Ancient cultural centers of the Southern Urals: Preservation with a view to development
The Bronze Age Settlements of Irendyk and Proto-City of Arkaim-Sintashta

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Abstract

The current status of the problem of identity and difference of historical archaeological artifacts of "The Country of cities" (Arkaim-Sintashta culture) located in the Chelyabinsk Region steppe zone and historical archaeological objects located in Irendyk mountain steppe zone of the Republic of Bashkortostan (ancient settlements Ulak-I and Selek) was investigated. General features of the objects were discovered. Consequently we can consider the idea of the existence of an integrated cultural space in steppe as well as in mountain steppe zones of the Southern Urals in the Middle Bronze Age. Further researches are to be conducted in two directions, namely: 1) to continue the investigation of archaeological artifacts; 2) to promote a united work of the Republic of Bashkortostan and the Chelyabinsk Region on creation of a biosphere reserve protected by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Keywords: Culture genesis, Ulak-I and Selek fortified settlements, The Country of cities, biosphere reserve of the United Nations Educational, Scientific and Cultural Organization (UNESCO).
Introduction

The area of junction of the great steppe of Eurasia and the mountains of the Southern Urals has been inhabited by people for hundreds of thousands of years. Chronologically the Southern Urals and TRANS-Urals monuments belong to the periods of the Paleolithic age, the Mesolithic age, the Neolithic age, the Chalcolithic age, the Late Bronze Age, the Early Iron Age, the Early and Late Middle Ages and ethnography. At the same time, the Southern Urals and TRANS-Urals are not considered as a single landscape where numerous ancient cultures were formed and functioned.

Culture genesis on the border of steppe and mountain landscapes. The significant characteristic of a transition zone from mountains to steppes is its landscape originality. Geographically the zone is a piedmont steppe and mountain territories with narrow valleys down the current of the small rivers forested here and there. Similar areas with a complicated landscape attracted the population at all historical times as they created full-scale conditions for maintaining traditional economy, possibility of shelter and creation of various types of settlements. Thus, the landscape being a natural and geographical factor acts as a catalyst of ethno-cultural processes, becoming a cultural landscape (Vedenin, U.A., 1999).

From the point of view of culture genesis A. Toynbee has assimilated islands in the ocean, oases in the desert and mountain forest areas in the steppe (Anthony D.W., 1990). According to L.N. Gumilev (Gumilev, L.N., 1989), a combination of two or more landscapes and ethnic groups is obligatory for the emergence of ethnos. The territory is a decisive factor for ethno genesis. Education of the people is polycentric. Flashes of ethno genesis are not connected either with culture and life of the people being at the stage of evolution or stagnation, or with their racial structure, the level of economy and engineering. They are associated with conditions of space and time.

The combination of different ways of managing economy is inevitable in conjunction with landscapes. Such systems are economically efficient due to differentiation of labor and specialization.

The territory of monuments of Sintashta-Arkaim, conditionally called "The country of cities" that includes fortified settlements of the Bronze Age located on Irendyk, covers several landscape zones which create conditions to cultural explosion which in its turn gives rise to new ethnic groups and cultures, namely:

1) the variety of landscapes comprises the ridge of Cisurals which is a combination of mountains, piedmonts, plains, steppes, forest-steppes, relic coniferous forests, pastures;
2) the peneplain comprises destroyed mountains of the Urals rich in mineral resources; these are malachites, lazurite, copper deposits with low-melting natural-doped copper ores;
3) the watershed which is a junction of headwaters of Siberian, European and Asian rivers on the eastern slopes of the Urals. This is the way from Europe to Asia.

According to L.N. Gumilev, such "mestorazvitiya" (a place of ethno evolution) with rich variety of landscapes and a junction of various natural zones can be a birthplace of ethnos. Southern Trans-Urals where "The country of cities" was situated during the Bronze Age could be such place.

The peak of culture genesis of steppe civilization of southern Trans-Urals is connected with Sintashta culture. Due to the development of the ore base of metallurgy "The country of cities" has reached the level of civilization of proto-city type.
We want to emphasize a unique floristic and syntaxonomic character of the steppes in the region of Irendyk. Earlier it was offered to allocate especially protected territory there (Yanturin, S.I., 1991, 2003). The large-scale analysis of the steppes of Eurasia was carried out by a group of Japanese researchers under the leadership of T. Nakamura. They registered that western and eastern parts of the steppe zone have undergone significant anthropogenous changes: if the eastern part of the steppes has undergone a pasture degradation, then the ground of the western part has been practically all broken. Owing to this fact, both in the east and in the west no steppe areas (Nakamura, T., 2004, 2005, 2007, 2008), typical for these places, remained.

According to T. Nakamura, the steppe areas of Irendyk and adjacent Trans-Ural steppes, including the steppes of the historical and cultural reserve Arkaim in the Chelyabinsk Region are the wealthiest as to a specific variety in the world. About 100 and more types, including representatives of "Red Book of Bashkortostan", located in the territory of 100 sq.m area have been described by him.

"The country of cities". The territory of Sintashta culture where fortified settlements of the Middle Bronze Age are compactly allocated is called "The country of cities". But the culture itself is called a "proto-city civilization" so as to emphasize a fundamental difference between rigidly planned and fortified Sintashta center and a traditional settlement of the Bronze Age.

"The country of cities", unlike other cultures of the Early Metal Age, such as Pit Grave Culture, Alakul, Srubna culture has borders, a clear-cut ecological niche and a relatively small territory.

It stretched along eastern slopes of the Urals for 350 km from the north to the south and for 250–300 km from the west to the east. The unique character of the area of "The country of cities" is that it has natural contours. High plains, a hummocky topography and insular low-hill terrains are in harmony. The landscape of the peneplain is restricted by the ridges of the Urals in the west. In the east it sharply turns into plains of Western Siberian Lowland. It is propped up by forests in the north and it is restricted by semi-deserts of Kazakhstan in the south. According to the administrative map of Russia it locates in the south of the Chelyabinsk Region, in the south-east of the Republic of Bashkortostan, in the eastern steppes of the Orenburg region and in the north of Kazakhstan.

The discovery of Sintashta-Arkaim culture has substantially determined the investigation of the steppes of the Bronze Age, i.e. forest-steppes of Eurasia. Southern Trans-Urals is acknowledged as one of the brightest centers of culture genesis of the Paleo-metall Age today. Essentially new objects for steppe area have been discovered here. It is like a complex of archaeological monuments of the Middle Bronze Age, such as fortified settlements, beneath barrows burial complexes with the remnants of war chariots, funeral and temple constructions with unusually difficult architecture (a big Sintashta barrow), mining and rock excavation production sites, fields of ancient agriculture, complex meliorative constructions. But the main element of the Middle Bronze Age culture of southern Trans-Urals and culture forming sign of Sintashta-Arkaim culture are fortified settlements. They have defined territorial limits of "The country of cities" within the boundaries of the peneplain of Trans-Urals and the watershed of Siberian and European river basins (Zdanovich, G.B., 2007, page 6).

The burial ground corresponds to each fortified settlement of "The country of cities". The distance between settlements amounts to 40-60 km. The radius of the territorial area is 20–30 km, the average territory of the area is 2000 sq.km. The area of the fortified center
within defensive walls is from 8 (Isiney I) to 34 thousand sq.m (Chernorechye). Arkaim "cities" can be compared with "palaces" of Minoan period of the second millennium BC in size. The area of the Palace of Knossos on Crete amounts to 16 thousand sq.m. Despite their small sizes, the fortified centers can be called proto-cities. The use of the concept "city" in reference to the fortified settlements of Arkaim-Sintashta type is tentative. However, it is impossible to call them just settlements since Arkaim "cities" differ in powerful defense construction, monumental architecture, complex communication systems. The territory of a fortified center is extremely saturated with layout details and profound meaning. It is very space-saving and carefully designed. The fortified center can be defined as an urbanized area. It is a city in terms of the organization of the territory.

Residents of "The country of cities" have for the first time laid the foundation of a complex economy, namely pastoral cattle breeding and steppe farming. This type of farming have defined the development of the entire steppe of Eurasia for thousands of years ahead. The main historical sense and the main action of the Southern Urals center of culture genesis consisted in it (Zdanovich, G.B., 2005, 2002).

**Baishevsky archaeological residential district.** So far, over 400 archaeological and ethnographic objects have been discovered in the territory of the Baymaksky region of the Republic of Bashkortostan, to the south of the city of Baymak, in the neighborhood of the village of Baishevo and in the surrounding territories. New interesting discoveries can occur in the course of researches. (Saveliev, N.S., 2004).

The peculiarity of this archaeological residential district is a combination of monuments of almost all periods of human exploration of this region in a rather small territory. The representative archaeological scale of the Southern Urals is presented here.

On the other hand, there is a variety of monuments such as earth and stone mounds and burial mounds, barrows "with moustaches", the stone and earth fencings, funeral monuments, stone-working workshops of the Stone Age, single menhirs and avenues of menhirs, a ritual and calendar complex, ancient encampments, fortified and unfortified settlements and ethno-historic objects of the settlement type presenting shelter of the ancestors of the Bashkirs (Yaminov, A.F., 2011). This region is also a part of the well-known "jasper belt of the Urals". It is rich in ornamental stones. Archaeologists discovered ancient workshops producing stone tools, including the earliest processing workshop of jasper.

**Kyzyl-Yar-II** (Kotov, V.G., 2001). The objects of material and spiritual culture reflect the history of the population for hundreds of thousands of years. They contain information about different types of farming such as hunter-gatherers, farmers, herdmen. Such wealth and diversity of the territory with regard to typological relation of archaeological monuments is an important factor of formation of a memorial reserve museum here. Therefore, according to the resolution of the Cabinet of Ministers of the Republic of Bashkortostan from 29 November, 2002, the historical, archaeological and landscape reserve museum "Irendyk" has been set up in this territory.

Currently the area under consideration is not a subject of intensive economic development and retains both its landscape originality and integrity of historic landscape complexes (Yanturin, S.I., 1991, 2003).

Among the variety of monuments located in the territory of the reserve museum, the fortified settlements Ulak 1 and Celek stir a particular interest. This is due to the fact that so far they have been the only objects in the territory of the Republic of Bashkortostan, which
most researchers more or less clearly link with the Sintashta-Arkaim range of monuments, or the so-called "The country of cities".

First of all, it is Ulak 1- a fortified settlement of Middle Bronze Age (the fourteenth century BC). The monument is located on a low above flood-plain terrace of the right bank of the Ulak stream (the right tributary (inflow) of the Big Urtazymka river) to the north west of the village of Baishevo. The platform of the monument is enclosed with circular defensive earthworks in a diameter of 100 m and up to 0.85 m high, opened in the north. From the ground side before the earth mound there is a slightly noticeable melted ditch about 5 m wide and 0.1-0.15 m deep. On the platform of a monument 28 residential hollows of an oval form are recorded, the majority locates radially. Both exploration works, test drilling and geophysical investigation have been carried out and the plan has been worked out. It allowed to find out construction features of the monument. Small collection of Srubna, Sintashta and Alakul ceramics was discovered (Saveliev, N.S., 1997).

The appraisal survey has been carried out in Selek. It is located in a steppe part of the reserve museum, on a low terrace of the left bank of the Urgaz river, to the south-east of Ulak I. The settlement has a binary structure, i.e. a ring-shaped defensive earthwork (in diameter about 70 m) and G-shaped one (up to 1 m high and 7-8 m wide) adjacent to the settlement. The defensive earthwork is not visually observed. Several large residential hollows have been noticed within the earth-mounded platform. The total number of dwellings and a detailed designing have not been clarified as the whole platform of the settlement is covered with very dense and high shrubs (a steppe bush of acacias blood line ). Occupation layer of thickness up to 1 m with fragments of bones of animals and sherds of Alakul culture (Akbulatov, I.M., 2004). has been revealed between residential hollows with the pit-hole (4×2 m).

Discussion

About common cultural space in the Middle Bronze Age in the Southern Urals and in Trans-Urals. The landscape and geographical position of the settlements of Ulak 1 and Selek draw attention regarding south-east boundaries of "The country of cities" in the first place. Both settlements are well enough fit for its planigrafiya, they can be included in the general system of monuments location of "The Country of cities" (Zdanovich, D.G., 2010) as its western-most settlements.

One of models of the end of cultural history of Arkaim – Sintashta assumes an outflow of the population. Moreover, one of the main migration flows of culture-bearers made for the west (Zdanovich, G.B., 2002). Migrants move in habitually favourable conditions of northern steppe of Cisurals, probably, between the Urals and the Belaya river. In that case Ulak 1 and Selek can be considered as set forward outposts at the starting point of migration. Traces of migrants are well observed in Middle Volga (monuments of the potapov type), and farther westward. Some European researchers such as Ya. Makkay (Hungary), Ya. Lishar (Belgium), Y. Vlados (Slovakia) find it possible to track their movement up to the Balkans (Makkay, J., 2000; Lichardus, J., 1996). According to one of the theories population shifts had a wave-like cycle in the Bronze Age. The impulse in the epicenter of migration makes oscillating motions in surrounding cultural environments, thus causing waves of migration of different cultures-bearers, set in the same direction (Anthony D.W.,1990). It can explain a considerable promotion of the "language" the Abashev Cisural monuments to the west and the existence of mixed Sintashta-Abashev monuments here (Epimahov, A.V., 2011).
The Influence of eastern migration flows is traced in the Bronze Age of the Ukraine. One flow accounts probably for the period of late "Sintashta", the other is connected with formation of Srubna culture of the Ukraine, the advent of the "Andronov" features. The center of migrations is specified rather precisely, i.e. Southern Cisural, Trans-urals, the adjacent regions of Kazakhstan (Berezanskaya, S.S., 1986, page 42-43). The population of the settlements like Ulak 1 and Selek could be a source of such cultural "indignations" at the western edge of the center.

Small collection of ceramics of Ulak 1 and Selek makes an impression of rather late. The group of Srubna-Alakul type ceramics stands apart. It doesn't contradict the stated thesis. It is also necessary to note that almost all fortified settlements of "The country of cities" were multilayered, and some of them (Kuysak, Alandskoye) had elements of fortification in a later period such as Srubna-Alakul. (Zdanovich, G.B., 2005, pages 115-116).

The future of the cultural landscape of the Southern Urals and Trans-Urals. Currently we can only make hypotheses about the degree of the unity of monuments in "The country of cities" and fortified settlements of Irendyk. There are not enough data on archaeological excavations. There are few publications analyzing similarities and differences of steppe and mountain artifacts. However, the problem has both scientific and practical interest.

The general schemes of A. Toynbee (Toynbee, A., 2012), L.N. Gumilev (Gumilev, L.N., 1989) allow to consider Irendyk as a territory of the certain chronological stage included in "The country of cities". There are few archaeological data on synchronism of historical events. However, the evidences of the existence of a single economic complex, as well as common production processes in living conditions of mountain and steppe residents of the Middle Bronze Age are required. The presented reasons actualize excavations of Ulak 1 and Selek with the view of development of a wide range of culture genesis and ethno genesis problems. Therefore, joint archaeological researches of the scientists of Bashkortostan and the Chelyabinsk Region are necessary.

Ways to improve the laws and regulations of preserving the cultural landscape of the Urals and Trans-Urals.

Taking into account a unique character of the steppes of Irendyk the representatives of Bashkir State University (Ufa), IFR of the Russian Academy of Sciences (Moscow), University of the city of Tsukuba (Japan) made a declaration of the need to protect the steppes of Bashkir Trans-Urals and the Chelyabinsk Region in the form of "Especially protected natural territory of the international level".

So, we consider that creation of the biosphere reserve "Steppes of the Southern Urals and Trans-Urals" as especially protected area and its inclusion in the world network of biosphere reserves of UNESCO as well as simultaneous inclusion of the "Irendyk" and "Arkaim" reserve museums in the List of objects of world natural and cultural heritage in the category of "Cultural landscape" are necessary.

At the same time, in accordance with Art. 25 of the Federal Law of 25.06. 2002 № 73-FZ, government agencies in charge of the protection of monuments of the Republic of Bashkortostan and the Chelyabinsk region have to call for a state historical and cultural expert examination as to possible inclusion of the reserve museums "Irendyk" and "Arch in the List of the World Natural and Cultural Heritage in the category "Cultural Objects landscape".

http://www.ijhcs.com/index.php/ijhcs/index
On the other hand, it is most essential to organize the development of a set of documents issued in accordance with the requirements of the World Heritage Committee attached to the United Nations Educational, Scientific and Cultural Organization (UNESCO). On the basis of the positive conclusion of the state historical and cultural expert examination and having the issued set of documents, the Ministry of Culture of the Russian Federation will be able to send documents to the Commission of the Russian Federation for UNESCO.

Conclusion

The practical aspect of the problem involves creating a single tourist space of the Southern Urals and Trans-Urals in the territory of the Chelyabinsk Region and Bashkortostan. It is necessary to create a scientific, informative concept combining the most valuable objects of cultural heritage of Bashkortostan and the Chelyabinsk region, such as Paleolithic sanctuary in the cave of Shulgan-Tash (Kapova), archaeological complexes of the reserve museums "Irendyk" and "Arkaim" (the capital of "The country of cities") and unique landscape complexes. And all this, consequently, actualizes the development of the interregional tourist project "Ancient Civilizations of the Southern Urals".
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