Chronology of the Nizhne-Arkhyz fortified settlement development according to historical, bibliographic and archival sources

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Abstract. This article is devoted to identifying the chronology of the medieval Alania capital architectural and spatial structure formation. The study revealed that the first on the site were erected cross-domed temples, built according to the Byzantine model and dated to the first half of the 10th century. In this regard, the planning structure of the fortified settlement was formed under the influence of the Byzantine Christian topography traditions. The chronological stages of the fortified settlement formation are revealed. The planning structure of the Nizhne-Arkhyz fortified settlement is similar to the planning of Constantinople, the main features of which were laid down at the end of the 5th century. Both cities have similar outlines of plans, inscribed in a triangle, at the eastern peak of which their community centers were located. In the spatial planning scheme of both cities, there are three main streets, the directions of which merge into one main street leading to the community center. Community centers of cities are represented by the squares where Christian churches are located.

1 Introduction

Nizhne-Arkhyz fortified settlement, located in the gorge of the Bolshoi Zelenchuk river, localized by the researchers as the Christian capital of medieval Alania. Today, it is a large archaeological complex on the territory of Karachay-Cherkessia, consisting of numerous fragments of buildings and structures dating from the X-XII centuries. The value of the Nizhne-Arkhyz fortified settlement lies in its unique history and in the memory of the events that played an important role in the history of our multinational people. The fortified settlement was a city-forming structure large for its time and country, consisting of streets, squares, residential quarters, public, industrial, defensive structures, and a large number of religious sites of Christian and pagan origin. V.A. Kuznetsov calls this medieval city "an outpost of Byzantine influence in the North Caucasus" [1].

The relevance is due to the need to study the cities of the North Caucasus during the Middle Ages. The problem of chronology and planning organization of medieval cities, which underlies many areas of historical knowledge, has a heterogeneous degree of study. The architecture of the medieval Alanya cities, mentioned in various chronicles, is poorly

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This study is devoted to the historical and chronological reconstruction of one of the most significant cities in Alania - Nizhne-Arkhyz fortified settlement in the gorge of the river Bolshoi Zelenchuk. According to many researchers, the Nizhne-Arkhyz fortified settlement is localized as the Christian capital of medieval Alania. Today, it is a large archaeological complex on the territory of Karachay-Cherkessia, consisting of numerous fragments of buildings and structures dating back to the X-XII centuries.

The object of research is the Nizhne-Arkhyz fortified settlement, the subject of the study is the historical and chronological reconstruction of the Nizhne-Arkhyz fortified settlement planning structure for the period of the X-XII centuries. The spatial boundaries of the study are determined by the territory occupied by the fortified settlement and the territory belonging to Alania in the X-XII centuries. Thus, the center of the study is the territory of the fortified settlement located in the valley of the Bolshoi Zelenchuk River (Nizhniy Arkhyz fortified settlement). The borders of the Alanian state are: southern - the Main Caucasian ridge; south-west - the Black Sea coast, west - the valley of the river Bolshaya Laba, southern - the lower course of the Kuban and Terek rivers, eastern - the valley of the river Argun. The above-outlined borders cover the mountainous regions of modern Karachay-Cherkessia and North Ossetia. Time boundaries - X-XII centuries - the period of emergence, intensive construction and flourishing of life in the fortified fortified settlement.

The problem of the research is that extensive archaeological material has been accumulated, but the results of archaeological discoveries do not give a holistic idea of the architectural and spatial structure of the medieval city in the historical and chronological aspect.

The aim of the study is to develop a spatial model that reproduces the architecture of the Nizhne-Arkhyz fortified settlement of the X-XII centuries in the historical and chronological aspect. Based on this goal, the following tasks have been identified:

- restoration of the historical and chronological map of the sites of the fortified settlement based on historical, bibliographic and archival research;
- identification of the Byzantine Christian topography traditions that influenced the planning structure of the Nizhne-Arkhyz fortified settlement.
- historical and chronological reconstruction of the architectural and spatial structure of the fortified settlement on the basis of archaeological materials and historical analogs;

The beginning of research at the Nizhne-Arkhyz fortified settlement dates back to the second half of the 18th century. At this time, the Russian Academy of Sciences organized an expedition to study the Caucasus. One of the expedition members J. Reyneggs (1783) reports that there are ruins of an ancient monastery on the Indzhik (Zelenchuk) river. The first archaeological excavations at the Nizhne-Arkhyz fortified settlement were carried out by V. M. Sysoev in 1895. Many authors of the pre-revolutionary period believed that there was a large Christian city here, and the Naryshkins and A. S. Fedorovsky even suggested the existence of a Byzantine monastery in Nizhny Arkhyz. Academician V.F. Miller was the first to express the idea that the center of the Alanian Metropolitanate, mentioned in Byzantine documents, was located here.

Based on the existing publications of the pre-revolutionary period, it should be noted that the objects of research of this time were mainly Christian monuments - Zelenchuk cross-domed temples, stone crosses and slabs, statues of warriors. Due to the concentration of Christian shrines, the Nizhne-Arkhyz fortified settlement attracted the attention of the first researchers and gained fame. An invaluable contribution to the study of the fortified settlement was made by the Naryshkin brothers, D.M. Strukov, E. D. Felitsyn, V. M. Sysoev, who left behind significant graphic and written materials.

In Soviet and modern times, long-term large-scale archaeological excavations were carried out on the territory of the fortified settlement, headed by V.A. Kuznetsov and U. Yu. Elkanov. As a result, extensive factual material was published, as well as prospects for
the possible preservation and museumification of the Nizhne-Arkhyz fortified settlement were identified. Fundamental research on the history of medieval Alania, conducted by V.A. Kuznetsov, published in numerous works of the scientist, among which were two monographs "Alania in the X-XIII centuries" (1971), "Essays on the history of the Alans" (second edition 1992). He wrote a series of works devoted to the study of the Nizhne-Arkhyz fortified settlement history. The final work summarizing the results of many years of archaeological research is the monograph “Nizhny Arkhyz in the X-XII centuries. To the history of medieval cities of the North Caucasus ”, published in 1993.

Results of archaeological and ethnographic research in the second half of the 19th - early 20th centuries and similar studies of the Soviet and modern times, together with historical documents, served as a scientific and factual basis and source study base for this study to identify the planning structure and historical and chronological reconstruction of the Nizhne-Arkhyz fortified settlement.

The fortified settlement was a large, for its time and country, city-forming structure, consisting of streets, squares, residential areas, industrial, defensive structures and a large number of places of worship - pagan sanctuaries and Christian temples and steles. A distinctive feature of the Nizhne-Arkhyz fortified settlement in comparison with other medieval fortified settlements of the North Caucasus is the unprecedented concentration of monuments of ancient Christian culture in a limited area. This is its uniqueness. On an area of 95 hectares, the Caucasian archaeologist and historian V.A. Kuznetsov and other researchers have recorded three monumental three-apse temples, twelve small one-apse churches and chapels, ancient Christian monuments in the form of stone crosses and tombstones.

2 Discussion and results

In the X-XII centuries as a result of Christianization, the new outlines of the Byzantine influence area including Alania emerged. The tactics of Christianization pursued by Byzantium, as before, consisted in the creation in the area of its influence of many confessional centers of local action, which were the metropoliises and dioceses of the Patriarchate of Constantinople. The most significant among them in the North Caucasus and the Northern Black Sea region were: Tamatarkh, Alan, Bospor, Kherson, Zikh, Abkhaz [2].

Each metropolitane had its own center and periphery of influence. As a rule, the center of the metropolis was located in the capital of the state association to which it belonged. The centers of the Abkhazian archdiocese and the Kherson diocese, through which Byzantium Christianized Alania, were located on the territory of the capital cities of Anakopia and Chersonesos.

The center of the Alan Metropolitane was localized by the researchers on the territory of the Nizhne-Arkhyz fortified settlement [3, 4]. The first mentions of the Alanian Metropolis and the capital of Alania, the city of Maas, appear in sources in the 10th century [5]. The lower cultural layers of the Lower Arkhyz fortified settlement - the supposed capital city of the Meuse - are also dated to the 10th century [1]. From this it follows that the creation of the Alan metropolis center and the founding of Alania capital took place at the same time. This, apparently, was facilitated by the intentions of Byzantium to strengthen its influence here. Perhaps with the construction of the main cross-domed temples of the Nizhne-Arkhyz fortified settlement, the topography of which corresponds to Byzantine Christian traditions, the spatial planning scheme of the capital of Alania began to form, an analogue for which was the capital city of Byzantium. The scientific hypothesis is that the first buildings of the Alan metropolis were erected on the fortified settlement, among which the main ones are cross-domed churches located in space in accordance with
Byzantine Christian traditions. The planning structure of the Nizhne-Arkhyz fortified settlement was formed during the X-XII centuries by the type of a Byzantine Christian city.

Byzantine sources X-XII centuries testify that the Alans regularly visited the Byzantine emperor, “twice, or even three times a year” [6]. Researchers have established that meetings with the emperor took place in Constantinople, and the Alanian nobility had a visual idea of the capital of Byzantium [7]. Despite the fact that Constantinople arose on the site of an ancient Greek city, its planning scheme did not have the correct grid of streets, similar to the ancient cities that continued to exist as part of the Byzantine Empire. The layout of Constantinople, the main features of which were laid down at the end of the 5th century and survived until the XIV century, were also significantly different from the Roman cities and the capital of the Western Roman Empire. The main distinguishing feature of the structure of Constantinople from the ancient Roman cities was the layout of the streets, which merged into one main street, directed towards the public center [8].

The main street of Constantinople, called Mesa, which means "Average", ran from the Golden Gate to the Cathedral of St. Sophia. This street, paved with stone slabs, was decorated with arcades and porticoes [9]. The main squares of the city were on its way. In addition to Mesa, two more large streets stand out in the structure of the city, which were directed towards the main one and ultimately connected with it. One of them went along the coast of the Marmara Sea, the second went along the Golden Horn coast.

A similar system of streets can be observed in the planning structure of the Nizhne-Arkhyz fortified settlement. V.A. Kuznetsov identified and recorded three main streets of the fortified settlement. One of them has a middle position relative to the other two, and, like Mesa, is paved with stone. This street crosses the city buildings along its entire length, and leads to the Middle Zelenchuksky temple. On its way there are open spaces resembling squares. Two other streets bend around the buildings along the ridge and the river and merge with the central one in a single direction leading to the buildings of the Alanian Metropolis.

Comparing the architectural and spatial organization of these cities, it is possible to identify a number of common features and patterns that will make it possible to consider their planning schemes to be similar. Planning schemes of cities are harmoniously inscribed into the existing natural landscape environment and form a single whole with it. The urban development of Constantinople is inscribed within the limits of the cape, bounded by the Golden Horn in the north, and by the Sea of Marmara in the south. The urban development of the Nizhne-Arkhyz fortified settlement is inscribed within a mountain valley, bounded by the Bolshoi Zelenchuk River from the northwest, and the Uzhum ridge from the southeast. The natural forms of the cape and river valley and the corresponding planning schemes of cities have similar outlines, inscribed in a triangle, at the eastern peak of which their social centers were located. In the spatial planning scheme of both cities, there are three main streets, the directions of which merge into one main street leading to the community center. The public centers of cities are represented by the squares on which the temples are located, which replaced the main public buildings with the adoption of Christianity. Noteworthy is the general feature of the public centers of cities. In Constantinople, the public center with the main city cathedral of St. Sophia is located opposite the ancient acropolis, built in the antique period, and form with it a single architectural and spatial ensemble. At the Nizhne-Arkhyz fortified settlement, a similar phenomenon is observed, when Christian shrines coexist in a single space with pagan antiquities and make up the public center of the city. Opposite the Middle Temple, at a distance of 130 m, within the visual accessibility of the Southern Temple, there is the largest circular sanctuary in the North Caucasus. As a result of the compositional analysis, it was found that the center of the circle lies on the same axis with the Middle Temple and the rock icon of Jesus Christ located on Mount Mycešta. Thus, Christian objects in
combination with a circular sanctuary form a single architectural and spatial ensemble. Perhaps the circular structure was the main sanctuary of the fortified settlement, and the Middle Temple had the status of the main city cathedral.

D.M. Strukov wrote about the Nizhne-Arkhyz fortified settlement, that by the nature of the buildings this city "is completely identical with the ancient Chersonesos", and its inhabitants were Alans and partly Greeks [10]. Nizhne-Arkhyz fortified settlement has preserved many monuments of medieval Christian architecture: 3 three-apse cross-domed churches, 12 one-apse hall-type churches, 1 apseless one, buildings of the Alan metropolis, Christian cemeteries. A similar concentration of Christian shrines on the local territory is observed in Chersonesos, within which 13 basilicas, 2 centric-domed churches, 5 cross-domed churches of the “free cross” type, 7 cross-domed churches of the “inscribed cross” type, 20 one-apse churches [11]. The identity of Chersonesos and the Nizhne-Arkhyz fortified settlement also lies in the fact that, as V.A. Kuznetsov, they were outposts of Byzantine Christian influence on the northern borders of the empire. In addition, the centers of the metropolises were located on their territory. Analyzing the architectural and spatial organization of the Nizhne-Arkhyz fortified settlement, Chersonesus and Constantinople, it is possible to note a common planning feature for all cities, which consists in the fact that the main street crosses through the city buildings, uniting the main public buildings of the city, which, with the adoption of Christianity, turned the temples into a single architectural and spatial ensemble. A holistic perception of the ensemble, based on visual-spatial connections between its elements, became available in movement along the main street of the city, which underlies the Eastern Christian liturgy and gave it certain outlines.

The defensive system of the fortified settlement consists of natural fortifications and erected defensive complexes. Natural fortifications include the Uzhum ridge, which is an inaccessible natural barrier that covered the territory of the fortified settlement from the southeast. From the north-west, the fortified settlement had two natural fortifications at once: the mountain river Bolshoy Zelenchuk and the Mount Mycesta located behind it. The northeastern side of the fortified settlement and two gorges in the Uzhum ridge, opening the valley from the southeast, called the Tserkovnaya ravine and the Podvorannaya ravine, remained accessible for the invasion of the nomads. In these, the most vulnerable places, and there were complexes of artificial fortifications. Thus, on the flat territory of the fortified settlement, four defensive walls were built, blocking the northeastern direction. The outermost wall had the greatest thickness (2.5 m) and the length in the transverse direction (295 m). The two above-mentioned gorges were covered with lintel walls. In addition, on the slopes of the Uzhum ridge, detached watchtowers were located, from which observation was carried out.

In the planning structure of the medieval city, several architectural objects can be distinguished, which are symbolic and figurative dominants, which formed ordinary buildings around themselves and determined the main paths of movement. These dominants include the South Temple, the Middle Temple, and the North Temple. According to the assumption of V.V. Pishchulina the first at the beginning of the X century on the basis of the ancient sanctuary, the Southern temple was erected, then after a certain period of time - the Middle one. The Northern Temple was the last to be built in the middle of the 10th century [12].

Temples were the compositional dominants of the spatial planning structure of the Christian city. Their location, which determined the directions of the main streets, influenced not only the formation of block buildings, but was also reflected at the level of the spatial organization of manor complexes. V.V. Pishchulina noted the Byzantine principle of placing the temple directly in the fortified settlement [13]. The Byzantine principle of the temple location on the territory of the manor complex should be added to this. This phenomenon can be seen on the example of the estate complexes of Chersonesos
and the Nizhne-Arkhyz fortified settlement. The medieval manor complex of Chersonesos, known in the literature as quarter X, is located in the northern part of the fortified settlement. Its configuration is predominantly rectilinear, retaining the features of ancient architecture. This is due to the fact that the planning structure of the city with a rectangular grid of streets, formed in the period of antiquity, was largely preserved and continued to exist in the Byzantine period. The structure-forming element of the estate complex is the courtyard, around which there are residential buildings and industrial buildings. In the center of the courtyard there is a one-apse church. A similar spatial planning organization has a manor No. 1 of the Nizhne-Arkhyz fortified settlement, which is a complex of residential and utility buildings formed around the courtyard, in the center of which there is a one-apse church. The emergence of a church in the courtyard center, which was the social and production center of the estate, can be explained by the fact that one of the Byzantine methods of Christianization was the addition and sometimes substitution of the ceremonial social function of the space associated with Christian liturgy. Probably, this was reflected not only at the level of the architectural and spatial organization of the city, but also received spatial development in the planning structure of the estate complex.

3 Conclusion

The capital of Alania (Nizhne-Arkhyz fortified settlement) was created as an Eastern Christian city, its foundation was associated with the Alanian Metropolitanate center formation in the first half of the 10th century and took place with the assistance of Byzantium. The planning structure of the city, formed during the X-XII centuries by the type of the Byzantine capital city. This follows from the fact that the planning schemes of the two Christian capitals (Alanian and Byzantine) are built according to the same compositional laws, which allows us to consider them similar. As a result of a comparative analysis of the architectural and spatial organization of the Nizhne-Arkhyz fortified settlement and the Byzantine capital cities (Chersonesos and Constantinople), a general pattern was revealed that the central street, crossing the entire length of urban development, unites the main public buildings of the city, which, with the adoption of Christianity temples become, into a single architectural and spatial ensemble. The holistic perception of the ensemble depended on the outlines of the central street and became available in the movement that underlies the Eastern Christian liturgy.

Based on the above-said, it is possible to identify the chronological stages of the Nizhne-Arkhyz fortified settlement planning structure formation. At the first stage in the first half of the 10th century - early XI centuries the main fortifications were erected in the form of defensive walls, three cross-domed churches, and a system of streets and squares corresponding to the Byzantine Christian topography was laid. At the second stage during the XI-XII centuries a large part of the quarter development, consisting of manor complexes was formed.

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