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**REMARKS ON THE GEOGRAPHY OF BRONZE AGE SITES IN
CENTRAL ASIA
ABSTRACT**

The Bronze Age is a historical period in which important cultural innovations took place in the history of mankind. The study of the geography of the archaeological monuments of this period is of great scientific importance. In the archeology of Central Asia, the issues of zoning of ancient monuments have attracted the attention of researchers for many years. The collected materials were used to register the monuments, determine their geographical distribution, record their location along trade and cultural communication routes, and study some issues of historical geography. However, archeological cartography data is extremely important in researching the problems of economic-cultural types, formation of historical-cultural regions, and ethnic geography. On the basis of archeological data, it is possible to study the geography of monuments and restore maps of archaeological monuments. The article focuses on these aspects.

Key words: historical geography, archaeological research, settlement, site, Bronze Age, region.

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**MARKAZIY OSIYO BRONZA DAVRI YODGORLIKLARINING
GEOGRAFIYASIGA DOIR MULOHAZALAR
ANNOTATSIYA**

Bronza davri insoniyat tarixidagi muhim madaniy innovatsiyalar sodir bo'lgan tarixiy davr hisoblanadi. Mazkur davr arxeologik yodgorliklari geografiyasini o'rganish muhim ilmiy ahamiyatga ega. O'rta Osiyo arxeologiyasida qadimiy yodgorliklarning rayonlashtirish masalalari ko'p yillar mobaynida tadqiqotchilarning e'tiborini jalb etgan. To'plangan materiallardan yodgorliklarning ro'yxatga olish, ularning geografik yoyilishini aniqlash, savdo va

madaniy aloqalar yoʻllari boʻylab joylashishini qayd etib oʻtish hamda tarixiy geografiyaning ayrim masalalarini oʻrganishda foydalanilgan. Biroq arxeologik kartografiyasi maʼlumotlarining xoʻjalik – madaniy tiplar, tarixiy–madaniy viloyatlarning shakllanishi va etnik geografiyasi muammolarini tadqiq etishda ham oʻrni nihoyatda katta. Arxeologiya maʼlumotlari asosida yodgorliklar geografiyasini oʻrganish hamda arxeologiya yodgorliklari xaritalarini tiklash mumkin. Maqolada shu jihatlariga eʼtibor qaratilgan.

Kalit soʻzlar: tarixiy geografiya, arxeologik tadqiqotlar, turar-joy, manzilgoh, bronza davri, mintaq.

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РАССМОТРЕНИЕ О ГЕОГРАФИИ ПАМЯТНИКОВ БРОНЗОВОГО ВЕКА В ЦЕНТРАЛЬНОЙ АЗИИ АННОТАЦИЯ

Бронзовый век – исторический период, в котором произошли важные культурные новации в истории человечества. Изучение географии археологических памятников этого периода имеет большое научное значение. В археологии Средней Азии вопросы зонирования древних памятников уже многие годы привлекают внимание исследователей. Собранные материалы были использованы для учета памятников, определения их географического распространения, фиксации местоположения на путях торговых и культурных коммуникаций, изучения некоторых вопросов исторической географии. Однако данные археолого-картографии чрезвычайно важны при исследовании проблем экономико-культурных типов, формирования историко-культурных регионов, этнической географии. На основе археологических данных можно изучать географию памятников и восстанавливать карты археологических памятников. В статье основное внимание уделяется этим аспектам.

Ключевые слова: историческая география, археологические исследования, поселение, памятник, бронзовый век, регион.

INTRODUCTION

As a result of large-scale archaeological research conducted in Central Asia, important information about the geography and cartography of the monuments of the region was obtained.

In terms of historical geography, the cartography of ancient sites contains different information compared to the first written sources. The information of ancient historians and geographers about the history of the campaigns of Alexander the Great contains more accurate evidence than the reports of Greek historians Herodotus and Ctesius about the territorial location of the peoples of the region. Based on the information of the ancient Persian inscriptions and “Avesta”, we face some difficulties in determining the territorial boundaries of the ancient peoples of Central Asia. There are no written sources about the territorial location of the Bronze Age tribes.

The problem of historical cartography has always been studied on the basis of mutual relations between ethnos and territory. Written and archaeological sources serve as the main source for determining the processes of territorial settlement of the ancient population.

By comparing written sources with archeological data, it is possible to determine the characteristics and boundaries of the population's territorial location, ancient fortresses and cities mentioned in the sources, communication and trade routes, and historical and cultural regions on geographical maps.

In the study of historical cartography, it is important to study sources close to the historical truth related to the subject.

The first stage is an archaeological survey, which begins with research and collects general information about the archaeological objects found and examined (their topography, determination of the number of settlements, calculation of their total area, structure of oases, part of ancient irrigated lands identification) then a map of monuments is drawn up.

The boundaries of the territories where settlements are located do not coincide with each other in different historical periods (Bronze Age, X-VIII centuries BC, VII-IV centuries BC, etc.). Therefore, it is important to create maps of archaeological monuments of different periods in this place. It is desirable to create separate maps representing a specific period.

By studying maps of different chronological periods and comparing them, it is possible to clearly imagine the process of development of territories, that is, the expansion or contraction of settled areas, as well as the boundaries of settled farming oases and historical regions.

MAIN RESEARCH RESULTS

Monument zoning is important in archaeological research. In this regard, the cartography of the Bronze and Early Iron Age sites located in the southern regions of Central Asia is testified [1].

In the course of the research, it is envisaged to analyze the issue of zoning of sites and settlements in the regions of Panj, Vakhsh, Kafirnigan, Surkhan, Balkhob, Kashkadarya, Zarafshan and Murgob oases in the Amudarya basin in the south of Central Asia.

Surkhan oasis.

Bronze and Early Iron Age monuments in the Surkhan Basin are spread over the foothills, and their locations are directly connected to individual smaller rivers.

Agricultural oases are located on alluvial-proalluvial plains on the slopes of Kugitang-Boysun Mountains. It is connected to the deserts of Muzrabod and Sherabad from the southwest, and to the large lowlands that continue to the Bandikhon, Kyzirikdara and Khalkajar rivers in the northwest. The presence of water sources, fertile land and vast pastures served as the basis for the development of the agricultural culture of the Bronze Age.

The settlements of this period were grouped according to the use of common water sources. Among the oldest sites of agricultural culture, the monuments of Sopolli and Jarkutan are located in the lower part of the Ulanbuloksoy and Sherabad rivers at the foot of the Kugitang Mountain [2].

The emergence of Bronze Age farming oases of Pashkhurd, Zarabog, Mirshodi, and later Bandikhon is connected with the settlement process of the ancient population in the foothills of Kugitang and the Boysun foothills in the northeastern direction [3]. Along the Surkhan-Sherabad oasis, 18 Bronze Age settlements are located in Pashkhurd, Karabog - Maidan, Zarabog, Ulanbuloksoy, Sherabad, Bandikhon and Mirshodi ancient farming oases. At the beginning of the I millennium BC, another agricultural site Sartepa was created on the slopes of Hisar Mountain ranges [4].

It is possible to mention seven oases belonging to the phase of transition to the Early Iron Age (Yoz I, Kyzil I, Kuchuk I) – Ulanbuloksoy, Sherabad, Karabog, Maidan, Zarabog, Bandikhon, Mirshodi and Vakhshuvor (or Sangardak-Tupalang). Sites related to this period: Kuchuktepa, Jarkutan, Gazakutan, Burguttepa, Kayrit group (8 monuments), Bandikhon I, Kyziltepa, Boyrachi I, Nomsiztepa, Boyrachi 2 and Sartepa were found and examined. An increase in the number of settlements was found during this period. In the oases mentioned above (except for Vakhshuvor), 14 monuments of the early Iron Age (Kyzil II until the Achaemenid period) were identified.

During the Achaemenid period (Kyzil III, Kuchuk IV) it is explained by the sharp expansion of the acquired territories and the formation of new settled farming areas. 12 monuments of this period have been identified in Mirshodi oasis. In the middle of the I millennium BC, new oases were formed – Surkhan (Bandikhonsoytepa, Khaitabad), Khalkajar (Qoratepa, Chorgul) and Sangardak-Tupalang (Obishir, Sherobodtepa, Dashnabad). A total of 8 settled agricultural oases and 30 houses and fortifications, individual fortresses and city ruins from the Achaemenid period were found in the Surkhan oasis.

Most of the sites were identified in the Mirshodi farming oasis district (15 of them belong to the Kyzyl I-III period). In other regions, from 1 to 6 settlements have been identified. The structure of territorial settlement in oases is different, and this situation is determined by socio-economic factors. Until the middle of the I millennium BC, the monuments were located along the streams, mainly in the

areas on the mountain slopes, while by the III century BC, the area of irrigated areas was gradually moved to the main riverbed of Surkhandarya. The development of this river was connected with the construction of large artificial irrigation facilities since the Greco-Bactrian period.

In the Early Iron Age, the inhabitants of the Surkhan basin were located in the foothills of Kugitang, in the area from lower Ulanbuloksoy – Sherobod River to Sangardak-Tupalang. The geographical boundaries of this area can be noted separately. The land acquired in the Surkhan oasis is bordered by the Hisar ridge in the north, Boysun-Kohitang in the north-west, Bobotog in the east, and Amudarya in the south.

In the research of Sh.B. Shaydullaev, the sites of the Surkhandarya region are placed in the following farming oases:

1. Sherabad oasis – occupied the territories of Ulanbuloksoy, Buston, Sherabad River. The center is Jondavlattepa. There are sites such as Pishaktepa, Kuchuktepa, Talashkantepa I.

2. Boysun oasis – combines Bandikhonsoy and Mirshodi (Kyzilsuv) regions. The center is the Kiziltepa site. The complex of ancient houses and fortifications (Kyzilcha) around Kiziltepa and the group of Bandikhon sites.

Surkhan oasis includes the middle and lower basins of Surkhandarya. Monuments such as Haitobodtepa, Bandikhonsoitepa, Nomsiztepa (Termiz) are located here.

The Kalai Mir site and the Nahri-kalon canal are located in the Kafirnigan oasis. The center of the country is the Kalai Mir monument.

5. Vakhsh oasis included the territories of Yavansu (Tomoshatepa, Shoralisoy) and Vakhsh (Boldaytepa, Boldai canal) basins.

6. In the Panj oasis there are monuments of Baytudasht. The center of the oasis is the Baytudasht 4 site.

7. The Makonimor monument is located in the Kyzilsu farming oasis [5].

In this regard, Sh. Shaydullaev interpreted different ancient farming regions as a common oasis. As an example, the monuments of Ulanbuloksoy and Sherabad,

Mirshodi and Bandikhon are combined into a common oasis (Sherabad and Boysun) [6]. However, the geographical distance between them (Mirshodi and Bandikhon) and the location of (40 km in the right direction) the irrigation system in different river basins were not taken into account. The composition of individual agricultural oases consisted of settlements, artificial irrigation system, cultivated fields, uninhabited lands and pastures surrounding the oases. Each agricultural-irrigation district is a geographical location occupied by people, which provides communities with water sources, fertile lands, pastures, building materials, and natural resources [7]. Oases are separated from each other by natural boundaries. Similar borders and separating geographical distance are defined between Ulanbuloksay and Sherabad, Bandikhon and Mirshodi oases. According to these signs, it is not appropriate to combine them, and their interpretation as separate agricultural oases is worthy of historical reality.

Each agricultural oasis was considered a small administrative area within ancient Bactria. Sh.B. Shaydullaev stated that some farming oases collected sites of the type of houses and fortifications organized in and around the main city [5, – Pp. 32-33].

In the 90s and the beginning of the XX century, research was carried out in the Bronze Age monuments of the Surkhan oasis in cooperation with the archaeologists of Uzbekistan, Germany, France, and the Czech Republic.

In 2006, the archaeological expedition of the Institute of Art History of the Academy of Sciences of Uzbekistan and the Museum of the East (Moscow) discovered the Tillabulak monument, located on the slope of Kugitang, 1.5 km east of the village of Poshkhurd. Tillabulak settlements were built on a high hill (40 rooms made of raw bricks were excavated) [8]. There is a shallow spring at the foot of the ridge. Tillabulak communities used spring water to irrigate smaller oasis fields east of the settlement. Similarly, the Boblangar monument in the south of the village of Zarabog is located 15 m above the natural spring of the same name and occupies an area of 30x35 m. According to the results of radiocarbon (S/14)

analysis, Tillabulak archaeological findings were dated to the XX–XVIII centuries BC [9].

Kafirnihan and Vakhsh oasis, South Tajikistan.

As early as the Bronze Age, the territories of Southern Tajikistan were occupied by agricultural and herding tribes [10]. Ancient monuments are mainly located near the Vakhsh and Kafirnigan basins and in the foothill valleys. Teguzak and Kangurtut settlements of the Bronze Age have been identified in Kyzilsuv oasis [11]. The above-mentioned area can be evaluated as a place where ancient cattle-breeding tribes lived, who knew the field of agriculture. Compared to agriculture, it was more convenient to raise cattle in the natural and geographical conditions of these regions.

Although the settlements are seasonal in nature, they provide information about the territories, settlements and archaeological complexes of the Bronze Age herding tribes.

The boundaries of the herdsmen culture in southern Tajikistan can be noted as follows: in the north - the Hisar range, in the east - the Pamirs, and in the south - the Amudarya. Animal husbandry remained the leading economic sector in the farm until the IX–VIII centuries BC, and in the next historical stage, this industry was continued by the Pamir Saks. Settlements such as Kalai Mir and Boldaytepa are dated to the VII–IV centuries BC. The settled cultural and economic regions of this period are spread on the right bank of the Kafirnigan, Vakhsh and Panj basins, but the agricultural monuments are less dense than in the Surkhan and Lower Murgab basins.

Panj Basin (Northeastern Afghanistan).

Since the Eneolithic and Bronze Age, there have been gradual processes of land development along the route from Hindikush – Amudarya – Panj. J.K. Garden and B. Lyonne noted that 26 sites between IV–II millennia BC, 146 sites belonging to two periods such as 1000–600 BC and 700–600 BC were identified here [12]. Many sites were found in the area from the left bank of the Panj, from Ai-

Khanoum to Shortokai (47 sites). Their main group is located in the area from the left bank of the Panj to the lower reaches of the Kokcha River, as well as on the left bank of Rud Sherovon, the right bank of the Khanobod River, and the middle stream of the Kunduz River.

Khanabad, Kokcha-Oikhonim, Shortugay and Yangikala oases are densely populated with monuments. In four farming oases (Kunduz, Talikan, Kokcha- Ai-Khanoum and Rustak) oasis centers fortified by defensive walls are separated, while in Khanabad, Imam Sahib and Archa oases there are 2-3 centers surrounded by defensive walls.

Lower Murgab farming oases.

The territories of Lower Murgab were first occupied by the farming tribes in the Eneolithic period [13]. The settlements of the Bronze Age are limited to the Murgab delta, and they are located in 8 agricultural oases (Takhirboy, Tughalok, Gonur, Taip, etc.). A large number of sites were found in these oases [13, S. 73].

The territorial location of the sites of Margiana shows that the structure and the total area occupied by the local agricultural oases are quite different from the cultural and economic oases in the Surkhan and Kashkadarya basins. According to the map published by V.M. Masson, the distance from Aravalitepa to Gyumishtepa and Koynetepa is more than 7 km, and in the north to Dashlitepa and Kushbegitepa is 2.5-7.5 km. 9 monuments have been identified in Aravalitepa oasis.

According to V.I.Sarianidi, at the end of the III millennium BC and the beginning of the II millennium BC, the agricultural regions of Southern Turkmenistan, such as Keleli, Ajikuy, Auchin, Taip, Gonur, Togolok, Adam-Basan, Takhirboy, had the first urban culture, the craft almost all areas were occupied by the owners of advanced culture as a result of migration. At the same time, there are 13 in Keleli farming oasis, 7 in Ajikuyi oasis, 14 in Auchin oasis, 8 in Taip oasis, 15 in Gonur oasis, more than 30 in Togolok oasis, 10 in Adam-Basan oasis, 12 in Takhirboy oasis and in total of more than 100 sites of the Bronze Age appeared in the Lower Murgab basin [14].

The second wave of migration of the owners of this culture that arose in the Murgob oasis, that is, the period of appropriation of Bactria is begun. According to V.I. Sarianidi, the people who migrated to the regions of South Bactria (Northern Afghanistan) in the Bronze Age settled in places that were convenient for artificial irrigation. 4 sites of the Bronze Age were found in the Davlatabad farming oasis, and more than 40 in the Dashtli oasis.

There is also information about the presence of Bronze Age monuments, the material culture of which is characteristic of the Dashtli culture, in the agricultural oases of Nichki and Farukhabad.

Bronze Age Sopolli, Jarkutan, Tillabulak, Arabulak sites appeared almost simultaneously in Northern Bactria, Surkhan oasis, and Molali and Buston sites were formed as a result of gradual historical development.

Kashkadarya oasis.

Until now, some archaeological materials found in the oasis – copper ax and dagger (Shahrisabz area), bronze spearhead characteristic of steppe cultures (Chirakchi district) – indicate that the oasis areas began to be occupied in the Bronze and possibly Eneolithic periods. At the end of the II millennium BC and the beginning of the I millennium BC, agriculture flourished in the eastern and lower parts of Kashkadarya.

During this period, four settled farming economic and cultural districts of Shorobsoy, Tankhosdaryo, Kyzildaryo and Yerkurgan oases were formed. They are located along the roads leading to Surkhandarya and Amudarya [15].

Zarafshan oasis.

In the upper Zarafshan oasis, Sarazm is a large settlement of the Eneolithic and Early Bronze Age (middle IV millennium – beginning of II millennium BC) (its total area is 90 ha). Multi-room dwellings, temples, pottery workshops, metal smelting and weapon manufacturing workshops were found in the site. From an economic and cultural point of view (farming, cattle breeding, mining, metal smelting), Sarazm communities were distinguished by a high level of socio-economic development [16].

In the lower Zarafshan oasis, there are monuments of the Zamonbobo culture based on the form of livestock-farming (end of the III millennium BC – beginning of the II millennium BC) and seasonal spaces of the Andronovo culture tribes that entered the lands of the Bukhara oasis and the lower part of Kashkadarya in the middle of the II millennium BC is identified (Kichik and Kattatuzkon, Kaptarnikumi, Nameless monuments) [17].

The pastoral tribes of the steppe are located on the slopes of the Zarafshan ridge and in large areas along the river oasis. Their places of residence - settlements, remains of settlements, mining workshops and separate cemeteries have been identified. Monuments such as Mominabad, Saigus, Chakka and Galasherik cemeteries, Tokayli settlement, Dashti Kazo cemetery and place located near copper and lead mines in Upper Zarafshon [18].

Materials related to the transition from the Late Bronze Age to the Early Iron Age and subsequent stages were found in Afrasiab and Koktepa [19].

CONCLUSION

Based on the geography and cartography of the sites of Bactria, Margiana and Sugd, it is possible to distinguish the following natural-geographic regions with ancient inhabitants:

1. Lower oases of rivers surrounded by steppes (lower Murghab, Balkhob and Zarafshan).
2. Plains of large rivers (middle Amudarya left coastal lands, Zarafshan, Kunduz and Kafirnigan).
3. Oases of small mountain rivers and streams (the eastern part of the Kashkadarya basin, the slopes of the Kugitang – Boysun mountains, the Panj basin).

Territorial location features are determined by the availability of water sources and the possibilities of their use. In the lower reaches of the rivers, the artificial irrigation system is connected to the riverbed networks. Also, irrigation canals were dug from mountain rivers. Streams at the foot of the mountain have formed small oases, their size is limited by high natural hills.

Lower Murgob region – Margiana is densely populated. The developed oases are not far from each other at a distance of 2.5-5-20 km. The oases, surrounded by deserts, are limited to the areas around the branches of the single Murgob River. The dynamics of the development of the irrigation system was determined by the use of irrigated land and affected the territorial location.

In the Zarafshan basin, the settled farming population is located in the oases of the middle and lower part of the river. A similar situation was found in the basins of the Kafirnigan and Vakhsh Rivers. The level of development of the territories was different. In comparison to Margiana, the reserve lands in Bactria and Sughd regions have a large number of reserves.

1. According to archaeological data, the following regions of territorial settlement can be distinguished:

2. Oases consisting of a large number of monuments grouped along springs and streams at the foot of the mountain.

3. Oases – districts consisting of 2-3 settlements in the oases of mountain streams.

4. Flat lands in the lower part of densely populated rivers (Murgob, Balkhob oases)

5. River plains surrounded by deserts (middle Amudarya).

6. River plains in front of the mountains (Kunduz oasis, Panj basin on the left bank).

Murgob, Balkhob oases, and especially in the basins of the Panj and Kunduz rivers on the left bank, are densely populated compared to Surkhan, Kashkadarya and Zarafshan oases. In this way, the level of development of the territories was high. For example, more than 70 ancient sites have been identified in the oases of Khanabad, Shortugai, Sheravanrud and Yangikala in the Panj basin. In the regions of Eastern Bactria, mining operations have been carried out consistently. The presence of precious metals (gold, silver) and rare mineral stone – lapis-lazulli mines in the mountains here determined the density of settlements and population.

Also, in the agricultural oasis district of Mirshodi in Surkhandarya, there are at least 15 houses and fortifications in the agricultural area of the large center – Kiziltepa. The boundaries of this cultural-economic oasis are artificial irrigation system, irrigated fields, Kyziltepa and homesteads, as well as meadows and natural hills used for cattle grazing along streams – limited to hills.

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