EMERGENT: JOURNAL OF EDUCATIONAL DISCOVERIES AND LIFELONG LEARNING (EJEDL)
ISSN: 2776-0995 Volume 4, Issue 2, Feb., 2023

EARLY ANTHROPOGEN ON THE TERRITORY OF THE NORTHERN SLOPES OF HIGH ASIA

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Abstract
The paper presents the results of studying one of the urgent worldview problems - the problem of the origin of man, the stages of formation and evolutionary development of his material and spiritual culture, determining the periods of initial habitation on the territory of the northern slopes of High Asia and adjacent regions. The results of studying the most ancient anthropogenic deposits showed that the territory of the Tien Shan, Pamir- Alai mountain systems was settled by the human ancestor within 1.5 million years ago. As a result of many years of research, the sites of the early Anthropogen in the region of research have gained worldwide fame and taken a worthy place in the world history of the origin of the most ancient material cultures. Original assessments of the emerging methodological developments in the study of the history of the early Anthropogen are based on the actual results and logic of the interpretation of "non-standard" scientific positions, as well as the receipt of new materials on and constantly growing information on the history of the early Anthropogen.

Keywords. High Asia, Tien Shan, Pamir-Alai, anthropogenic deposits, landscape zonation, history of early anthropogenesis, anthropological material, paleogeographical environment, Selbungur.

Introduction

Until recently, the question of the early habitation of the territory of the northern elephants of High Asia by humans was solved mainly in the abstract and on hypothetical assumptions. As a result of large-scale research based on a comprehensive interdisciplinary methodology of the ancient monuments of history Sokh, Chashma, Obzhaz, Kyzylolma, Tashsay, Kolbulak, Selungur, etc., the history of the early anthropogen in the region acquired a real shape. Of great interest is the discovery of the oldest hominid remains on the Asian continent, which is of considerable interest in the study of the history of early anthropogenesis in the Central Asian region.

In the process of developing methods aimed at a comprehensive study of the history of the paleogeographic development of nature, against which the formation and development of the most ancient material culture took place, an analytical determination was made whether this work would be a real study or a repetition of already known phenomena.

This determined the idea of the place of complex studies of archaeological objects in the general process of development of the social and natural sciences that study the history of nature and society and of the general possibilities for studying the task at hand. Therefore, at the first stage, the existing methods of a number of natural sciences were studied, and methods were developed for specific, special issues of Paleolithic archeology.

Research methods include tasks to study the features of the development of scientific areas in the historiographical plan, in which the available documentary material has been received throughout the 19th-20th centuries and up to the present inclusive.

The transition from one stage of study to the next is determined, when the results of the studies begin to differ from the previous ones by a radical new quality. The research method is a complex of interdisciplinary areas, the content of which is a logical sequential process.

Determining the logical order was the goal of the research. It began with the fixation of early Anthropogene monuments, the conditions of their paleogeographical position, the determination of local and regional features of the formation of the natural environment, based on the material obtained as a result of studying the research region. Then there was a long stage of analytical study of essential relationships and connections, during which an object that was integral in nature was determined and subjective conclusions or artificial combinations that arose due to the tendency of some researchers to associate the elements of reality they observed were eliminated.

The study of early Anthropogene sites in the zone of the northern slopes of High Asia, objects of the natural environment is based on the results of the primary direct fixation of facts as reliable historical sources. The main thing in the study is the desire to extract the maximum amount of objective informative data.

Particular attention is drawn to the fact that complex, interdisciplinary areas in the process of studying the most ancient periods of the Anthropogen include a number of scientific disciplines that have their own specifics and methods for studying one of the global problems of our time - the problem of the origin of intelligent life on the planet and determining its initial sources in a specifically selected region.

This, in turn, led to the urgent need to develop a level of integration that meets modern requirements for a number of scientific areas devoted to the study of the ancient history of mankind, both regionally and globally. A level of generalization has been developed that will be understandable and useful to specialists, both public and natural scientific boards.

Proceeding from this, the most general problems of the history of the geological development of the earth's surface, as the arena of vital activity of the most ancient inhabitants of the region, have been studied. The stages of the evolutionary development of the natural environment in local and regional terms, including the geological history of the formation of landscape zonality in the system of mountainous structures of High Asia, against which the processes of the initial emergence and

development of the most ancient cultures of mankind in the research region, took place were studied.

Methods have also been developed that will make it possible to study the specifics of local and regional conditions in the history of the geological development of the natural environment at certain stages, evolutionary changes in facial and local features of the material culture of the Stone Age, and the relationship between them. Research is based mainly on the monuments of the most ancient material and spiritual culture, objects of the natural environment and are the result of primary, direct fixation of facts as reliable sources.

Without losing sight of the diversity of tasks, methods and specific features of studying the history of the early anthropogen, the method of searching and further studying the origins of the formation of the most ancient material culture as a whole is considered as a single scientific direction, and, moreover, as an integral part of historical science.

As a result of "unconventional" methodological developments in the study of the history of the early Anthropogen based on actual results and the logic of interpreting scientific positions, new anthropological material was obtained in the deposits of the Selungur site. Based on the results of the study of anthropological material, some reassessment of previous opinions was carried out and significantly supplemented the knowledge of nature against which the formation of the material culture of the most ancient inhabitants of the northern slopes of High Asia took place.

As a result of systematic, interdisciplinary research of the unique monument of Selungur, in 1988, fragments of the skull cover and scattered teeth of an archanthrope were found. In fact, this is the first find of a fragment of the skull cover of the Early Anthropogenic epochs in Central Asia. The fragment of the occipital part of the skull is an important anatomical part for the morphological identification of fossil hominids. The unique finds were studied by Academician of the Russian Academy of Sciences V.P. Alekseev, Doctor of Historical Sciences, Professor T.K. Khodzhaiov, who identified the antiquity of the anthropological material, and the fact that the fragment of the skull is a unique find by archaic features (Alekseev 1996). In essence, this is the first discovery in the territory of the central part of Eurasia of fragmentary remains, the most ancient representatives of the human race.

Taking into account the uniqueness of the discovery of the remains of the most ancient representatives of the genus Homo in the anthropogenic, multi-layered deposits of the cave site, the opening and study of the layer was carried out with the direct participation of anthropologists - Academician of the Academy of Sciences of the Russian Academy of Sciences Valery Pavlovich Alekseev, Doctor of Historical Sciences Telman Kasymovich Khodjayov and the author of this article.

In addition to this unique find, isolated teeth and fragments of the humerus of a fossil man were found in the cave deposits of the ancient Paleolithic Selungur site.

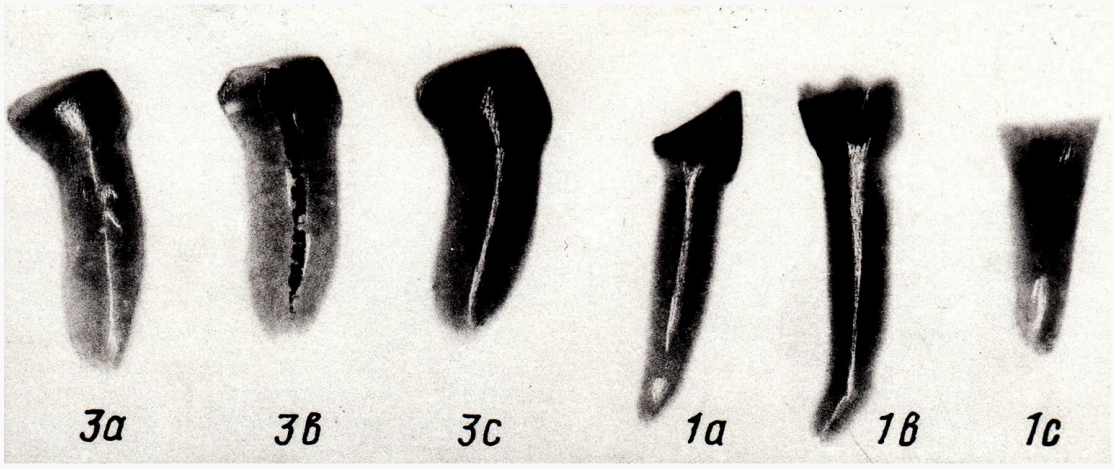
The study of the unique remains of the most ancient human ancestors was carried out by A.A. Zubov in the Department of Anthropology of the Institute of Ethnography of the Russian Academy of Sciences and V.M. Kharitonov - Research Institute and Museum of Anthropology, Moscow State University. The results of the study are based on the materials of A.A. Zubov and V.M. Kharitonov. Anthropological material is presented on the basis of the results of research by the above-mentioned anthropologists.

The teeth found in the Selungur cave are quite well preserved, but they are heavily worn, which makes detailed morphological analysis difficult. Leading anthropologists have determined that the teeth belong to four different individuals. According to the results of anthropological research, odontological material is divided into three groups.

The first group includes two large upper incisors with heavily worn crowns and long roots. As defined by anthropologists, belonging to one individual, presumably male, aged 35-40 years. To the second - two - (1a and 1c), and a small upper incisor with a short root, apparently, female at the age of about 40 years. To the third - three lower premolars (3a, 36, 3c), belonging either to one of the individuals named above, Or to the third individual (individuals?).

In favor of the assumption of the presence of a third individual, according to the definition of anthropologists, the marked lower degree of wear of the premolars compared to the incisors speaks. However, often in different classes the process of erasing teeth proceeds unevenly, so that in the same individual the teeth of different classes may have a different degree of wear.

In the studied series of teeth from Selungur, there are no signs of caries, but another form of pathology, apparently, the so-called "wedge-shaped defect", is quite common. An oblong depression in the cervical region on the mesial or distal surface. Pathological phenomena of this kind have been noted in fossil material before.



Rice. 1. X-ray of teeth from the stratified cave deposits of Selungur. The teeth are arranged in descending order of overall size.

1a. Right upper central incisor. The crown has been worn off by about half of its height. The root is long. The apex is curved distally. The vestibular surface of the crown is severely damaged. Total tooth height - 30.0 mm (corrected for wear of the crown approximately 35 mm). The mesio-distal diameter of the crown is 9.5 mm (adjusted for wear - more than 10 mm), the vestibulo-lingual diameter is 5.6 mm (taking into account the missing part of the crown, possibly more than 7 mm). Crown height cannot be estimated.

The length of the root on the lingual side is 22.2 mm, the mesio-distal root diameter at the level of the middle of the length is 5.5, the vestibulo-lingual root diameter at the same level is 6.2 mm. Possibly shovel-shaped crown. The lingual tubercle covers two scars.

On the distal side in the region of the neck there is a narrow groove (wedge-shaped defect). The X-ray image shows a rather weak obliteration of the root canal (Fig. 1), which indicates the absence of pronounced recurrent changes that could indicate an age exceeding 40 years.

1b. Upper lateral left incisor. The crown is worn out by about one third, the root is long, strongly curved in the distal direction. The total height of the tooth is 28.0 mm (corrected up to 32 mm), the mesio-distal diameter of the crown is 7.5 (taking into account wear, probably approx. 8 mm). The vestibulo-lingual diameter of the crown is 7.3 mm, the height of the crown is 7.4 (taking into account wear up to 10 mm).

Root length from the lingual side - 20.1 mm, mesio-distal root diameter - 4.8, vestibulo-lingual - 5.7 mm. The mesio-distal flattening of the root, characteristic of lateral incisors, is noted. Judging by the x-ray, the root canal is slightly obliterated. The pulp chamber is small. In the region of the neck on the mesial side, a wedge-shaped defect is strongly pronounced.

2. Upper right central incisor. The crown has been worn down to half its height. The root is straight and short. The total height of the tooth is 20.0 mm (adjusted, probably up to 25 mm). The mesio-distal crown diameter is 8.8 mm (corrected, probably up to 10 mm), the vestibulo-lingual crown diameter is 6.8, the crown height is 5.5 (corrected, probably over 10 mm). Root length - 14.0 mm, mesio-distal root diameter - 6.0, vestibulo-lingual - 5.2 mm.

The root canal is wide, slightly obliterated, which indicates an age not exceeding 40 years, as well as an intensive process of tooth wear in the considered hominin population. On the distal side of the neck, a wedge-shaped defect is expressed.

3a. First right premolar. The crown has been worn off by about one third of the height. The root is massive, forming a single trunk without splitting. The X-ray picture shows the absence of splitting on the root canal as well. On the distal surface of the root there is a shallow longitudinal depression. The total height of the tooth is 22.5 mm (corrected, probably about - 26 mm).

The mesio-distal diameter of the crown is 8.0 mm (corrected to about 9 mm), the vestibulo-lingual crown diameter is 10.2, the height of the crown is 6.8 (corrected to 10 mm). Root length - 17.9 mm, mesio-distal root diameter - 6.0, vestibulo-lingual - 8.4 mm. The crown is elongated in the vestibulo-lingual direction and has two tubercles. The x-ray shows the branching of the pulp towards the lingual tubercle. On the vestibular side in the cervical part of the crown, there is a pronounced swelling of the enamel.

3b. First lower left premolar. The crown is worn off, about a third of the height. The root is quite massive, forming a single trunk without splitting. There is no splitting of the channel on the x-ray. The root is markedly curved in the lingual direction, and forms an angle with the axis of the crown (cyrtodontia). The vestibular contour of the root has a convex shape. The crown is three-cusp. The lingual cusp is divided into two parts by a furrow. In the cervical part of the crown, from the vestibular side, a convex area of enamel is visible. The total height of the tooth is 25.8 mm (corrected by more than 28 mm). The mesio-distal crown diameter was 7.9 mm (adjusted to about 8.5 mm), the vestibulo-lingual crown diameter was 10.2, the crown height was 7.4 (adjusted to 16 mm). Root length - 19.2 mm, mesio-distal root diameter - 6.2, vestibulo-lingual - 8.0 mm. Canal obliteration is insignificant, taurodontism is not observed. In the area of the neck from the distal side, a deep depression is noticeable - a wedge-shaped defect.

3s. Second lower right premolar. The crown is massive, worn down to one-fifth of the height. The root is strongly curved in the distal and lingual directions, forming an angle with the crown. On the mesial and distal surfaces of the root - longitudinal grooves. The root forms a single trunk without splitting. Judging by the x-ray, the root canal is not split, there is no taurodontism. Three tubercles are clearly distinguished on the crown. The large size of the crown suggests even more significant molarization with differentiation of the distal and distolingual sections. In the cervical part of the crown, on the vestibular side, swelling of the enamel was noted. The total height of the tooth is 24.2 mm (adjusted for wear up to 27 mm). The mesiodistal diameter of the crown is 8.6 mm (corrected to approx. 9 mm), the vestibulo-lingual crown diameter is 11.1, the height of the crown is 9.8 (corrected to 12 mm). Root length - 17.0 mm, mesiodistal root diameter - 6.4, vestibulo-lingual - 8.0 mm.

The determination of the taxonomic position of the described find was carried out on the basis of the obtained comparatively large amount of data, which was limited by the strong wear of the teeth and the presence of relatively uninformative classes of teeth - incisors and premolars.

The upper incisors described above - 1a, 1b and 2) allow for a complete comparative morphological analysis. Their crowns are heavily worn, as a result of which the obtained dimensional characteristics can be considered reliable. However, even the dimensions, which are obviously underestimated due to wear, make it possible to draw a fairly convincing conclusion that incisors 1a and 1b belong to more archaic fossil hominids.

Thus, the mesiodistal diameter of the incisor crown (9.5 mm) - 1a brings the Selungur man closer to the archanthrope (9.62 mm on average) and moves it away from later anthropological species - the average value for all modern races is 8.8 mm.

Anthropologists noted the same about the mesiodistal diameter of the crown of the lateral incisor 16 (16 - up to 7.5 mm, archanthropes on average 7.77, modern races - 6.9 mm).

Based on the measurement of the vestibulo-lingual diameter of incisor 1a, it is also noted that it is smaller than that of fossil hominids. This is confirmed by the data on the lateral incisor (16 4 7.3 mm, modern races - 6.3, archanthropes - 8.64 mm), which, according to the vestibulo-lingual diameter of the crown, belongs to the archanthropes.

Carrying out a comparative analysis in the phylogenetic plan, A.A. Zubov and V.M. Kharitonov was attracted by data on archanthropes. It is noted that in archanthropes the incisors (especially the upper ones) are superior to the corresponding teeth, and complete the evolutionary trend that originates at the origins of the genus Homo, when the Homo line, characterized by a gradual increase in incisors, diverged from Australopithecus with their relatively small incisors.

This point is very important for interpreting the evolutionary significance of the size of the incisors before the Paleoanthropian stage. The small relative sizes of the incisors (especially the lateral upper incisors) can be considered an archaic feature, since they resemble the ratio that developed at the stage of Homo habilis.

As a result of the study of anthropological material A.A. Zubov and V.M. Kharitonov noted that the small size of the lateral (and partly mesial) incisor shows an archaic indicator. The incisor, designated in the series of teeth from Selungur under the number "2", is distinguished by an extremely small size. Its unusually short (14 mm) root, cross-sectional shape (meso-distal diameter is greater than the vestibulo-lingual diameter with a triangular section contour). The presumably small size of the crown suggests a milk incisor. However, the size of the tooth is still not so small as to speak of a milk change (even taking into account the evolutionary level). This is contrary to the morphology of the incisor neck region.

A.A. Zubov and V.M. Kharitonov noted that we are talking about a female tooth and, in part, can explain its small size. If we take into account the significant sexual dimorphism of odontometric characters in the era of the archanthrope, noted by F. Weidenreich (Weidenreich, 1937). Incisor “2”, along with the described incisors 1a and 1b, makes it possible to note that this specimen indicates either very early sapiens features or the preservation of deep archaism.

An analysis of the morphology of the premolars gives a clearer and more reliable picture of the taxonomic relationships of the find in question with other fossil hominids. Graphs (Fig. 2) illustrate these relationships. Dots mark the position of the Selungur finds in the evolutionary series of hominids - Homo habilis, Homo erectus, Homo sapiens meanderthalensis and Homo sapiens sapiens, in the coordinate system.

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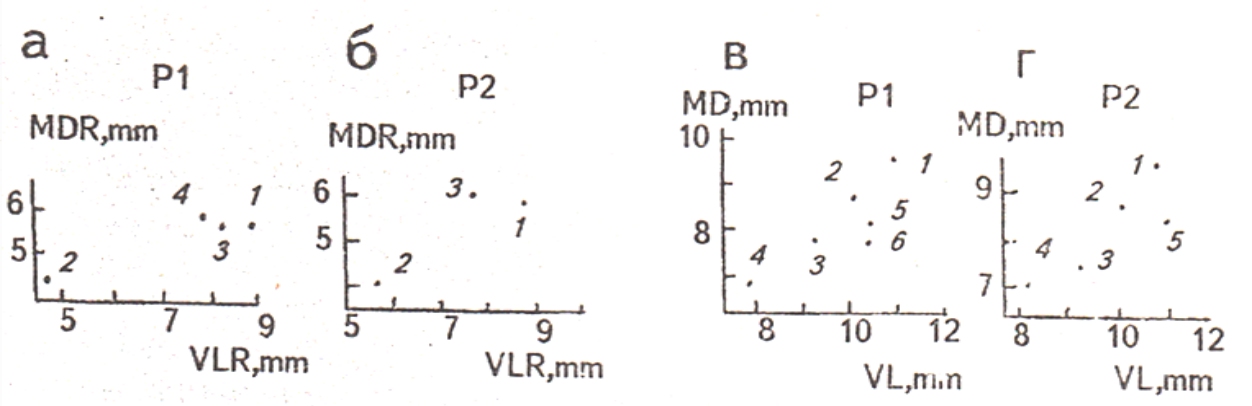
The abscissa shows the mesio-distal crown diameter of the first and second lower premolars (Fig. 2).



Rice. Fig. 2. Correlation of mesio-distal and vestibulo-lingual diameters of the crown of the first lower premolar of fossil hominid and humans from the Selungur Cave (a), crown of the second lower premolar (b); root (c) in Sinanthropus (c, 1), modern man (c, 2) and Selungur man (c, 3 - premolar 3a; 4 - premolar 3) and the root of the second lower premolar in Sinanthropus (2.1), modern man (2,2) and Selungur man (2,3 - premolar 3c): a, b: 1 - 2 - archanthropes; 3 - paleoanthropes; 4 - modern man (races on average); 5 - Selungur 3a; 6 - Selungur 3.

The evolutionary series of the genus Homo forms an almost straight line on both graphs, illustrating the sequence of reduction in the size of the considered teeth from Homo sapiens to modern races. The teeth from Selungur on the graph determine the position between the archanthropes, while significantly deviating from the general direction of the evolutionary line, due to the very large values of the vestibulo-lingual crown diameter. This is especially true for the second lower premolar (3c). It is possible that the mesio-distal diameters of the crowns studied by A.A. Zubov and V.M. Kharitonov's premolars are somewhat underestimated due to approximal erasure, but the originality of the described form is in any case undeniable.

Anthropologists explain such a pronounced molarization of premolars by the preservation of an extremely archaic structure in this class of teeth or food specialization.

The large area of the chewing surface of molars and premolars indicates a narrower adaptation to coarse plant foods (grains, roots, leaves), which require considerable effort to grind it. The taxonomic relationship of the described premolars from Selungur with similar teeth of modern man and archanthropus (sinanthropus) is shown. The graphs do not need such comments: in their field, the Selungur man clearly approaches the archanthrope.

In the process of evolution, the lower premolars (unlike the incisors) underwent a significant reduction jump in the transition from archanthropus to paleoanthropus. Morphological indicators of premolars and the taxonomic position of the Selungur man,

as the graphs clearly show, have retained very archaic features. Such side branches, but close to the main line and bearing some of its features, we call paramains.

The anthropological material of Selungur shows how wide was the area of distribution of archanthropes and their numerous local variants of this species, largely subject to the laws of adaptive radiation. According to modern concepts, sapientation is the transition from an archanthrope to a paleoanthrope, which was considered a subspecies of the genus Homo sapiens. The question of which "Western" or "Eastern" archanthropes were the ancestors of modern man is still open. We can only say that the geographical gap between the areas of settlement of these two branches of archanthropes seems to be less and less significant.

The result of the analysis of the lower half of the diaphysis and the lower epiphysis of the right humerus of a fossil man from the Selungur cave, carried out by V.M. Kharitonov, is extremely interesting for paleoanthropologists. The lateral and medial epicondyles are absent. The bone cavity is filled with rock. On the basis of the completed fusion of the block with the diaphysis, one can approximately estimate the age of the individual as close to 10 years according to modern standards. The maximum length of the humerus fragment approaches 160 mm. The minimum diameter of the middle of the diaphysis is 12 mm (in modern children 10-14 mm), the maximum is 15 mm (in modern children 12-16 mm).

The bone from Selungur is more massive. According to anthropologists, this is the first sign of archaism. The humerus from Selungur is characterized by an ellipsoidal cross-sectional shape in the region of deltoid roughness, which is not characteristic of later types. The body of the humerus from Teshik-Tash is somewhat more laterally compressed; in the region of the deltoid roughness, the minimum and maximum diameters are 11 and 13 mm, respectively.

Thus, against the background of the standard value of the maximum diameter of the humeral shaft from Teshik-Tash, the Selungur hominid looks more archaic. As a result of the analysis of the radiographs of Teshik-Tash and Selungur. D.G. Rokhlin noted the massiveness of the cortical layer of the Teshik-Tash humerus as significant, and the width of the medullary canal as insignificant.

The radiographs of the finds were made by Doctor of Biological Sciences O.M. Pavlovsky. The results showed that the features mentioned above look more archaic. E.N. Khrisanfova, also noted the massiveness of the diaphysis as a feature characteristic of Neanderthals. The index representing the ratio of the minimum thickness of the medullary canal to the diameter of the diaphysis (on the x-ray) is 28% for Teshik-Tash, 22% for Sinanthropus, and 15% for the Selungur hominid. Thus, Selungur is more archaic.

The maximum antiquity of anthropological material is determined within 1.5 million years. The dating of the material and the horizon of the anthropological fragments was carried out by the 42K 40Ar method.

Anthropologists noted the presence of this phenomenon in early hominids belonging to the species Homo erestus carriers of a very primitive material culture.

The study of the conditions of occurrence of bone remains in the cultural layers, their stratigraphic situation made it possible to draw a number of conclusions on the history of the development of the environment, to make geochronological determinations and to attribute the discovered oldest traces of human habitation of the territory of Fergana to 1.5 million years. This, in turn, led to the urgent need to conduct a series of studies based on interdisciplinary methods for studying the paleogeographic conditions of the natural environment of the northern slopes of High Asia, against which the development of the most ancient cultures of mankind took place.

Geochemical studies of anthropogenic deposits of the Selungur archaeological site were carried out for the first time. In this regard, all available and accessible sources on the problem of this area of research were studied, and a method of sampling acceptable for an archaeological object for laboratory analysis was developed. A number of consultations were held with leading experts in the field of geochemistry in order to substantiate the necessity, prospects and expediency of this area of research, the main provisions of which were presented in a number of publications. Geochemical studies of anthropogenic deposits were carried out according to a specially developed methodology in combination with historical-geological, lithofacies, mineralogical-petrographic and a number of other scientific areas, without which it is impossible to get an idea of the conditions for the formation of the natural environment surrounding archanthropes. As a result of studying the geochemical environment of sedimentation, changes in physiographic and paleoclimatic conditions, breaks in sedimentation in cave deposits, 30 lithological isolated layers were identified. Of these, 22 samples were selected to determine the geochemical composition by components. The component composition was determined by the atomic absorption method on a C 302 spectrometer (GOST-11884, 14-81, GOST-12362-79), laboratory studies were carried out at the Geological Engineering Research and Production Association of Uzbekistan.

To compare the results of stratigraphic, lithological-facies studies, sediments outside the cave site were studied by the geochemical method. Here, eight separate layers were identified, which were used as stratigraphic markers, allowing comparison with cave deposits.

On the basis of the data obtained, the characteristics of the climatic situation during the periods of habitation of the cave site by archanthropes and the formation of anthropogenic deposits were refined. It should be noted here that the accumulation of strata with a heavy fraction of clay deposits is associated with humid climatic conditions. During these periods, there was an increased leaching of carbonates, which was determined as a result of studying the process of transformation of rocks and their weathering products.

The middle and upper parts of the deposits are characterized by an increased content of individual groups, in particular, feldspars, micas, similar minerals, with moderate resistance to weathering.

This, in turn, indicates a certain change in climate from wet to arid conditions for the transformation of the mineral part of the original rocks in the process of weathering and deposition of horizons, which correspond to the periods of habitation of the cave site by archanthropes.

The study of the remains of fossil fauna discovered in the deposits of the Selungur cave site is a well-defined landscape biocenosis. The present study also considers the rate of vertebrate evolution and temporal ecological diversity. In accordance with this, it was necessary to obtain the most complete picture of the local features of the animal world in the area of the Early Paleolithic site. In addition to the fossil material obtained as a result of archaeological excavations at the Selungur cave site, the main regularities of the distribution of these species in modern conditions that make up the biocenosis of the Khaidarkan Valley and adjacent regions in the zone of the High Asia orogen and the Turan platform have been studied.

Comparison of the fossil faunistic complex with modern species of the animal world made it possible in the present work to characterize the process, according to the stages of the evolutionary development of some mammalian species. Based on the study of paleozoological problems , the results of paleoecological reconstruction are given .

The results of the paleozoological study of the bone remains of mammals discovered during the archaeological study of the Selungur site largely complement and mutually control the paleobotanical data. They show that the bulk of the animal world lived in an environment that had a relatively warm and humid climate with woody coniferous and broad-leaved vegetation. The complex of paleobotanical studies of the Selungur archaeological site and adjacent regions also made it possible to make a number of historical, chronological and paleogeographic determinations. In the process of archaeological research, 49 samples were taken from the thickness of cave deposits for spore-pollen analysis. The results of the analyzes showed that a number of tree species found in the lower layers of the site belong to the relics of the tertiary flora of the Turgai type.

In 1988-1989 collagen analysis was also performed, which during the periods of study of the site was the only available method of absolute chronological determination. Undoubtedly, further analyzes and improvement of the methodology of collagen research could provide more perfect definitions and create a regional chronostratigraphic scale of the Early Anthropogenic epochs. But, due to a number of circumstances, the research was not continued. Nevertheless, the results obtained made it possible to refute the existing concepts that there were not enough favorable conditions for the emergence of the most ancient cultures on the territory of the northern slopes of High Asia.

Various theories of diffusion, influences and borrowings of the most developed cultures and their penetration into this region no earlier than 100 thousand years, and the natural conditions themselves contributed to routine, immobility, lack of dynamism and evolutionary development, did not provide an opportunity for objective coverage of the course of the historical process . Our research allowed us to illuminate the ancient history of the anthropogenesis of Central Asia in a new way; results were obtained that did not fit into the usual stereotypes of cultures,

Certain chronological milestones have long served as an age guide in studies of problems of early anthropogenesis. This, in turn, made it possible to discover synchronous deposits and relict landforms, which were the scene of vital activity of the most ancient inhabitants of this region. As a result of their study, more ancient Paleolithic sites of Chashma and Sokh in the Ferghana Valley and Kyzylalma Tashsay in the Angren River valley were discovered. The results of archaeological research of the early anthropogenesis of Uzbekistan consisted not only in the increasing number of discovered sites, but also in the improvement of the very methodology of research work, in the expansion and complexity of its tasks. Without the slightest exaggeration, it can be noted that the development of the methodology of archaeological research was determined by refinements in the comprehensive and holistic study of early Paleolithic sites.

In this regard, it should be noted that the introduction into scientific circulation, for the first time in the practice of archaeological research, of methods for analyzing the absolute dating of anthropogenic deposits is an important historical event. Conducted analytical studies, under the guidance of B.S. Yuldashev in the Department of Information Analysis by the Head of the Sector of Nuclear Geochemistry Professor Sh. Khatamov, analysts N.S. Osinskaya and T.P. Rakhmanova showed that the age of deposits of the second cultural layer of a unique historical monument of the early Anthropogenic is 1,500,000 years. The dating of the material was carried out by the potassium-argon method.

Conclusions

Thus, as a result of the complex of studies carried out, the early stages of the habitation of the northern slopes of the High Asia of Central Asia were determined, which, with their origins, go back to the depths of the geological chronology. As new material is accumulated, additions to the established definition may and should appear. But already now there are reasonable grounds to conclude that on the territory of the northern slopes of High Asia, the process of the formation of man as an anthropological type, the emergence and formation of the most ancient material culture took place. The results of these studies give grounds to start developing the main contours of a geographical map, within which the main centers of the most ancient material cultures of mankind were born.

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