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Proposals to the Formation of a Complex Model to Renovation, Reconstruction and Modernization of the Vladivostok Fortress for Cultural and Recreational Aims

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Abstract. The article discusses the capabilities of the Vladivostok fortress as a center for recreation and tourism of residents and guests. The proposals on the formation of a comprehensive model of renovation, reconstruction and modernization of the Fortress for cultural and recreational purposes are considered. In the forts, it is planned to create leisure and entertainment, sports and recreational, recreational and rehabilitation, scientific and educational, and museum and memorial institutions. A prerequisite is the creation of urban recreational squares and parks around the forts. Three levels of structural reorganization of the Vladivostok fortress are revealed. The first is the reorganization of the fortifications of 1899, the second is the reconstruction, renovation and reorganization of the fortress structures of 1910-1914, the third level is the renovation of the Vladivostok Fortress on Russky Island. It was established that the creation of a multifunctional cultural and recreational belt around the city on the basis of the Vladivostok fortress will allow: firstly, to increase the necessary recreational territory for it, that will solve the problem of sightseeing tourism and short-term recreation for residents and guests of the city; secondly, it will protect the fortifications of the fortress as a historical monument.

1. Introduction

Currently, the state program "Tourism Development in the Primorsky Territory" is being actively implemented in the Primorsky Territory. It operates within the framework of the federal target program "Development of domestic and outbound tourism in the Russian Federation". The purpose of the program is to increase the competitiveness of the tourist market of the Primorsky Territory and attract tourists from the countries of the Asia-Pacific region. Under this program, the Vladivostok may become a center for the development of international tourism in the Russian Far East. Recently, the city is actively visited by tourists from China, Korea, Japan, Australia and other Asia-Pacific countries. The status of Vladivostok raises the question of creating an innovative management concept that will contribute to the development of all areas of cultural, educational and tourist-recreational business in the region.



An right system for the development of cultural, educational, sports and recreational tourism and the development of multifunctional zones for long and short rest will create the conditions for the introduction of world standards of quality in cultural and recreational services, and will make it possible to achieve competitiveness of the Russian tourist and recreational business at the world level [1]. As a result, this will cause for significant growth in the Far East of Russia, not only domestic but also inbound tourism.

We believe that a cultural and educational tourism in the Vladivostok should be based on showing preserved cultural heritage sites: historical and cultural centers, archaeological sites, architectural monuments, museum and exhibition complexes, various events of an event nature. A special place here is occupied by events on the territory of fortifications of the Vladivostok fortress: the festival "Vladivostok Fortress", "Far Eastern Maslenitsa", the feast of "Ivan Kupala", Easter, various conferences for historians and architects.

The purpose of this article is to present proposals for the formation of a comprehensive model of renovation, reconstruction and modernization of the Vladivostok fortress for cultural and recreational purposes.

2. Discussion and results

Currently, the Vladivostok Fortress is a visiting card of the city of Vladivostok. The fortress is an example of fortifications at the turn of the XIX-XX centuries. It includes: 16 forts, about 50 coastal batteries and strongholds, several dozen coastal caponiers and half-caponiers, who made up an extended land defense line around the Vladivostok. All fortifications of the fortress were connected by roads, underground passages, special narrow-linear steam-powered railways, a cableway system and various visual, telephone and telegraph communication systems [2-7]. The Vladivostok Fortress is one of the unique and most powerful fortifications in the world located on the sea coast (Figure 1).

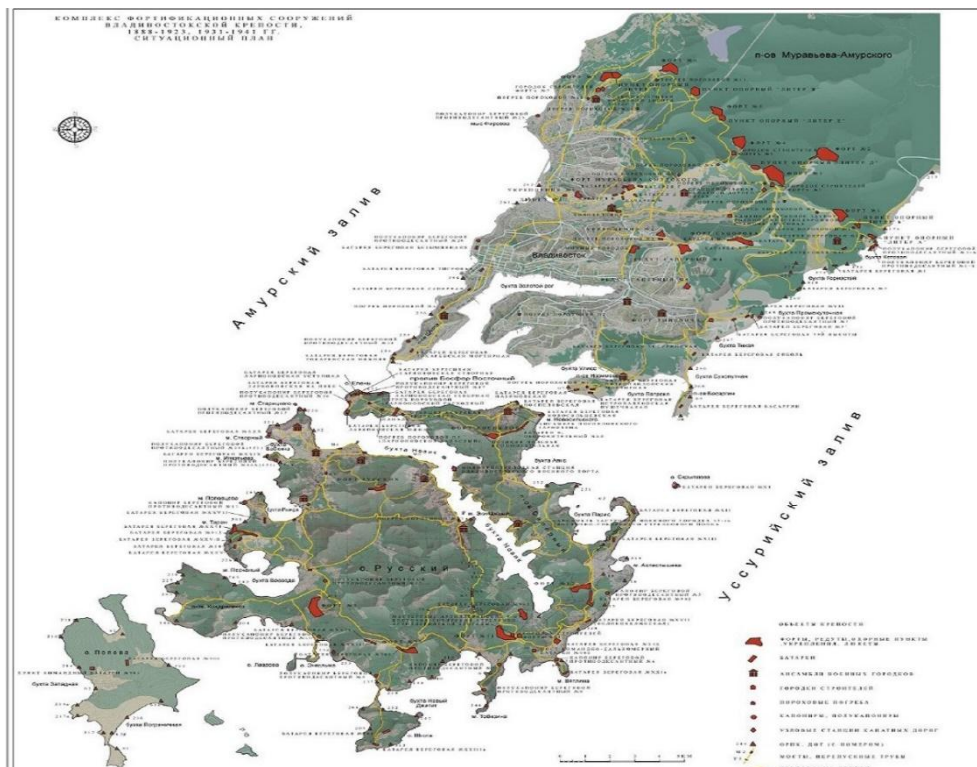


Figure1. Construction of Vladivostok Fortress.

Today the fortifications of the "Vladivostok Fortress" have lost their original functions, but have not ceased to exist. They acquired a new function and became a monument of architecture and military defense construction. Now, part of the fortifications turned out to be in residential areas, some in industrial and communal-warehouse areas, many are still used by various organizations for warehouses, radio posts, barracks, and the rest are completely abandoned or partially destroyed.

Despite the fact, that the fortress is a monument of federal significance, most of it is under threat of partial, and eventually complete destruction.

The creation of a multifunctional cultural and recreational belt around the city on the basis of the fortifications of the Vladivostok fortress would allow: firstly, to increase the necessary recreational territory for it, that will solve the problem of sightseeing tourism and short-term recreation for residents and guests of the city; secondly, it will protect the fortifications of the fortress as a historical monument. This will be a guarantee to preserve the surrounding landscape and natural environment.

To create a multifunctional cultural and recreational belt around the Vladivostok, it is necessary to develop a conceptual model of comprehensive renovation, reconstruction and modernization of the fortress's remaining fortifications [8]. Consider the necessary measures and infrastructure changes:

- First, it is necessary to train qualified personnel, employees, guides of the Vladivostok fortress;
- Second, to give design proposals for the creation of tourist and recreational centers of short-term recreation on the basis of fortifications; to develop linear, ring and radial-ring options for tourist excursion and educational routes that will connect the forts and batteries of the fortress together;
- Third, to carry out the necessary measures for the conservation, restoration, reconstruction and landscape organization of fortifications of the Vladivostok fortress for cultural, recreational and tourist purposes;
- Fourth, to provide the facilities of the Vladivostok fortress with the necessary elements of tourist and recreational infrastructure; for that to use elements of subject-spatial, visual-communication, environmental and landscape design;
- Fifth, to develop programs for visiting by foreign tourists the most significant objects of the Vladivostok fortress;
- Sixth, to develop an advertising PR company to promote and consolidate of the fortress as a military historical symbol of Vladivostok;
- Seventh, to involve travel agencies, the media, departments for tourism and excursions in Vladivostok and the Primorsky Territory;

The Vladivostok fortress may become the basis for future cultural and recreational system. It will include various fortifications, within that individual types of social activity of the population will be realized: tourist-recreational, cultural-sports, scientific-educational, military-patriotic and landscape-ecological activities.

The term "cultural and recreational system" emphasizes the need to consider the entire area of functioning in the object "Vladivostok Fortress", even in those cases when it coincides with the existing administrative and formal border of the city and its suburbs. The main place in it is given to the study of internal, essential interconnections of existing fortifications; to identifying the most interesting properties of their structural and functional organization.

This allows us to make a qualitative leap in the spatial study of this system and to distinguish three main levels of its structural reorganization in it. These levels are associated with certain stages of development of the city of Vladivostok - as fortified cities (Figure 2).

The *first level* is the reorganization of the fortifications of 1899, that are currently located in the urban environment and are partially destroyed.

The authors, having made an assessment for the structural and functional potential of the fortes taking into account the needs of the city, recommend developing various multifunctional centers here: leisure and entertainment, sports, recreation and rehabilitation, scientific and educational, and museum and memorial ones. At the same time, creation of urban recreational squares and parks around the forts is required.

For example, in the Pervorechensky district, the fortress of Muravyov-Amursky may become a city center of leisure, that will be a new type of cultural and recreational institution. It can carry out recreational, health and museum educational functions with a full range of services that necessary for proper relaxation and entertainment.

In the Pervomaisky district - on the basis of Linevich Fort, the creation of a cultural and memorial complex is possible. He will carry out cultural, educational and military-patriotic work among the people. The sea cemetery, that is located around the fort, must be turned into a reserved, memorial and museum zone.

Fortifications No. 1 and No. 2 may become the basis for the organization of leisure centers of citywide significance. Part of the batteries can be used for various classes of interest, that contribute to the maximum creative development of residents and visitors. In these centers it is necessary to create: architectural-design, art and restoration workshops, theatrical studios, various orangeries and greenhouses using hydroponics, children's sports and play areas with terrain paths and a skate room. It is possible to create small art galleries that organize thematic exhibitions on the history of the city.

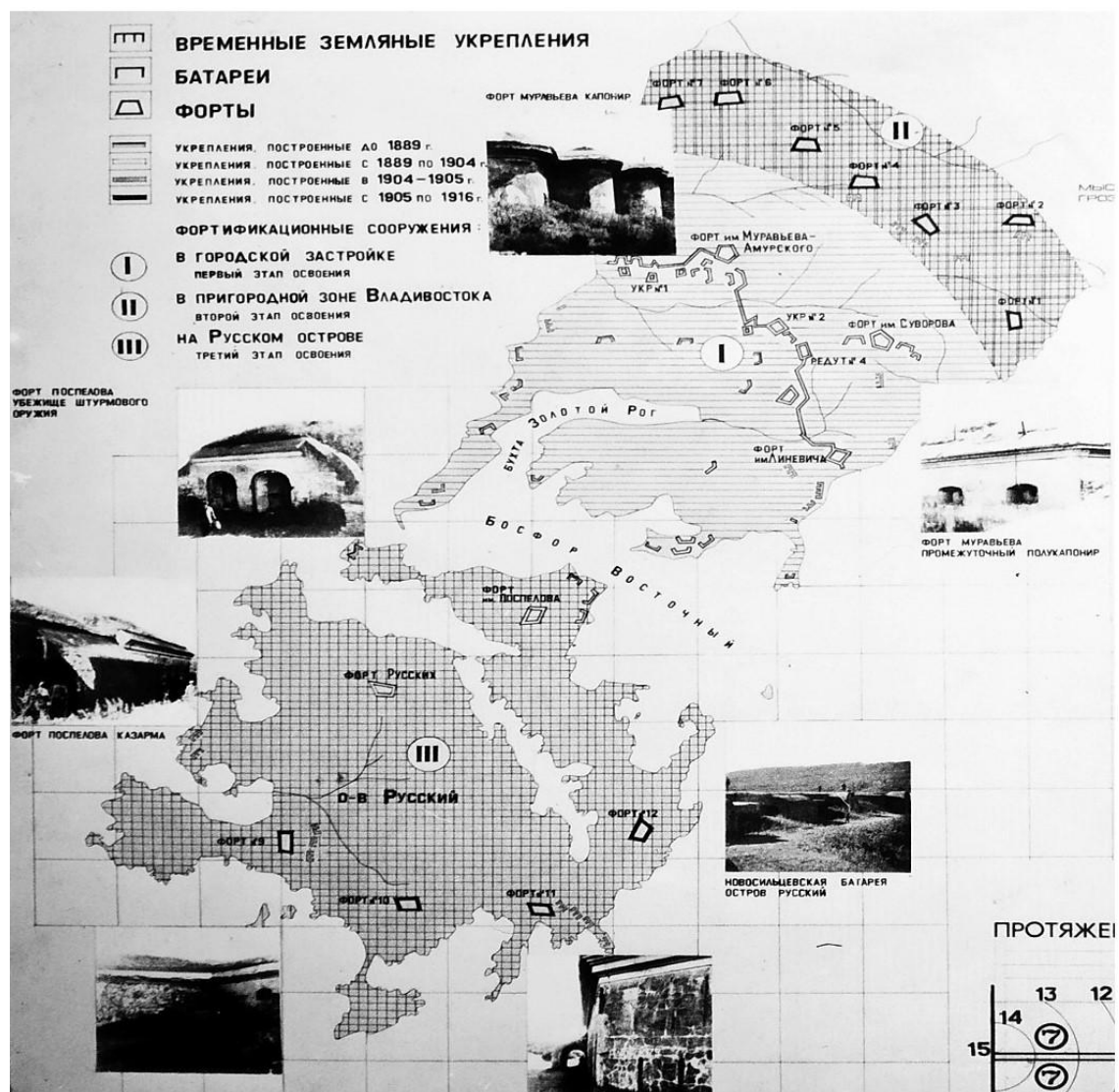


Figure 2. Three main levels of structural reorganization of the Vladivostok fortress.

The *second level* is the reconstruction, renovation and reorganization of the fortress structures of 1910-1914, that are located in the suburban forest zone of Vladivostok. Landscape-ecological analysis of the zone near these fortifications showed that about 80% of its territory has excellent tourist and recreational qualities.

It requires the restoration of existing roads and the organization of new entrances from the route Airport - Russky Island. An interesting attraction for tourists will be the reconstruction of the cable cars that existed here until 1911. This will create a linear system of environmentally friendly multi-functional centers year-round functioning, that are integrated into the natural landscape.

The linear cultural and recreational system will unite urban recreation areas: the sanatorium-resort zone of the Amursky Gulf and places of mass weekly rest on the coast of the Ussuriysky Gulf. We note the need for this system: if you follow the migratory traffic of vacationers in the summer, you can see that on weekends their concentration here reaches almost 40%. This creates not only uncomfortable conditions for a short rest, but also increases the load on the natural landscape, beach areas, that very quickly begin to degrade.

This linear cultural and recreational system is proposed to be preliminarily divided into three planning zones. The *first and third zones* can become large concentrated centers of leisure and recreation on the principle of procedural activities. They will be organized for the public entertainment.

Fort No. 6 can be equipped like a scientific and educational center. In it, science, technology and modern innovative technologies could be used for educational and outreach activities. The center could support the formal education system and promote the popularization of scientific knowledge and modern digital technologies. As an option - the creation of a "smart fort".

Fort No. 7 is currently used for sightseeing visits and short rest. Various cultural events are held on its territory: the festival "Vladivostok Fortress", "Far Eastern Maslenitsa", the feast of "Ivan Kupala". The fort hosts conferences for historians, architects and designers. It should be noted that a diploma project was developed on this topic at the Department of Design of an Architectural Environment at the Far Eastern State Technical University (now Far Eastern Federal University), that received the top place in the International Review Competition.

In the *second zone*, we propose to include well-preserved forts No. 3, No. 4 and No. 5, that can become a compositional center in the proposed linear cultural and recreational system. Untouched in these places, nature and monuments of fortification art will be the main tourist and recreational potential for development. Centers for weekly recreation and international sightseeing tourism will become a rational path to the revival of the "Vladivostok Fortress" as a monument of military-defensive architecture.

The center of the *third zone* should be forts No. 1 and No. 2, together with the batteries surrounding them. Reconstruction of Fort No. 1 will allow creating, for example, an eco-museum with elements of landscape architecture and design. The ecomuseum will become an integral part of local economic and cultural life and will be closely connected with regional industry and science.

This fort is chosen to create an ecomuseum not accidentally. Next to it are the city dump and the former landfill. Nearby is the so-called Glass Bay. Instead of sand and stones, the coast is strewn with a thick layer of glass that were polished by sea. Currently, this bay is a unique monument of urbanism. Therefore, in this fort you can clearly explain the consequences of urbanism and scientific and technological progress.

Fort No. 2 can serve as a kind of cultural and recreational express center to restore physical and especially spiritual strength. It is possible to hold festivals and forums that are aimed at professionals and amateurs. Visitors can act not only as spectators and users of multimedia, 3D and other products, but also as active participants in various processes. The program of such festivals may include complex events: symposia, art and industrial exhibitions, performances, various shows, lectures and advanced training courses. A special place is given to immersing viewers in a virtual environment; various theater effects using laser and multimedia systems can be actively used.

The *third level* is associated with the renovation of the "Vladivostok Fortress" on Russky Island. In addition to the forts of the fortress, there are many attractive places for tourism: the campus of the Far Eastern Federal University, the Oceanarium. Currently, there are spontaneously developing institutions for

long and short-term rest and in-health tourism. The main activities here are active recreation on the water and sightseeing tourism: visiting coastal fortifications, batteries, forts. For example, the famous Voroshilov battery on Russky Island (Figure 3.).

The third level of renovation and reorganization for the fortifications of the Vladivostok Fortress allows you to create a ring cultural and recreational system in the city. To implement this idea, the Department of "Designing an Architectural Environment and Interiors" regularly conducts research work in the field of organizing an architectural and design environment; various models and programs for the development of fortifications of the Vladivostok Fortress for cultural and recreational purposes are being developed.

Thus, the formation on the basis of the existing in the Vladivostok fortress of the ring cultural and recreational belt and the tourist and recreational system of the Vladivostok will lead to an increase in innovative financial injections of the city, regional and federal levels, as well as create conditions for attracting international investment from the Asia-Pacific countries. All this will allow the capital of the Far East to become the main sea gate of the Russian Federation in the Asia-Pacific region.

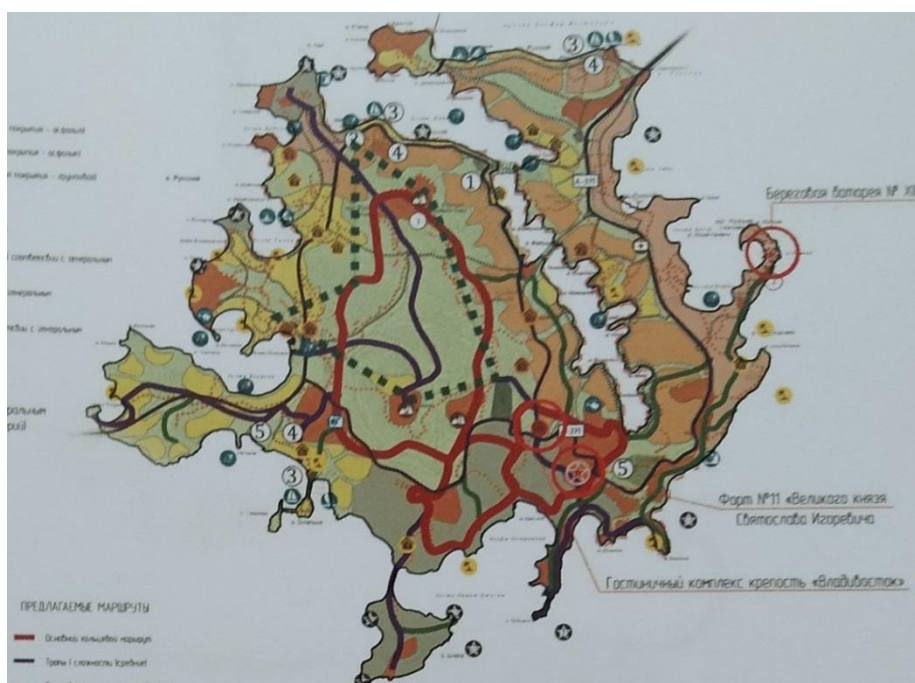


Figure 3. Scheme of tourist-recreational and sightseeing routes on the island of Russky "Vladivostok Fortress".

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