

Development Features of the Southern Districts of Leningrad in the 1930s (Russia)

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Keywords: urban planning, architecture of the 1930s, ensembles, housing estates, master plan for the development of Leningrad, visual connections.

Abstract

Introduction. Studying the urban planning features of Leningrad in the pre-war decade may serve as the basis to determine whether the visual identity of the architectural ensembles of historical and cultural heritage of the first half of the 20th century was preserved. *Purpose of the study.* The study aimed to analyze the architectural and compositional as well as spatial features in the organization of residential areas on the periphery of Leningrad. *Methods.* We revealed the architectural principles of formation and means of organization for the architectural ensembles of the 1930s, and determined the protection boundaries for the sites in the context of visual relationships. *Results.* The master plans of 1935–1937 guided project activities and large-scale construction in Leningrad for two decades. The creation of a complex of architectural ensembles that united the peripheral areas and areas following the traditions of Petersburg architecture provided the basis for a system approach to forming the structure of the new development in Leningrad. As a result, we determined the protection boundaries for the ensembles and complexes of the 1930s, aimed at preserving the spatial structure, as well as the visual connections between the dominants and accents of the period under consideration.

Introduction

In the 1930s, one of the most important goals in Leningrad was to provide housing for workers since the size of the working population had increased significantly. Plants and factories built residential areas for their workers: cultural and community centers, schools, commercial kitchens, and bathhouses (banyas) were built near industrial enterprises. The pace of residential and public buildings' construction in Leningrad starting from 1925 was quite unique: in a short period, the workers' suburbs on Vyborgskaya Side, and the areas near Narvskaya Zastava, Moskovskaya Zastava, and Nevskaya Zastava were developed. Following the master plans of 1935–1939, the city began to grow at an enormous rate, by developing the territories of the former suburbs, replacing the wooden workers' barracks with housing worthy of Soviet workers. It was a professional work of architects who not only solved functional tasks but also paid close attention to urban planning aspects, spatial solutions, artistic image, and introduced an ideological component.

Purpose of the study

The study of urban planning and spatial features in the organization of architectural ensembles and complexes in the pre-war decade in Leningrad aimed to establish compositional patterns and principles of the ensembles and complexes' formation. It is extremely relevant in the current period, characterized by tendencies to reduce the boundaries of cultural sites in general and by denial of the value of the 1930s environment-forming development in particular.

Methodology

To achieve the purpose stated, we determined the boundaries of the studied 1930s development near Moskovsky Prospekt and Stachek Prospekt. When studying the area, we assessed the

development (local facilities and sites) for compliance with the criteria of urban planning as well as historical and architectural significance, ensemble nature, comprehensiveness, stylistic uniformity, continuity of formation, and identity of the environment. This allowed us to determine the boundaries of the ensembles and complexes of the 1930s in the context of preserving the spatial structure, visual connections, and the system of dominants and accents.

Results

The spatial structure of the historical environment in Saint Petersburg may be considered in the context of relations between ensembles, compositional nodes, high-rise and stylistic dominants. Without a doubt, this principle of the historical center composition was continued in the future when creating interconnected compositional systems in the design of new districts in Leningrad in the 1930s, which resulted in the particular continuity of the historical development of the city.

In the 1920–1930s, housing development became one of the top priorities for Leningrad. The implementation of the master plans of 1935–1939 provided for doubling the city territory with the development of large-scale housing construction in the south, south-east, and south-west of the city [1]. Malaya Okhta, Shchemilovka, the Narvskaya Zastava area, Avtovo, some areas in the north, as well as areas near the new city center adjacent to Mezhdunarodny Prospekt and Moskovskoye Shosse were to become territories for new ensembles of public and residential complexes (Fig. 1). Thus, extensive territories of Leningrad were included in the development to create a citywide ensemble from its southern to the northern border. Before that, architects had never faced such tasks.

The nodes of these connections were fixed by squares at the intersections of the “arched” thoroughfares. One of them led to the area of Shchemilovka and the Bolshevik plant (in the project, it was indicated as “Northern”), the other one led to the Kirov plant, the Severnaya shipyard, and the sea port (in the project, it was indicated as “Southern”). Another thoroughfare, designated in the project as the main one, crossed Moskovskoye Shosse near the Leningrad House of Soviets and, bypassing it, was divided into two parallel streets, which were supposed to provide transit traffic from the west to the east in this area, and connect the area of the Gulf of Finland and the Volodarsky bridge [2]. Other less significant thoroughfares crossed Mezhdunarodny Prospekt and Moskovskoye Shosse every 400–450 meters, with the exception made in the area of the Moskovsky Park of Culture and Recreation (Park Pobedy, or Victory Park) [3]. Following the rhythm of the intersections, the sizes of the quarters were determined, which ranged from 9 to 15 ha. The streets ran like rays from Moskovskoye Shosse to the west of the city, and there they were collected in bundles by centric squares.

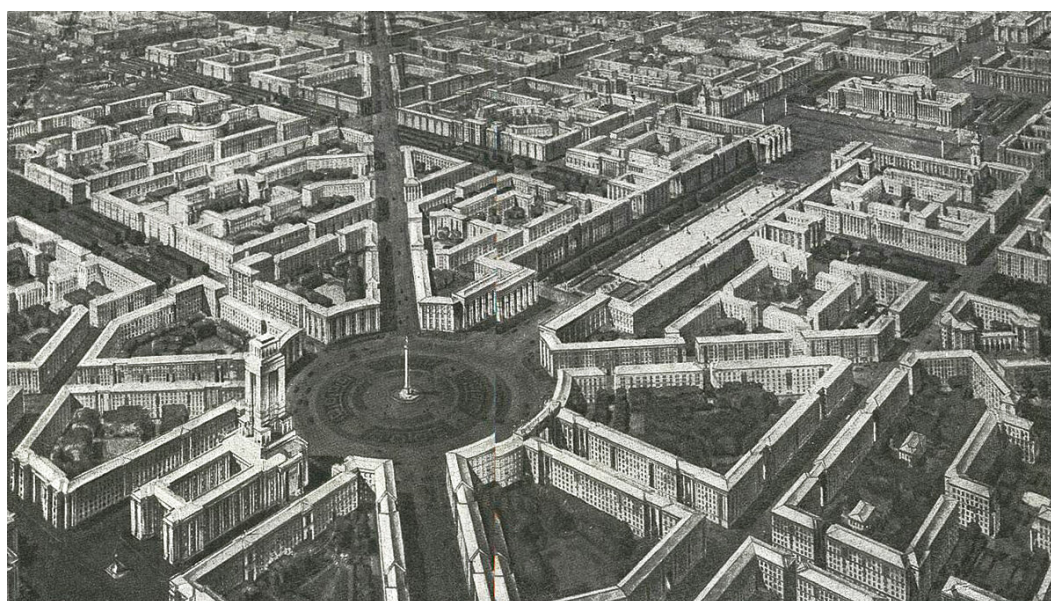


Fig. 1. Reconstruction of Leningrad in the 1930s.

The article considers the spatial organization of the two longest thoroughfares — Moskovskoye Shosse (Moskovsky Prospekt) and Stachek Prospekt.

Moskovsky Prospekt was supposed to be reconstructed along its entire length from Sennaya Ploshchad to Srednyaya Rogatka. The reconstruction of Sennaya Ploshchad was to be carried out according to the project of architect N. Baranov [4]. In the late 1930s, the market pavilions in the square were dismantled and a stele was planned to be erected in its center, accentuating the perspective depth of Mezhdunarodny Prospekt and Sadovaya Ulitsa.

The modern Moskovsky Prospekt can be divided into several compositional segments: the first one from Mira Ploshchad to the Obvodny Canal, which can be called a “historical segment”, the second one from the Obvodny Canal to the railway overpass (where new development is represented by local facilities) (Fig. 2), and the third one from the railway overpass to the entrance square to the city near Srednyaya Rogatka. The second and third segments attract the most interest.

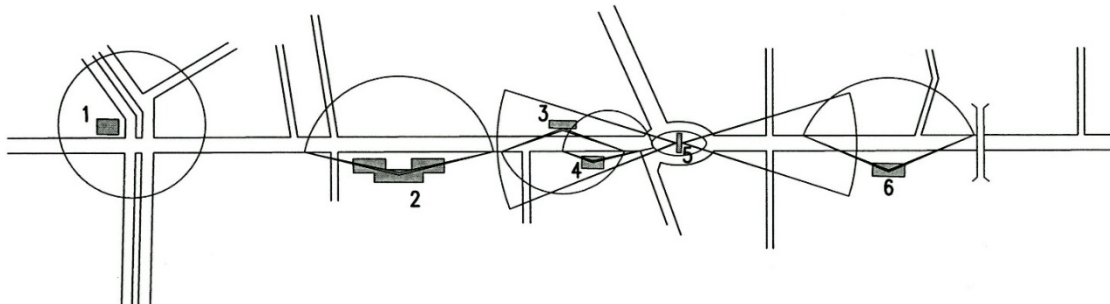


Fig. 2. Areas of dominants and visual accents' influence in the second segment of Mezhdunarodny (Moskovsky) Prospekt (1 - the Frunzensky department store, 2 - the House of Textiles, 3- the residential building of Narkompishcheprom (People's Commissariat for the Food Industry), 4 - the Cultural Center of the Kapranov Union of Leather Workers, 5 - the Moskovskiye Vorota triumphal arch, 6 - the Moskovsky District Soviet)

The beginning of the second segment is highlighted by the Frunzensky department store (Fig. 3). It was built in 1938. The building sort of “secured” the intersection of Mezhdunarodny (Moskovsky) Prospekt and the embankment of the Obvodny Canal. In addition to the department store, some other buildings — silhouette and compositional dominants — can be distinguished. Until 1934, the bell tower of the Novodevichy Convent of Holy Resurrection was the most important urban planning dominant in this segment. Under the pretext of expanding Mezhdunarodny Prospekt, the bell tower was demolished. The complex of the House of Textiles (currently located at 79 Moskovsky Prospekt), partially built in 1938–1941 by architects L.A. Ilyin and A.M. Arnold and completed (in terms of the main volumes), following the plan of L.A. Ilyin, after the Great Patriotic War, became an important spatial node of this segment of Mezhdunarodny Prospekt [5]. The Triumphal Arch of the Moscow Zastava was included in the system of compositional accents of Moskovsky Prospekt (Fig. 4).



Fig. 3. Frunzensky department store



Fig. 4. Moskovskiye Vorota triumphal arch

The system of dominants and visual (silhouette and compositional) accents in the first and second segments includes objects following the new Soviet ideology. These are cultural centers built close to industrial enterprises: the Cultural Center of the Kapranov Union of Leather Workers and the Ilich Cultural Center of the Elektrosila plant, as well as the building of the Moskovsky District Soviet. It should be noted that now these cultural centers play the role of stylistic and compositional accents, but their main meaning (ideological and compositional) has been lost. As for the building of the Moskovsky District Soviet, it still remains a compositional dominant thanks to its spatial solution and large scale (Fig. 5).



Fig. 5. Compositional dominant of Moskovsky Prospekt - Moskovsky District Soviet

The heterogeneity of the development that formed by the 1940s in the segment of Moskovsky Prospekt from the Obvodny Canal to the railway overpass made it impossible to create architectural and compositional as well as spatial unity. It was taken into account in the further design of the thoroughfare from the Elektrosila plant to Srednyaya Rogatka.

In accordance with the master plan of 1935, the new administrative center of the city was moved to the south, and its development became a priority. The thoroughfare of Mezhdunarodny Prospekt and then Moskovskoye Shosse and the central arched thoroughfare were to become the main compositional axes of the city. In 1936, large-scale design and construction works began [6] (Fig. 6). The total length of the built-up area was to be 4.38 km. The layout basis was prepared in the Architectural Planning Department of the Leningrad Soviet by the team consisting of D.K. Mikhaylov, P.N. Tvardovsky, O.S. Milberg under the guidance of L.A. Ilyin [7].

The Leningrad House of Soviets was to be the most important compositional center in the area. Therefore, the main artistic task was not only to create a representative thoroughfare leading to the future city center and its main square [8] but also to deepen “the impression of an increase in architectural power as approaching to the square of the House of the Leningrad Soviet and then reduce it as moving to the border of the city” [9]. The architectural and compositional organization of the surrounding development was planned to highlight its main dominant — the House of Soviets. The buildings were supposed to prepare the viewer for its perception, therefore, the solemn “propylaea” were created throughout the thoroughfare.

The requirements for the arrangement of buildings as well as their parts facing Moskovskoye Shosse were determined accordingly. The new quarters facing the thoroughfare could be divided into blocks of more than 400 m, therefore, the following scheme of their development was adopted: the frontage line of the quarters was formed by buildings of 100–140 m, located at a distance of 35 m from each other [10]. These gaps were decorated with arcades, colonnades, open recessed balconies, order compositions, etc. By combining the facades, these elements created the unity of the quarter development. Besides, recommendations were given for the overall composition of the facades along the thoroughfare to ensure a uniform architectural appearance. The buildings had 6 floors, but their height could change in the nodal points where 6–7-story buildings were erected (Fig. 7).

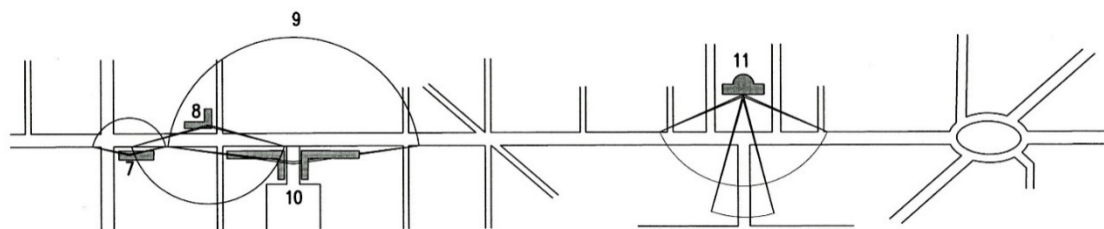


Fig. 6. Areas of dominants and visual accents' influence in the third segment of Moskovskoye Shosse (Moskovsky Prospekt): 7 - the building of the firefighter training school, 8 - 157 Moskovsky Prospekt (residential building), 9 - the Moskovsky Park of Culture and Recreation, 10 - 157–160 Moskovsky Prospekt (residential buildings), 11 - the House of Soviets

By analyzing the design documents and constructed buildings, we can identify the main compositional concepts of the spatial organization of Moskovskoye Shosse in the pre-war decade.

The first quarter designed on Moskovskoye Shosse was the quarter between Blagodatny Pereulok and the Park of Culture and Recreation. Its dimensions were 430 x 480 m. Here, one of the accents is a residential building highlighting the corner and turning to Kuznetsovskaya Ulitsa (155 Moskovsky Prospekt, 23 Kuznetsovskaya Ulitsa, architect O.R. Munz, 1938).



Fig. 7. 157–160 Moskovsky Prospekt (residential buildings)

The formation of the park was started in 1937. Its green areas represent an important compositional node in the panorama of Moskovsky Prospekt. At the time, the park was also a part of the “northern green belt” of the city. The quarter opposite the park had a length of 725 meters. The symmetry in the volumes of the residential buildings relative to the strong compositional axis, the entrance to the park, was enhanced by the theater building, framed by semicircular buildings and located in the center of the quarter, with an offset from the frontage line [11]. The houses that faced Moskovskoye Shosse were connected in pairs by arches to the full height of six floors. The plastics of the facades often had a pronounced relief formed by semi-columns, pilasters of the giant order, and recessed balconies [12].

The spatial organization of this fragment makes it the largest element of the architectural landscape of the thoroughfare segment from the park to Severnaya Ploshchad (currently Strugatsky Brothers Ploshchad).



Fig. 8. the House of Soviets

The next segment of the development has a fairly uniform spatial composition of buildings flanking Moskovskoye Shosse and preparing the viewer for Severnaya Ploshchad spreading out. The center of Severnaya Ploshchad was to be highlighted with a monument. In this square, three thoroughfares intersect, one of which is oriented to Duderhof. However, since the architectural solution of the square was not formed before the Great Patriotic War, therefore, we cannot distinguish it as a spatial compositional accent (Fig. 8).

The architectural and compositional solution of the thoroughfare ensemble was originally conceived as featuring cornices of the same height, which created not so expressive silhouette. Therefore, attempts were made to saturate the space of Moskovskoye Shosse with vertical dominants fixing its nodal points. Some projects date back to the very end of the 1930s or even 1940 and are represented by corner towers “fixing” the intersections of Mezhdunarodny Prospekt and small streets [13]. Later, in the 1950s, a system of engaging high-rise and silhouette dominants would be designed here.

The plan for the development of Leningrad in the south-west assumed the active development of the area near the historical Narvskaya Zastava. Residential quarters with houses for the workers of the adjacent enterprises, and the civil and socio-cultural center of Moskovsko-Narvsky (since 1934 — Kirovsky) district were to be formed there.

In the early 1930s, a “construction boom” occurred in the area adjacent to Stachek Ulitsa. Dozens of public and residential buildings were built here, which have quite interesting spatial characteristics and important functions.

With the design of the site near the Narvskiye Vorota triumphal arch (Stachek Ploshchad) and the construction of the House of Soviets in Moskovsko-Narvsky district (Kirovsky District Soviet, architect N.A. Trotsky), the territory of Narvskaya Zastava received a complete ensemble consisting of two squares. From the very beginning, it was supposed to connect the square near the House of Soviets with the triumphal arch (a monument in honor of the victory in the Patriotic War of 1812), therefore, the relationship between the Narvskiye Vorota triumphal arch and the vertical dominant of the administrative building became the main visual axis of the composition. Even though the Kirovsky District Soviet is the compositional center of the area, the overall spatial solution has more complex relationships since its composition includes other structures as well. For instance, the building of the school named after the 10th anniversary of the October Revolution (architects A.S. Nikolsky and A.V. Krestin) acts as a silhouette dominant, towards which Traktornaya Ulitsa is oriented, while the passage that starts from the square and runs in the continuation of Shvetsova Ulitsa is oriented towards the cubic volume highlighting the entrance to the health care center of Moskovsko-Narvsky district (L.V. Rudnev, O.L. Lyalin, I.I. Fomin) [14]. It can be noted that the spatial composition of the territory under consideration is based on the mutual intersection of axes that establish numerous visual connections [15], making its space semantically filled up (Fig. 3, 4, 5).

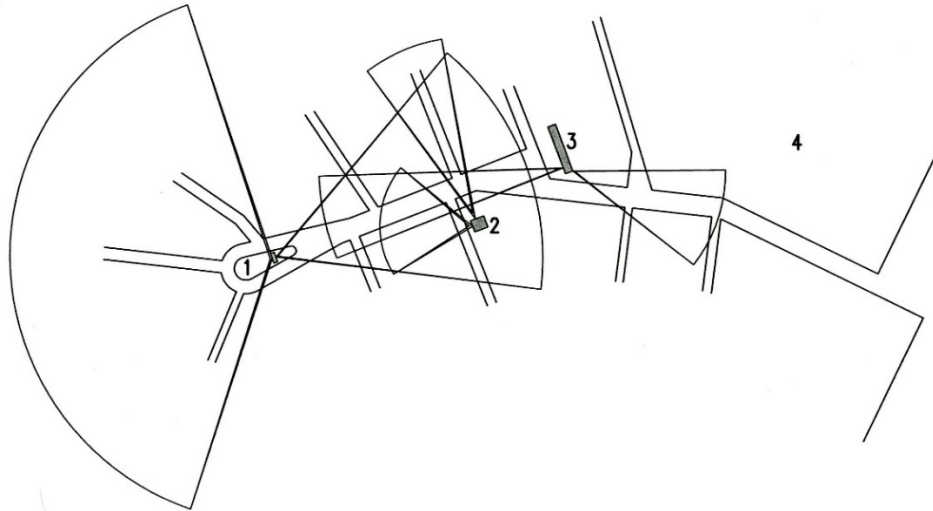


Fig. 9. Areas of dominants and visual accents' influence in the segment Stachek Ploshchad–Stachek Prospekt: 1 - the Narvskiye Vorota triumphal arch, 2 - the school named after the 10th anniversary of the October Revolution, 3 - the Kirovsky District Soviet



Fig. 10. Composite axis: Narvskiye Vorota triumphal arch - Kirovsky District Soviet



Fig. 11. Composite axis: School named after the 10th anniversary of the October Revolution – Traktornaya street

In the 1930s, the development of these areas and the adjacent territories in Avtovo district continued. Since Stachek Ulitsa was defined as one of the “arched” thoroughfares with transit traffic to the new city center, the territory of Avtovo became an important development area in Leningrad [16]. The boundaries of the development area were determined from the north, south, and east by the existing railway lines of the Baltiyskaya railway. In the western and north-western parts, the district was limited by the territory of the Putilovsky (Kirovsky) plant and the area not intended for development.

Here, behind Narvskaya Zastava, development was not regulated and consisted of stand-alone one- or two-story buildings, which were mostly wooden.

The general concept for the organization of Avtovo quarters was determined by the following provisions: the average population density was adopted at the level of 440 people per ha, with 12 square meters per person, while the land use ratio was 24–25%, and the number of floors was 5–6; the location of schools and kindergartens in residential quarters was used as the main element of inter-quarter axial compositions; the overall composition and spatial organization of the quarters were supplemented with green spaces.

The site of new construction in Avtovo was located at the south-western border of the city in the territory adjacent to Kruglaya Ploshchad, which was given special importance not only as a district but also as a city compositional node.

The area for residential development was located in the round section of the square and had the shape of a sector. The territory for residential development was 29 ha. Upon construction completion, 10,000 people were to receive houses here. The area had the shape of a sector since, in this part, the thoroughfares were located radially meeting on the axis of Stachek Prospekt (at the time, Stachek Ulitsa), which in the area of the square changed its E-W direction, deviating to the south-east, and connected this territory with the future main node of Leningrad, at the intersection with Mezhdunarodny Prospekt [17].

The perimeter development on Stachek Prospekt had a uniform outline, without significant deviations from the frontage lines, and residential buildings were designed to have five or six floors. By the end of the 1930s, along the entire length of Stachek Prospekt, from the Narvskiye Vorota triumphal arch to the south-western entrance to the city, compositional nodes were formed, where Stachek Ploshchad, Kirovskaya Ploshchad, and Kruglaya Ploshchad became the main ones.

The studied development expands the ensemble nature introduced throughout the history of Petersburg construction, which is based on the structural and spatial relationships between dominants and accents, and the system of consistently unfolding panoramas. The ensembles were formed in the key planning nodes created at the beginning of city planning. The linear ensembles of new streets with accents in the form of small, local squares correspond to the architectural and planning identity of the historical Petersburg. The streets and squares formed in the 1930s are structurally connected with the historical ensembles of Petersburg; they successively develop the principles of harmony, scale, proportionality, and integrity of all structural constituent elements.

Conclusion

Based on the conducted study, we can draw the following conclusions.

The plan for the development of the city in the 1930s was based on the continuity of the city ensemble system. The planning structure of new districts provided for the creation of a system of radial, arched, and diagonal thoroughfares, with the formation of an integral system of ensembles in centers of citywide and district significance, squares, gardens, and parks. The spatial features of the development of the peripheral districts in Leningrad determined the general nature and ranking of the system of dominants created in the residential areas of the former workers' suburbs.

The development pattern of the linear ensembles of new streets, the nature of their silhouette components, and stylistic unity allow us to raise the issue of adjusting the boundaries of cultural heritage objects that meet the criteria of urban planning as well as historical and architectural significance, ensemble nature, comprehensiveness, stylistic uniformity, continuity of formation, and architectural and planning identity with the historical Petersburg.

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