The identity of the medieval fortress architecture on the river Godlih and of the Humara settlement

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Abstract. The article describes the scientific hypothesis about the architectural and spatial identity of a medieval fortress at the mouth of the Godlich river and the Khumarinsky fortification on the Kuban river. It was revealed that the planning structure as well as the architectural and spatial organization of these medieval monuments are similar and consist of three parts: the citadel, the fortress and the open settlement. The citadel was a monumental multi-tiered tower, surrounded by a courtyard and a fortress wall. The fortress along the perimeter was surrounded by a defensive wall, fortified with square towers in plan. The open settlement did not have artificial fortifications and was located in an inaccessible place in the immediate vicinity of the citadel and fortress. The architecture and construction of the walls and towers of both fortresses are made in the Byzantine construction culture traditions. The masonry of the fortresses’ walls and towers is a lining with shell-like rows of stones with a filling between them and stone fragments in lime mortar. Since the fortress at the mouth of the Godlich river was severely destroyed as a result of the Tuapse-Adler railway construction, it is possible to rely on the identified analogue to carry out a hypothetical reconstruction, which will serve as a theoretical justification for its restoration and museumification.

Introduction
The relevance of the study lies in the need to carry out a theoretical justification of poorly studied monuments of architectural heritage of the Middle Ages in the North Caucasus with a view to their subsequent restoration and museumification. The significance of solving this problem lies in the fact that the aim is to correctly transmit the cultural heritage from the past to the present and future. In addition, this largely determines the demand degree for the monuments in the modern sociocultural situation and affects the relationship nature of the present society and future generations to cultural heritage.

The fortress is located at the mouth of the Godlich River in the village Volkonka Lazarevsky district of Sochi, is one of the poorly studied monuments of medieval architecture on the Black Sea coast in the Caucasus. The lack of a sufficient factual base and archaeological research leaves open the question of the exact dating and ethnicity of the monument. Yu.N. Voronov identified two construction periods of the fortress functioning: Roman-Byzantine - V-VIII centuries AD and Genoese - XIV-XV centuries AD.

Discussion
The first research on the fortress territory at the mouth of the river Godlich was conducted by N.V. Anfimov. He uncovered the remains of a large tower in the western part (tower number 5) in 1957. After clearing the rubble, it turned out that it consisted of two rooms adjacent to the defensive wall from the
outside and from the inside. The external dimensions of the tower are 12x12 m; and the wall thickness reached 2 m. The voids were revealed inside the walls - perhaps these are the rotten wooden floor structures traces. N.V. Anfimov noted that during the fortress construction the traditional techniques of Byzantium were used. The walls consist of two outer shell masonry, the inner space between them is clogged with stones and lime mortar. At the end of archaeological work, the remains of the tower were left in an open state, which led to their further destruction. To date, the excavations have been partially filled with soil and stones falling from the walls.

In 1965, while studying the ancient monuments of the Black Sea coast, the fortress was examined by I. B. Brashinsky. It was most fully examined by Yu.I. Voronov, who conducted the work on the archaeologica map compilation in the surrounding area of Sochi. Yu.I. Voronov suggested that the remnants of the structures under consideration might have been existing in this area up to the 5th century AD and mentioned by Pseudo-Arrian as the Bagu fortress [3, 81-82].

Yu.N. Voronov made measurements of the fortifications’ remains and drew up their general plan. According to him, the total length of the walls along the perimeter was 700 m, and the thickness reached 2 m. He indicates that along the cliff to the sea, the walls long ago collapsed down. The researcher identified two construction periods of the fortress construction - V century AD (Roman-Byzantine) and XIV-XV centuries AD (Genoese). In the first period fortifications were built covering an area of 2.6 hectares. During their construction, the Roman-Byzantine masonry technique was used - shell-like rows of stones with filling. The second period is marked with a small wall that separated the western part of the fortress. During its construction, a peculiar technique was used: on the outside, the wall is lined with high-quality stone blocks, and inside is lined with flat cobblestones forming a “herringbone”. Their rows are separated by the horizontally laid cobblestones. Such techniques, according to Yu.N. Voronov, were inherent in the period of the Genoese colonization of the Black Sea coast. The researcher notes the presence of six towers: three of them in the northern wall, and three in the eastern and southeast. A similar dating of the fortress functioning was made by Yu.N. Voronov on the basis of a ceramic material found at the excavation site dated to the V-VIII centuries AD [3, 80-81].

The remains of the fortifications occupy a triangular shape, limited in the north by the valley of the river Godlich, in the east - a small but deep gorge, and in the south-west - a coastal cliff of the sea. To the northeast, the hill passes into a narrow dividing ridge between the mentioned valley and the gorge. This is the only convenient way connecting the hill with the surrounding area. The slopes of the hill are steep and were natural fortifications. The natural landscape environment, providing the natural protection of the territory, played an important role in choosing a place for the fortress construction.

In the 20s of the XX century in the immediate fortress vicinity, the Tuapse-Adler railway was laid, and the coastal part of the hill on which the fortress is located was blown up. Since then, from the sea, the fortress territory has been practically impregnable, since it ends with a cliff up to 40 m above the sea level. It is only possible to imagine what the coastal part of the fortress looked like before blasting.

At the end of the 50s of the XX century on the empty territory of the fortress, a military construction unit No. 86 501 was located. It was disbanded in 1991 and the fortress territory was transferred to the military sanatorium Chemitokvadzhe, located next to the remains of a medieval fortress. At this time, the construction work started on the fortress territory, as a result of which a pit of 7x14 m in size was dug. During its examination, no cultural remains were found. Then the construction was stopped until an agreement with the conservation authorities was reached.

The entire fortress interior, except its western part, limited by a wall folded in “herringbone” style, has been occupied by various buildings - barracks, communications facilities, sports grounds; part of the territory is covered with asphalt or concrete.

**Material and method**

Along the entire perimeter of the hill occupied by the fortress, except for the coastal cliff, are the fortifications’ remains of the 5th century and VIII-X centuries: the north wall with towers No. 3, 4, 5; northeast tower (tower No. 2); eastern wall; southeast wall and tower No. 1; internal defensive wall (VIII-X centuries) (Figure 1).
The northern wall is located on the edge of the hill and protects the fortress territory from the Godlich River. Its length was about 265 m (the eastern edge is limited by the north-eastern tower, and the western breaks into the sea). In plan, the wall is arched to the north. In its central part, on the outside, the remains of tower No. 3 are adjacent to the remains of the wall. To the west of the tower No. 3, at a distance of 35 m, are the ruins of tower No. 4, which also adjoin the ruins of the wall from the outside. It is not possible to determine the exact dimensions of these towers, since they are hidden under the ruins and densely covered with shrubs. Judging by the collapses’ shape, it can be assumed that both towers had a rectangular shape.

Further west, at a distance of 50 m from the tower No. 4, at the cliff, the remains of the tower No. 5 are located. They were investigated in 1957 by N.V. Anfimov. Currently, the tower interior, where the excavations were carried out, is partially flooded with soil. The tower has an irregular quadrangular shape: 14x11x12x12 m. The outer sides of the tower were not excavated and were hidden under the rubble of stones to their full height. The defensive wall does not end at the tower, but continues inside it, dividing the tower in half.

The northeast tower is angular and is located in the highest fortress part: from the west, the northern wall adjoins it, from the southeast - the eastern wall of the tower No. 2 occupies an important strategic position, as it is located in the place where there is only one path connecting the hill, on which the fortress is located with the surroundings.

Currently, the remains of the tower are hidden under the collapse. On the surface, only partially visible are the remains of the southern and eastern walls. The interior space is filled with blockage. The plan can be restored from the remains of the walls: the tower has a rectangular shape with sides of 12.5x15 m. The walls are folded in the same Roman-Byzantine technique as the northern wall, that is - from the outside the carapace - inside there is a stone cladding mixed with limestone mortar. An interesting masonry shell of the southern wall of the tower No. 2. It is visible above the block to a height of 2 m. The lower rows of the shell are composed of small and large cobblestones, the upper ones are made of long flat stones. Inside the southern wall, the square-shaped voids (2.5x2.5 cm) are noted, apparently left during its construction.

The eastern wall adjoins the tower No. 2 with the northern edge, the southern one breaks off at the former military checkpoint located on the fortress territory. The length of the wall is 65 m, the height is from 0.1 to 5.5 m, the thickness is about 2 m. It is best preserved in the northern part - the port of entry section. In this section, the wall makes a slight bend to the west. It is impossible now to determine whether this bend is initial, since the wall turns in those places where there are faults in it at the entire height. It could acquire this curved shape as a result of soil landslides on which it is located. During the security excavations, a pit was laid on the inner side of the wall, as a result of which it was revealed that
lime mortar was laid under the base of the wall, 0.40 m thick, and on the top, it was an armored wall masonry. The shell masonry consists of large and small cobblestones, ragged stone; filling - stone mixed up with lime mortar.

In the northern part of the wall, 2 meters from the southern wall of the tower No. 2, there is an arched masonry in shell on both sides of the wall. Probably in antiquity there was a gate near the tower. It is laid with cobblestone in a mortar. In the same section of the wall, small but deep holes between the shell stones left during the construction were fixed. On the outside of the wall they are arranged in three horizontal rows. On the inner, western side in the wall there are five horizontal rows of the same holes. The lower two rows are located at a height of 1.00 m and 1.60 m. This wall part on the east side is hidden under the collapse; it is possible that there are also corresponding holes there. The holes are not continuous, up to 1.40 m long. Their diameter is 5.5 - 9 cm. The purpose of these holes is unclear. Perhaps they are the traces of scaffolding established against the wall during its construction.

The southeastern wall starts from the road passing at the entry port of the former military unit. The southwestern edge of the wall ends at a cliff. In the southwestern part, it was destroyed in two places during the road construction leading from the sea to the building No. 6 of the Chemitokvadzhe sanatorium. The whole wall is hidden under the collapse. When installing the summer cinema outside near the wall, the blockage on the “I-K” site was demolished. The shell here is made of rubble stone. According to eyewitnesses, when dismantling the blockage, cast-iron cores and a rusty dagger were found. In the northeastern part of the wall, near the road itself, blockages are significantly larger in size than the ordinary wall blockages. Here was the tower No. 1.

The internal defensive wall of the VIII-X centuries. Inside the fortress V century AD and later, a wall was built in the fortress to separate a small area of 0.12 hectares in the western part near the tower No. 3. The length of its individual sections is: northeast - 38 m, east - 21 m, southeast - 5 m; and the height in some places reaches 4.5 m. During the construction of this wall, the masonry technique used is completely different from that in the fortress construction of the V century AD. The internal masonry of the wall consists of large flat cobblestones, placed on a rib in rows. Moreover, each row has an inclination in the direction opposite to that in which the cobblestones of the upper and lower rows are inclined. Between the inclined rows is horizontally stacked, the same flat, cobblestones. This is the so-called “Christmas-tree” masonry used in the Northern Black Sea Region in the 8th century AD. From the outside, the wall is lined with well-crafted blocks, which are now preserved to a height of 1-2 nearby.

In the center of the eastern wall are the significant stone collapses of fallen defensive structures. Perhaps there was a tower with passage to the territory limited by the wall of the VIII-X centuries.

On the Karachay-Cherkess Republic territory in the gorge of the river Kuban there is well preserved Alan-Byzantine fortress known in the sources as the Khumarinsky fortress [5], which can be considered as the closest analogue, related by location in the landscape, architectural and spatial organization and building culture.

The Khumarinskyoye settlement is located on the right bank of the Kuban, 11 km north of the Karachayevsk city on an elevated plateau cut by deep balkas: from the north - the Inal balk, from the south - the Sugar balka. The Khumario fortification is a large Alan-Byzantine military fortress built at the passage of the North Caucasian section of the Great Silk Road. The fortress length is 840x480 m (Figure 2).

The first archaeological site of the settlement was headed by E.P. Alekseeva in 1963 - 1964, which dated the fortress of the 9th-13th centuries. She also discovered a cultural layer of the VIII-VI centuries BC at the foot of the citadel from the side of the Sugara balka [1, 53-55]. Throughout 1974 - 1987 the archaeological research on the Khumarinsky settlement was carried out by the expedition of the Karachay-Cherkess Research Institute under the leadership of Kh.Kh. Bigzhiev. Ceramics fragments dated back to the II-VII centuries and VIII-X centuries were found on the fortress territory. Moreover, all structures are dated back to the VIII-X centuries [2, 8]. V.A. Kuznetsov dated the monument back to the X-XI centuries [4]. This territory was inhabited in the VIII-VI centuries BC by the tribes of Koban culture; in the II-VII centuries AD Alans settled here; in the VIII-X centuries AD the military-political center of the Khazar Kaganate arose and in the X-XII centuries this territory belonged to the Byzantine
Christian Alanya. In architecture and in the construction of walls and towers of the Khumarinsky fortification, as well as in the Godlich fortress, there are mainly features of the Byzantine building culture, it can be assumed that the fortifications on the Kuban River and the Godlich River that have survived to our time were built during the Alano-Byzantine interaction.

![Figure 2. Khumara settlement on the Kuban River (Karachay-Cherkessia): general view, plan](image)

The planning structure of the Khumarinsky settlement has a three-part division: a citadel, a fortress, an open settlement. The fortifications of the settlement are represented by the walls, towers and citadel buildings, similar to those that were preserved on the fortress at the mouth of the Godlich River. The construction equipment features of walls and towers are similar and constitute lining with the shell-like rows of stones with a broken stone between them and filling mortar of lime (Figure 3). The thickness of the Khumarinsky settlement walls exceeds 5 m, while the thickness of the fortress walls at the mouth of the Godlich River is 2 m (Figures 1.2).

The gates on the Khumarinsky fortification were located in two places on the southern and northern sides, in addition, several gates-passage flanked by one or two towers were revealed in the fortress walls. One of these gates was preserved in the eastern wall of the fortress at the mouth of the Godlich River (Figure 1).

The citadel of the Khumarinsky settlement was located in the north-eastern part of it on a hill, it was severely destroyed. According to the assumption of V.V. Bigzhiev, it was a monumental multi-tiered tower, surrounded by a courtyard and surrounded by a fortress wall around the entire perimeter [2, 27]. An open settlement existed on the Inal balka side.

**Summary**

The fortress at the mouth of the Godlich River and the Khumarinskoye fortification can be attributed to one type of Alan-Byzantine military-fortification complexes, which were formed in the strategically determined places where the trade routes of global importance passed. Therefore, it can be assumed that the fortress, which has been severely destroyed by now at the mouth of the Godlich River, had a planning structure and an architectural and spatial organization similar to the Khumarinsky fortress on the Kuban River, consisting of a citadel, a fortress, and an open settlement.

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