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FROM THE HISTORY OF THE STUDY OF BOTAI CULTURE**Dosbol S. Baigunakov**

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Abstract. The research demonstrates its relevance due to the need for a historiography of archeology and an analytical understanding, evaluation, and analysis of certain aspects in the study of Botai culture. The article proves justified due to the need to develop modern methods in study of historical and cultural complexes, emphasized by the long history of study and worldwide circulation of information surrounding the bright archaeological phenomenon that is Botai culture. The purpose of the study is to analyze the historiographical aspects since the opening of the Botai settlement in Northern Kazakhstan, using the latest methods of historiographical research and general theory of systems (methods of dialectical and system analysis, scientific abstraction and comparison, interpretation of the results, etc.). This goal predetermined the formulation and the need to solve the following main research tasks: to study some aspects of the historiography of the Botai culture, determine the contribution of individual scientists in the field, codify evidence of the origins and development of equestrian culture in the Eneolithic era, identify patterns and substantiate the general scientific principles of field work, and determine the main directions of scientific approaches and research.

Specialists, through the use of traditional and innovative methods within both the humanities and natural sciences, have reviewed the latest information about the Eneolithic period of the Ural-Irtysh interfluve. In particular, the research of the Botai settlement has provided unique materials for archaeological science around the world. In recent years, large-scale research has begun on other objects of Botai culture. The found artifacts and the works of specialists have formulated the concept in historiography that the domestication of the horse took place in Kazakhstan, as well as that individual members of Botai society took part in the integration of cultural systems aimed at ensuring the distribution of functions and roles, establishing various links between nature and man, and meeting the current and future societal needs in primitive history.

Keyword: Kazakhstan, archaeology, Eneolithic, Botai culture, horsemanship, horse

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Научная статья

ИЗ ИСТОРИИ ИЗУЧЕНИЯ БОТАЙСКОЙ КУЛЬТУРЫ

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Аннотация. Актуальность исследования вызвана необходимостью аналитического осмысления, оценки, анализа отдельных аспектов в изучении ботайской культуры. Новизна статьи обосновывается необходимостью разработки современных методик в изучений историко-культурных комплексов, систематизацией источниковедческих данных и подчеркивается многолетней историей исследования ботайской культуры, как яркого археологического феномена

имеющую широкую известность в мировой науке. Цель исследования - анализировать историографические аспекты со времен открытия поселения Ботай в Северном Казахстане, используя новейшие методы исследования историографического характера и общей теории систем (методы диалектического и системного анализа, научной абстракции и сравнения, интерпретации полученных результатов и т.д.). Указанная цель предопределила постановку и необходимость решения следующих основных задач исследования: изучить некоторые аспекты историографии ботайской культуры, определить вклад отдельных ученых в этой сфере, систематизировать свидетельства о зарождениях и развитии всаднической культуры в эпоху энеолита, выявить закономерности и обосновать общенаучные принципы полевых работ, определить основные направления научных подходов и изысканий. Специалисты, используя традиционные и инновационные методы гуманитарных и естественных наук, получили новейшую информацию об энеолитическом периоде Урало-Иртышского междуречья. Исследования Ботайского поселения дали для мировой археологической науки уникальные материалы. В последние годы начались широкомасштабные исследования и в других объектах ботайской культуры. Найденные артефакты и труды ученых сформулировали понятие в историографии, что domestикация лошади произошла в Казахстане, а также что каждый член ботайского общества был частью интеграции в систему культур, направленной на обеспечение распределения функций и ролей, на установление разнообразных связей между природой и человеком, способствующего удовлетворению актуальных и перспективных потребностей социума в первобытной истории.

Ключевые слова: Казахстан, археология, энеолит, ботайская культура, всадничество, конь

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Introduction

The entirety of the ancient material and spiritual riches of the people are reflected in the historical and archaeological sources. Through it, the soul of the people, its centuries-old wisdom, their vision of the surrounding world, its peculiar history, life experience, etc. are manifested. Historical and archaeological heritage is a powerful energy filled with the images, practices, and aspects of the everyday life led by previous generations. Such moments are always determined by an increased interest in

archaeological culture, which is an independent part of civilization. At the origins of any civilization, first of all, there is always a person. The Botai man stood at the origins of the Steppe civilization and marked the beginning of the Kazakh cultural genesis. Therefore, the need to generalize the historical material obtained from the Botai cultural complexes and the results of its research not only determines the relevance of our topic, but also is of great scientific interest to specialists in various fields, who utilize data from Eneolithic objects in their research or study its aspects. This article presents a novel viewpoint by systematizing the main results of years of field work on the Botai culture. In the history of the study of Botai culture, there have been many views expressed, and a wide variety of aspects studied. During this period, researchers determined the cultural affiliation of the culture, the absolute and relative chronology of Botai-type movements, and economic, socio-ethnic spiritual components, forms, and directions of development. Causes of the crisis of culture and vectors of its transformation were reconstructed; the use of koumiss by Botai people was proved in foreign laboratories; the theory of archaeological Botai culture with its internal historical, ethnographic, ideological, economic, and social contexts has been developed. We have summarized some works that characterize the main features of the Botai society.

The purpose of the article is to review the main archaeological works concerning the Botai culture. The objectives of the research are to conduct a historiographical review of the problem, generalize the historical data relating to the identification and study of archaeological monuments, highlight the main works as well as scientific and cultural value of the archaeological heritage, solve the issues of systematization of the archaeological heritage of Botai culture on the cultural principles and typological diversity of objects, and identify socio-cultural features of Botai society.

Methods

Various methods often used in historiography were applied while writing the article. The methodological basis of the research is the general historical principles of historicism and systematic analysis. These are understood as principles of scientific cognition, requiring the study of any historical phenomenon and event from the point of view of occurrence, development, and correlation with other phenomena. The article also applies the principles of scientific study and objectivity, which allowed us to approximate an objective picture of the past.

In addition to them, the historical-genetic method was widely used, which allows us to determine the factors influencing the process of protecting historical and cultural heritage and to identify the nature of archaeological work and cultural conservation activities in the Botai culture. Using the historical-comparative and historical-typological methods, an interpretation of the source base was constructed. The historical-systematic method made it possible to determine the main stages of archaeological study

surrounding Botai culture. This method allows for the identification of promising research areas relating to the development of archeological research and clarifies the role of individual research and scientific societies. The main results were derived with the help of the structural and function method. Thus, the methods of research are well-known and follow those often used in history, archeology, and historiography. These are only a part of the methods often used in research.

Analysis

In the last decade, Russian archaeology has noticeably devoted increased attention to the historiographical aspects of this science. Thanks to the efforts of archaeologists H.Alpysbayeva, V.F.Zaibert, J.Taimagambetov, O.A.Artyukhova, V.Logvin, V.K.Merts, G.T.Iskakov, S.V.Zakharov, T.B.Mamirov, D.S.Baigunakov and others, the history of the study of the Stone Age and the paleometallic epoch are now systematized.

S.V.Zakharov, in his research "The Study of the Eneolithic of Northern Kazakhstan and the Southern Trans-Urals", reviewed and described the history of the study of Eneolithic monuments, the content of the cultural attribution problem, and analyzed the issues of modeling the economic context and cultural communities in the Eneolithic of the aforementioned region (Zakharov, 2009: 12-20)[1]. Later, an article by D.S.Baigunakov was published, in which he highlighted the features of Eneolithic cultures and complexes throughout Kazakhstan. The article focused its attention on the promising historical and cultural sites, identifying Eneolithic sites, highlighting stages of the historical study surrounding the Copper-Stone Age, and revealing the content of historical and cultural processes that took place within them (Baigunakov, 2013: 94-96)) [2].

A.A.Pleshakov, T.A.Danilenko, V.I.Zaitov, O.I.Martynyuk, A.M.Kislenko, I.L.Chernai, B.C. Mosin and others who worked as part of the Botai archaeological expedition have published their works on various aspects of Botai culture. There were foreign joint publications that included Northern Kazakhstan Archeological Expedition members. The majority of them have been analyzed by the above-mentioned authors. The data drawn from the archaeological material in Kazakhstan is widely used for the study and historical reconstruction of the ancient spiritual culture attributed to the inhabitants of the country. An artifact bearing chronologically deep and diverse information is, of course, interesting for the history of culture. The main purpose of the study of individual artifacts, historical, and archaeological complexes is to deepen the distant history and stimulate historical and typological understanding of unique phenomena. It is difficult to overestimate the role of an archaeological artifact in the reconstruction of culture, especially when it comes to the development of semantic problems and interpretation of various paradigms. A historical artifact as a reflection of cultural elements is directly related to mythology, archaic and religious beliefs.

According to the same parameters, experts have recreated the sacred contexts of Botai culture in the form of a separate monograph (Zaibert, Khazbulatov, Outram, Baigunakov, Bekseitov, Nauryzbayeva, Karazhigitova, Sala, Deom: 2018) [3]. It analyzes the sacred and profane contexts, as well as the worldview and ideology of the inhabitants of the above-mentioned culture.

Having formed a specific subsystem, the Botai culture played a very important role in the system of steppe civilization. Traditional information developed by the Botai ethnic group was integrated, consolidated and accumulated in a peculiar form. The historical experience of the Botai people later served as a foundation for others on the steppe regions of Eurasia.

As a result of more than 40 years of research by the North Kazakhstan and Kokshetau archaeological expeditions, several thousand monuments of archeology and history have been discovered and partially explored on the territory of the current North Kazakhstan and Akmola regions. It should be noted that as late as the 1980s, the Eneolite remained relatively unknown. Through the painstaking efforts undertaken by the members of the above-mentioned archaeological expedition, it was possible to reconstruct the historical past of the region.

The Botai settlement was discovered in 1980 by an archaeological expedition led by V.F. Zaibert. At the same time, thousands of finds showed the prospects and uniqueness of the discovery (Zaibert, 1981: 435-436) [4]. The new find immediately drew the interests of the scientific community (Danilenko, 1985: 34-47) [5]. The speeches of archaeological expedition members including reports in scientific forums caused a real sensation among specialists of Eurasian archaeology (Zaitov, 1985: 17-33; Pleshakov, Zaibert, 1985: 48-59) [6; 7].

In 1983, the All-Union Archaeological Seminar was held on Botai, which brought together the wide array of scientists specializing in the primitive archeology of Eurasia, including representatives of the discipline from Moscow, Leningrad, Kiev, Chelyabinsk, Samara, Yekaterinburg, Novosibirsk, Krasnoyarsk, Almaty, Karaganda, Kostanay and many other cities of the Soviet Union. The uniqueness of the settlement, having been recognized by the scientific community, encouraged a global discourse on the topic of Botai.

After Kazakhstan gained independence, scientists from England, the U.S., and Germany visited the Botai settlement. During their visits, joint research programs on Botai materials were adopted, which included a visit by V.F. Seibert to several British universities in 1994 with lectures on Botai, the organization of an exhibition on Botai culture at the Cambridge Archaeological Museum, and an international symposium "Early Horse Breeders of Eurasia" on Botai in 1995, which was attended by 80 scientists from 16 countries. In addition to archaeologists, the symposium was attended by

specialists in natural sciences (paleozoology, paleobiology, etc.), causing an interest in Botai culture to spread to those fields as well.

In 1996, joint Kazakh-German studies of Botai materials and excavations of early Iron Age mounds were launched. The discovery of Botai and other similar sites, and their long-term research, enhanced the authority of archeology and historical science in both the North Kazakhstan region and the republic as a whole (Sandra, 1997; Anthony, Brown, 1998) [8; 9].

In 2000, the Republic of Kazakhstan expanded the national park "Kokshetau" to include the Botai settlement. Since that time, complex security measures have been undertaken at the settlement, including the creation of a security zone, the reclamation of ravines cutting through the cultural layer, and protective excavations in the coastal part of the monument.

The most important stage in the study of the Botai settlement was associated with the implementation of the state program for the: "Study and preservation of the historical and cultural heritage of the Republic of Kazakhstan". In 2004-2006, the Kokshetau archaeological expedition (headed by V.F.Zaibert) carried out large-scale scientific and preservation work at the Botai settlement, which ensured the relative safety of the cultural layer of the monument from destruction by ravines. It also allowed for the presentation of the main research results in the collective monograph "Secrets of the Ancient Steppe" (Zaibert, Tyulebaev, Zadorozhny, Kulakov, 2007) [10]. Within this book, the members of the expedition present the main results of the comprehensive study and preservation of Botai, along with the materials of the long-term excavations. The authors restored individual finds, carried out a statistical analysis of artifacts, the experience of reconstruction of the Botai society and more.

In 2009, according to the National Strategic Program "Cultural Heritage", the final monograph "Botai Culture" was published under the authorship of V.F.Zaibert.

This fundamental book raises questions surrounding the problems of archaeological definitions, historical reconstructions, and various topics of the Botai settlement and other Botai-type monuments. The book also substantiates the role of Botai culture in world archaeology, analyzes the paleoeconomical model of the aforementioned culture and its people, and studies the methods used in the study of the economic, cultural, and societal aspects of Botai culture (Zaibert, 2009)[11].

In 2011, the implementation of an international project involving members from Kazakhstan, Great Britain, China, Lithuania to study the Botai settlement began. The excavations, organized by the Republic of Kazakhstan's Ministry of Culture, were combined with environmental studies concerning the Botai period and the search for traces of possible agriculture among the Botai people. Indirectly, the possibilities of agriculture are evidenced by a number of artifacts and visual observations (earthmoving bone and stone tools, abrasive plates (potential grain grinders), the fundamental nature of

residential architecture and the device of closed hearths (possible early tandirs) topographic association of Botai culture settlements with high-quality fine-grained, multicolored loam of Quaternary and Early Holocene origin.

Since the opening of the Botai settlement and other monuments of Botai culture have been investigated by scientists, students, schoolchildren, and other enthusiasts take part in annual field work. Such high interest in the topic of the Eneolithic era (4-3 thousand BC) was caused primarily by the fact that the Botai settlement was a new monument, large in size (20 hectares), informative, rich in archaeological and osteological materials (350 thousand units), which has been studied for 40 years, and exhaustive information about the monument can be obtained only after two hundred years. It should be borne in mind not only the volume of the archaeological source, but also the scientifically significant historical context embedded in it. This is reconstructed using traditional typological and statistical methods and the possibilities of innovative technologies. As a result of the collective activity of domestic and foreign specialists from Germany, England and the U.S., certain developmental patterns of ancient ethnic groups in the Central part of Eurasia were identified and several scientific discoveries were made that allowed for the reconstruction of the main features relating to historical and cultural development in the steppe zone. Naturally, comprehensive international studies increased the validity of research findings and their objectivity. Additionally, they laid the foundation for the worldwide fame of Botai culture.

On March 31, 2018, Resolution No. 150 of the Government of the Republic of Kazakhstan was adopted. The resolution outlined the reorganization of the state-owned enterprise "Museum of Peace and Harmony", controlled by the Ministry of Culture and Sports of the Republic of Kazakhstan, by separating from it the state-owned enterprise "State Historical and Cultural Museum-Reserve "Botai".

On July 7 of the same year, the grand opening of the cultural and historical museum "Botai-Burabi" (visitor's center) took place in the open air of "Burabay" (Akmola region) national park.

All the above activities were implemented within the framework of the "Sacred Geography" project of the "Rukhani Zhangyru" program.

Such interest on the part of the state and the public shows the importance of work on the aspects of Botai culture. Modern society needs applied programs of historical-cultural, ethno-cultural and education of citizens. These can be museum-archaeological and ethnographic complexes in the open air, where the unique history of our country is demonstrated by visually attractive and innovative methods.

The historical significance of the results of the Botai culture research is as follows: in the steppes of Northern and Central Kazakhstan, for the first time on the planet in the IV millennium B.C.E., a horse was domesticated.

After several million years of evolution, humanity switched from walking to equestrian means of transportation. This moment was the beginning of steppe civilization, a dynamic accelerator of the world historical process. Starting from the IV millennium B.C.E. – the time of the early Eurasian horse breeders within Botai culture – up to the industrial era of the XVIII-XVII centuries, the horse played a major role in the evolution of civilizational processes not only in the Great Steppe, but also in the rest of the Old World ecumene.

Judging by the archaeological materials, the Bohai population led a semi-sedentary lifestyle. For the first time in the steppes, people began to build major wooden structures using original architectural techniques. Residential semi-ground houses were built of wood, clay, horse bones, birch bark and earth layers. The houses reached an area of up to 120 sq m (Kislenko, 1993: 117-137)[12]. They were polygonal in shape, and the vaulted ceiling was held very firmly without supporting pillars.

For two thousand years before the Bronze Age, the Botai people used copper tools and objects. They were skilled craftsmen, doctors, artists and jewelers. Trepanation of the skull in the conditions of that time borders on fantasy. A number of products are made in such a perfect way that it is often difficult to imagine that they were constructed with Stone Age technology.

Life in the steppe forced the population to develop calendar cycles of pastoralists. In winter, they moved to large settlements and stationary houses, and in spring, some of the residents of the settlements, along with horses, went to the open steppe areas of the Turgai hollow and the ranges of Ulutau in the Dzhezkazgan region. This fact is depicted as a drawing on a clay pot depicting two wheels and a stylized image of a horse between them (Martynyuk, 1985: 59-72)[13]. For temporary housing, a light dwelling made of tallow and horse skins was used, and the idea for creating the first yurts was an ordinary basket woven from willow, which, with its simple and durable construction, fascinated people, giving them a fishing tool, a skeleton smeared with clay (a future vessel). The layout of an upside-down basket is illustrated as a prototype of a Botai dwelling or yurt (Kislenko, 1993: 117-137)[12]. All significant and small discoveries of the first horse breeders were introduced into everyday practice, consolidated in the process of traditional upbringing, passed from generation to generation for thousands of years and spread across the steppe and forest-steppe expanses of Eurasia.

A simple enumeration of the achievements of the Botai culture carriers in the IV-III thousand years B.C.E. is enough: fastenings of fetters for horses made of bone and wood, scalpels for castration of stallions in the form of tubular punctures made of bird bones, bone and hair bits, bridles made of belts, house-building and economic architecture of polygonal circular layout of dome type, ukryuk – a long stick with a loop at the end - a herdsman's tool for catching horses, bolas – throwing stone balls for hunting small animals, birds and artiodactyls, etc., throwing darts, bow and arrows,

throwing spears, wheeled transport, gear stone discs for twisting ropes, stone discs with a hole in the center as flywheels of machine drills, canning pits and the principle of preserving meat, hearth furnace or proto-tandoor – a protective truncated cone over a fire in dwellings, made of a clay-coated basket without a bottom, a primary economic house complex – housing and production premises of a horse breeder and an adjacent paddock for horses (milking mares and foals), unique jewelry - stone beads, bone chisels, cylindrical bone stamps, a plate made of native copper (Zaibert, 1993; Zaibert, Tyulebaev, Zadorozhny, Kulakov, 2007)[14; 10].

In recent years, new aspects of the study of Botai culture have matured, they have begun to pursue such problems as its origin, the ratio of autochthonous and innovative formation of this historical and cultural phenomenon, the correlation of economic activity between members of the culture, and its role in the formation of Bronze Age Eurasian steppe cultures.

As a result of many years of research, a model of horse domestication has been created that is related to the natural landscape context (Alan K. Outram, Natalie A. Stear, Robin Bendrey, Sandra Olsen, Alexey Kasparov, Victor Zaibert, Nick Thorpe, Richard P. Evershed, 2010)[15]. The domestication of the horse stimulated the development of the producing economy in its diversified form with the addition of dominant horse breeding. This in turn led to a division of labor, allowing for the development of domestic industries and the formation of large settlements.

The transition to a diversified economy determined the social structure and organization, the norms of the hostel. The Botai people interacted within their multi-layered economy. It was regulated by social needs and the state of the biosphere and hydrosphere. With the increasing role of fishing and hunting, the share of meat ration provided by horses decreases, and vice versa - under extreme conditions for appropriating forms of prey, the consumption of domestic horses increased. The change of "menu" took place dynamically in the utilization of various landscape and climatic areas within the Botai habitat zone. In the spring, part of the Botai people left with the horses in a south-westerly direction from the Kokchetav hills to the Upper Priishimye and Pritobolye. Numerous rivers and lakes with temporary runoff came to life here for a short time. At that time, hunting and fishing products were increasingly consumed, and dairy food was also widely used. By the autumn-winter period, when the Botai people gathered in their villages, the role of meat products increased, as the slaughter of horses began (Zaibert, 2009: 293-298)[11]. Archaeologically, this is confirmed by the abundance of artifacts related to the sphere of domestic crafts and forms of economy both in stationary year-round settlements such as Botai, Krasny Yar, and in seasonal, spring-summer sites such as Tersek, Kozhai, Salt Lake and others (Zaibert, 2009: 293-298)[11].

The new system of equestrian communication of the Eneolithic era defined the nature of interaction between man and the environment for several millennia. The

possibilities of equestrian communication determined the development of productive forces, new spatial possibilities of territorial development by humans, determined the historical continuity of life support systems, and canonized the concepts of "steppe dwellers", "pastoralists", "nomads" and "nomads". Steppe cultures, which have been experiencing the development and regression of technological discoveries for thousands of years, transformed culturally and ethnically while preserving adaptive systems.

Conclusions

It is difficult to imagine the history of Russian archeology without such an event as the 40-year study of the Botai culture. The materials of the Botai settlement, which were first presented to specialists in 1980, gradually became widely known not only at home, but across the world. The Botai settlement later turned out to be the testing ground where the methods of historical and natural science research were applied and improved. It was here that the first experience of restoring the Eneolithic dwellings in Kazakhstan was made. Thanks to the excavations of Botai cultural monuments, the national historical field has been enriched with a whole range of research studies and reconstructions.

Unlike the paleometallic monuments of Kazakhstan, the history of further excavations of the Botai settlement determined its unique fate: from the gradual improvement of the excavation methodology to the clarification of historical conclusions using various methods of natural sciences. The use of geomagnetic techniques, space photographic materials in archaeological exploration, innovative technologies (GPS, etc.), modeling of situational plans, various analyses and others gave an impetus to a new look at the problems of Russian archaeology.

The discovery of the Botai settlement and its correlation to the standard of Eneolithic complexes was closely connected with the process of expanding and lengthening the range of Steppe civilization sites. A number of researchers rightly put the Botai culture at its origins. Steppe civilization is a self-reproducing independent socio-economic, cultural-political and ideological system that actualizes cultural innovations as needed. As a result of steppe civilization in historical times, the addition and transformation of traditional cultures takes place.

Botai, the largest Eneolithic settlement in the region, was the center of the most complex historical processes throughout the Eneolithic period. The special place held by Botai culture is determined by the exclusivity of its geographical location. The emergence and existence of this culture was carried out on a local basis. Having co-existed for some time with representatives of the Neolithic Atbasar archaeological culture, the Botai gradually dominated and eventually became masters of the vast steppe space. Engaged in horse breeding, representatives of the Botai culture have been acting as a link between the inhabitants of Central Asia for centuries. According to archaeological materials, it is partially possible to recreate various elements of ethnocultural

interpenetration, as materials were brought to the Botai site from Siberia and Central Asia.

The historical experience in horse breeding of the Botai people has been passed down from generation to generation for millennia. The archaeological materials of the Botai culture, their objects of labor, works of art, architectural complexes, religious itmes and everyday life experience have made them the property of all mankind in the territories of Eurasia.

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