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# Preservation of the heritage of historical environment through the example of the Vvedensky Cathedral of Orenburg

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**Abstract.** The article presents a collection, retrospective analysis and reconstruction of the Vvedensky Cathedral of Orenburg, located on the country's border with Kazakhstan and serving as a for-post since its foundation in the middle of the 18th century. The author highlights the characteristic features of the constructed building, the differences between historical drawings and photographic data. As a result, a comparison was made between the reconstruction and the RONA NSO project, which served as the basis for the real restoration of the building in 2007-2010. The authors draw conclusions on the differences and similarities between the projects. Such analysis and comparison may become the basis for further reconstruction of the city buildings.

## 1. Introduction

Orenburg was founded in 1743 as a nodal outpost on the border with Kazakhstan, which completed the Samara line of fortresses [1]. According to modern economic studies, Orenburg, with a population of 564,443 people in 2017, belongs to the cities of the so-called “second tier”, that is, having great commercial attractiveness. At the same time, according to the Ministry of Culture of the Russian Federation, 420 objects of cultural heritage are located in Orenburg, of which 17 are of federal significance, half are of regional importance and the second half requires a state historical and cultural examination to determine the historical and cultural significance. It is of particular interest in the historical development of Russian cities because it was founded after the city-planning reforms of Peter the Great, the famous “chicks of Petrov’s nest”, such as Neplyuev and Tatishchev, who took care of the implementation of the emperor’s advanced ideas, participated in its design. Torah. However, during the Soviet period, some of the historical buildings and structures were lost. Today, the issue of restoration and reconstruction of lost historical heritage is very acute.

The relevance of the chosen topic is that the preservation of historical and cultural heritage is an enduring problem of historical cities. In order for this process to proceed organically without violating the historically established outline of the settlement, the historical process should be studied in detail, with a view to its further reconstruction, taking into account the established principles. In the new economic conditions, with the increase in construction volumes associated with the increase in sleeping areas, the preservation of the historical environment and the non-interference of modern buildings in it began to play an important role. This meets current trends in the sustainability and continuity of architecture.



## 2. Materials and methods

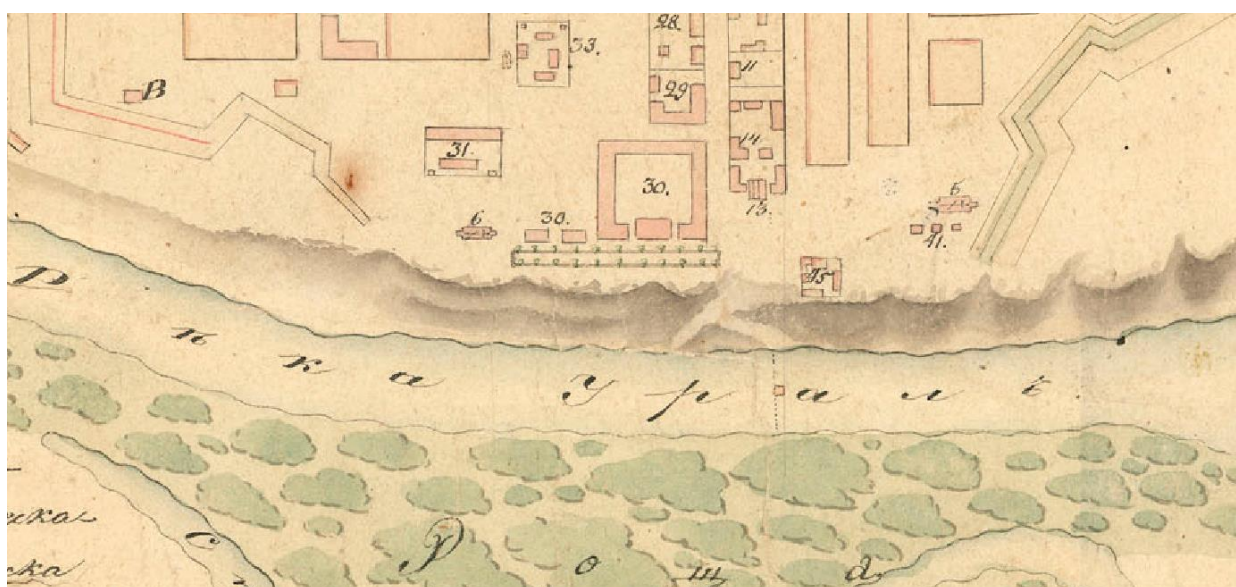
The purpose of this work is a historical analysis of the Vvedensky Cathedral, built in Orenburg in 1755, destroyed in 1931 and reconstructed in 2007-2010. A retrospective analysis made it possible to create the author's reconstruction and compare it to the version according to which the final temple was recreated. The results of this study are important for the further development of Orenburg, as a unique phenomenon of the Russian architecture.

To achieve these goals, the following tasks were set: collection, analysis and systematization of information about the Vvedensky Cathedral (historical, archival, project materials, demographic, sociological data on economic development) and a retrospective analysis of the architecture of Orenburg.

The main research method is a retrospective analysis based on existing archival material. The method includes collecting information, drawing up circuit diagrams and comparing the resulting models with each other. This allows tracing the development process and establishing the characteristic features of each stage.

## 3. Experimental part

The cities located on the picturesque banks of the rivers are famous for their panoramas, which open onto the embankment and form the coastline. Orenburg is no exception. The very planning organization of the fortress with its opening towards the Urals (which was achieved by breaking the fortification line in the coastal part) and the features of the topography of the area (high terrace of the coast) contributed to the creation of a harmonious architectural image. The first church that forms this panorama appeared in 1746 and was called the Transfiguration Cathedral. After 10 years, Vvedensky Cathedral, which this material is dedicated to, is being built symmetrically with respect to the center of the square forming the city embankment. The cathedral was built in the Baroque style, as indicated by the currencies of the main facade. This style is not typical of traditional Russian right-wing glorious churches, therefore, the construction is of particular interest. To date, there are no special studies on this temple. Fragmentary information is available in the literature on the city and stone construction in it, there are also several historical photographs depicting the structure. Unfortunately, the fate of the cathedral is sad - like most Orthodox buildings, it was destroyed. The restoration and preservation of the lost architectural heritage is one of the main tasks for architects today, helping them to determine the originality of the city.



**Figure 1.** Location of the Vvedensky church on the map of 1828. 5 - Transfiguration Cathedral, 6 - Vvedensky.

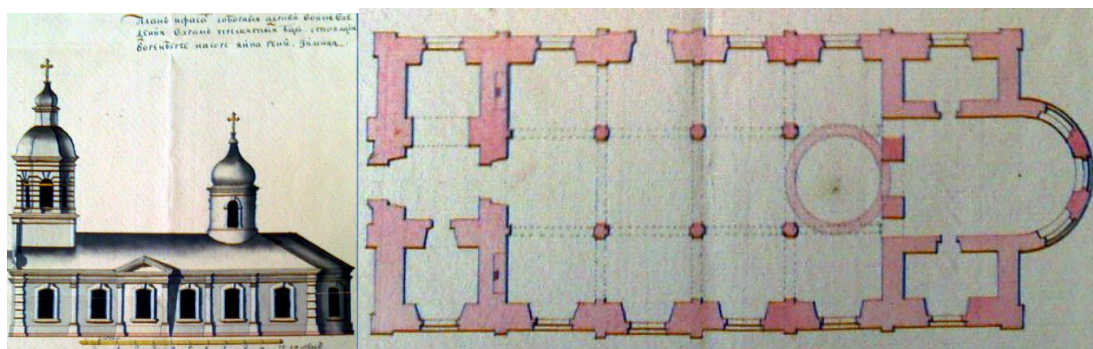


The city-forming Vvedensky Cathedral was founded in 1755 at the state expense at the request of Governor Neplyuyev in 1750 to the Kazan Spiritual Consistory [1]. According to which it follows that at the time of the beginning of its construction in the city there were 3 parishes and one merchant (gate) church. Accurate data on the architect of the building is not available, but we can conclude that such was Johann Muller, who was working at the time of the Transfiguration Cathedral (based on the similarity of the features of the buildings). It was rebuilt and consecrated by His Grace Bishop Gabriel of Kazan, July 12, 1758. In 1859, with the opening of the Bishop's Chair in Orenburg, the church was turned into the Cathedral [2]. And on July 18, 1931 the Cathedral was destroyed to the ground [3].

The cathedral was three-apsed: the main altar (middle) was consecrated in honor of the Entry into the church of the Blessed Virgin Mary, the right chapel - in the name of the Right Prince Alexander Nevsky, the left - in the name of Alexy, the man of God [4]. In the archives of the city, a historical construction project was discovered, from which it can be concluded that the cathedral was a basilica, with the main dome installed above the altar. The project provides for the bell tower - the octagon on the four ends with a dome built in the Ukrainian Baroque style [5]. The bell tower is the main volume, more than the church. As in the case of the Transfiguration Church, most likely this appearance was formed under the influence of the Peter and Paul Cathedral in St. Petersburg. This is also indicated by the currencies of the main facade, which determine the belonging of this building to the Baroque style. But, unlike the Spaso-Preobrazhensky, this is no longer the modest and ascetic Peter's baroque, but the elegant Elizabethan.



**Figure 2** - Historical photographs of the Vvedensky Cathedral. 1 - Panorama of the coastal line of the Urals with a view of the cathedral, 2 - Perspective image of the cathedral

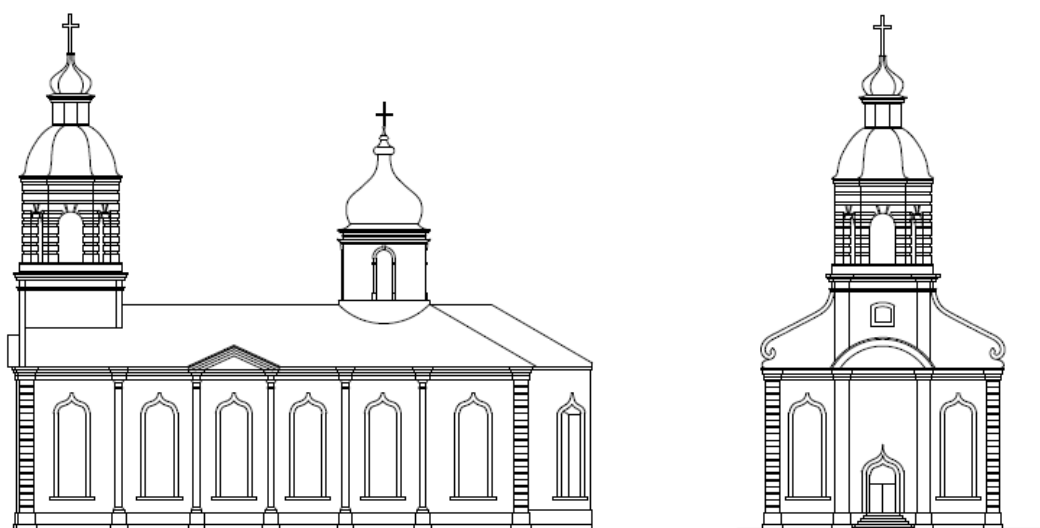


**Figure 3** - Archival project of the Vvedensky church

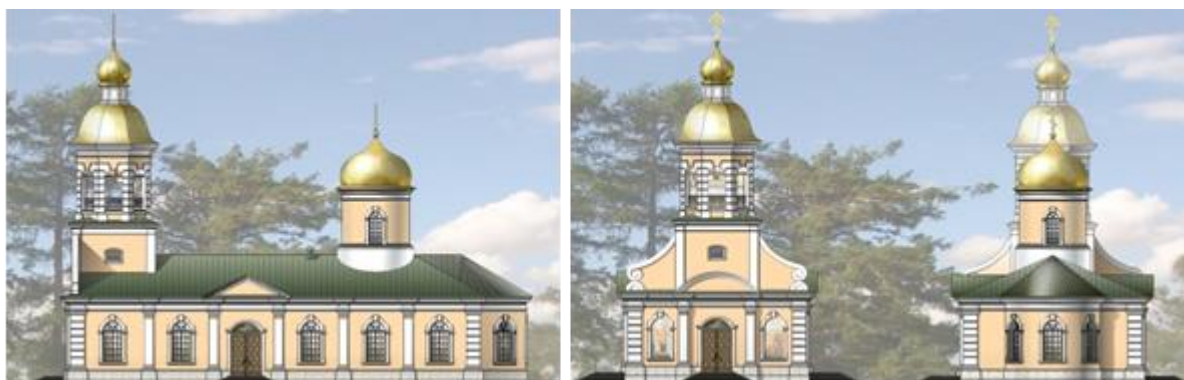
When comparing archival materials with historical photographs, a number of discrepancies were found. The height of the rectangular volume of the temple on the project is 2 times less than the actually built one, the shape of the windows and especially their assurances vary - instead of semicircular arches with a protruding castle stone, kokoshnik-like completions were built, which gave the volume a big parade. Lat-eral rustication becomes more frequent, which reduces the massiveness of the church achieved by increas-ing the height. Also, over time, wooden canopies were added from the main entrance.

Due to such differences, the authors of the article made an attempt to restore the appearance of the temple on the basis of existing archival material and historical photographs, in order to more accurately transmit the appearance of the Orenburg temple.

Based on the existing material in the architecture of the Vvedensky Cathedral, one can see such features as a pronounced verticality of the main facade; layering; gradual decrease in each tier; rustication; clear sym-metry of the facade relative to the main axis; the presence of currencies in the decor. Comparing the Transfiguration of the Savior and the Vvedensky Cathedrals, one can conclude about the gradual evolution of styles in the county town - from Peter's to Elizabethan Baroque, which fully corresponds to the histori-cal context. That is, we can say that the architecture of the city of Orenburg developed according to the general picture of the development of the Russian Empire.



**Figure 4** - Author's reconstruction of the facades of the Vvedensky Cathedral



**Figure 5** - Reconstruction project of the Vvedensky Cathedral LLC NPO RONA

According to the surviving drawings, as well as the developed new project, presented in Figure 5, which was performed by RONA Research and Production Enterprise LLC in 2007, the restoration of the first Vvedensky Cathedral in Orenburg was started. On the preserved foundation, the foundation is poured. In 2010, the construction of the Vvedensky temple intensified. On May 24, 2010, a moleben was served at the beginning of construction. November 8, 2011 the consecration and installation of the domes of the cathedral took place. Since 2012, Vvedensky Cathedral has been considered fully completed and open to parishioners.

#### 4. Conclusion

According to the comparison of the author's reconstruction and the project, on which real work was carried out, we can conclude that the NPO RONA relied more on not the photographs and the actually constructed object, but the project and the preserved drawings. This is evidenced by the height of the lower floor and the shape of the windows. However, in the completed project, the width of the drum was increased and, as a result, the shape of the main dome changed. Otherwise, the reconstruction project was completed as close as possible to the original Vvedensky church.

The preservation of historical heritage is an important part of the modern activities of architectural workshops in every city. During the reconstruction process, the authors of the project introduce the changes necessary in the prevailing urban, political and economic environment. The differences in the author's re-construction and the RONA NSO project show that the restored projects are not exact copies of the originally constructed buildings. In the process of preparing drawings for reconstruction, it is important to conduct an accurate historical analysis and data collection so that the changes made by the designers fit seamlessly into the architectural image of the historic building. This is a complex process that requires the proper knowledge and skills of the author.

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