

ARCHITECTURE AND LANDSCAPE OF THE NORTH CAUCASUS HISTORICAL AND PROCEDURAL STUDY OF SETTLEMENT SYSTEMS AND RECONSTRUCTION OF ANTHROPIZATION OF TERRITORY. HERITAGE AND ITS POTENTIAL.

ANNA LINNIK
POLYTECHNIC UNIVERSITY OF BARI

ABSTRACT

This work was presented at the School of Specialization in Architectural and Landscape Heritage held at Politecnico di Bari, Italy, with the guidance of Professor Matteo Ieva.

The subject of the research is the historical process of space development, the origin and evolution of forms of architecture and urban structure in the conditions of autochthonous cultures and stylistic influences, reflected in the architectural and urban planning heritage in the North Caucasus, the farthest part of south Russian territory. This heritage is represented by architectural and natural complexes that are integral part of the landscape of the mountainous regions and foothills.

Mountains and hills divide the territory into many areas, which have their own distinctive features. Historically, this has predetermined the diversity of habitats, the diversity of flora and fauna, and contributed to the formation of ethnic diversity. The culture of the North Caucasus populations is characterized by diverse social communities and their sustainability of traditions that have received a peculiar expression in the organization of the architectural and spatial environment.

Communication: Anna Linnik **E-mail:** a.linnik@studenti.poliba.it
FORMA CIVITATIS: International journal of urban and territorial morphological studies (IJUTMS), Vol. 2, N. 1, 2022

Typological diversity of settlements and dwellings among the North Caucasus peoples is due to the difference in the natural and geographical environment, the uneven social and economic development of individual peoples in the past, as well as ethnic and cultural features. But the initial and fundamental component here is the territory itself. This way of understanding of place allows us to create the fundamental “structural” relationship between place and architecture, between the physical form of place and the built-in form of architecture.

At each stage of the history of the environment’s formation, the main natural spatial properties of the region have a significant impact on the development of architecture and the territorial structure in the North Caucasus: “borderline”, “peripherality”, “penetrability” and “local isolation”. Along with factors of social history and cultural history, they determined the uniqueness of the historical path of the formation of architectural cultures.

The heritage carries general information about the ideas, tastes, artistic preferences and character of previous generations, is the material basis that preserves the culture of peoples, memory and “spirit of the place”, and guarantees the preservation of the historical and cultural identity of settlements.

The research undertaken, in addition to explaining anthropic phenomena, aims to document the architecture on the urban, aggregative and building scale that remains today, in order to testify specifically to the civilizations that have developed and stratified over time. For this reason, the study forms the basis for defining a set of guidelines for the recovery and enhancement of this heritage, which could become part of tourist routes and therefore continue to be used today.

Methodology

The methodology of this study includes the collection and analysis of historical-documentary material from which the main elements were extracted for reconstructing the historical picture of the territory development and the formation of building traditions.

The difficulty of the work lies in the fact that the database are literature, publications and various research works that are available only on the web, due to the impossibility to travel to Russia because of the pandemic.

Furthermore, I wanted to apply the Italian school method, learned in the course of the specialization school, to the study of this geographical area in order to explain the phenomena that characterized its formation. To analyze the built environment on various scales: reading of constituents, determining the shape, structure and various uses of buildings, towns and

¹ *Vasilievich E. G. - Architectural and Urban Heritage of the South of Russia. – Moscow, 2004 – p. 10.*

territory, that can enable us to understand the conforming rules at the root of the structuring territorial ranges.

The uniqueness, typicality and originality of life, culture and architectural and spatial organization of settlements in this territory were formed as a result of the interaction of various factors. But the initial and fundamental component here is the territory itself. Archetypal elements of geography often become the “original elements of the city”. As such, they contain an explanation of the urban form origin, that is, “constitutes the etymological root of urban facts”. This way of understanding of place allows us to create the fundamental “structural” relationship between place and architecture, between the physical form of place and the built-in form of architecture.¹

The thesis reveals the main historical events, in chronological order, in parallel with the main changes in the field of architecture and urban structure, which implies as independent consideration of phenomena, and provides opportunities for analyzing their interactions and mutual influences on the architecture of the region. Research of the historical process and various influences on the formation of the architectural and spatial environment of the territory can provide not only a basis for various types of architectural analysis, but also more clearly identify the features of the uniqueness of the architecture of the region in the process of its formation.

Reconstruction of the process of formation of the architectural and spatial environment involves the using of global categories of “space” and “time” as the basis of research. Deciphering the system “time-space” is the main interest in trying to understand architecture as a spatial culture inherent in a certain time.

Main stages of territories development and formation of the architectural and spatial environment of the North Caucasus. The ancient stage of population of the territory

The geographical position of the North Caucasus has determined the peculiarity of its historical past. Situated on the routes of intersection of cultural migrations from Western Asia and Transcaucasia, the region of the North Caucasus has already been involved in the global cultural processes since ancient times.²

Archaeological findings testify to the first appearance of humans in the Caucasus, in the lower Pleistocene. The first flows of settlers of the Paleolithic era moved from Transcaucasia gradually covering the territories of the Eastern and Western Ciscaucasia and spreading into the steppe zone.³ The archaeological materials shedding light on the process of territories development in the ancient times confirm the

conclusion that the way of life corresponds to the way of formation of the artificial environment, starting with the primitive forms of organization of life in natural caves up to the aggregate of the simplest settlement structures (Paleolithic, Mesolithic, Neolithic sites) and villages with communication infrastructure and a differentiated spatial organization (dividing the city into two parts: “city of the living” and “city of the dead”).

Preferences in the choice of areas for settlement at the early stages of the ancient period are stable, and there is a tendency of repeated usage of local sites for settlements in subsequent periods of time.

Stabilization of natural and climatic conditions promotes sustainability and expansion of settlement areas, contributes to the development of settlement forms. Numerous archaeological monuments and their descriptions confirm that awareness of landscape features such as relief of the place, availability of water resources and natural arable lands becomes a natural feature of the resettlement process at all stages of the ancient period. This starts with the adaptation of local natural relief features for living and goes up to the usage of peculiar terrain features (plateaus, terraces, capes, hills), water obstacles and ravines for the protection of settlements. In this way, the landscape examination by man and the development of natural features of the terrain and of water bodies during settlement have been natural features of the process of development of the North Caucasus starting with the most ancient period.⁴ (Fig. 1, 2, 3)

Nomadic and sedentary ways of settling space exploration

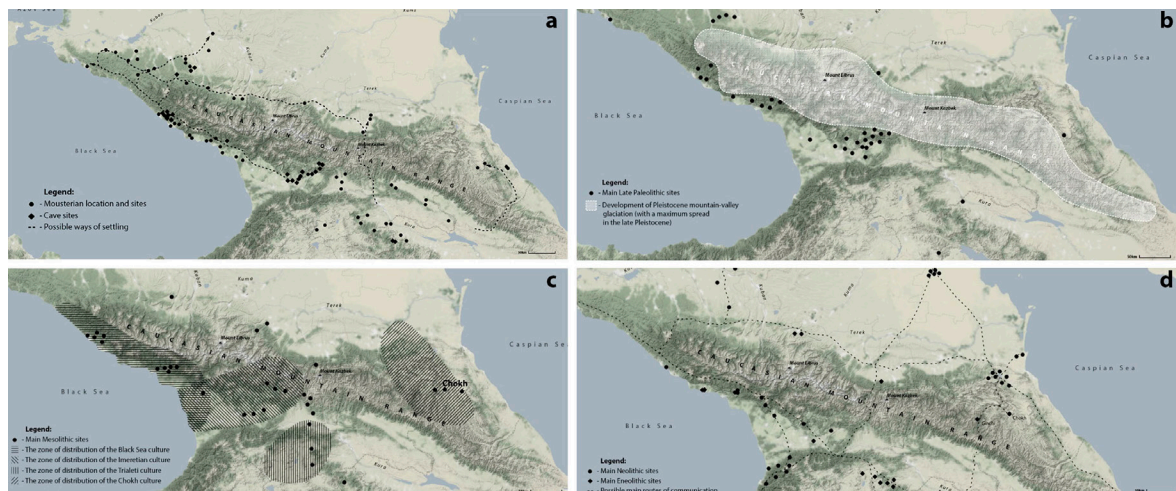
The next stage is characterised by emergence and evolution of forms of ancient architecture and urban planning in the territory of the Bosporan Kingdom, the involvement of the

² *Paleolithic of the USSR. Ed. P.I. Boriskovsky - Moscow, 1984 - p. 42-43.*

³ *Narochnitsky A. L. - The history of the peoples of the North Caucasus from ancient times to the end of the XVIII century - Moscow, 1988 - p. 28.*

⁴ *Paleolithic of the USSR. Ed. P.I. Boriskovsky - Moscow, 1984 - p.69, 70.*

Fig 1. a - Map of Middle Paleolithic sites in the Caucasus; b - The main locations of Upper Paleolithic sites on the Caucasus territory; c - Main Mesolithic sites of the Caucasus; d - Main Neolithic and Eneolithic sites of the Caucasus.



⁵ *Steppes of the European part of the USSR in the Scythian Sarmatian time - Moscow, 1989 - p.10, 34, 112, 113.*

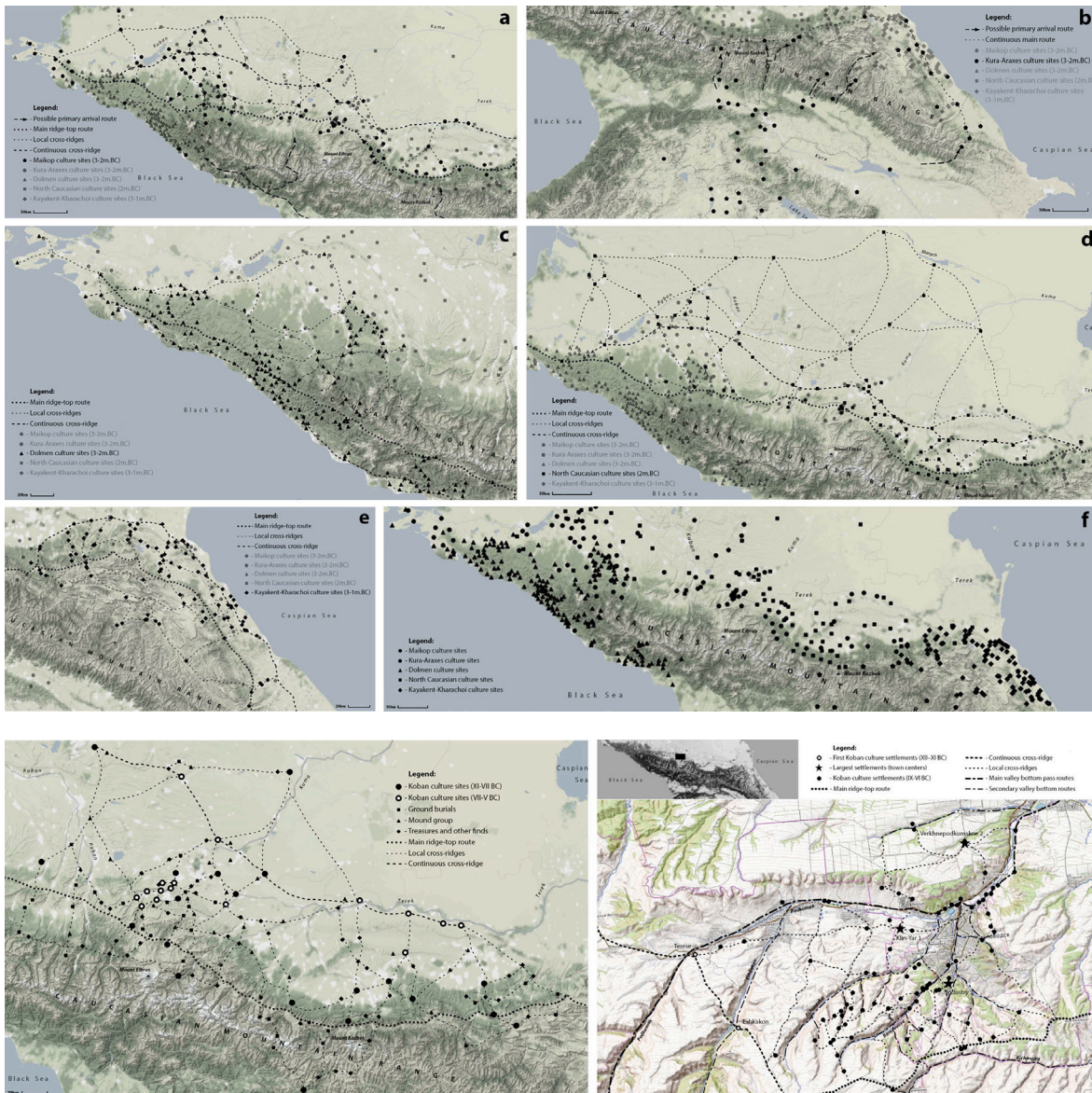
Fig 2. a - Map of Maikop culture sites; b - Map of Kura-Araxes culture sites; c - Map of dolmen culture sites; d - Map of North Caucasian culture sites; e - Map of Kayakent-Kharachoi sites; f - Map of Bronze Age sites in the Caucasus.

Fig 3. Map of Koban culture sites; Map of Kislovodsk basin archaeological sites (XII—XI B.C.).

settled and nomadic population of the North Caucasus in the sphere of influence of ancient culture.

Groups of nomads were moving mainly from east to west. They led large campaigns to the south and to the east, and much less often - to the north. A review of archaeological sources gives grounds to conclude that the vector of territory settlement that had been mainly directed from the south to the north and west starting from the Paleolithic Age and that later changed due to cultural interactions, has now acquired a different orientation: from east to west.

The paths of movement are marked by the roads of nomads. Mounds, Scythian monuments very big in size both in diameter and in height, become accents in the steppe space devoid of any other artificial landmarks. This all contributes to the allocation of the territory of residence and to the formation of a kind of communication infrastructure for



development, interaction and mutual influence of cultures which manifested in the development of rectangular, round and circular forms of settlement, in differentiation of buildings and highlighting its central parts, in zoning of territories and dividing them into a residential part and a necropolis, as well as in the transfer of funeral rites and types of burials.⁵

Northern Pontic area and Azov Sea area are a peculiar part of the ancient world. Its peculiarity was determined by both climatic conditions of the new territories and specific features of the Greeks' way of living in the immediate neighborhood with local tribes of Scythians, Sarmatians, Maeotians, and Sindi.

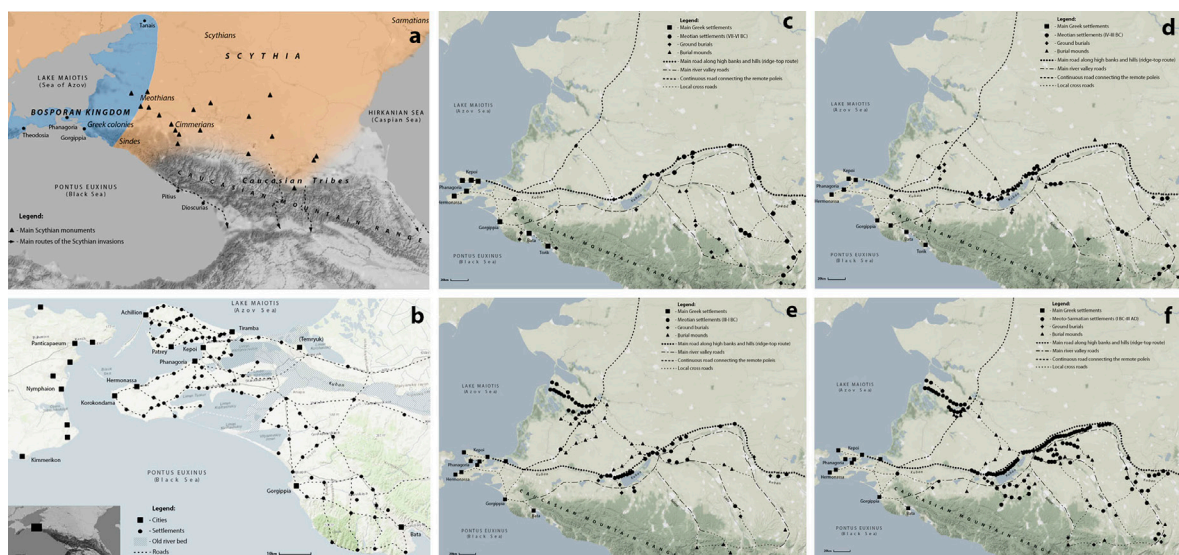
Architectural and construction culture born in such conditions was a projection of Greek traditions and their transformation by the local construction culture based on simple spatial building schemes of sedentary population, local materials and emerging dwellings of nomads moving to sedentary lifestyle.

Peculiarities of the historical development of the Northern Black Sea states have influenced the formation and development of architecture of the two periods: the first one from the VII to the II century B.C., and the second one from the I to the IV century A.D. The content of the first period includes the formation and development of urban planning and architecture based on the traditions of the Greek culture. The second period is marked by a qualitative change in the Greek architectural forms which manifested in the increasing influence of local tribes. This led to the "sarmatization" of the culture of antique cities.⁶

Antique architecture in the Azov and Black Sea regions, being almost destroyed by the invasion of nomads, did not have a direct impact on the formation of architectural stylistics of subsequent epochs. (Fig. 4)

⁶ *Narochnitsky A. L. - The history of the peoples of the North Caucasus from ancient times to the end of the XVIII century - Moscow, 1988 - p. 26-31, 78, 79.*

Fig 4. a - Map of Scythia with the main location of the mound groups; b - Map of Greek settlements on the Taman Peninsula; c - Map of early Meotian sites (VII-VI B.C.); d - Map of Meotian sites (IV-III B.C.); e - Map of Meotian sites (III-I B.C.); f - Map of Meoto-Sarmatians sites (I B.C.-IIIA.D.).



⁷ Pletneva S. A. - *Nomads of the Middle Ages* - Moscow, 1982.

⁸ *Steppes of Eurasia in the Middle Ages. Archeology of the USSR* - Moscow, 1981 - p. 64-70.

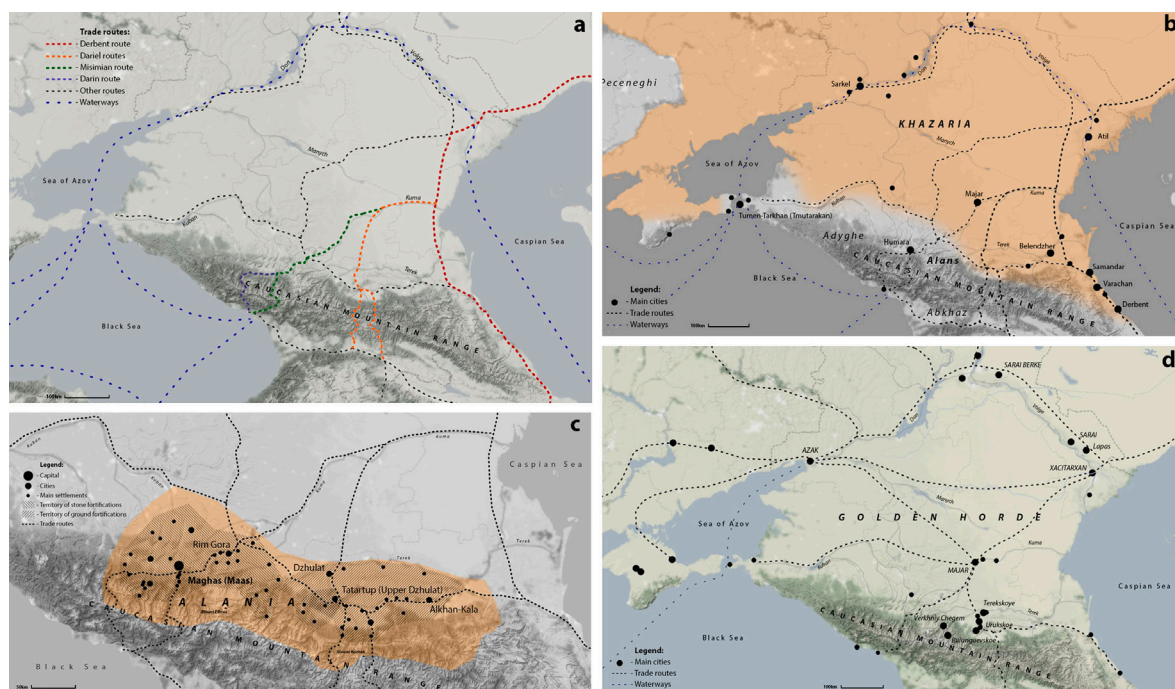
Medieval stage of territory development as a combination of state and territorial integration, and nomadic lifestyle.

The Middle Ages are traditionally associated with the Great Migration of Peoples which involved the entire population of the Eurasian steppes. On the territory of the North Caucasus in question, the Medieval Period was a time of collision and displacement, absorption and interaction, mutual influence and synthesis of various cultures. From the point of view of space exploration, the essence of these processes was the coexistence of nomadic and sedentary lifestyles which led both to the integration of local cultures and territories of their residence, and to disintegration across the large spaces of the Eurasian steppes.⁷

Strengthening the state formations of Khazaria, Alanya, the lands of Dagestan and of the Golden Horde contributed not only to the stabilization of socio-economic and trade relations at the stages of establishment and prosperity of feudal states, but also to the materialization of these relations in the forms of settlements and constructions that could meet the needs of the state system. At the same time, the temporary nature of states - in the context of the East-West polar world - not only predetermines contacts and borrowings of various building traditions as an inevitable component of interaction between different cultures but also causes loss of these traditions at the time of changes in the state formations of the North Caucasus.⁸

The sphere of borrowings covers the established architectural and construction cultures of Iran, of the Near East and

Fig 5. a - Trade networks in the North Caucasus; b - Map of Khazaria; c - Map of Alania; d - Map of Golden Horde main cities on the North Caucasus territory.



Asia Minor, Arab and Central Asian culture, Byzantine architecture, architecture of Greece and Abkhazia, and to a certain extent, architecture of Ancient Russia (possibly through the Tmutarakan principality).

The nature of religious buildings was influenced by the spread of world religions: Christianity and Islam.

Christianity was most widespread in medieval Alanya (in western and central parts), moving from Byzantium through the Black Sea coast.⁹ The purity of the religious building canon is being lost as it spreads and penetrates into the traditional pagan architectural culture.¹⁰

The spread of Islam was associated with the mass migration of Muslims from Central Asia in period of Khazaria, especially it was prevalent in the eastern part. The spread of Islam in Dagestan led to the construction of mosques in Dagestan villages and the transformation of their forms in folk architecture.¹¹

The development of trade and crafts - led to the emergence of cities at the points of trans-shipment of goods at river crossings, in the lower and upper reaches of rivers, at ports at the places where rivers flow into the Black or Caspian Sea. Apparently, the North Caucasian section of the Great Silk Road played the most important role in the system of settlement and formation of cities.¹² (Fig. 5)

As already noted, the main aspect in terms of space exploration was the coexistence of nomadic and sedentary ways of life or shift from one to another. A qualitatively new phenomenon in the context of these processes was the appearance of cities practically on the whole considered territory.

The process of urban development in the Middle Ages took place on the background of the transition of nomads to sedentarization, the destruction of previously built cities, almost complete lack of continuity of urban life forms and of architectural planning environment.¹³

The autochthonous as a defining feature of the identity of the North-Caucasian highlanders.

During the middle ages against the background of changing ethnic groups in the steppe area the stable settlement systems of mountain peoples were formed in Dagestan, Chechnya, Ingushetia, North Ossetia, Kabarda, Balkaria, Karachay, and Cherkessia.

Territorial localization of cultures gave rise to autochthony which manifested in the ways of territorial arrangement of peoples' habitats and in the originality of their architecture.

Isolation of mountain communities led not only to the repetition of the found forms, but also to a single line of evolution of original architecture, which continued until the middle of the 19th century.¹⁴

⁹ *History of Russian architecture.* Ed. Yu.S. Ushakova, T.A. Slavina - Leningrad, 1983 - p. 28, 43.

¹⁰ Kaminskaya I. V., Kaminskiy V. N. - *Alans in the Kuban - Krasnodar*, 1993 - p. 40-46.

¹¹ Magomedov M.G. - *The history of Dagestan from ancient times to the end of the 19th century. Part I - Makhachkala*, 1997 - p. 138.

¹² Petrov A.V. - *The Great Silk Road - Moscow*, 1995, -p. 85

¹³ Narochniyskiy A. L. - *The history of the peoples of the North Caucasus from ancient times to the end of the XVIII century - Moscow*, 1988 - p. 119.

¹⁴ Lyubimova G.N. and Khan-Magomedov SO. - *Folk architecture of South Dagestan. Tabasaran architecture.* - M., 1956.

¹⁵ Sulimenko S. D. - *The value of architecture in the traditional culture of the mountain peoples of the North Caucasus - Vladikavkaz*, 2001 p. 11-17.

The formation of the settlement system was determined by the following factors: the proximity of trade routes (main valley bottom roads, that like corridors crossing this territory); securing the protection from the enemy required defense capability taking into account the terrain; taking into account the availability of water and land; saving land necessary for agricultural labor; orientation to the sun. Mountain settlements formed in a band of sunny valleys located between the Rocky and Side ridges, oriented along the ridges and connected by continuous cross-ridge road.¹⁵ (Fig. 6)

The architecture of Chechnya, Ingushetia and North Ossetia that we can see belong to the period of the XII-XIX centuries.

Differing from the architecture of neighboring territories, the architecture of Vainakhs and Ossetians is in many respects a united group of structures in functional, typological and stylistic terms.

The settlements located lower in the valleys were built relatively late, in the 16-20th centuries, as a result of the mass migration of mountaineers to more comfortable places to live, by reason of the weakening of the military danger.

The settlements can be classified according to their locations on the terrain (flat, foothill, mountain, high-mountain), the density, the types of buildings and structures, the size of the built-up area and population.

Frequent invasions and their threat influenced the layout, settlements shape and appearance.

Settlements were combination of residential buildings and towers, in which each building was part of a defensive system. The towers were located in strategically important places. They had visual communication between them.

The most common type of settlement was a small one-family settlement consisting of several, usually no more than 1-1.5 dozen courtyards, but there were also some large villages.¹⁶

Tower-villages with their external similarity differ in the building-structure, depending on the nature of the site. For example, Erzi and Targim are compact, the composition develops in a vertical direction, Egikal has a "freely" dispersed development along the mountain slope.

As for Dagestan, individual structures did not play a decisive role in defense, but all the villages were single fortress. As Kahib and Gamsutl. The grid of streets was formed as a kind of maze, formed in the process of settlement development, growth of population, and construction of new houses in the limited area conditions.¹⁷ (Fig. 7)

Local architecture is all-Caucasian in appearance, but with its own specific features and with their own typological schemes of buildings. Different peoples have their own typological schemes of buildings: residential, military, religious and burial. (Fig. 8)

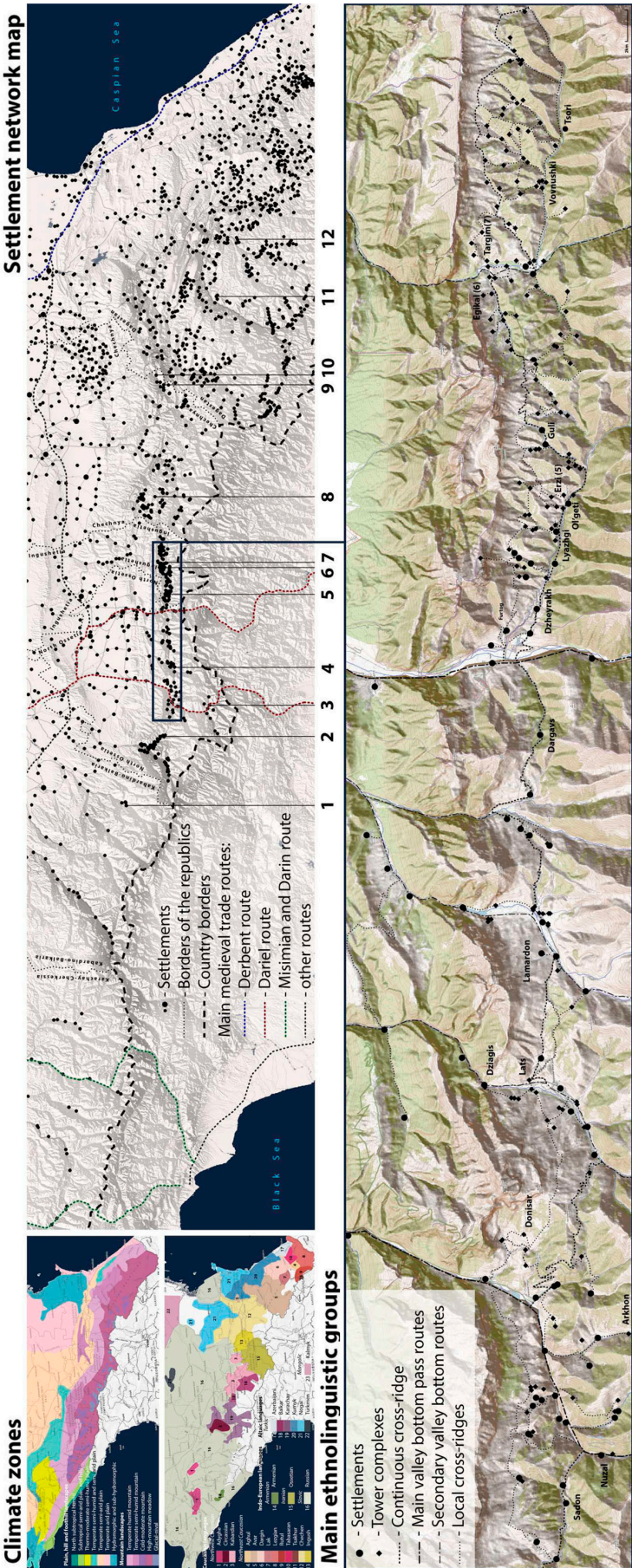
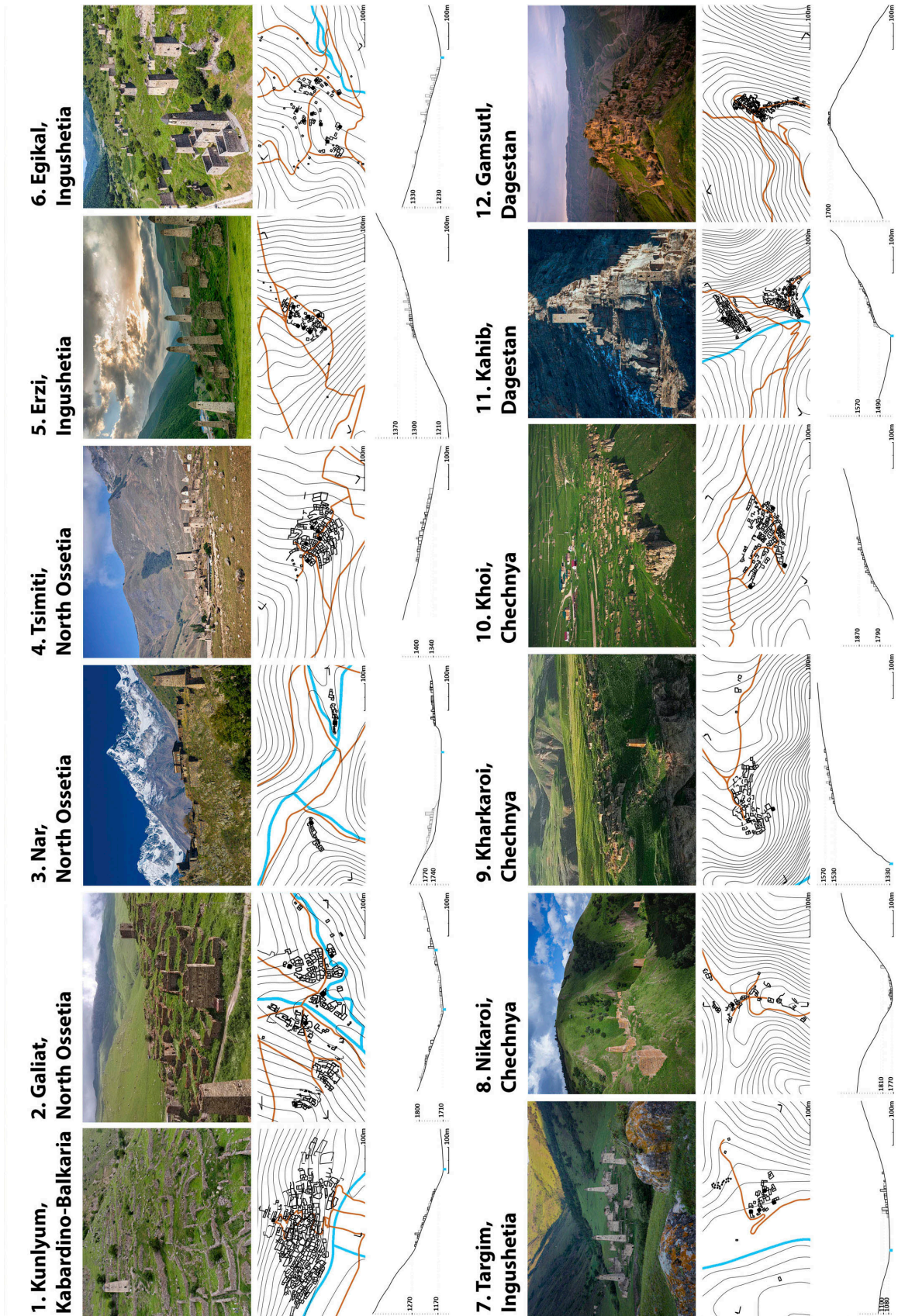


Fig 6. Climate zones; Main ethnolinguistic groups; Settlement network map; Map of the central part of the North Caucasus.

Fig 7. Abandoned settlements in the mountains of the North Caucasus.



The tower is the most striking example of folk architecture, which has become widespread among many North Caucasian peoples. In architecture Balkaria and Karachay we see a tower of a fortified citadel and towers as separate standing protective and residential construction and the buildings in the fortress-complexes and others.¹⁸ The tower form is included in the composition of the main types of medieval Ossetian dwellings. Towers can be divided into residential, semi-military, and combat towers.¹⁹ (Fig. 9)

The classic form of Vainakh architecture (Ingush and Chechens) was the battle-towers with a pyramid-stepped roof, located on commanding heights, steep cliffs, in the middle of villages, in niches of rocks, etc.²⁰

We see that namely here in the mountainous regions the Genesis of architectural culture becomes apparent as a result of the interaction of three main components: nature, individuals and community as a whole. Architectural cultures appear as a material embodiment in the spatial organization of settlements and forms of buildings corresponding to their worldview (philosophical, aesthetic, ethical) and religious values and ideas.²¹

At various stages of history, since the XVI century and to the second half of the XIX century, we see the process of these south territories entering into the Russian state. In the second half of the XIX century is to see the breaking centuries-old way of life of highlanders, the processes of penetration

¹⁶ Khan-Magomedov S.O. - *Lezgin folk architecture* - Moscow, 1969 – p. 181.

¹⁷ Potto V.A. *Caucasian War: Vol. 1. From ancient times to Ermolov - Stavropol*, 1994 - p. 170

Fig 8. a - Balkarukov Tower, Kabardino-Balkaria; b - Dzivgis rock fortress, North Ossetia; c - Egikal, Ingushetia; d - Ushkaloi towers, Chechnya; e - Senty Church, Karachay-Cherkessia; f - Nusal chapel, North Ossetia; g - Tkhaba-Yerdy Church, Ingushetia; h - Mosque (XI-XII), Kala-Koreish, Dagestan; i - Crypts in Eltyubu, Kabardino-Balkaria; j - Crypts in Dargavs, North Ossetia; k - Mausoleum in Khutkhul, Dagestan.



¹⁸ Kobychyev V.P. - *Settlements and dwellings of the peoples of the North Caucasus in the XIX-XX centuries.* - Moscow, 1982.

¹⁹ Takoeva N.F. - *From the history of the Ossetian mountain dwelling - 1952* - p. 187-190.

²⁰ Muzhukhoev M.B. - *Medieval material culture of mountainous Ingushetia (XIII-XVIII centuries)* - Grozny, 1977 - p. 48.

²¹ Sulimenko S. D. - *Towers of the North Caucasus (symbolizing space in the house-building creativity of the highlanders)* - Vladikavkaz, 1998.

²² Narochnitsky A. L. - *The history of the peoples of the North Caucasus from ancient times to the end of the XVIII century* - Moscow, 1988 - p. 276-278.

into the mountains of urban culture. The further events dramatically affected the preservation of cultural traditions and everyday life, including the use and development of traditional types of folk architecture, the emergence of new types of housing, the formation of which was significantly influenced by Russian construction culture. Primarily, this was caused by the mass migration of mountaineers to the plain and the strengthening of inter-ethnic contacts that generated the exchange of cultural traditions.²²

Conclusions

Reconstruction of the development process of the territories in the North Caucasus allows us to formulate approaches concerning the foundations of the regional history of architecture, which can no longer be considered only as the sum of local invariants of architectural cultures. Theoretical analysis we have done gives grounds to interpret architectural and urban heritage of the region as the embodiment of formation processes and interaction of cultures that defined the localization and integration of architectural cultures and state formations. The provisions that are identified as basic historical and theoretical, as well as forms and mechanisms of disclosure and transfer of the values of historical and architectural heritage, are determined by the following positions:

- the history of the region's development "as a process of space modernization" reflects a consistent change of the mode of the development of environment: from the local forms of adaptation to the landscape and climate conditions and their use (terrain, ponds, rivers) to the transformation of the natural environment and the form of the built environment: from the settlement in the form of rural settlements to the cities, urbanization and the formation of a local and then a regional system of settlement;
 - at the each stage of the history of the environment's formation, the main natural spatial properties of the region have a significant impact on the development of architecture and the territorial structure in the North Caucasus: "borderline", "peripherality", "penetrability" and "local isolation". Along with factors of social history and cultural history (including "peripherality") they determined the uniqueness of the historical path of the formation of architectural cultures;
- The territorial analysis has allowed us to explain the reasons why this territory has always been a "borderline". Consequently, because the populations who settled have tried to be recognized as independent national cultural entities;
- against the background of the diversity and changeability

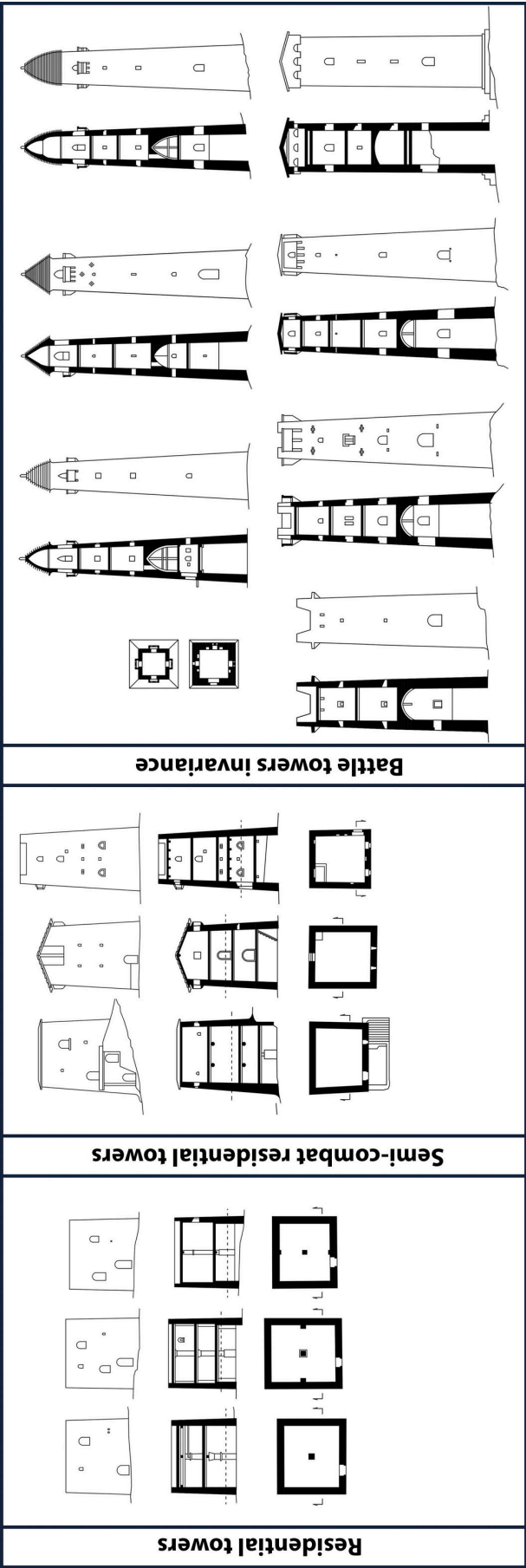
of the population lifestyle, inheritance and continuity in the development of the region is manifested in the use of previously inhabited territories, starting from the sites of the Paleolithic, Mesolithic, Neolithic throughout historical time. The forms and character of the landscape, topography, and riverbeds prove to be stable bases of settlement in consistently changing socio-economic and ethno-social conditions;

- the regional architecture sources and its originality are laid in the fundamental defining cultures that form the subject-spatial environment: landscape, climate, material resources, ethnopsychological characteristics of the population, its perception of the world, and susceptibility to influences;

- historical architecture preservation in modern conditions becomes a manifestation of the emerging culture of the region, its ecological basis. Architectural and urban planning heritage, which carries general information about the ideas, tastes, artistic preferences and character of previous generations, is the material basis that, preserves the culture of peoples, memory and “spirit of the place”, and guarantees the preservation of the historical and cultural identity of settlements.

Preservation of heritage as a component of the distinctive appearance of localities, reflection of historical forms of interaction and connections between architecture and the landscape, and human-adapted landscape-spatial relations is one of the most important conditions for the sustainable development of settlements in the region, transfer of cultural values of the environment in the process of forming new values. This thesis can serve as a basis for further scientific research. And also, thanks to this study, we can understand the cultural differences, evident in the very different architectures, which makes it possible to organize the recovery and restoration of buildings with greater scientific knowledge and at the same time, it is better to define tourist route.

Fig 9. The main types of towers.



References

- Boriskovsky P.I. (1984). *Paleolithic of the USSR*. Moscow.
- Caniggia G., Maffei G. L. (2001). *Architectural Composition and Building Typology, Interpreting Basic Building*. Firenze.
- Kaminskaya I.V., Kaminskiy V.N. (1993). *Alans in the Kuban*. Krasnodar.
- Khan-Magomedov S.O. (1969). *Lezgin folk architecture*. Moscow.
- Lyubimova G.N., Khan-Magomedov S.O. (1956). *Folk architecture of South Dagestan. Tabasaran architecture*. Moscow
- Magomedov M.G. (1997). *The history of Dagestan from ancient times to the end of the 19th century. Part I*. Makhachkala.
- Muzhukhoyev M.B. (1977). *Medieval material culture of mountainous Ingushetia (XIII-XVIII centuries)*. Grozny.
- Narochnitsky A.L. (1988). *The history of the peoples of the North Caucasus from ancient times to the end of the XVIII century*. Moscow.
- Petrov A.V. (1995). *The Great Silk Road*. Moscow.
- Pletneva S A. (1982). *Nomads of the Middle Ages*. Moscow.
- Potto V.A. (1994). *Caucasian War: Vol. 1. From ancient times to Ermolov*. Stavropol.
- Rybakov B.A. (1981). *Steppes of Eurasia in the Middle Ages. Archeology of the USSR*. Moscow.
- Rybakov B.A. (1989). *Steppes of the European part of the USSR in the Scythian Sarmatian time*. Moscow.
- Sulimenko S. D. (2001). *The value of architecture in the traditional culture of the mountain peoples of the North Caucasus*. Vladikavkaz.
- Takoeva N.F. (1952). *From the history of the Ossetian mountain dwelling*.
- Ushakova Yu.S., Slavina T.A. (1983). *History of Russian architecture*. Leningrad.
- Vasilievich E. G. (2004). *Architectural and Urban Heritage of the South of Russia*. Moscow.