 24 thousand years ago.

The geologist S. Krivonogov who studied Aral Sea bottom said in his article: «The Aral is dead. Welcome the Aral!» radioactive date has been pointed out as it is about 18 thousand years old (and up till the end of the year – 24 thousand years)».

The medieval Aral asar monument is located 60 km from the coast of the Aral Sea placed under the water of 20 meters is similar to the age of archaeologists obtained by the radiocarbon analysis. Archaeologists had described this monument as the 14th century. That is, according to scientists, in the medieval times the ecological situation of the Aral Sea was concluded that it was like to present time. The work of the international expedition was limited to medieval monuments and there was not investigated the Stone Age monuments.

Currently, more than 450 Paleolithic, about 40 Mesolithic and about 800 neolithic parkings had been identified in Kazakhstan (Baygunakov, 2003: 70).

Let us briefly speak about the history of the post-Stone Age of Kazakhstan, the history of the Neolithic monuments in Kazakhstan. The Central Asian region after joining to the Russian Empire, various military scientific expeditions were collected

and were done research works to explore the natural resources of Kazakhstan.

Members of the Russian Geographical Society, Orenburg Archival Science Commission and members of the Turkestan Archeology Amateur Club have collected stones from the monuments of Stone Age in Kazakhstan and made several records.

The research works of members of this community conducted in Mangystau, suburbs of Aral, Torgai, East and South Kazakhstan and recorded interesting monuments of these regions. The works of scientists as A.Beloslyudov, F.I. Pedeatchenko, I.T. Poslavsky, M.A. Kirkhgoft, I.A. Kastane, P.S. Nazarov, M.V. Bayaruanas, I.M. Petrijkevich, G.N. Kirillin, I.N. Bulgakov, V.Andusov were among them (Chalaya, 1970: 241-250).

In the 20-30th years of the 20th century, the Neolithic parkings on the territory of Kazakhstan can be found in the research works of some geologist-zoologist researchers as P.E. Chernyakhovsky, I.S. Zagorodonov, A.Y. Bryusov, N.Harlomov, I.P. Novokhatsky, G.A. Popov, S.I. Rudenko, A.A. Marushenko, A.L. Yanchin. Owing to these scientists, many Neolithic parkings have been included in the work «the Archeological Map of Kazakhstan» that published in 1960 (Arkheologichiskaya karta Kazakhstana, 1960).

As it was the first archaeological collection, the scholars above-mentioned, did not separate the monuments of the Neolith-Eneolithic of the Bronze Age, and the problem of elaboration was not set correctly. The question was risen in the examples of the candidate dissertation of D.S. Baigunakov on the theme: «The period of Stone Age of Kazakhstan: the history of the Study and the Main Problems» (Baygunakov, 2003).

The concepts of the location of the Neolithic era are described by M.N. Lentovsky, P. Davert, A.F. Sosedko, P.S. Rykov, B.N. Grakov and Kh.A. Alpysbaev and L.A. Chalaya.

Futher let discuss about the history of the exploration of the Stone Age monuments of the Aral region. It is worth mentioning that the archaeological and ethnographic expedition of Khorezm had started exploring the monuments of the Stone Age, which was the first to be introduced into the scientific circle, investigation of the region was held from 1946 to 1991.

The history of the stone age of the region

Studying the ancient Stone Age of the suburbs of the North-East Aral, the first monuments of these

regions were discovered under the influence of geologists, geographers and biologists. During the state control work of the Aral Sea by these scientists Sekseuil parking was discovered by the geologist A.L. Yanshin in 1938 and collected many stone tools from the monument's face. The Moscow State History Museum rediscovered the full range of rock materials as a result of expedition in 1944, further it was given a full description in the article of A.A. Formozov, it subsequently belonged to kelteminar culture, was concluded the period of the Neolithic to the Bronze Age, and some articles were published related to it (Formozov, 1946: 24-25.1950: 15).

For the first time, the Kelteminar culture was discovered by the head of the Khorezm archeological ethnographic expedition S.P.Tolstov in 1939 that opened the lower stream of the neighboring Amu-Darya river near the Zhanbas castle, and the name of the culture was named after the nearby «Kelteminar» channel (Tolstov, 1948a: 65;). The date time of culture of this is BC III-II millenniums. The distribution area of the Kelteminar culture ranges from the channels between Akshadarya Island, Uzboy, Sarykamys, the lower stream of Syr Darya River, to the mouth of the Inkardarya River, to the Zeravshan region (Tolstov, 1948b: 34-77).

The parkings of Kelteminar culture are considered as temporarily parkings and settled down for four seasons. Good parking spaces are rarely found, including the best preserved was Zhambas 4 parking. During the digging expedition work of this parking was taken materials about showing development of culture. The excavations were carried out in 1939-1940, 1945, as a result the plan was written down, the types of parkings were determined that they were as taper, covered with a tree or reed outside, and the area occupying 300 square meters. There was a large home for a large, patriotic family. Throughout the excavations, in the house was found settings of *oshak* (fire places), broken ceramic vessels and bones of animals. The *oshak* (fire places) was for every families and the middle *oshak* was fired for a long time, fire was important from this period, it is a phenomenon that is typical for the families of the Central Asian people. Bodies of fish, wild boar, deer, birds had been found mostly in the parking. The discovery of marine shells and poultry egg shells and other poultry bones had proven to be an emerging entity.

During the excavation of the Tumek-Kichidjik burial monuments on the territory of northern Turkmenistan, the first kelteminar hunter and fisherman were found and anthropological species were reconstructed (Vinogradov, 1981:90-94).

At present time about 1500 monuments of the kelteminar culture had been discovered, the excavations are Zhambas 4 near the Aral Sea, parking named after S.P. Tolstov and Kavut 7 Lyavlyakan monuments (Korobkova, 1996: 87-134).

The similarities of the things of kelteminar culture are similar to the Mesolithic of countries located near the Caspian Sea. Monuments of the suburbs of Ural and the Western Siberian Neolithic era are similar to kelteminar culture.

As a result of the research, A.V.Vinogradov said that the parking Zhambas 4, the parking after S.P. Tolstov, the parking Kavut 7 Lyavlyakan near the Aral region were subsequently attributed to the kelteminar culture, in similarity is close to the Sekseil parking.

In 2004-2011, the exploration team of Shyrik-rabat archeological expedition (head Zh. Kurmankulov) visited the lower flow of the Syrdarya, and many monuments were subtracted and included in the work «list of monuments of Kyzylorda region» the Russian version was published in 2007 and the Kazakh version in 2011. While collecting these monuments mostly was given location of the Stone Age settlements of the Aral region and the Kazaly district (Svod pamyatnikov istori kultury Respubliki Kazakhstan. Kyzylordinskaya oblast', 2007).

In addition, since 1979 in the North-East suburbs of Aral had been discovered besides the Neolithic monuments also the Paleolithic parkings. The Small Borsyk sand was first found and conducted by researchers as Zh.M. Kulumbaev, B.Zh. Aubekeov, D.P. Pozdnysheva, A.A. Slozarev, O.A. Artyukhova and others. In the parkings Aral 1, Aral 2, Aral 3 were collected stone tools from the ground surface and published articles (Artyukhova, 2001: 32-38).

The Russian scientific academy, Russia-Kazakhstan-Kyrgyzstan-Uzbekistan joint archaeological expedition (heads of academics A.P. Derevyanko and Zh.T. Taimagambetov) conducted huge exploration of the Paleolithic era in the Aral region in 1998-1999, as the results of researches of the Paleolithic, Neolithic eras were discovered parkings as Aral 1-2, 4-6, Akespe Akkyr 1,2, Aiteke bi workshop in Kazaly region, 1-12 paleolithic monuments and stone materials were collected from the surface layer (Chekha, 2012:74-80; 2014:63-72; Chekha, Kulik 2015:242-245; 2016: 114-119).

According to these expedition, scientific reports and articles were published about this research and the results were published in some articles. The stone tools found in the Paleolithic parkings of the Aral had been dated to the Early and Medium Period of the Paleolithic Period in Kazakhstan,

and has been reported in separate articles. By these materials Candidate dissertation of T.B. Mamirov was defended on the theme «Paleolith of Aral-Caspian region» and later published as a book (Taymagambetov, Mamirov, 2012: 254).

On the basis of the Aral 1-8 and Saryshyanak, Kosaman and Irgiz parkings near the Northern Aral region was defended doctoral dissertation «The stone industry in Mugojar and the Northern Aral in the Mesolith-Eneolite» by G.T. Iskakov that opened by the Russian-Kazakhstan expedition, and published some articles on the Neolithic parkings of Aral region (Iskakov, 2006:30).

The parkings opened in the North Aral area were dated to the Early or the later Neolithic, Bronze Age (Iskakov, 2006b: 108-111).

Due to the subsequent researches in medieval Aral asar, Mausoleum of Kerder found in Barsakelmes island after the Aral Sea discharge in 2001-2004, the scholars of the Margulan Institute of Archeology and the Korkyt Ata Kyzylorda State University conducted exploration work and identified the Paleolithic, Neolithic, Bronze Age settlements and parkings (Baypakov, Borofkko, Savel'yeva, Akhatov, Lobas, Yerzhanova, 2004: 236-254). Among them were the names 1-12, because they were close to the village of Tastubek near the Northern Aral region. During these years of exploration monuments near Aral city was studied by A.V. Vinogradov in 1955.

The next Stone Age of the Sekseuil parking, which was first discovered in the North Aral, was located on the hill of Termenbes mountain 8 km to north of the Sekseuils station in the Aral region, Kyzylorda Oblast. Observing the following materials collected from the surface of the monuments, A.A. Formozov claimed that a large number of quartzite rocks in this area were used by ancient people and local soil used to make ceramic dishes. In 1945, A.A. Formozov published the first article on the theme «About opening of the kelteminar cultures in Kazakhstan»

Among the ceramic vessels made of decorative ornaments found in well-prepared vessels, which are made with the technique of sealing, and some dishes are not commonly found in other parkings. It is surrounded by rounded points and inclined lines. In spite of preserving poorly things as kitchen spoons were made of bones of pets, cows, sheep and horses were found among other things in the Sekseuil parking. Permanent inhabitants were engaged in animal husbandry and hunting. They made their own weapons, made ceramic dishes, and decorated them with various ornaments and put their food on fire in ceramic vessels.

A.A. Formozov referred the monument to the Neolithic to the Bronze Age or to the first period of the Bronze Age, during the second millennium BC that was collected from the surface of the parking Sekseuil I.

In 1955, A.V. Vinogradov conducted exploration on the territory of the Aral region, opened other parking spots apart from Sekseuil I and II, and collected archaeological materials from the surface of the earth and carried out small excavations.

Monuments

In the above-mentioned Sekseuil parking were collected a lot of materials from the surface during excavation. In 1955, according to the results of these researches was published the article by A.V. Vinogradov that titled as «Archeological exploration in the district of Aral-Sekseuil in 1955». In this article was proved the stone and ceramic vessels found in the Sekseuil monument was belonged to the early Neolithic and pointed out that the similarity of many objects was similar to those findings in the monument of Zhantas 4, in the first monument of the kelteminar culture.

During A. Vinogradov's exploration, he opened the second monument of Sekseuil II. The main raw materials were mountainous, rock, jasper, chalcedony. Most of them were made of arrowheads, spindle heads and darts head, scrapers, pincers, niches, knives with blades, and jewelries made of soil.

A.V. Vinogradov determined the location of small parkings from the 7-8 km to the southwest of Sekseuil parking area, and good things had been collected from the parking of Termenbas-4 were stone tools, collections and shards of ceramic dishes. Looking at the set of vessels and stone tools, the things that found in the Sekseuil II parking and near the Akhadarya channel were similar to those discoveries in the parkings of Kauyndy 3, Tazhi-Kazgan 2, 3, 6.

The parking opened in the Aral region in 1955 are located near the present city of Aral. Most of these parkings can be renovated by the Neolithic or Bronze Age, and these parking spaces are not yet preserved.

A.V. Vinogradov divided the parkings near the city of Aral into two groups:

The first group includes 5 parking spaces. The Saryshyanak hill is located on the north-eastern part of the railroad to the west from Aral. The terms are named after Aral 2, 3, 4, 5. Because of rainfall, grass growth, heavy winds the condition of parking

spaces were in critical. According to different construction works the monuments may not be preserved in present times

The monuments of the second group are located on the border of the railway at the present-day Zhaksylysh village to the south-east of Aral city. The parking are located above intermittent sands, so some of the things can not be reconstructed.

The 3 parkings were discovered in the Shelgi-Zagem suburb to the north of the city of Aral, and besides the railroad tracks at the station Kontu area was opened one more parking place, where ceramic vessels and stone tools were collected.

The common chronological framework and boundary of the kelteminar culture is not still defined, each region can be treated differently by considering the presentation of S.P. Tolstov.

During archaeological exploration work conducted by A.V. Vinogradov in Aral district in 1955, was discovered nearly twenty parking places and was introduced to the science and in the discovered parkings were found a large number of ceramic vessels of the Neolithic and Bronze Age. He also mentioned that there are akshadarya, uzboilyk, western-Kazakhstan models in the culture of Kelteminar.

According to the materials of the kelteminar workshops, A.B. Vinogradov showed two large chronological groups, representing the stages of the development of the Kelteminar Culture.

Early period is mostly belonged the materials of Zhanbas 4, Kuniyak; Kuniyak – 1 (district of Akshadarya); Bufynek – 22; Bala-Esil – (Upper Uzboy); Akespe and other North East Aral areas. The materials of these parkings are mainly different types of ceramics and ornaments, as well as similar materials as matches. Early kelteminar ceramics were made of shamodo, a mixture, local forest clay, wood mixture, crushed shells and sand, they have the main types.

Conclusion

The last stage includes materials of Zhingeldi-6, Tadzhi-kazgan-2, 3, 8 (Akshadarya), Lyavlyakan and

Besh-Bulak (Kyzylkum), Sekseuil-II (North-East Aral) and other ten large parkings. The materials of all subsequent kelteminar parking have a very strong early kelteminar tradition.

In the latest ceramics of kelteminar parkings were kept some early types of vessels. This is the first and second-group vessels that mentioned above.

There are early neolithic substances among the materials collected from the surface of the North-East Aral area. According to A.B. Vinogradov's point of view, to the Early Neolithic was referred part of collection of the Sekseuil 1 parking, as well as the Shollum 1.

According to archeological data, by the end of the III century BC in the South-East Aral region, the main channel of ancient Syrdarya was formed. There are a lot of monuments of this period, but at the same time, it defined that the ancient river Syrdarya had two main directions in the flow of water; in the western part of the Inkardarya canal system existed Amudarya river to the north, the Akshadarya river on the right bank (Shopan kazgan gorge, the Zhalpak parking) (by M.I. Itina) and in the central part of the Syrdarya from south to north, from Inkardarya flow to Eskidarya (Kosmola parking).

This was the main nomadic cattle-breeding farm of the first tribal tribes, which did not require permanent housing, and the traces of the existence of the first tribal tribes were not preserved in the cultural landscape and were now renamed or renovated as parkings. Most of the temporary parking places are located close to the existing channels, which are not subsequently flooded.

Based on the above-mentioned data, we can see that this period is not fully studied, focusing on the Stone age of this region, including the later Stone Age of Neolithic monuments. Nevertheless, based on existing materials, the monuments of Aral region materials are often associated with the materials of the kelteminar culture, contribute to the creation of chronology of the cultures of this region. The level of research is still insignificant, and complex research has not been carried out since the independence years. Monuments of the Neolith-Eneolithic era are required research now.

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