

# HISTORICAL AND ARCHITECTURAL PATTERN OF TOWN-PLANNING OF EARLY MEDIEVAL ABKHAZIA

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## ABSTRACT

The author's thesis that city spatial culture always expresses the "highest" ideals of this or that ethnos is the basis for a research. And there time, it is real modeling of reality, that is transformation of the environment, modeling of the second human nature, space of its civilized existence and social development. In it its feature - in city spatial culture two above-stated aspects of culture are at the same time created and broadcast in spatial forms and symbolical images: "high" and "low". "High" aspects in spatial culture are most expressed in the system of resettlement, structure of the settlement, sacral objects. City-forming creativity is Wednesday of the most difficult interaction "high" and "low" in spatial culture. The dwelling at the same time is also representation, symbolical and a trope of the social status of its inhabitants, on the one hand, and, the real daily environment of human dwelling, with another. In article historical stages of transformation of the most significant fortresses of Abkhazia – Anakopiya and Sebastopolis to city settlements, transformation processes are considered spatial culture as material and spatial expression of the dominating ideological and world outlook installations of ethnos in general. The picture of stage-by-stage formation of the city from antique fortress to a medieval outpost is recreated, the level of "high" fortification art in the territory of Abkhazia is revealed, some strengthening are more precisely dated. The picture of the medieval town is complemented with his economic life, stages of development of various crafts, somehow: potter's, blacksmithing, weaving. On the example of glazed ceramics the art skill of the people, on material, a way of preparation is shown, to an ornament close ties which existed at that time between Abkhazia and other medieval states are tracked.

Keywords: Medieval town-planning, system of the settlements

## INTRODUCTION

The topography of the Abkhazian (Abasgian) settlement in the period of Late Antiquity and the Early Middle Ages is represented by a multitude of fortresses, fortified settlements, settlements located in the Black Sea area, in the foothills and mountain gorges. The location of settlements depended on several factors, connected with the particularities of spatial expression of the traditional culture of the Abkhazians. These factors include: the natural landscape environment, the system of foreign policy relations and the patronymic structure of the society.

The natural landscape environment in the worldview of the Abasgians of the period of late Antiquity and the early Middle Ages was a sacred space in which there existed a system of natural "sacred places": caves, forests, mountains, groves, trees, water sources. Most of these sacred elements were located on natural elevations and over time formed the structure of landscape-visual connections of the Abasgian

territory, as well as a system of selective routes. Sacral symbolization of the natural landscape environment regulated the degree of anthropogenic impact and influenced the territorial and spatial location of the settlements, determining their place in the system of “sacred places” and setting the main paths of movement in the form of trails and mountain roads.

## MATERIAL AND METHODOLOGY

During the period of close contact of the Abkhazians with the Roman- Byzantine cultural world, at the early stage, the fortresses of Sebastopolis, Pitiunt, and Anakopia were formed, which later became cities. The ancient state formations of the Sanigs, the Apsilae, and the Abkhazians were formed in the II c. in this territory under the Roman protectorate; it contributed to a greater concentration of the vertical of power, which was the basis for the formation of new fortified points in the depths of the mountain gorges, outside the Roman garrisons, but under the influence of the ancient and Byzantine construction technique. These include the fortresses in Achipse (in the basin of the Mzymta river), Khashupse, Anakopia, Tsibilium. The buildings of Sebastopolis and Pitiunt possessed “classic” defensive functions (towers pushed forward beyond walls, buttresses, complex gate devices). Monumental residential, household buildings and Christian churches built with the use of lime mortars were located on their territory. Arches, domes and vaults with the use of bricks and roof tiles were used in construction. For the decoration of buildings they used hewn limestone, marble, mosaic.

In the era of Justinian, in the second quarter of the 6 century, in the West Caucasus region, a system of fortifications was created - “klisur”, constituting the internal “Caucasian Limes”, which included Gerzeul, Tsibil, Tsakhar, Shapky and others. Far in the mountains they widely applied roman and byzantine methods of construction: combined masonry, brick-stone, masonry of roughly processed limestone blocks, masonry of the processed limestone with rubbing joints with mortar. Monumental multi-storey towers (round, quadrangular, pentahedral) overlapped with low domes, three centered arcs, supplied with catapults and other throwing machines. Behind the double walls, framed by battlements, are the guard stations and ladders, barracks, baths with three rooms (cold, warm, hot), reservoirs, wineries, civil and temple buildings. Fortresses had water pipes (Tsibilium). The rapprochement of the power elites of the Byzantine Empire with the representatives of local government entities led to the transfer of knowledge in the field of crafts, architecture and construction to local soil. Unfortunately, the civil structures of the early period, which arose outside the walls, were practically not preserved, and those that did not undergo destruction were, as a rule, rebuilt in the late medieval period. The presence of large garrisons in the territory of Abkhazia created the prerequisites for the emergence of settlements of merchants and artisans near the fortresses. These settlements later formed the structure of the first Abkhazian cities of the early Middle Ages. In the early medieval Sebastopolis, one can speak of a fairly rapid block development of the territory adjacent to the walls from the north (from the south it faces the sea). The excavations revealed stone foundations of residential buildings, wells, narrow streets. In such suburbs formed polyethnic population of artisans and merchants. Due to the early Christianization of Abkhazia, already in the beginning of the 6 c. as settlements grow, Christian buildings appear outside the fortress walls. A striking example of this is Pitiunt, outside whose walls 3 Christian churches of the 5-6 c. were revealed. In the mountainous areas of historical Abkhazia, there were Christian churches in the 6 c. They were built mainly inside fortresses and have a monumental stone wall, which may indicate that they were given a defensive function, along with a sacral (Tsebelda, Hashupse, Gerzeul, Caps, etc.). They were located in the geographic center of the fortresses, on the dominant sites. The church architecture of Abkhazia of this period bears the impact of the various territories of Byzantium from Constantinople to Antioch. The revitalization of the transit trade between Byzantium and China from the second half of the 6 c. contributed to the formation of a new type of settlement, close to the urban (hillfort) On the

way from the coastal points of Abkhazia to the Marukh and Klukhor passes, more than a dozen such settlements were formed; they specialized in the provision of various services to trade caravans - from protective to residential. Along with the physical protection of individuals and their property, shelter, food, horses and guides were provided at every point along the way. The materials of the burial grounds located along the caravan routes mark the higher degree of welfare of the inhabitants of these sites. Along with a large number of weapons, they contain jewelry and imported items from the manufacturing centers of Byzantium, Iran, Eastern Europe, Central Asia and China. The appearance of Christian centers far from the fortifications marks the situation of the formation of a new type of urban settlement for mountainous Abkhazia. The development of the Christian sacred topography associated with the ancient places of worship can be seen in the example of the village of Ankhua from the beginning of the VII c. The lack of study of the chronology of Christian buildings in the mountainous areas of historical Abkhazia does not allow us to make reasoned parallels at this stage. But we are confident that a similar picture may emerge for other historical centers of both Abasgia and neighboring territories. The location of the three identified Christian objects of the 6-7 c. in Ankhua testifies to the formation of a system of densely populated settlements in natural dominants, in picturesque places, near clean sources of water — settlements, united by sacral topography.

In 8-10 c. the processes of reclamation the space acquire a new impulse associated with the expulsion of the Arabs and the formation of the Abkhazian kingdom [1]. At this stage, the Abkhazian school of Christian architecture, having a number of distinctive features, is formed. According to written sources, administrative and church reforms were taking place on the territory of the kingdom. There were new major Christian centers, the boundaries of which, it must be supposed, coincided with the administrative ones. These centers, as a rule, were formed along large roads, the boundaries between several settlements were delineated by natural boundaries (rivers and mountain ranges). An example of such a center is a well-preserved complex of the 9-11 c. In the village of Lykhny, which includes a palace, built on a vast meadow and a cross-domed temple. Notable is the Bzyb complex (8 c.), located on the way from Pitiund to the mountain passes. A cross-domed temple, a number of military and residential towers, the remains of a dense stone civilian building were built behind a monumental fence on the dominant height. We can assume that here they located the episcopacy and vicariate, which controlled the movement cargo along the trade route. We can consider the formation of the first capital of the Abkhaz early medieval kingdom, Anakopia as an example of an early medieval city. The status of Anakopia predetermined a high concentration of fortification objects. The defensive lines of Anakopia were formed in 7 stages, of which the second line of defense, built by the Byzantines in the second half of the 6 c., the coastal defensive line, built in the middle of the 9 c. by the Abkhazian kings, and a long wall of the 11-12 c. worth highlighting. Thus, during its heyday, Anakopia was a fortress city, located mainly in the flood plain between two rivers: Psyrdzka and Mysra, surrounded by fortification objects from three sides. The internal space was equipped for 2 ship tie ups, the port and customs services, markets, and the episcopal center were located nearby. Inside the spaces separated by walls, the foundations of numerous stone buildings remained, indicating the presence of garrisons and buildings for the local nobility. Outside the fortress walls, the dwellings have not preserved, however, according to the topography of the area, it can be assumed that there was a dense development concentrated on convenient places along the internal communication lines. In Anakopia, outside the defensive lines, they built the first cross-domed church of the Abkhazian school of Christian architecture which spread throughout the 9-10 c. on the territory of the kingdom. (Loo, Merry, Pitsunda, Alahadzy, Bzyb, Lykhny, Msyghua, Psyrdzha, Mokva, the temple in Severniy Zelenchuk, etc.). Modern researchers [2] revealed that Anakopia also formed its own school of fortification and civil architecture. In 8-9 c. here appeared a new type of rectangular towers with rounded outer corners (defensive and residential). At the beginning

of the 10 c. the pre-gate tower of the 2nd defense line was reconstructed; 3 floors were added to it, 2 of which are overlapped by arches of the original construction [3]. The age of architectural objects of this period on the territory of Anakopia and their quality, the absence of lags in architectural trends indicate that Abkhazia of this period was one of the most important states of the Byzantine Ecumene, and its elite was in close contact with the empire. Anakopia of this period, as the capital city of Byzantine Christian culture, influenced the architecture of adjacent territories. Based on a comparison of the architecture and construction technique of the objects of Anakopia and the neighboring fortified settlements, we can differentiate the imperial order and the provincial Abkhazian architecture. The ordering customers of the latter, most likely the local elite, sought to follow the capital fortification and construction rules. In this sense, the "capital" architecture of Anakopia influenced the minor objects of the neighboring territories. Such objects include numerous temples and temple complexes on the territory of mountainous Abkhazia, small fortresses (Kaldakhvara, Hasantaba, Uazaba, Mushba, Abgarhuk, Rechabaa, etc.). The appearance of these objects indicates the formation of close diverse relationships within the Abkhazian kingdom. Forts arose on the routes leading from the large coastal centers of the Abkhazian kingdom to the "Abkhazian" foothill road connecting the kingdom territories in the latitudinal direction. The Abkhazian piedmont road intersected with the transit pass road in many places and the local roads led to it. On the more strategically important sites (at water crossings, at the entrances to the gorges) large fortresses arose, similar in type to the classical ones; on a small distance from them there were smaller fortresses which controlled travelers' safety and, if needed, shelter and protection inside their walls. We can assume that the merchants paid the fare in the large fortresses of the Abkhazian road (part of the Great Silk Way), where the governors lived. The creation of a caste of warriors, secular and religious nobility, merchants within the Abkhaz society became the main reason for the differentiation of the nature of the settlements, departure from the traditional rural communities in the direction of deepening social differentiation. Archeologists revealed that by the X century in different types of the landscape, formed local settlements of craftsmen. The most studied are the settlements of potters who created their products close to the sources of raw materials (Othara, Arsaul, Atara, etc.). Following a similar principle, formed settlements of metallurgists producing blacksmith iron from iron ball. In the territory of Abkhazia, in many places outcrops of iron ore (up to 11 m.) [4] and smelting furnaces were discovered. In the context of the growing urban population, the production of grain crops and meat is of particular importance. Despite the existence of extensive network of public and royal roads, as well as strongholds and fortifications on these roads, the basis of whose economy was payment for the service, handicraft settlements, which in some cases united in large settlements, developed together with trade. Despite the above said the rural community ("aqita"), which was the "foundation of the foundations" of economic life, remains the basic unit of the social structure of Abkhazia in the early Middle Ages. By the X century in the traditional culture of the Abkhazians had formed a particular kind of radial-route model of the development of the space of ethnic groups. Such a model most fully corresponded, firstly, to the increasing role of the rental economy, associated with the maintenance of international trade routes, and secondly, to the management of two types of producing economy: distant cattle breeding and terraced land use; thirdly, it was the most effective from the point of view of the protection of settlements and the settling system as a whole.

This model reflects the context of the formation of social relations from the patronymic system to a centralized state. Considering the patronymic structure of various peoples of the North Caucasus and the Caucasus at different stages of its formation, it should be noted that the process of its development could lead to the formation of either a monocentric or polycentric society. The determining factor in this territory was the natural landscape environment, as well as the geographical location of Abkhazia. On

the one hand, it was located on the Black Sea coast, through which people realized the communication link between the internal parts of the country, topographically cut by rough rivers and impassable ravines, as well as international trade connecting the peoples of different continents living in the Mediterranean basin. On the other hand, it was a part of the Main Caucasus Range, which was covered with snow and impassable during a significant part of the year, but was used for stable international trade relations with the peoples of the Caucasus and Asia for several months a year. By the heyday cattle breeding had become the main producing industry of the Abkhazian kingdom. Two different landscapes, the Black Sea region and the mountains, became objects of spatial modeling of the route-radial settling structure and identified two types of settling: Black Sea region one and upland one. A common feature of both types was, firstly, a clearly delineated and legally fixed territory of living; secondly, the presence of two types of settlements: permanent and seasonal. The permanent settlements of both types include fortresses (outposts and forts), rural settlements, fortified settlements, craftsmen's settlements, ancient settlements associated with administrative and religious authority. Seasonal settlements are formed near winter and summer pastures and are typical of the distant pasturing system.

## RESULTS

The main settlements of the upland type were located, first of all, in the gorges, with the growth of the population, small villages were created, both inside the gorges of the initial settling and in the new adjacent territories. An important component of the upland type of settlement during the Middle Ages was the system of sacred places: Christian temples, protected groves, mountain passes and trees. The basis of defense works of the upland settling system was the natural and landscape factor characterized by: 1) the location of villages in remote mountainous areas; 2) the creation of particular fortification complexes of natural-artificial type at the entrance to the main gorges; 3) favorable, from the point of view of defense, location of the main villages within the gorges; 4) the creation of a settlement structure, organically associated with the mountainous terrain, which increased the efficiency of the fortification qualities of residential development; 5) the presence of mountaineering association the population from the main villages to safe shelters and seasonal encampments. The main type of traditional upland settlement had the following structure-forming components: a walled space or tower, water sources; sacred place; place of assembly. The following mountain settlements of historical Abkhazia completely possessed these signs: Mdavei, Akhchipsy, Pskhu, Dal. The system of settling of the upland type was even more rigidly associated with a specific territory of its spreading than the system of settling of the Black Sea region type. Therefore, the diversity of local features of the mountain landscape served as the most important factor in the formation of the spatial structure of the upland type of the settling system. The social and demographic basis of the upland type of settlement was a community. Initially, a community was a patriarchal-clan commune, connected by a certain single territory of its dwelling. Patriarchal-clan communes eventually became territorial communes, i.e. a group of families on the basis of the common area of settling [5]. Each community consisted of several monogenic, and subsequently, polygenic villages, which occupied a territory that had clearly defined spatial boundaries. The gorges and mountain valleys were the territories where such communities settled. The system of settling of the upland type as well as the system of settling of the Black Sea region type consisted of the main and seasonal settlements. The main settlements were situated, first of all, in gorges, with the growth of population they created new villages both within the gorges of the initial settling, and in new adjacent territories. Seasonal settlements (sites) - summer and winter sheds for sheep and premises for shepherds - were also mostly permanent, since seasonal cattle grazing areas - summer and winter pastures - were permanent and assigned to certain main settlements. Seasonal settlements of the upland type ensured management of the main producing economy of the

Abkhazians: distant sheep breeding, and were divided into settlements, of both seasonal and year-round use. All these settlements were connected with the main settlements by a well-developed system of mountain trails. Trails and mountain roads are a kind of spatial framework that ensured the territorial and social integrity and consistency of the upland type of settling. A characteristic feature of the upland type of settling was the organic connection of all its components with the landscape and the formation of the structure of the settling itself, taking into account the natural landscape features. One of the important components of the mountainous type of settling was the system of "sacred places" - sacred forests, caves, mountains, groves, trees. This system was a kind of ecological framework of the territory - an effective means of preserving and protecting ecosystems from the negative effects of anthropogenic influence. The ideological attitudes of the Abkhazian culture received spatial expression, consolidation and development in an effective and environmentally friendly system of nature management and the system of settling interrelated with it. Mountain roads of international importance (mainly the branches of the Great Silk Way), via a system of passes, connected the communities of Abkhazia with the coast, as well as with the communities of Alanya, the Nakh people who inhabited the valleys of the Dzherakhovsky Gorge in the east; in addition to this, there were trails that provided links to the mountainous regions of the Central Caucasus. These roads were used for trading purposes, for seasonal transfer of large quantities of livestock. They were landscaped, had a system of special landmarks on dangerous areas. Mountain trails of internal significance (the second category) carried out communication between groups of villages within one community, and their main purpose was to provide economic relations. These paths were also landscaped and maintained in good condition by efforts of the community. Mountain trails of local importance provided a seasonal run on pastures, used for hunting. They were shorter, but less landscaped and less convenient.

The main settlements of the Black Sea type of settling, as a rule, arose as fortification points of the Romans and Byzantines, were trading points on the territory of Abkhazia. These should include Sebastopolis, Pitiunt, Mamay-Kala, Godlik [6]. Sources report that in the 6 c. Justinian I built a big city with streets and public buildings in the fortress of Sebastopolis after the departure of the Persians [7]. The economic interests of the world powers contributed to the development of cross-border routes through the territory of historic Abkhazia via transit routes [7]. With their direct participation in strategically important places on transboundary routes, additional outposts were built to mark the route model of space exploration. These include the fortresses of Achipse, Khashupse, Gerzeul, Tsebelda, Bukolos [8]. These objects, along with the Black Sea coast ones, played a similar role in the formation of the spatial framework. They build numerous roads (radial network) leading to and from these fortresses, passing through the most convenient sections and connecting nearby settlements with each other. The specialization and differentiation of the latter was deepening, international trade was becoming a driving force for the development of all sectors of the economy. Industrial, craft and commercial settlements that occurred near the outposts were fitting into the radial model. In the 8 c. due to the formation of the political body of the Abkhazian kingdom, the importance of the piedmont Abkhazian road comes to the fore. On this route, a new system of upland fortifications, settlements serving them and major settlements were formed. Anakopia turns into a large city, the center of the Anakopian episcopacy, protected by fortifications from three sides. Its economic well-being is ensured by maritime trade through two ports. The pass way through the North Caucasian passes of Sanchar and Himsaiz also leads here. The transfer of the capital of the Abkhazian kingdom to Kutais required additional efforts to improve the route and ensure its safety. The importance of western cross-border access routes was increasing. They were marked with the fortresses of Achipse and Pslukh, Bzyb and Pskhuv located on the way through the passes of Pseshkho and Sanchar, respectively. A new stage in the formation of the space reclamation scheme leads to the development of the radial model. Paths and mountain roads

become a kind of spatial framework that ensures the territorial, social and economic integrity of the population of the Abkhazian kingdom.

## CONCLUSION

In the process of the Abkhazian ethnogenesis, a peculiar radial-route model of space reclamation corresponding to the new historical and landscape conditions of the development of the space was formed. Its first major centers which formed the radial connections are marked by coastal fortresses-cities: Sebastopolis, the main trading port of Abasgia, Pitiunt-the main religious center of the Abkhazian kingdom, Anakopia - the first capital of the Abkhazian kingdom. The points of the second-level radial connections were natural and artificial sacral objects. The third-level radial connections were determined by the contacts between the patronymic communities. Route connections were predetermined by the territorial and geographical location of Abasgia - the passage of the Great Silk Way through its territory, the arrival of Roman and Byzantine garrisons on its territory, and the

formation of the kingdom of Abkhazia in the territory of the Western Transcaucasia in the 8 c., which had established close contacts with Byzantium by the end of the 9 c. The radial-route model can be considered as one of the essential manifestations of the traditional Abkhazian culture, it was of vital importance in the development of the settlement system and the urban development of the Abkhazian territories. Another determining factor of traditional settling was the landscape, landscape characteristics of the space development of the Abkhaz ethnic group. Two territories different in terms of landscape, the Black Sea and the mountains, became objects of spatial modeling of the radial-route structures of the Abasgian settling.

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## REFERENCES

- [1] Maan O. V. From history of trade and economic relations of ancient and medieval Abkhazia. Sukhum – ABIGI – 2012. 344 pages.
- [2] Pishchulina V.V., Treyman Yu.F., Sulimenko S.D. Civil architecture of the North Caucasus of the 6-17th centuries. Rostov-on-Don – 2014. 386 pages.
- [3] Pishchulina V.V. Argun A.V. To a question of restoration of entrance knot of Anakopiysky fortress, Abkhazia, the VI-XI centuries of NMK No. 2 (94), Rostov –on-Don). 2018. Page 64-71.;
- [4] Longvort John. Year among Circassians [Text] / Longvort John//On kN. Adyghe, Balkars and Karachays in news of the European authors of the 13-15th centuries. Collection of traveling notes//Sost. Gardanov V.K. – Nalchik, 1974. – 636 pages.
- [5] Lekvinadze V. A. Concerning the Roman fortresses in East Black Sea Coast. - SANG, 1965, t. X1.
- [6] Procopius of Scythopolis. War with Ghats. About Constructions. - M.: Vika press, 1996. - S.P. Kondratyev's translation.
- [7] Procopius of Caesarea. War with the Goths. About Buildings. - M .: Arktos - Vika-press, 1996. - Translation by S.P. Kondratyev.

[8] Voronov Yu. N. Kolkhida in the Iron Age. Colchis at the turn of the Middle Ages. //Scientific works. T.1. Abigym them. D.Gulia ANA, Sukhum, 2006.

## THE PECULIARITIES OF THE ARCHITECTURE OF OUTPOSTS OF THE WEST-CAUCASIAN BRANCH OF THE GREAT SILK WAY

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### ABSTRACT

The article shows the results of the research of the regional system of territorial and spatial carcasses of the given group of monuments in the context of universals of medieval fortification architecture, traditional natural resource use and the sacral aspect; the research was conducted on the basis of historical and theoretical underpinning of the models of interaction of universal and traditional cultures in the fortification architecture of the region and its territorial subjects as a reflection of blends in the world view of the population and cultural identity.

We revealed the peculiarities of intercultural influence of the biggest objects- outposts of fortification architecture, elements of the defensive carcass of the Great silk way, situated along its main branches (the fortresses of Tsebelda and Khumara), which were earlier centers of fortification culture, on the architecture of the fortresses of the adjacent regions.

The fortification architecture of the mentioned fortresses is viewed as a system of original architectonic models, bright examples of universal fortification culture in the context of archetypic layers of ethno cultural consciousness, centers of spreading of the Byzantine culture and creation of blended variants of fortification architecture in the region.

Keywords: Middle ages, fortification architecture, Great silk way, Northern Caucasus, Abkhazia

### INTRODUCTION

Archaeologists Y. N. Voronov and V. A. Kuznetsov studied the problems of revealing and locating the West-Caucasian branch of the Great silk way. The background for the creation of the West-Caucasian branch of the Great silk way is: first, the creation of the Khazar Khaganate and the inclusion of the North Caucasus into its territory; second, the creation of friendly relations between the Khazar Khanate and the Byzantine Empire to join forces in the fight against Sasanian Iran, third, the creation of friendly relations between the Byzantine

Empire and Alania to join forces against Khazaria [14]. The primal cause why one of the main branches led through the North Caucasus was the desire of tradesmen to leave out Sasanian Iran, which tried to establish total control over the world trade and introduce high taxes [12]. Due to this they resumed contacts through the passages of the North Caucasus, situated within the sphere of the Byzantine influence. It should be noted that the crossing routes were formed much earlier: Strabo mentions that in Dioscuria representatives of many nations gathered for trade and used the help of 70 interpreters. In

Roman times, through the Roman fortresses on the Abkhaz coast, mainly salt and slave trade was carried out, there were crossing routes, as is evidenced by materials from Tsebeldino necropolises.

For the central and eastern Caucasus, it is important to note the direct participation of Iran in the construction of two important branches of the Darin and Derbent routes. According to written sources, in the first half VI century Byzantium subsidized the construction of these fortifications, bearing in mind the general fortification system against a possible invasion of barbarian hordes from the north. However, realizing the vulnerability of such a policy, Justinian<sup>1</sup> ceases the payment of subsidies, and sends its own military contingents to West Transcaucasia, having in mind the organization of its own delivery of goods from China and Central Asia. The fortification and spatial carcass of the West-Caucasian branch of the great silk way was formed since the VI century in the territory of the West Transcaucasia. The establishment of the status quo by the results of the Iranian-Byzantine war of the 6th century, when West Transcaucasia was divided into zones of influence, served to highlight the path from Sebastopolis (Byzantine fortress), through Tsibilium (Byzantine fortress in the mountainous part of Abkhazia), then through Klukhor and the Marukh passes to the Northern slopes in Alanya. The territory beyond the Likh ridge, also the mountain Svaneti remained in the zone of influence of Iran, in connection with which further formation of fortification objects of Derbent and Dara took place. In general, the formation of the frame occurred in the direction from the southern slopes to the northern slopes, as evidenced by the chronology of the objects studied in the territory of Abkhazia and Alanya. Voronov revealed a dozen fortresses in the valley of the rivers Machara, Kodor and its upper tributaries, which were also stopping points for trade caravans. The direct participation of the Byzantine emperors in the formation of a fortification carcass on the Abkhazian part of the Silk Road demonstrates the special significance of this project for the Byzantine Empire. Synchronously at that time, fortified settlements were formed on the territory of Alanya, which, in principle, had a similar function. The need for fortifying the arrangement of cross-border roads resulted from the need for physical protection of caravans and their cargoes, in context of the possibility of deep raids to plunder both forces subordinate to the main players (Byzantium and Iran), and regional groups opposed to those who received benefits from trade. Security and stability in the Caucasian section of the caravan route were to be provided by: firstly, the large military bases of the Byzantines and the Khazars, secondly, an extensive network of small forts, which were located at a distance of a day march. As a rule, this position was controlled by local power elites who received their share of the transit of goods.

#### MATERIAL AND METHODOLOGY

Fortification carcass was formed on strategically important parts of roads in rocky landscape with the usage of classic rules of fortification architecture. Certain attention was paid to the location of springs of water and water delivery.

In addition to the classical fortifications, which controlled the exits of the trade routes to the passes and to the foothill valleys, there appeared fortresses at the forks of the trade routes; fortified settlements evenly distributed throughout the trade roads. Recent authorial field studies of the Gerzeul fortress allowed to convincingly link it with the Abkhaz branch of the Silk Road. The location of the object itself was not chosen by chance. It is separated from Sebastopolis at a distance of the day's transition, located on a high elongated ridge, access to which is possible via a narrow terraced road. The ridge was enclosed by walls inscribed in the existing relief. The walls were reinforced by two towers, which were pushed beyond the walls, which were also walk-throughs. Inside the fortress, we revealed a baptismal, cruciform in plan, similar to the baptismal in Derbent fortress, above which a Christian three-nave

temple was built. Space-planning decisions of church construction, as well as fortresses speak in favor of the construction of this object by the Byzantines in the 6th century. This assumption has been confirmed by the method of research of the lime solution. Voronov's assumption about the function of the Gerzeul fortress as a stronghold of the caravan route received due clarification. It should be noted that in the southern part of the West Caucasus, the presence of church buildings in outposts is obligatory. On the stretch before Gerzeul the road goes along the gorge of the r. Kelasur. Then the path followed through the Gerzeul fortress, located on the top of the ridge between the two left tributaries of the r. Bolshaya Machary [6] at the exit from the Pakhtsirsky gorge to the system of fortifications of the Tsebelda highland (Fortresses V.Yuryevka, Shapky). [10] Passing them, the road led to the main center of the Byzantines in Apsilii - the fortress Tsibilium, which is located on two cliffs, connected by an isthmus, facing the gorge Kodor. [8] The defensive structures in the form of fortress walls are located on the continental side: on the west side the length of the walls is 60 m, on the north - 350 m, on the east - 50 m. On the south side of the fortress there is a cliff of about 400 m length. In the immediate vicinity of the fortress remained fragments of the ancient road, which was the main route from the Black Sea coast to the passes of the Greater Caucasus Mountains.

From 1977 to 1985 expeditions of the Abkhaz Institute YALI n.a. D.I. Gulia and the Abkhaz State Museum under the direction of Y.N. Voronov carried out archaeological studies of the West part of the fortress as a result of which two parallel defensive walls were discovered - the main and proteychism, peribolos, three towers, two rooms - a guard behind the tower No. 1 and a dwelling behind the tower No. 2, a corridor over a cliff, several entrance openings, remains of stone staircases, temple complex, storage, two-story residential building, stairs, fragments of water supply and other objects. [8] A characteristic feature of the fortress is the presence of a system of double walls: the main and protehism. The main wall 2.4-2.6 m thick had a battle trail. The thickness of the protechism is 2.6 m. The space between the walls, called peribolos, ranges from 5.5 to 14.5 m. A similar system of double walls was typical of early Byzantine fortifications of the 6th century, known in Chersoneses, Constantinople and other cities of the Byzantine Empire. [8]

Approaches to the wall were guarded by the towers. Tower number 1 is located on the edge of a cliff; its significant part is pushed out outside the walls of the fortress. On the west side, the tower is wedge-shaped, finding an early Byzantine analogy. In the former territory of the Byzantine Empire, there are about a hundred of such towers, the closest of which existed in Eski-Kermen. [7]. From this tower the entrance to the peribolos was controlled. Tower No. 2 was attached to the main wall; on external measurement it has a square base of 9.5x9.5

m. The interior of the tower is 3.16x5.5 m. The tower had the function of a catapult. Tower number 3 attached to the main wall has a rectangular base with corner supports in the form of pillars. The internal dimensions of the tower are 6.85x6.6 m. [8] all the towers of the fortress are lined without ligation with the fortress wall, which correspond to the most important principle of Byzantine military architecture. [8]

Tsibilium occupied a central position in the Apsilia fortification system. The Byzantine military garrison was repeatedly located on its territory. This fortress and other similar fortifications of Apsilia (there are more than a dozen), which locked all the gorge passages leading from the North Caucasus to the Byzantine Sebastopolis, were built simultaneously in a short period of time that began in the Justinian period in the second quarter of the 6th century. [7] Y.N. Voronov connects the examined part of the tower with the early Byzantine fortification architecture of the 6th century. [8] "Full compliance of all

the features of the Tsbilium fortress with the canons of Byzantine fortification makes you see in its builders Byzantine engineers and workers, including Apsilian builders who have received the necessary training in Byzantium." [9]

Beyond the Tsbilium, the path continued along the Kodori Gorge. Here fortresses were located on the way (Pal, Uchkur, Zima, Azhara). Stepping over the Klukhorsky Pass, the Misimian Way led further through the territory of Alanya. The road went through the snowfield Klukhor lake and descended along the river Honachhira in the gorge of the river Teberda. Having reached the interfluvium of the Kuban and Teberda, the Misimian path goes into the foothill valley. In this place on the border of mountains and foothills is located Humara fortress. According to V.A. Kuznetsova Humarinsky fortress acquired a value similar to the fortress of Tsbilium in Abkhazia. [14]

Thus on the examined part of the Great silk way we can single out two main outposts: Tsbilium, which controlled the exit to the Klukhorskiy pass and the fortress of Khumara, which controlled the exit to the valley in front of the mountains.

Khumarinskaya fortress which controlled the exit to the valley in front of the mountain is situated on the right bank of the Kuban, 11 km. to the north of the city of Karachaevesk over the village of Khumara, on an elevated plateau Kalej, carved with deep gorges: Inal from the north and Shugara from the south.

During 1974-1987 archaeological research in the Khumarinskaya fortress was conducted by the expedition of the research institute of history, philology and economics of Karachay-Cherkessia headed by H. H. Bidzhiev. As a result, sections of a large defensive wall in the southern, eastern and northern parts of the settlement, fragments of towers, a square in terms of fire sanctuary, the main gate, a gate-passage, residential and farm buildings were investigated, and a detailed topographical plan of the settlement was made. Fragments of ceramics dating back to the II-VII and VIII-X centuries were found on the territory of the fortress. [5]

The planning structure of the Khumarian ancient settlement has a three-part division: a citadel, a fortress, a settlement. The settlement was located on the side of the Sugar hollow, east of the ancient road leading to the site of ancient settlement. From the west and south it is surrounded by a mound. [13] The area of the citadel, the fortress and the settlement is 40 hectares. [5] The overall dimensions within the fortress contour of the walls are 840x480 m., The length of the fortress walls is more than 2100 m. [11] The fortifications of the settlement are represented by walls, towers, buildings of the citadel and earthen moats.

On the Khumarinsky site of ancient settlement, as well as in the fortress Tsbilium, a system of double walls was applied: the main and the protehism. Double walls are located from the north and from the south of the citadel and have a space between them, the peribolos. A gateway was found in the front wall. The main part of the settlement - the fortress was surrounded on the perimeter by a stone wall, fortified with 17 towers. [13] The wall ran along the most abrupt edge of the spur. The configuration of the fortress wall has many kinks repeating the outlines of the relief. By assumption H.H. Bidzhiev the wall was completed with a toothed parapet, was provided with numerous loopholes and was whitewashed on both sides. [5] One of the design features of the wall is the presence of drainage channels, which are through holes of 0.2-0.25 m wide, 0.3-0.45 m high in the lower row of masonry, formed by two parallel rows of masonry and covered with plates of the second row masonry. Another constructive feature of the fortress walls of Khumara, as well as in the fortress Tsbilium, is the presence

of the battle trail on the inside, built due to the fact that the base of the walls was wider than the top. [4]

The thickness of the walls of the fortress is 3.50 m; 3,80m; 5.10 m. [5] The walls are composed of well-processed large squares of sandstone with the observance of the "header and stretcher" alternation without blockage and without foundation. At the same time there is a limited use of lime mortar. The mortar was used for laying stone blocks on steep sections of the fortress (eastern part of the citadel, the main gate) and was used only to coat the seams of the armored blocks.

H.H. Bidzhiev noted that in the territory of Karachay-Cherkessia, in the construction of fortifications, the use of lime mortar as a binder material is extremely rare. Of the many monuments of the region, its use was recorded on the Khumarinsky settlement, on the walls of the citadel of the Inzhurgatinsky settlement, the towers of the Adiyukha settlement, the Khurzuk tower. Other defenses of the region are folded without mortar, using dry technique. [5] The towers have a rectangular base. The sizes of all the towers are different. We give the dimensions of the four towers investigated by H.H. Bidzhiev: 11.10x7.75 m;

10.70 x 9 m; 10x9 m, 11x10 m. These towers were built in a dressing with fortress walls, which testifies to their one-time construction. The citadel of the Khumarian ancient settlement was located in the northeastern part of it on a hill, it was severely destroyed. [1] According to V.V. Bidzhiev, it was a monumental multi-tiered tower, surrounded by a courtyard and surrounded by a fortress wall around the perimeter. [5] Researchers are still asking who, when and for what purpose built the Khumarinskaya fortress. H.H. Bidzhiev and A.V. Gadlo believe that the fortress belonged to the bearers of the steppe Zlivka local version of the Saltovo-Mayak culture, relying on ceramic material and the similarity of the construction techniques of this fortress to the white-stone fortresses of the North-West Khazaria (Right Bank, Tsimlyanskoe, Mayatsky settlement). [2] However, in its dimensions and power of fortification, the Khumarinskoe settlement significantly exceeds all the known settlements of the Saltovo-Mayatsky culture (brick Sarkel and Semikarakory, stone Mayatsky, Verkhne-Olshanskoe and Verkhne-Saltovskoe). Compared to Khumara, they look tiny. [15]

H.H. Bidzhiev also noted that the Khumarinskaya fortress in what concerns the construction technique has much in common with the fortress architecture of the Crimea in the 6th century. (Kherson, Mangup-Kale, Eski-Kerman, Chufut-Kale, etc.), which is characterized by a square masonry "header and stretcher" of hewn blocks.

As a result of many years of excavation, H.H. Bidzhiev succeeded in defining the stratigraphy of the monument, which, according to archaeological material, is divided into three historical epochs: VIII-VI centuries BC, II-VII centuries AD, VIII-X centuries AD [5] Regarding the dating of the main fortifications of the settlement (walls and towers) H.H. Bidzhiev writes that their foundations lie on an earlier cultural layer than the VIII-X centuries. [5]. U. Y. Kochkarov writes that the life time of the settlement, judging by the archeological material, coincides with the life of the Saltovo-Mayatsky culture - the leading culture of the Khazar Khanate. After the fall of the Khanate, the people left the fortress. The reason why the Alanian population of the region did not occupy an unbroken fortified settlement with powerful fortifications is unknown. [13] The author also notes that the issue of the time of the construction of the walls of the settlement remains open, and the location of the necropolis belonging to the population of the Khumar settlement still remains unknown. [13]

M.S. Gadzhiev draws architectural and construction parallels in the fortification of the Khumarian settlement and the Sasanian defensive architecture of Derbent, as well as other fortresses of Dagestan

in the middle of the 6th century: the use of well-hewn stone laid in regular horizontal rows, the use of two-pierced dry masonry with internal filling with stone and rubble, header and stretcher method, squares at the base of the walls, rare use of lime mortar to coat the seams of the bottom row of masonry walls, escarpment of the slope to create a horizon under the walls, drawing epigraphic marks on stone blocks. [11]

The authors of this study share the point of view of V.A. Kuznetsov about the fact that the Khumarinsky fortress had a meaning similar to the fortress Tsibilium in Abkhazia. In the context of growing Byzantine-Iranian contradictions, it became necessary not only to pave the West Caucasus direction of the Great Silk Road, but also to create a defensive system that would protect the path itself, as well as the settlements of the peoples through which it passed (Apsils and Alans) and borders of the Byzantine Empire.

As Y. N. Voronov and H. H. Bidzhiev fairly noticed, in what concerns the greatness and the difficulty of the planning and the inaccessibility of the fortification works both Tsibilium and Khumara fully comply with the recommendations of Vitruvius, F. Vegetius, L. B. Alberti and TS. Kun. [3]

## CONCLUSION

The described outposts of the West Caucasian branch of the Great Silk Road, as earlier centers of fortification culture, showed transcultural influence on the architecture of adjacent regions. The fortification architecture of the designated outposts is considered as a system of unique architectural models, powerful installations of universal fortification culture in the context of the archetypal layers of ethno-cultural consciousness, centers of the spread of the Byzantine culture and the formation of blended variants of fortification architecture in the region. In the context of the above said, the universals of medieval fortification architecture include the following: the layout of the fortress is in line and with the relief of the area; the fortress plan consists of a single or a double line of defense, interrupted with flanking towers; the distance between two combat towers is determined by the range of the weapon, the shots from which must be crossed in the interval from one tower to another, hence the maximum length of the front from one tower to the other is 40 m; if the line of defense is double, then the external line has a lighter structure, and the height is less so that it is possible to shoot from the internal line over it, the distance between the lines of defense does not exceed 15 m; the use of a serrated parapet that serves to cover the defenders of the fortress; use in the construction of the walls of the battlefields; the use of square or rectangular in plan towers to strengthen the walls; the use of monolithic construction for the lower floor of the tower (ejection tower); device loopholes in the upper floors of the tower; use of internal stairs in the thickness of the walls of the tower; the principle of not associating the wall of the tower with common masonry with the fortress wall, but placing them independently of each other in order to minimize possible damage from enemy rams; the location of the gate under cover, between the two towers, or in such a way that the defenders hit the besiegers on the right, from the unprotected shield the use of exit gates.

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## REFERENCES

[1] Alekseeva E.P., *Arkheologicheskie pamyatniki Karachaevo-Cherkesii*, Rossiya, 1992.

- [2] Bidzhiev H.H., Gadlo A.V. Issledovaniya 1974 g. naKhumarinskom gorodishche v Karachaevo-Cherkessii / Materialy po izucheniyu istoriko- kulturnogo naslediyaSevernogoKavkaza. Krupnovskie chteniya 1971-2006, Rossiya, vyp.VIII, pp. 121-122, 2008.
- [3] Bidzhiev H.H., Krepostnye sooruzheniya Khumarinskogo gorodishcha / Problemy arheologii i etnografii Karachaevo-Cherkessii. Material'naya i duhovnaya kul'tura, SSSR, pp. 84-112, 1982.
- [4] Bidzhiev H.H., Tyurki Severnogo Kavkaza, Rossiya, 1993. [5] BidzhievH.H., Khumarinskoe gorodishche, SSSR, 1983. [6] Bondarev N.B., V gorah Abhazii, SSSR, 1981.
- [7] Voronov Y.N., Bgazhba O.H., Krepost Tsibilium - odin iz uzlov kavkazskogo limesaYustinianovskoy epokhi / Vizantiyskiy vremennik, SSSR, tom. 48, pp. 116-132, 1987.
- [8] Voronov Y.N., Nauchnye trudy, tom 1, Abhaziya, 2006.
- [9] Voronov Y.N., Novoe ob arhitekturnyh pamyatnikah Tsebeldy. - Apsny Akazara, Abhaziya, vyp. №2, pp. 2-5, 1979.
- [10] Voronov Y.N., Tayna Tsebeldinskoj doliny, Abhaziya, 1975.
- [11] Gadzhiev M.S., Khumara: nekotorye stroitelnye paralleli i problema datirovki ukrepleniy / Ocherki srednevekovoj arheologii Kavkaza K 85-letiyu so dnya rozhdeniya V.A. Kuznecova, Rossiya, pp. 51-65, 2013.
- [12] Ierusalimskaya A.A., Velikiy shelkovyy put i Severniy Kavkaz (k vystavke «Sokrovishcha iskusstva Drevnego Irana, Kavkaza, SrednejAzii»), SSSR, 1972.
- [13] Kochkarov U.Y., Ukreplennye poseleniya Khazarskogo kaganata /Vestnik Rossiyskogo gumanitarnogo nauchnogo fonda, Rossiya, vyp. № 2 (67), pp. 59-70, 2012.
- [14] Kuznecov V.A., Alano-Osetinskie etyudy, Rossiya, 1993.
- [15] Flerov V.S., "Goroda" i "Zamki" Khazarskogo kaganata. Arheologicheskaya realnost, Rossiya, 2010