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FORMATION OF THE ARCHITECTURAL SPACE OF CENTRAL UKRAINIAN CITIES. THE EXAMPLE OF KROPYVNYTSKYI (YELISAVETGRAD)

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Abstract
The article examines the architectural spatial development of cities in Central Ukraine under the influence of landscape conditions and changes in socio-cultural factors using the city of Kropyvnytsky (Elysavetgrad) as an example. The peculiarities of the historical development of the architectural and planning structure of the city, located on the border of Central Ukraine and the northern Black Sea region, are poorly studied due to its location in the agricultural steppe region of Ukraine.
The aim of the paper is to reveal the regularities and basic principles of the relationship between the architectural and spatial development of the city with natural and landscape conditions and changes in socio-cultural factors. The work is based on a complex application of general scientific and special research methods.
The transformations of the urban environment of the centre of Kropyvnytskyi (Elysavetgrad) at the end of the 20th century led to the distortion of the scale of the buildings and the loss of their significant elements. Comprehensive studies of the evolution of the urban structure and historic buildings in the city centre will help architects and urban planners to preserve the architectural and urban heritage in the modern urban space.

Keywords: **Architectural space; Yelysavetgrad; Kropyvnytskyi; Planning structure; Landscape; Socio-cultural factors.**

1. INTRODUCTION

At the end of the 20th century and the beginning of the 21st, significant socio-cultural changes took place in Ukrainian society, which led to a deepening of the process of awareness of Ukrainian identity and a widening of the range of definitions of national values. A prominent place in the formation of a person's worldview is occupied by the national spiritual heritage, especially architectural monuments, which vividly reflect the dominant ideas about the lifestyle of the time.

The majority of studies on the development of Ukrainian architecture have been devoted to the capitals and cities of regions bordering other countries or located on the sea coast. The cities of the central region of Ukraine, founded on the basis of the fortress of the Russian Empire, were small in size and served mainly as agricultural settlements. But the fortress of St. Elizabeth became the basis for the development of the city – a regional military, trade and industrial centre. In the culture of Kropyvnytsky (Elysavetgrad) multinational European traditions, traditions of the Russian nobility brought by the inhabitants of the fortress and autochthonous Ukrainian traditions of the inhabitants of the surrounding Cossack settlements,

which became part of the city, were intertwined. This led to the creation of a unique architectural and urban space. The study of the architectural heritage of the city of Kropyvnytsky (Elysavetgrad) as a part of the national culture is important for the formation of a holistic concept of its development.

The authors of the paper see the purpose of the study as revealing the influence of the natural landscape, and changes in socio-cultural factors on the features of the development of the planning structure of the city: the placement of urban planning dominants, the main pedestrian and transport connections, the features of functional zoning, the development of residential and public architecture.

2. STATE OF STUDIES

During the analysis of literary sources, it was found out that the first descriptions of the fortress of St. Elizabeth with its forstadt, and later of the county town - the inner military town of Yelisavetgrad, were written mainly by Russian officials of the Military Department, who described the state of development of towns – fortresses of the southern defensive lines of the Russian Empire in the first half of the 19th century.

Among them were A. Skalkovsky, G. Sokolov [1], A. Schmidt and others. At the turn of the 19th and 20th centuries, the historical and statistical works of P.P. Semyonov – Tyan – Shansky [2] were important, and the researches of the Kharkiv University professor D.I. Bagaley [3] were significant. The analysis of the cultural development of the city and the formation of urban development at the end of the 19th and the beginning of the 20th century in Yelysavetgrad is given in the works of the mayor O.M. Pashutin [4], the city surveyor P.Z. Ryabkov [5] and the others.

The researches of the Ukrainian scientists of the New Era are the works that reveal the problems of architectural and urban development of the regions of Ukraine and the problems of research of their historical and cultural heritage: Yu. S. Aseev, V. I. Timofeenko, V. Ye. Yasiyevych and others.

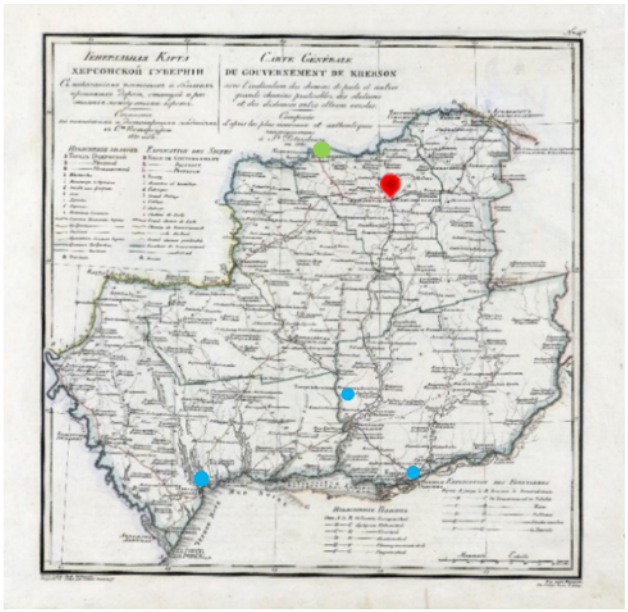
At the end of the 20th century – at the beginning of the 21st century appeared works devoted to the formation and development of the supporting fortifications of the defensive lines of the Russian Empire in the 18th century on the territory of Ukraine, from which later the cities and settlements of the region were formed. The history of formation and development of fortifications (including earth fortifications) is given in the work of V.V. Yakovlev, on the basis of which the structural analysis of Ukrainian fortifications was given in the work of O. Hlushok [6], the conditions and factors of formation and development of military settlements in the centre and south of Ukraine - in the works of A. V. Krasnozhon [7]. V. Pirko [8], V. Bushyn [9], the features of the formation of the cities of the northern Black Sea region in the 18th century are devoted to the work of V. I. Timofeyenko [10]; the peculiarities of the regulation of the building activity in the cities of the Russian Empire at the end of the 18th century. The peculiarities of the regulation of building activity in the cities of the Russian Empire at the end of the 18th and 19th centuries are defined in the works of S. S. Ozhegov [11], G. L. Ledenyova [12] and M. V. Zolotaryova.

In 1983 the Scientific and Research Institute of Theory and History of Architecture and Town Planning (Kiev) prepared a historical-architectural reference plan of the city, the materials for which were collected by G. Ya. Shcherbina, E.V. Tymanovych, O.I. Tyschenko with the help of Kirovohrad architects R.G. Kovalova, S.O. Likhachova. In 2020 the Ukrainian State Institute of Cultural Heritage (Kiev) prepared a new historical-architectural reference plan for the town of Kropyvnytsky (Yelysavetgrad) [13], the results of which are largely based on previous researches and archival information of local historians of the beginning of the 21st century: V. Polishchuk [14; 15], S. Nevesyolov [16; 17; 18; 19], A. Pyvovar, K. Shlyahovy [20], architect O. Ketsko, art critic O.(Ye.) Kirichenko [21]. Most of the works of the Kropyvnytsky researchers are devoted mainly to the historical and cultural aspects of the town's development, as well as to certain architectural problems of the town.

3. METHODOLOGY

The work is based on the method of historical-genetic analysis of the development of the urban structure of Kropyvnytsky (Yelysavetgrad), which is based on the study of historiographical, literary and documentary sources. The method of systematization of information allows to generalize the results of research. They allow to draw a complex and multifaceted picture of the development of the urban structure, to identify its fixed and changing components.

The method of structural and functional analysis makes it possible to determine the peculiarities of the influence of landscape and socio-economic factors on the formation of the system of urban planning and



Conventional designations

Novoserbsky Regiment

- Novomyrhorod

Novoslobodsky Regiment

- Yelysavetgrad

The Dnieper defence line of the south-western borders of the Russian Empire

- Odesa,
- Mykolaiv,
- Kherson

Figure 1.
Map of the province of Kherson with the location of the studied towns - centres of the military settlements, property of Kropyvnytsky Museum of Local History

architectural dominants, on the stylistic development of architecture, and on the system of functional zoning of the city.

The method of graphic-analytical comparison of historical plans and modern cartography allowed to specify the positions of available historical materials.

The work is based on materials from the history of the formation and development of cities – military settlements on the territory of Ukraine [7–12], published photographs of the studied architectural objects, drawings [5; 13], the historical descriptions of the city [1–4], modern local researches [14–20] and biographical materials [21]. Special attention is paid to the comparison of historical cartographic sources with modern cartography.

4. INFLUENCE OF THE NATURAL LANDSCAPE AND SOCIO-CULTURAL FACTORS ON THE DEVELOPMENT OF THE TOWN

Yelysavetgrad was founded in the mid-18th century as one of the strongholds of the Novoslobodsky Regiment, which bordered the north with the military region of New Serbia and on the east with the Ukrainian line of defence of the south-western borders of the Russian Empire created as a result of the expansion of the territory of the Russian Empire in the 18th century [10] ((Fig. 1).

They continued to develop mainly as agricultural settlements. However, Yelysavetgrad was an exception, as it was both the centre of the Second Reserve Cavalry Regiment and a commercial and industrial city [9], which was reflected in the development of its architectural and planning structure.

The peculiarities of the natural landscape (hydrography, relief), together with economic and political factors, influenced the formation and development of the spatial structure and the system of architectural dominants of the town under study. Cultural and educational factors (local and metropolitan) influenced the architectural development of the city.

4.1. The natural landscape factors of the urban formation of Kropyvnytsky (Elysavetgrad)

The Ingul River (a tributary of the Southern Bug) and its tributaries – smaller rivers Gruzka, Chechora, Sugokliya and Biyanka – form the hydrographic system of the area of the future town of Kropyvnytsky (Yelysavetgrad) [13].

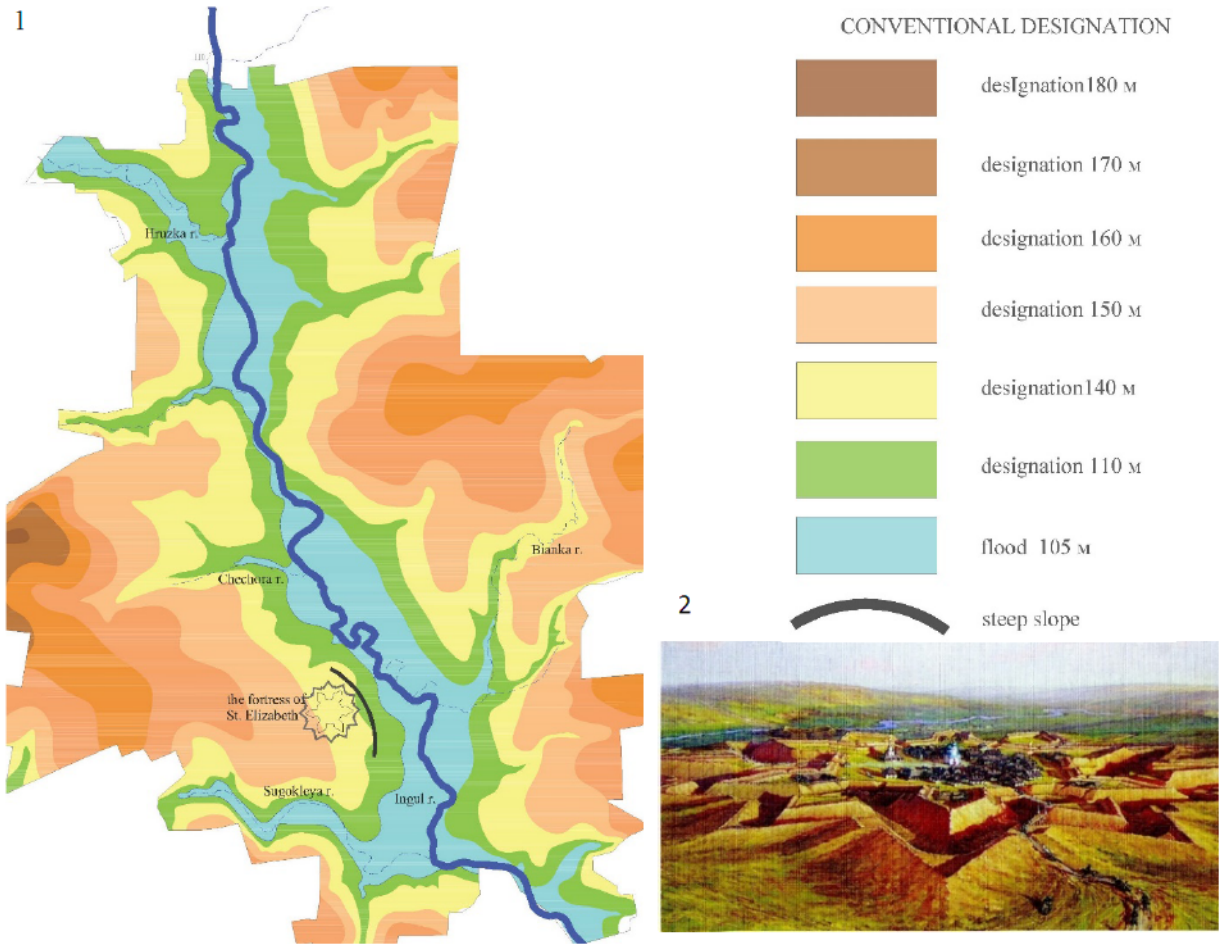


Figure 2.
2.1 Geographical map of the territory of the town of Kropyvnytsky (Elysavetgrad), drawings of T. Penyaz; 2.2. A perspective view of the fortress of St. Elizabeth. Painting by V. Storozhenko, property of Kropyvnytsky Museum of Local History

On the western bank of the Ingul River, there is a plateau with slopes towards the shore, which is cut by gullies with channels of the Gruzka, Chechora and Sugoklia Rivers. The plateau on the left bank has a gentle south-westerly slope towards the valley of the Ingul River and is bounded on the north by girders and on the south by the Biyanka River. Both plateaus consist of several promontories formed between ravines and small rivers flowing into the Ingul River. The water surfaces of the rivers with wide valleys served as natural barriers around the future fortress. (Fig. 2).
The territory of the town has fertile soils, sedimentary and mineral resources suitable for industry.

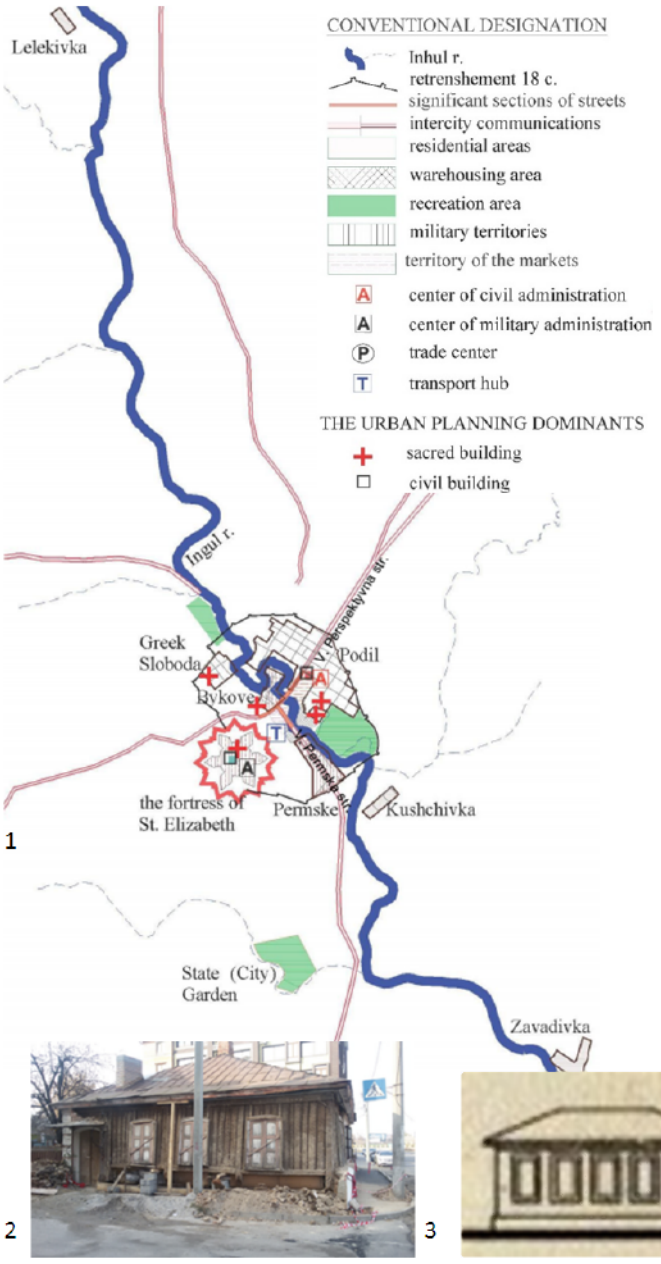
4.2. Interaction of natural landscape and socio-cultural factors in the urban formation of Yelysavetgrad, late 18 c. – early 19 c.

From the 10th century, the territory of the region was successively occupied by Slavic (Uglich) and Turkish tribes. In the twelfth century the area was a hunting ground for the Kievan princes. In the 14th century, it served as a border with the Bratslav Voivodeship of the Grand Duchy of Lithuania. This is reflected in the toponymy of the founded settlements and geographical objects.

Since the seventeenth century, the area of study in southern Ukraine has been inhabited by Ukrainian Cossack settlements such as Lelekivka, Tsybuleve and Zavadivka, and by schismatic Old Believer villages of immigrants from Poland and Sivershchyna: Klintsy, Vyska, etc. [4].

In the middle of 1754, the construction of the outpost began, consisting of the St. Elisabeth fortress with its inner part and the surrounding urban periphery (forstadt), which was surrounded by a circular fortified belt (retranchment) [5].

The earth fortress was built in 1754–1759 under the direction of the engineer colonel I.L. Menzelius



Natural - landscape factors:

1. winding riverbed
2. ravines and stream valleys
3. the soils are suitable for agriculture
4. minerals

Socio-cultural factors:

1. the presence of Cossack and Schismatic settlements
2. external communications from Chisinau to Poltava; from St Petersburg to the Black Sea coast
2. 1754 - outpost of Novoslobodsky regiment (fortress and hold)
3. 1755 - magistrate (Magdeburg law)
4. 1784 - abolition of the fortress and creation of the internal military settlement of Yelysavetgrad
5. trade in agricultural products through the Khadzhibey pier
6. Organisation of 4 annual fairs of agricultural products, manufactured goods



Figure 3.
3.1 Scheme of town development in the second half of the 18th century. Drawings of T. Penyaz; 3.2. The house in 14 Vasylivskyi Lane at the stage of facade reconstruction (2016) photo of T. Penyaz; 3.3. "Exemplar" facade (D. Trezzini) [11]; 3.4. Plan of the fortress of St. Elizabeth and its forstadt from 1776 [13]

according to the principles of the construction of the defensive lines of the Russian Empire in the 17th and 18th centuries and the Cossack earth fortresses of the 17th century [6]. It had six bastions surrounded by moats, six ravelins and six escarp curtains forming a firing zone from the open side and covered an area of 20 hectares.

Inside the fortress, in the central square, there was the wooden church of the Holy Trinity (1755) with a bell tower and the military administration building with a central tower, both of which served as urban planning dominants. Around the square, 12 quarters of soldiers' barracks [13] were built according to the "exemplary" projects of the "Building Commission" [11]. The bastions housed engineering, artillery, warehouses, etc.

On the right bank of the Ingul, according to the plan of the surveyors of the engineering expedition of the Military Department O. Guryev and S. Leontyev [14] for the military settlements of Permske – for the Perm Dragoon Regiment and Bykovo – for the Pikiner Regiment, prefabricated wooden "mazanka" houses were built in half a year according to the "exemplar" designs of D. Trezini. They were arranged in a chessboard pattern on the ground "for protection against fire" (Figs 3.2; 3.3) [6:11].

The main streets of the slobods V. Permska (Evropeyskyy Avenue) in Permsky; M. Sadovsky (N. Bykivska); V. Bykivska – in Bykovo; and Ostrivska (in modern Podil) were laid parallel to the coast and formed terraces.

To the north of Bykovo, according to the possibilities and tastes of the owners of the houses [1], a civilian Greek settlement (later called Chechora) was spontaneously built to serve the military units.

The wooden churches of St. Sign and St. Volodymyr were built on the outskirts of Bykovo, marking the boundaries of the settlement and, together with the Trinity Church of the Fortress, serving as urban dominants of the right bank.

The Cossack settlement of Lelekivka was situated north of the military fortifications.

To the south of the fortress on the Sugoklea River, in 1764 General O.P. Melgunov ordered the existing orchard of the Zavadivka Cossack winter quarters, located further south, to be transformed into a "state garden" to supply the High Court with fruit and vegetables.

The layout of the streets of the left bank part of the fortress town, inhabited by craftsmen and merchants, corresponded to the location of the fortress redoubts [20]. It was planned in 1766 by ensign S. Leontiev and had rectangular quarters of close size and narrow (10–12 m) streets [4]. The centre – V. Perspektyvna Street, which passed by the fortress between the suburbs of Permske and Bykovo on the right bank of the Ingul river and divided the left bank fortress town into two parts, which was distinguished by its width (20 m). On the corner of St. V. Perspektivna and Preobrazhenska (Kupetska) a market square was built within a few blocks, around which the magistrate's office, the parade ground, the guardhouse and the fire brigade were located. On the corner of Khrestovozdvizhenska (Pokrovska) and Olexandrivska (A. Tarkovskogo) streets a wooden church of intercession was built, and on the corner of Kupetska and Pashutynska streets a wooden church of the Transfiguration. Thus, in the city centre facing the fortress, on the banks of the Inhul River, a civil administrative centre dominated by churches was established (Figs 3.1; 3.4).

4.2. The features of the development of the urban space of Yelysavetgrad in the first half of the 19th century

At the beginning of the 19th century, the town suffered from fires and floods as a result of military operations during the war with the French. The city had 4,746 inhabitants in 1787. Further development of the city began in the 1830s.

During the 1820s and 1850s, the city had been receiving general plans from the "Commission from Buildings", showing the market squares that were created with the development of fair trade in the town were indicated: Hay and Skotopriginna – on the right bank of the Ingul; The Big Bazaar, Kinna Square – on the left bank. Near to them were located small repair workshops, the mills, the food and processing manufactories. Brick production developed in the Chechora suburb. The military settlements on the right bank expanded and were complemented by civilian buildings.

In 1835–1836, by order of the head of military settlements in the region, General D. Ye. Osten-Saken, a city hospital and a garden were built in the abandoned fortress.

In order to protect the city from floods, the canal and the banks of the Ingul River were arranged: in 1841 the straightening of the Ingul River canal began, and in 1845 a large stone bridge was built connecting the left and right banks of the Ingul River at V. Perspektyvna Street.

In the middle of the 19th century, there was a transition from the universal and finished language of classicism to the various styles of world architecture, appropriated for the expression of the appointment of a building. In 1843, the decree "On the Ununiform Appearance of the Facades of the Buildings of the Capital" (указ "О даче фасадам столичных домов вида неединообразия" (rus.) [12] was published, which led to the spread of historicist architecture in the second half of the 19th century and the development of modernism at the beginning of the 20th century.

In 1845 the house of the landowner K.V. Sokolov-Borodkin was built under the fortress, on V. Permska Street (Everopeysky Avenue), in the romantic classicist style, which together with the fortress walls became the architectural dominant of the city, marking the location of the fortress, the Hay Square, V.

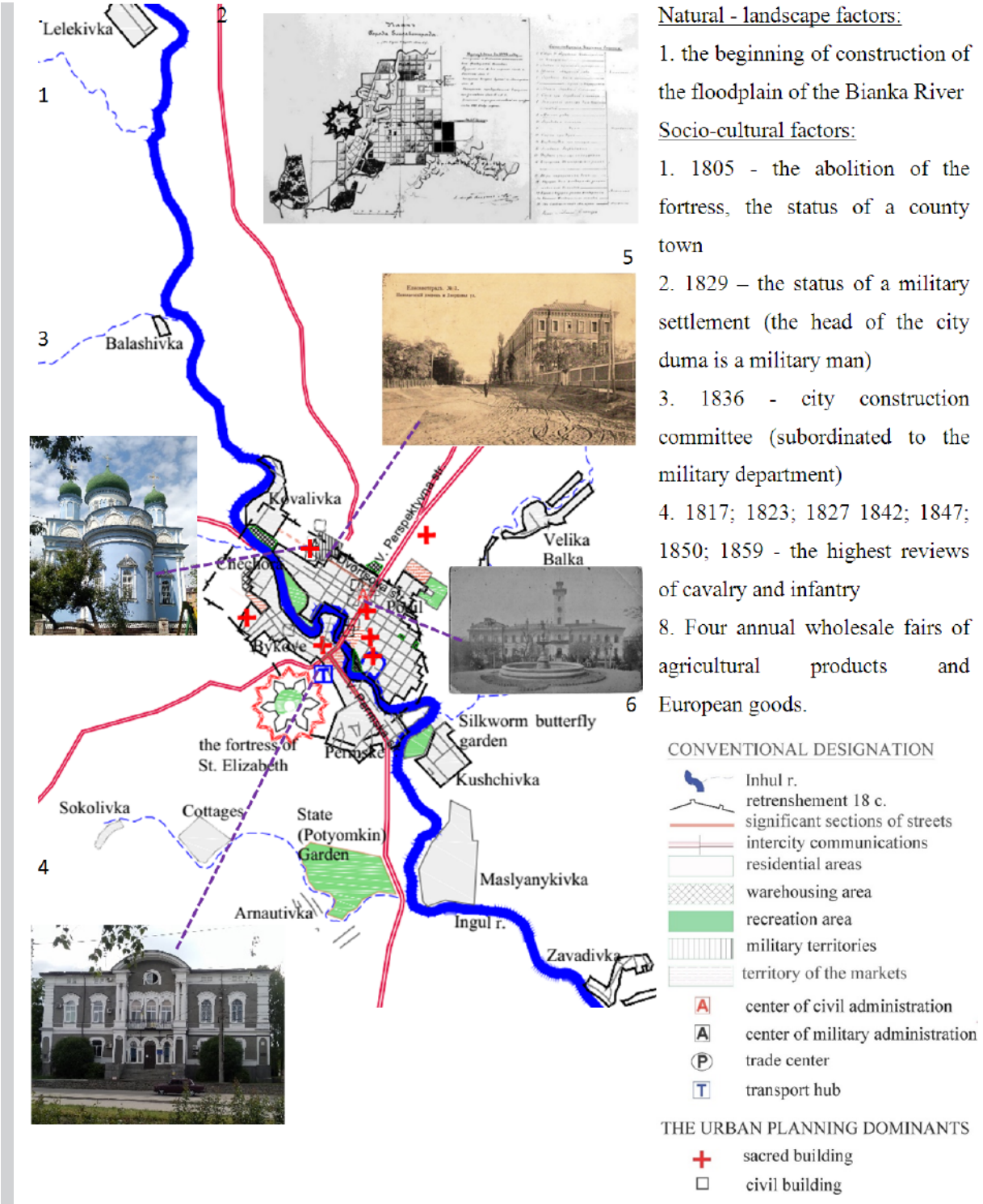


Figure 4.
4.1. Scheme of urban development in the first half of the 19th century. Drawings of T. Penyaz; 4.2. General plan of the city of 1842 [13]; 4.3. Intercession Church in the suburb of Kovalivka, photo of T. Penyaz; 4.4. House of K. V. Sokolov – Borodkin, photo of T. Penyaz; 4.5. The headquarter building. Postcard of the early twentieth century [13]; 4.6. The building of receiving places (Будівля присутственних місць (Ukr.) postcard of the early twentieth century [13]

Perspektyvna Street and the entrance to the Great Bridge (Fig. 4.4) [4].

In the 1840s the ensemble of the military administrative centre began to form in the suburb of Kovalivka. In 1841 an aristocratic meeting house was built in the Boulevard Street (Yu. Olefirenka). In 1848–1950, on the orders of the Military Department, the Cavalry Boulevard was built nearby, surrounding the parade ground, where regular military reviews were held. On the sides of the boulevard, on Dvortsova (Theatre) and Cavalry Streets, a complex of headquarters and training buildings of the Second Reserve Cavalry Regiment was built in the empire style (architects: V. Verlon, F. Shokhin). In 1849 the construction of the Church of the Intercession in the historicist style (architect: O. Ya. Andreev) was begun on the side of Bulvarnaya Street (Fig. 4.3) [14].

In 1848–1850 the centre of the civil administration began to take shape at the intersection of V. Perspektivna and St. Dvortsova (Teatralna) Streets: the City Boulevard was planned with an ensemble of government buildings in the style of historicism (architects: P. Farafontyev, V. Verlon), to which the services previously located on the market square near the Ingul River were moved [14]. At the end of the 19th century, the complex of government offices was reconstructed with the construction of new buildings (extension of the city administration, fire station, completion of the premises of the city bank, a library designed by the city technician K.E. Shostovsky [17]).

The centre of the civil administration served as a link between the fortress with the house of K. V. Sokolov-Borodkin on V. Perspektivna str. and the ensemble of the main buildings with the cavalry park on Dvortsova str. Dvortsova Street. The best houses, shops and hotels were built on these streets (Figs 4.1; 4.5; 4.6).

Stone churches – the Church of St. Volodymyr, the Church of Intercession and the Church of the Transfiguration – were built in place of the old wooden churches of the 18th century. A Lutheran Kirkha was built near the Church of the Transfiguration on the corner of Nevska (Pashutynska) and Gogol Streets in 1852. The wooden church of St. Peter and Paul was built in the northeast of Podol. The silhouette of the fortress, the domes of the churches and the spire of the church were the dominant features of the town.

In the middle of the 19th century, the area of the city increased. In 1858, the city had 23,700 inhabitants. On the right bank of the Sugokleya River, a tributary of the Ingul River, the area of the City (former State) Garden was enlarged by the construction of cottages, and further west the settlement of Sokolivski Khutory was established.

To the south of the Podol, the suburbs of Kushchivka and Maslyanikyvka began to be built according to a regular plan. The regular residential quarters of the Kovalivka suburb began to form in 1850.

The settlements of Lelekivka and Zavadivka grew. Between Lelekivka and Chechora the settlement of Balashivka appeared (Figs 4.1; 4.2) [4].

4.3. Characteristics of development of the urban space of Yelysavetgrad in the second half of the 19th and early 20th centuries

In 1861 serfdom was abolished in the Russian Empire, which led to an increase in the urban population and a rapid development of the cities. In 1873 the city had 38,100 inhabitants. In Yelisavetgrad, in the late 19th and early 20th centuries, the suburbs of Maslyanikyvka, Arnautovo and Kushchevka, Lelkivka, Zavadivka and Balashivka continued to grow.

The activity of the headquarters of the reserve cavalry regiment had determined the administrative and cultural dependence of the city on the centralised Russian government, which influenced the typological features of the buildings in the city, and the strict orderliness of its classicist buildings of 1860 y. designed by the city architect I.A. Shilin [19].

In 1867, at the junction of Dvortsova (Teatralna) Street and Cavalry Park, a theatre building in the late empire style was built at the expense of the engineer – colonel H.V. Trambytsky. Together with the complex of headquarters and training buildings of the Second Reserve Cavalry Regiment, with the classicist facades of the mansion of K.V. Sokolov-Borodkin (6.6) and the hotel "Versailles" (6.3) at the beginning of Dvortsova str., they formed a complete classicist ensemble of a military town (Figs. 5.3; 5.4; 5.6; 4.3; 4.5) [20].

In a part of the streets adjacent to Cavalry Park, the construction of educational institutions began. In 1876, the Zemstvo Real School was built in Bulvarna Street, near the Cavalry Park, at the place of the meetings of the nobility.

In 1884, according to the project of the city technician K. E. Shostovsky, a men's gymnasium was built in (Shevchenko) Petrovska Street. Next to it, in 1887, a gymnasium square was designed (Fig. 5.5) [4; 17].

In 1897–1901, according to the project of the city

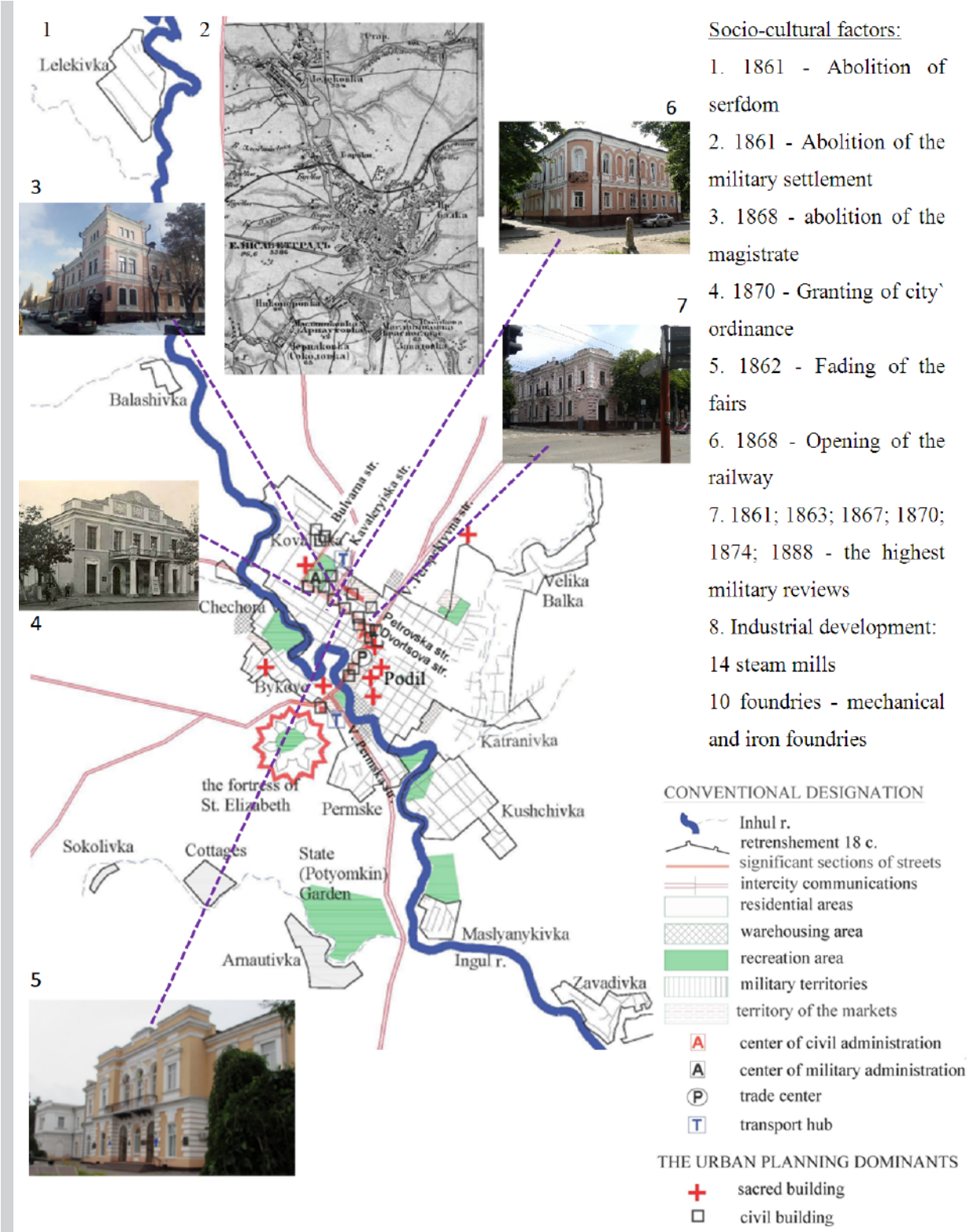


Figure 5.
5.1. Scheme of the town development in the middle of the 19th century, drawings of T. Penyaz; 5.2. Fragment of the military map of 1869 [13] 5.3. The building of the hotel "Versailles", photo of T. Penyaz; 5.4. The building of the theatre. Postcard of the early twentieth century [13]; 5.5. The building of the men's gymnasium, photo of T. Penyaz; 5.6. The Mansion of K.V. Sokolov – Borodkin, photo of T. Penyaz; 5.7. Building of the zemstvo administration (будівля земської управи (ukr.), photo of T. Penyaz

architect O. Lishnevsky, a public girls' gymnasium was built on Petrivska (Shevchenko) Street near Cavalry Park (Fig. 6.5) [19; 22]. In 1914 in the suburb of Kovalivka on Vokzalna Street, according to the project of the city architect L. Lubelskyi, a crafts-literacy school was built [15].

The educational institutions of Yelysavetgrad were characterised by a high level of teaching and gave the inhabitants of the city the opportunity to receive a European and metropolitan education, which contributed to the formation of the creative intelligentsia of the city. At that time Yelysavetgrad was the home of writers – creators of Ukrainian literature: I. Tobilevich, Yu. I. Yanovskiy, V. K. Vynichenko, E. Malanyuk, A. Tarkovskiy, A. Shpolyanskiy, M. Khoromanskiy. World-famous musicians began their creative careers in Yelysavetgrad: K. Szymanovsky (a classic of Polish music), F. Blumenfeld, G. Neuhaus (prominent pianists – professors of the Moscow Conservatory), world-famous painters – O. Osmyorkin, I. Rybak, P. Pokarzhevskyi, I. Pokhitonov, A. Nurenberg, actors – "luminaries" of the Ukrainian theatre: I. K. Karpenko – Kariy, M., Sadovskyi, P. Saksaganskyi, M. Zankovetska, Ukrainian historian V. Yastrebov.

The cultural development of the city was reflected in the expansion of the typology of buildings: industrial complexes (factories of T. and R. Elworthy, I. Shklovskyi, E. Burghardt, etc.), shopping arcades (I. Shpolyanskyi Arcade at V. Perspektivniy str., 60), banking institutions typical of economically developed cities (the building of the State Bank of Russia at 33 V. Perspektivniy str.), the newest hospitals (I.A. Goldenberg Hydroclinic, S. Meitus Electroclinic) and the newest educational institutions.

In the streets: V. Perspektivna, V. Permska, Dvortsova, and Shevchenka (Petrovska) streets were mainly buildings for temporary accommodation – inns (Kovalenko's Inn on Dvortsova Street, Ts. Kaminsky's Inn on V. Permska Street), hotels ("Northern" Hotel, "Grand Hotel" on V. Perspektivnaya Street, "Mariani" Hotel on Dvortsova (Teatralna) Street, "Petrovsky" Inn on Petrovska (Shevchenko) Street) and profitable buildings with retail and office space on the first floor (Gunkina's House and Giunter's House on Dvortsova (Teatralna) Street). There were elegant mansions in Bulvarna, Ivanivska, V. Bykivska, Mirgorodska (Shulginykh) and Ingulska (V. Panchenko) Streets. There were elegant manor houses with reception rooms for the institutions of the city. (Figs. 6.1–6.3; 6.4; 6.8–6.9).

In 1868–1869 the railway was built connecting Yelysavetgrad with Odesa, Kremenchuk and Donetsk. It ran through the northern part of the town, along the top of the hill. Near the railway station, a Catholic church was built in 1875, with a spire towering over the town. Owing to the changing character of the intercity connections, the trade fair activity in the town began to decline, and the processing, food, milling, engineering, iron and foundry industries began to develop actively [4].

The introduction of a new "city ordinance" in 1870, reforms in the legal and financial systems, education, led to economic growth and the formation of a new social class – the bourgeoisie, represented in the city by merchants (I. Makeev, O. Pashutin, A. Barsky, D. Barsky, S. Barsky, L.I. Brodsky, G. Dmitryan), by industrialists (A.L. Shklovsky, P.I. Kessler, T. Dmitryan, T. and R. Elworthy, V. Yaskulskyi, E. Burghard, I.M. Homberg, G.O. Seltzer, etc.), by dealers (N.I. Zaslavskyi, D. Shpolianskyi), by doctors and pharmacists (S. A. Weisenberg, I. Goldenberg, S. Maytus, P. P. Gaskalin and others), by lawyer I. A. Homberg, by printers (D. M. Shpolyansky, P. Zeleny, B. Brown and others), by landlords (K.V. Sokolov – Borodkin, V.V. Kelepovskyi, A.K. Dunin – Zhukhovskyi, etc.).

The Jewish community played a leading role in the economic growth of the city. The Jewish part of the city was located south of V. Perspektyvna Street. Important educational and cultural institutions were built there. The Elisavetgrad Choral Synagogue was considered one of the best in the Russian Empire. The town had well-known Jewish patrons from Kyiv (I. Fundukley, L. Brodsky) and Odesa (A. and S. Barsky). For this reason, the city was considered one of the best in southern Russia in terms of its urban landscape (by the City Garden, City Boulevard, Cavalry Park, Ottoman Boulevard and paved streets in the central part of the city) and the presence of architecturally outstanding buildings, mainly in the historicist and modernist styles.

Local merchants and the city administration invited young, talented architects to design buildings and structures, who later made a significant contribution to the architectural image of St. Petersburg, Odessa, Warsaw and other cities of the Russian Empire.

The influence of the capital's architectural traditions is connected with the fact that most of the architects working in the city at the end of the 19th and the beginning of the 20th centuries were graduates of the St. Petersburg School of Civil Engineering (hereinafter – the Institute of Civil Engineering), the St. Petersburg



Figure 6.
6.1. Urban development plan of the end of the 19th – beginning of the 20th century. Drawing; of T. Penyaz 6.2. General plan of 1913 [5]; 6.3. H. Volokhin's villa. Photo; of T. Penyaz 6.4. Gunter's profitable House. Photo of T. Penyaz; 6.5 Public Women's Gymnasium; 6.6 "Northern" Hotel. Photo of T. Penyaz; 6.7 Branch of the State Bank. Photo of T. Penyaz; 6.8. Mansion of D. Barsky. Photo of T. Penyaz; 6.9. M. Solovyov's profitable building. Photo of T. Penyaz; 6.10. Shopping arcade of I. Shpolyansky. Photo of T. Penyaz;

Academy of Arts, the School of Painting, Sculpture and Architecture of the Moscow Art Society, as well as with the participation of the city's architects in the competitions organised by the Zodchy magazine. Among them were A. M. Dostoevsky, Ya. V. Pauchenko, O. L. Lishnevsky, O. P. Kishkin, P. V. Bartoshevych, L. A. Lubelsky [15; 21].

The industrial areas extended south of the Great Market along the Ingul River to the confluence of the Biyanka and Sugokleya Rivers. A new industrial area

was built near the railway – the engineering factory of R. and T. Elworthy (1896), with a craft school and workers' theatre nearby (1904). In the suburb of Chechora "in 1857 nine brick factories in Yelisavetgrad produced products worth 21,900 rubles" [2], which led to the development of various architectural decorations of facades and contributed to the development of the brick style.

At the beginning of the 20th century, with the development of industry, workers' districts were created: Novomykolaivka (1911) to the north behind the railway, and Sugokleivka (Oleksyivka) (1912) – to the west of the Permske suburb [4]. Velika Balka developed spontaneously and expanded to the vicinity of the railway The area of the regular suburbs of Kushchivka and Katranivka grew considerably. The suburb of Ozernaya Balka was created to the north of Chechora. The city had 61,500 inhabitants in 1897 and 76,000 in 1910 (Figures 6.1; 6.2) [13].

5. CONCLUSIONS

The article reflects the results of the analysis of the development of the architectural and spatial structure of Yelysavetgrad under the influence of natural factors and changes in the socio-cultural situation. The obtained results can be used in the preparation of local historical and scientific publications; in the development or adjustment of the general plan of the town of Kropyvnytsky, the historical-architectural plan of the city centre.

Based on the research carried out, it has been possible to determine the regularity of the changes in the location and size of the functional areas, the characteristics of the formation of religious, public and residential buildings at each stage of the city's development under the influence of social and cultural factors, and the dominant functional purpose of the main streets.

1. It was found that natural factors: hydrography and topography of the area were important for the establishment of the fortress, the formation of the street system and the laying of the railway.
2. It has been shown that the development of the architectural and planning structure of the city was determined by changes in economic, political, external and internal cultural factors, which largely contributed to changes in the urban scale and architectural image of the central part of the city:

In the first stage: 1754–1797 – the internal connections between the fortress and the forstadt, the main external connections of the town were formed. A system of urban dominants was formed: the domes of wooden religious buildings and watchtowers of administrative buildings, the silhouette of the fortress. A system of streets and squares was formed and was preserved in the future. The loss of importance of the outpost contributed to the development of fair trade, leading to the formation of market squares in the city.

In the second phase: 1797–1830s, construction stagnated due to frequent fires and floods in the city as a result of military operations during the war with the French.

In the third stage: 1830–1865, the central streets were built, connecting the fortress and the centres of military and civil administration. The domes of the stone Orthodox buildings and the spire of the Lutheran church became the dominant features of the city. The political reforms of 1861 led to the expansion of the city and the construction of classicist villas, hotels, inns and profitable houses along the central streets and near the markets.

The fourth stage is divided into two periods: 1865–1895 and 1895–1915.

The city charter of 1870 and its approval in 1890 led to the development of local self-government and further economic growth of Yelisavetgrad. The railway connection with the regional centres of southern Ukraine in 1868–1869 led to the extinction of fair trade and the development of international and intermetropolitan trade, the development of food production and the engineering industry. It led to the expansion of the typology of public buildings: Zemstvo and city administrations, public, merchant and aristocratic meetings, financial institutions, shopping centres, industrial complexes, medical institutions of the latest treatment directions, educational and cultural and educational institutions built in the styles of historicism and modernism.

5. The central streets were determined by the dominant location: entertainment – Dvortsova Street, trade – V. Perspektivna str., educational establishments – Petrovska str., V. Perspektivna str. The best residential buildings were located on Ivanovska and Petrovska streets.
6. The increase in industrial production caused the rapid territorial growth of the city at the expense of the development of its suburbs with the construction of workers' houses, mostly one-storeyed and blocked.

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