

## Architectural and design features of the brick buildings of Petropavlovsk city XIX - XX centuries

Rakhima Chekaeva<sup>1</sup>, M. Chekaev<sup>1</sup>, T. Awwad<sup>1</sup>, A. Issina<sup>1</sup>, Y. Khvan<sup>1</sup>, and D. Sarsembaeva<sup>2</sup><sup>1</sup> Department of Civil Engineering and Architecture, L.N. Gumilyov Eurasian National University, 13, Kazhimukan Street, Astana 010000, Kazakhstan.<sup>2</sup> Department of Architecture and Design, S.Seifullin Kazakh AgroTechnical University, 73, Beybitshilik Street, Astana 010000, Kazakhstan.

## ABSTRACT

This paper discusses the stone, brick architecture of Petropavlovsk at the end of the 19th century and the beginning of the 20th century. The paper analyzes the architectural planning solution and the style of objects. At the end of the 19th century, in the era of the industrial revolution, it was necessary to create new types of buildings - industrial workshops, railway stations, covered markets, trading houses, gymnasiums, and apartment houses. Turning into the main customer of construction work, the merchants introduced traditions, criteria, and views of their own cultural environment. The meaning of the activities of the merchants in this area is reduced to one thing - to make obvious the cultural and historical roots of the merchants, to show its connection with the folk culture (Voloshinov et al. 2011).

**Keywords:** brick; eclecticism; figured pediment; pilaster; sandrik

## 1 INTRODUCTION

Compositional techniques and artistic norms of the classicism style that prevailed before in the architecture were not always able to meet the requirements of the new time, therefore, it became a natural departure from them. Eclectic architectural style appeared in response to the needs of life itself (Ageeva et al. 2011). Well-preserved to our time buildings, the expressiveness of which was built on the brickwork and aesthetic properties of the brick. The red-brick style is called non-plastered eclecticism. Such buildings were relatively inexpensive and more "unpretentious" in the conditions of the harsh Siberian climate, so they quickly gained popularity in the province. One of the most expressive architectural and constructive elements are the crowning eaves of buildings. (Fig. 1) Giving the building a finished look, at the same time, they perform an important function of protecting the walls of the house from moisture. Under the brick cornices are often brackets that complement the architectural decor, facilitate the laying, support the cornices and allow them to increase the removal from the wall. Above the windows and doors, too, arrange small cornices topped with gables - sandriks. From the point of view of engineering mechanics, curtain elements reinforce the load-bearing walls, correctly distributing the load.

In the late nineties of the XIX century, a new stage of development of trade and the entire economic life of the city of Petropavlovsk began, which was associated with the completion of the construction of the Siberian Railway. During this period, merchant houses, trading

houses, shops, banks, offices with intricate brickwork, transforming the view of the city, are being built (Morozov 1981). A large number of houses and shops of Petropavlovsk merchants were located along Voznesensky Prospekt (Kazakhstan Constitution Street) and many of which are preserved today.

The merchants financed gymnasiums, madrasas, a merchant club, on the basis of which the local drama theater grew. They owned enterprises for processing livestock raw materials, mills, warehouses, factories equipped with the most modern equipment (Makhmutov 2015).

Most of the architectural monuments of Petropavlovsk are merchant houses and shops. Having emerged in 1752 as a military fortress, the city soon lost its military destination, becoming the center of commerce. The favorable geographical position made Petropavlovsk one of the major trading centers. Archival documents say that "in 1777 in the fortress of Sts. Petra (Petropavlovsk) exchanged steppe goods more than in Ust-Kamenogorsk, Semipalatinsk, Yamyshevsk and Omsk fortresses together." Merchants made a significant contribution to the architectural appearance of Petropavlovsk (Poluyanov 2014).

Houses and shops still adorn the streets of the city, they are located mainly on the streets of the Constitution of Kazakhstan. The surviving merchant houses and buildings gave Petropavlovsk a unique architectural appearance. At the end of the 19th century, the architects of Russia and Siberia used the techniques of such styles as Baroque and Classicism, and also reproduced forms of ancient Russian architecture - Old

Russian romanticism. It was the so-called pseudo-Russian style or red-brick architecture. The expressiveness of the red-brick style is based on the use of shaped brickwork (Ponomarenko 2008).

Well-preserved to our time buildings, the expressiveness of which was built on the brickwork and the aesthetic properties of the brick. The red-brick style is called plastered eclecticism. Such buildings were relatively inexpensive and more “unpretentious” in the conditions of the harsh Siberian climate, so they quickly gained popularity in the province. Thus, the brick style represents the rationalization of eclecticism for mass and utilitarian construction (Gumenyuk 2009).

Beautiful examples of the red-brick style in the architecture of Petropavlovsk are: House and Shop of the Merchant Strelov, House of the Merchant Arkel (Complex of the Museum of Regional History); House and Shop of Merchant Ismailov (Restaurant; private enterprises); House of merchant Shamsutdinov (Shops, private enterprises); The house of the merchant Mukhamedyarov and many others. Architectural and structural elements of historic buildings determine the belonging of a building to a specific architectural style, and also combine in themselves a decorative and functional purpose. One of the most expressive architectural and structural elements is the crowning eaves of buildings (Fig. 1).



Fig. 1. Crowned cornices with ribbon toothed brick brackets.

Giving the building a finished look, at the same time, they perform an important function of protecting the walls of the house from moisture. Under the brick cornices are often brackets that complement the architectural decor, facilitate the laying, support the cornices and allow them to increase the removal from the wall. Above the windows and doors, too, arrange small cornices topped with gables - sandriks. From the point of view of engineering mechanics, curtain elements reinforce the load-bearing walls, correctly distributing the load. (Fig. 2).



Fig. 2. Figured Sandrik above the windows

## 2 MAIN PART

Constitution Street is a pedestrian street, a kind of local "Arbat". Before the revolution, the street was called Voznesensky Prospekt and had a narrow wooden pavement. In Soviet times, it was called the standard for such streets - Lenin Street.

Figure 3 presents a vivid example of decorative towers, attic and dormer windows, as well as the rich complex red-brick architecture of the facades of the house and merchant Shakirzhan Shafeev's shop.

The eclecticism of these buildings combines elements of red-brick style, baroque and classicism. The facades of many merchant buildings erected in the eclectic style are decorated with embossed masonry and pilasters, which have a considerable amount of brick columns and turrets on the roof. This is the house and shop of the merchant Shafeev. Figured parapet columns and walls connected by an openwork metal fence give buildings special expressiveness and completeness.



Fig. 3. Architectural decor of the facade of the House of Merchant Shafeev.

The next object is “Trading house of the merchant of the first guild of Blumenthal” in Petropavlovsk (Fig. 4). Before the revolution, a merchant family of Jewish origin, Blumenthal, lived in Petropavlovsk. In 1909, a stationery shop and the printing house of the merchant of the 1st guild Alexander Lazarevich Blumenthal was

in place of the present TSUM. Alexander Blumenthal was a great expert in hides leather. At that time there were three or four such experts in this business as he, to the whole of Russia. Taking the item, Blumenthal sorted it at the same time. He did not enter into any contracts, everything was built on trust, no one was deceiving anyone or cheating. A few years later, the owners sold the building for the construction of the Siberian Trade Bank. In 1915, a rubble foundation was laid for the bank, walls were erected, but the revolution of 1917 prevented the final construction of the bank.



Fig. 4. Trading house of the merchant of the first guild A. Blumenthal.

The Bolshevik government seized the unfinished building, and the next mention of it dates back to 1926. In the same year, the building was finally completed and the People's Commissar of the Kazakh SSR was located there, which was later renamed the North Kazakhstan regional executive committee. At present, the building houses the "Tsum" trade house by all recognizable residents of Petropavlovsk (Fig. 5).



Fig. 5. Modern view of trading house of the merchant A. Blumenthal.

The merchant Blumenthal's family, who lived in Petropavlovsk before the revolution, left a legacy to

contemporaries in the form of a series of postcards with views of the city of the publishing house Blumenthal Alexander Lazarevich and Lydia Isaevna. In 1912, Blumenthal and his family left Petropavlovsk forever, where they lived for 12 years.

### 3 CONCLUSION

For the construction of houses at the end of the 19th century, burnt bricks were used and they were built in eclectic style in the Petropavlovsk city. We need to preserve these unique architectural monuments, which, being in the center of the city, without detracting from its appearance, still fascinate with their exterior. As each of these houses conceals the history of its roommates and their greatness.

In the process of studying, studying historical and architectural monuments, an understanding of the relationship of the artistic image of each building, its design features, and the mechanics of its parts is taking place. Each element is multifunctional, as it adorns the building, and strengthens it, at the same time, giving it originality.

The buildings are a sample of the historical planning of a provincial merchant city, characteristic of the 19th - early 20th century, expressed in the planned integrated building of brick buildings of a hotel and shopping destination and are the architectural heritage of the city.

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