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ON THE EMERGENCE OF A PRODUCTIVE ECONOMY IN THE LOWER REACHES OF THE SYR DARYA (THE ETHNOCULTURAL SITUATION IN THE SOUTHEASTERN ARAL SEA REGION IN THE SECOND HALF OF THE 1st MILLENNIUM BCE)*

This article is devoted to the emergence and development of sedentary agricultural and pastoral cultures that formed in the second half of the 1st millennium BCE in the lower reaches of the Syr Darya. The formation of these cultures was closely associated with the economic and cultural transformation of the early Saka pastoralists, who adapted to the conditions of agriculture. These processes occurred against the backdrop of natural and hydrographic changes, such as the displacement of the Syr darya riverbed towards the Zhanadarya River. The study employs comparative-typological, stratigraphic, and interdisciplinary methods, including comparisons with the regions of Khorezm, Bactria, the Volga river region, and the Southern Urals. Paleoecological and historical-geographical approaches were also used. The article examines in detail the information of ancient authors about the geographical location and characteristics of the archaeological sites of the region. The research of such scientists as S.P. Tolstov, B.I. Weinberg, B.A. Litvinsky, I.V. Pyankov is analyzed. By comparing the works of these authors with ancient written sources, various scientific hypotheses regarding the ethnicity of the population of the Shirikrabat culture are considered. Thus, the Shirikrabat culture is interpreted as a unique local manifestation of the sociocultural system in which farmers, semi-nomads and nomads of the Eurasian steppes interacted. The article also highlights data on the life and economy of the population, as well as the conclusions of experts regarding the dating of sites.

Key words: the Aral Sea region, chronology, Saka, Massagetae, Sarmatians, pastoralists, nomads, semi-nomads, farmers.

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К ВОПРОСУ О ВОЗНИКНОВЕНИИ ПРОИЗВОДЯЩЕГО ХОЗЯЙСТВА В НИЗОВЬЯХ СЫРДАРИИ (ЭТНОКУЛЬТУРНАЯ СИТУАЦИЯ В ЮГО-ВОСТОЧНОМ ПРИАРАЛЬЕ ВО ВТОРОЙ ПОЛОВИНЕ I тыс. до н.э.)

Статья посвящена вопросу возникновения и развития оседло-земледельческой и скотоводческой культур, сформировавшихся во второй половине I тыс. до н.э. в нижнем течении Сырдарии. Становление этих культур тесно связано с хозяйственно-культурной трансформацией ранних саков-скотоводов, адаптировавшихся к условиям земледелия. Данные процессы происходили на фоне природно-гидрографических изменений, таких как смещение русла Сырдарии в сторону Жанадарии. В исследовании применены сравнительно-типологический, стратиграфический и междисциплинарный методы, включая сравнение с регионами Хорезма, Бактрии, Поволжья и Южного Урала. Также использовались палеоэкологический и историко-географический подходы. В статье подробно рассматриваются сведения античных авторов о географическом расположении и характеристиках

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археологических памятников региона. Анализируются исследования таких ученых, как С.П. Толстов, Б.И. Вайнберг, Б.А. Литвинский, И.В. Пьянков. Путем сопоставления работ этих авторов с античными письменными источниками рассматриваются различные научные гипотезы относительно этнической принадлежности населения ширикрабатской культуры, рассматриваемой как уникальное локальное проявление социально-культурной системы, в которой взаимодействовали земледельцы, полукочевники и кочевники Евразийских степей. Также в статье освещаются данные о быте и хозяйстве населения, выводы специалистов относительно датировки памятников.

Ключевые слова: Приаралье, хронология, саки, массагеты, сарматы, скотоводы, кочевники, полукочевники, земледельцы.

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Introduction

In the middle of the 1st millennium BCE (most likely at the turn of the 5th—4th centuries BCE), the hydrographic situation in the Syr Darya delta changed. The channel of the Zhanadarya formed along its entire length, and the main flow of Syr Darya water into the Aral Sea was carried out along it. Some sections of the earlier channel of the Inkar Darya turned into lakes and oxbow lakes (Andrianov, Glushko 1991: 110; Weinberg, Levina 1993: 7—14). Thus, the southwestern part of the delta offered highly favorable conditions for the development of a sedentary agro-pastoral culture based primarily on irrigated agriculture. The materials obtained as a result of the study of ancient monuments in the Middle Zhanadarya basin cover the period from the end of the 5th to the 2nd centuries BCE or, according to the latest data, to the turn of the 2nd—1st centuries BCE. Based on a number of significant common features, they can be combined into a single compact group. Currently, more than 200 sites of this culture are known — fortresses, fortified hillforts, unfortified settlements, burial structures. Initially, all these sites were united into the so-called Kokcha-Tengiz archaeological culture, which, according to S.P. Tolstov, was divided into two variants — western (northern delta of Akchadarya) and eastern (lower reaches of Zhanadarya and Inkar darya). At the same time, hillforts and settlements of the eastern variant were attributed to the late stage of the Kokcha-Tengiz archaeological culture. S.P. Tolstov believed that its origins should be sought in the cultures of the southern Aral Sea region of the Late Bronze Age and pointed out that Kokcha-Tengiz ceramics "bear the imprint of the traditions of the Bronze Age" (Tolstov 1962: 137). Thus, the Early Iron Age culture of the lower reaches of the Syr Darya was considered, in a certain sense, as a continuation of the steppe bronze cultures of the southern Aral Sea region. Later, as new archaeological materials accumulated, this point of view was not confirmed, and at present the formation of the Saka-type cultures is associated with a discontinuous and chronologically parallel cultural development, which was largely due to the eastern impulse in the ethnogenesis of the early Sakas of the Aral Sea region. This process is recorded both in archaeological and paleoanthropological material and is associated, to a large extent, with the multidirectional migrations of the population of the Late Bronze Age of Eastern Kazakhstan, Southern and Western Siberia (Yablonskiy 2015: 295; 2017: 160).

Certainly, the Syr Darya Saka were part of the Saka—Massagetae ethnocultural complex, which occupied the territory of the entire Southern Aral Sea region. If we take into account the numerous parallels, correspondences, and often direct analogies in the material culture and burial rites of the Saka of the lower reaches of the Syr Darya and the population of the Volga—Ural interfluve and the Southern Urals of the 6th—5th centuries BCE, then in all likelihood, one can say that the mobile pastoralists of the southeastern Aral Sea region were part of the vast Saka—Massagetaean—Sauromatian world of the steppe zone of eastern Eurasia (Vishnevskaya, Itina 1971: 197—208; Vishnevskaya 1973: 131—132; Itina 1992: 46; Levina 1998: 45; 2000: 129).

Methods and materials

Research Materials

The study is based on a comprehensive analysis of archaeological materials obtained as a result of long-term field work in the basin of the middle and lower Zhanadarya, covering the sites of the second half of the 1st millennium BCE. The sources used were data from systematic excavations of fortified and unfortified settlements, hillforts and necropolises, as well as exploration materials. Special attention is paid to the complexes, which are considered as key monuments of the Shirikrabat archaeological culture.

Research Methodology

The methodological basis of the study was a comparative typological analysis, which made it possible to establish cultural and chronological frameworks and inter-regional relations. Methods of stratigraphic analysis, serial typology, and comparison with materials from neighboring regions — Khorezm, Bactria, Ferghana, Volga—Ural, and Southern Urals — were used. Paleoanthropological and paleoecological data were also used to reconstruct the demographic and natural-geographical conditions of the formation of a settled culture.

Additionally, methods of historical and geographical analysis were applied using data on changes in the ancient riverbeds of the Syr Darya (Zhanadarya, Inkardarya), and information from ancient written sources was used to compare archaeological and historical data.

Discussion

At present, there is no doubt that the culture of sedentary farmers and pastoralists of the second half of the 1st millennium BCE was formed in the lower reaches of the Syr Darya on the basis of the Saka culture of the early Iron Age. There is every reason to believe that the people who inhabited the agricultural oases were direct descendants of the pastoralists who left the early Saka burial sites of South Tagisken and Uygarak (Trofimova 1963: 232—235; Ginzburg, Trofimova 1972: 117—118). S.P. Tolstov identified the bearers of the Shirikrabat archaeological culture with the Saka tribe of the Apasiaks, known from ancient sources as the water Saka, and the massagetae of the swamps according to Strabo (Strabo VIII: 483—485; Tolstov 1948: 99), who, as follows from the same source, participated in the defeat of the Greco-Bactrian kingdom (Gafurov 1972: 130—131). However, this point of view was later questioned. First of all, attention was paid to the economic method of the population, based on irrigation agriculture and the presence of fortified urban-type settlements, which is difficult to correlate with the mobile Saka-Apasiacae cattle breeders, mentioned in written sources (Litvinsky 1972: 174—175). At present, based on newly obtained archaeological data, the western group of monuments discovered in the area of the lower reaches of the Uzboi are associated with the Saka-Apasiak tribe, which, in general, does not contradict the data of written sources (Weinberg 1999: 262). At the same time, S.P. Tolstov's point of view is not completely excluded, so, according to I.V. Pyankov, both Uzboi sites and the Shirikrabat archaeological culture can be associated with the apasiaks (Pyankov 2013: 607). However, if we accept the point of view of I.V. Pyankov, then it must be admitted that in the lower reaches of the Syr Darya, mobile cattle breeders (the Saka-Apasiacae mastered a completely new type of economic activity for themselves — irrigation farming, which again contradicts the data of written sources. Much later, B.I. Weinberg proposed to identify the population that developed the territory of the southern part of the ancient delta of the Syr Darya in the second half of the 1st millennium BCE with the tribe of dahae, known from written sources. Following V.V. Struve, B.I. Weinberg equated «the Saka who lived beyond Sogdiana» with the Dahae (Struve 1968: 58, 113—114; Weinberg, Levina 1992: 60—61). This point of view was not shared by all scientists. For example, B.A. Litvinsky localized the “sakas who are beyond Sogdiana” on the right bank of the Syr

Darya in the region of its middle reaches (Litvinsky 1960: 91—96; 1972: 169; Shcheglov 2006: 288—289). In connection with the problem of localizing the territory of settlement of "the Saka who lived beyond Sogdiana", it seems that one cannot ignore the burial sites and individual mounds discovered in the territory of the Central and Northern Kyzylkum, which, in all likelihood, were the "scythian desert" that Arrian speaks of (Arrian IV, 5: 3—4). Now, taking into account archaeological data, there is reason to say that groups of cattle breeders roamed the territory of Kyzylkum, which can be attributed to the Saka or Saka-Sarmatian period in the broad sense of the word. In any case, the burial sites studied in the central and northern parts of this Central Asian desert are dated within a fairly wide chronological range — the 6th—1st centuries BCE. It should be noted that, if the early complexes (the Juzkuduk burial ground, 6th—5th centuries BCE) with the western orientation of the deceased and certain similarities in burial rites and grave goods, reveal certain parallels among the materials of the Saka burial grounds of Uygarak and South Tagisken (Manylov 1990: 33—38), then later burials (the Kokpatas burial mound groups, 3rd—1st centuries BCE) with a meridional orientation of the burial pit and a predominantly southern orientation of the deceased, based on the analysis of the burial inventory, most likely belong to the Sarmatian groups (Manylov 1992: 59—68). It must be assumed that the early burial mounds of the Saka period discovered at Sultan-Uizdag, as well as the under-mound burials in the western part of the Kyzylkum Desert — Uch-ochak, Tashkala (Baratov et al. 2013: 47) belong to the same circle of sites. Thus, the «scythian desert» in the second half of the 1st millennium BCE was not such a «desert», but it can be considered as a region of migration of mobile cattle breeders. Could these nomadic groups be identified with "the Saka who lived beyond Sogdiana", as mentioned in ancient sources? Of course, this assumption requires additional argumentation, but the fact that in the territory to the north and northeast of central Sogdiana during Alexander's campaigns there were nomadic camps of the Saka, and later Sarmatian period in the broad sense of this term, seems to be confirmed by archaeological data. Based on the analysis of ancient Persian texts, I.V. Pyankov came to the conclusion that "the Saka beyond Sogdiana" lived in the northeast of the Achaemenid Empire, to the northeast of Sogdiana, while he clearly separates the Dahae (dai) tribes from both the massagetae and the "Sakas who lived beyond Sogdiana" (Pyankov 2013: 452—458). B.A. Litvinsky was of the same opinion (Litvinsky 1960: 92). Tarn also placed this group of sakas in approximately the same area, suggesting that «sakas who are beyond Sogdiana» occupied the territory between the mountains north of Samarkand (Nurata Range) and the Syr Darya (Yaxartes), which included the region of Khojent (Alexandria the Farthest) and, perhaps, the right bank of the Syr Darya from the side of the Fergana Valley (Tarn 1951: 475). Meanwhile, Arrian, in addition to the "scythian desert", names another region, namely "the plain in front of the scythian desert", where Spitamenes, after lifting the siege of Maracanda, having recruited another 600 Scythian horsemen, awaited the pursuing detachment of Macedonians under the command of Farnuh. Based on the source information, this region is definitely located on the northern borders of Sogdiana, moreover, there are good reasons to assume that this was the northwestern border of Sogdiana, possibly the lower reaches of the Zeravshan, since after an unsuccessful confrontation, in order to avoid even greater losses, a detachment of Macedonians, "lined up in a square, retreated to the Politimet River (Zeravshan), where there was a forest" (Arrian IV: 4—6; Droysen 2011: 270—280). It must be assumed that the "plain before the scythian desert" could have been the steppe zone north of the floodplain of the Zeravshan and bordered on the north by the bedrock sands of the Kyzylkum Desert, where the main burial mounds of Bukhara Sogdiana are concentrated, which, by many features, belong to the monuments of the Sarmatian period (Obelchenko 1992: 219—224). In this regard, the hypothesis of A.S. Balakhvantsev deserves attention, who, in our opinion, quite reasonably proposed to correlate the population that left the mounds on the territory of Bukhara Sogdiana with catacombs of a certain type (Lavandak) and meridionally oriented pits with the dahae who at the end of the 1st millennium BCE advanced into the territory of southwestern Turkmenistan, into the foothills of the Kopetdag (Balakhvantsev 2005: 64—67; 2016: 11—19).

It is quite possible that the ethnonym "dahae" in the sources refers not to one tribe, but to a confederation of tribes that inhabited the desert between the Oxus and the Jaxartes. In any case,

Strabo speaks of three tribes of dahae “Some of the Dahae are called Aparni, others Xanthii, and still others Pissuri” (Strabo VIII).

Result

Thus, according to ancient sources, two areas occupied by nomadic Saka groups can be distinguished north of Sogdiana, or along its northern borders, in the last third of the 1st millennium BCE. The first was the “plain in front of the Scythian desert”, where Spitamenes recruited another 600 “Scythian” (Saka) horsemen (Dahae?). The second was the “Scythian desert”, through which nomadic groups roamed, possibly including the “Saka who lived beyond Sogdiana” mentioned in written sources. It should be noted here that the areas to the north or northeast of the “Scythian desert”, where the Shirikrabat archaeological culture was widespread in the southern part of the Syr Darya delta, are not mentioned in any way in ancient sources. This is explained by the fact that Alexander's companions and, accordingly, later authors knew nothing about the lower reaches of the Syr Darya and considered it to be the European Tanais (Don), which was the border between Europe and Asia. Only the middle reaches of the Syr Darya were in the field of view of ancient authors (Pyankov 2013: 604).

As mentioned above, according to B.I. Weinberg, in the 4th—2nd centuries BCE, the dahae tribes inhabited the southwestern part of the ancient Syr Darya delta. However, this hypothesis is not supported by either written sources or archaeological data (Pyankov 2013: 598—618). It should be noted here that, according to all sources, the Dahae are positioned as nomads who advanced to the territory of the Central Asian Mesopotamia from the region “above Meotida” (in this case, the Aral Sea), as is believed by most researchers from the regions of the Southern Urals, where the Prokhorov archaeological culture was widespread. The bearers of the Shirikrabat archaeological culture cannot in any way be considered nomads. As follows from the analysis of the archaeological complex, they were the direct heirs of the Saka, who inhabited the southern regions of the delta in the 7th—5th centuries BCE. Thus, if we follow the hypothesis of B.I. Weinberg, the dahae are the autochthonous population of the delta regions of the Syr Darya, which does not correspond in any way to the data of ancient authors.

The “cornerstone” of the hypothesis of B.I. Weinberg is her assumption that Babish-Mola is an unfinished satrapal residence of the governor of the Achaemenid Empire, from which it follows that the lower reaches of the Syr Darya and, consequently, the tribal association of the dahae were part of the Ancient Persian state as a separate satrapy. At the same time, the dahae, erroneously, in our opinion, are identified with the “the Saka who lived beyond Sogdiana” (Weinberg 1999: 131—132, 261). However, archaeological data obtained in recent years do not confirm this assumption. The archaeological complex obtained during excavations on the territory of the Babish-Mola oasis cannot yet be dated earlier than the beginning of the 3rd century BCE. Earlier materials come from the Shirik-Rabat hillfort, which cannot be considered a satrapal residence — it was a huge burial cult center.

The dating of the Babish-Mola complex proposed above is not contradicted by the fact that the layout of the eastern part of the “Great House” is largely close to the plans of Iranian temples. At present, archaeological evidence suggests that the Achaemenid architectural tradition continued in Bactrian architecture during the Seleucid and even the later Greco-Bactrian periods. Evidence of this is the construction of the Oxus Temple on the bank of the Amu Darya, which dates back to no earlier than the beginning of the 3rd century BCE. In this monument, the Near Eastern and, above all, Achaemenid architectural tradition is very clearly traced (Litvinsky, Pichikyan 2000: 367—370). Another piece of evidence of the «Achaemenid cultural connection» in new areas (the Syr Darya delta), according to B.I. Weinberg, is the spread in this region of the pottery complex from the south of Central Asia, together with adobe construction» (Weinberg 1999: 131). However, in the archaeological complexes that we attribute to the early stage of the Shirik-Rabat culture (Shirik-Rabat and the lower cultural layers of the fortified estate of Bulandy), where handmade pottery accounts for more than 50% of the total assemblage,

ceramic forms that could be defined as "Achaemenid"[1], and are known from southern Central Asia are practically absent. At the same time, the complex contains vessels that find direct analogies among the ceramics of Khorezm in the middle of the 1st millennium BCE. It is enough to recall the fragments of large vessels with red engobe decoration on the outside, typical Khorezm flasks of a hemispherical shape. The traditions of building from adobe bricks, as already mentioned above, could have been borrowed from Khorezm. At a later stage of cultural development (complex Babish-Mola 7), the connection with the southern regions is indeed clearly visible, especially in pottery production, but these are already traditions of the Hellenistic period. Taking into account the above, as well as in light of new data obtained during excavations in recent years, there is no reason to speak of any «Achaemenid» cultural connection, much less of the political dependence of the lower reaches of the Syr Darya on the Achaemenid state.

Conclusion

At present, we have no convincing arguments on the basis of which we could correlate the population of the southern part of the Syr Darya delta (Shirikrabat culture) with any people or tribe known from ancient sources. At the same time, there is every reason to believe that in the second half of the 1st millennium BCE, in the territory of the Southern Aral Sea region, along with Khorezm, there was a large agricultural oasis in the lower reaches of the Syr Darya. Just like Khorezm, it was surrounded by the Sarmatian and Saka pastoralist tribes that occupied vast expanses of the eastern part of the steppe zone of Eurasia. Apparently, these two agricultural oases can be considered as components of a huge socio-economic megasystem — the Saka—Sarmatian—Massagetaean world, within which nomadic cattle breeders, semi-nomads and farmers interacted.

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[1] In this case, it is necessary to clarify. The set of ceramic forms that in the archaeology of Central Asia is usually called the "Achaemenid ceramic complex" (the Yaz II—III complexes) is practically unknown in the territory of Iran. At present, there is every reason to believe that this complex was formed in the second third to the middle of the 1st millennium BCE in the territory of the southern regions of Central Asia (Bactria, Margiana) and derives from the Late Bronze Age ceramic assemblage.

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