Residential Housing in Kharkov (Ukraine), 1920-1935

CATHERINE DIDENKO, ALEXANDER BOURYAK, NADIIA ANTONENKO

Abstract

This paper explores the evolution of residential housing approaches in Kharkov, the first capital of Soviet Ukraine, during the period from early 1920s till mid 1930s. The starting point of urban planning experiments was the implementation of the idea of the Garden City (mid 1920s). The building of the house-commune type (1925) and the emergence of a number of large housing estates, which formed a core of the social infrastructure for the new governmental complex, brought a shift in the former urban approaches. At last, the Socialist City (sotsgorod) as a new form of urban lifestyle was consolidated mainly in the late 1920s. Kharkov was one of the first cases, where it was experimentally tested. The 'socialist city' model, continuing its existence in the post-war time, underwent significant morphological changes, which, nonetheless, did not alter its fundamental social functional meaning.

Keywords

Barden citv. house-commune.			

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[Fig. 1] Kharkov governmental complex. Source: areal photo by photographer V. Bysov.

Kharkov as the capital: a new administrative centre of Ukraine, and a new type of an industrial city

This article explores the evolution of residential housing approaches in Kharkov during the period when the city was the capital of the Ukrainian Soviet Republic and was a huge laboratory of the modern architecture of the time. In European and even national press, publications on Kharkov architecture of that period are devoted to huge administrative complexes – i.e. the State Industry Building (Gosprom), the House of Projects, the building complex in Dzerzhinsky Square¹ – as well as to club building². The residential houses and complexes of that most interesting period are virtually unknown to foreign readers, even though it is during that time that the foundations of Soviet urban planning were laid.

In late 1920s and early 1930s, Kharkov along with Moscow and Leningrad was one of the three most important cities of the USSR³. However, even among them, Kharkov stood out as a testing site for modern architecture. It was due to the fact that the structures for the new capital of the country that did not have statehood before 1917 were being formed anew.

Two groups of reasons promoted rapid development of new residential housing approaches in Kharkov. First, the fact that the city was established as the capital resulted in fast population growth. Over a span of seven years between 1920 and 1927, the city's population nearly doubled, increasing from 285,000 to 423,000 people⁴, and it was only the beginning of full-blast urbanisation. Before World War II, the city's population reached 902,000 people, whereas in the post-war years, despite the fact that the capital was relocated, Kharkov secured its position in the list of 20 the largest European metropolises with its population fluctuating around 1.5 million⁵.

At the same time, after the mid-1930s, Kharkov disappears for a long time from architectural publications focus of attention and even more so from historical and architectural research. Even the huge Kharkov government centre, which is one of the early and, undoubtedly, the largest manifestation of European modernism in architecture, remains barely researched in national professional literature and is virtually unknown abroad. Thus, for instance, not one constructivist building from Ukraine is so much as mentioned in the first monograph published in Italy and devoted to Soviet Constructivism, *Il costruttivismo*, by V. Quilici⁶. The new interest

- 1 Буряк А. П., Крейзер И. И. Между конструктивизмом и Ар Деко: метод и стиль в архитектуре Харькова 20-х 30-х гг. //A.C.C. №3. Киев, 2000. С. 100-103.
- 2 Bouryak A., Didenko C., Deryabina-Konopleva O., "Clubs for People in Kharkov, Ukraine", in Architecture de la Culture Relais du Pouvoir Europeen, Acte du colloque. Paris: Edition Docomomo International, 2009, p. 54-58.
- 3 Paperny V., Architecture in the Age of Stalin: Culture Two, Cambridge Studies in New Art History and Criticism, Cambridge University Press, 2002. ISBN 10: 0521451191, ISBN 13: 9780521451192
- 4 А. В. Скоробогатов. Харьков во время немецкой оккупации (1941—1943). Х.: Прапор, 2006. ISBN 966-7880-79-6
- 5 Europe's largest cities. Cities ranked 1 to 100. City Mayors Statistics. http://www. citymayors.com/features/euro_cities1.html
- 6 Quilici V., *Il costruttivismo*. Roma: Laterza, 1991, 214 p.

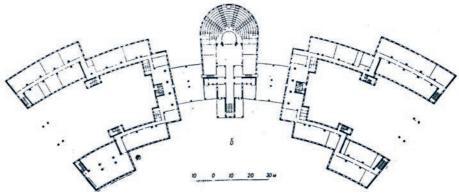
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[Fig. 2] State Industry Building (Gosprom), 1925-1928, arch. S. S. Serafimov, S. M. Kravets, M. D. Felger, engineer P. P. Rottert. Source: Всеобщая история архитектуры в 12 томах. Том 12 (первая книга): Архитектура СССР / Под редакцией Н. В. Баранова (ответственный редактор), Н. П. Былинкина, А. В. Иконникова, Л. И. Кирилловой, Г. М. Орлова, Б. Р. Рубаненко, Ю. Ю. Савицкого, И. Е. Рожина, Ю. С. Яралова (зам. отв. редактора). — 1975. — 755 с., ил.





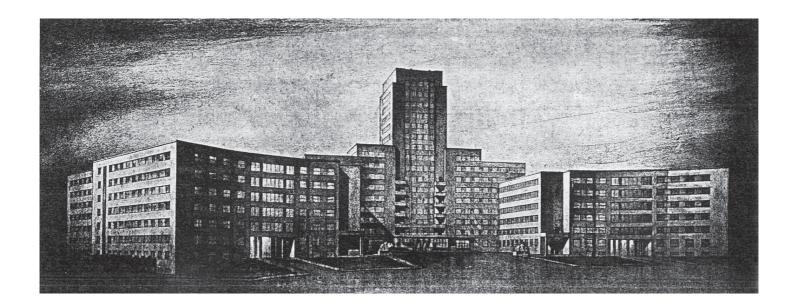


[Fig. 3] House of Projects, 1935, arch. S. S. Serafimov, M. A. Zandberg-Serafimova. Source: prof. A. Bouryak's personal archives.

7 Ukrainian Architectural Avant-Garde – Studies and Protection, Abstracts of the conference. Kharkiv: Rarytety Ukrainy, 2012, 67 р.; Architecture of Ukraine 1955 – 1975. The Second Wave of Modernism Protection, Abstracts of the conference. Kharkiv: DOCOMOMO Ukraine, 2013, 70 р.; Буряк А. П., Дерябина О.А., Пундик Я.Л., Хлюпина А.С. Харьков. Архитектура авангарда. // Путеводитель. – Харьков: Раритеты Украины, 2012. – 16 с., илл.

in the topic was awakened at the break of the 2010s, which was mostly due to preparatory work related to the opening of Ukrainian DOCOMOMO chapter⁷.

Immediately after the capital was established in Kharkov, the city's historical centre was reconstructed. The building of the Assembly of the Nobility and the Astrakhanskaya Hotel were interconnected to house the All-Ukrainian Central Executive Committee (VUTSIK, the Soviet Parliament) (1922), the Trade Exchange and the New Passage were erected (1925), Rozy Luksemburg and Proletarskaya squares were reconstructed.



[Fig. 4] House of Cooperation, 1932-1954, arch. A. I. Dmitriev, O. R. Munts. Source: S. Khan- Magomedov (Архитектор Павел Алешин. С. Хан-Магомедов. Архитектура советского авангарда. Кн. 2. Социальные проблемы. Глава 4. Новые типы зданий для советских, общественных и административных органов. Дома Советов. http://www.alyoshin.ru/Files/publika/khan_archi/khan_archi_2_083.html).

The development of the new government complex was started in 1925 one kilometre away from the old city centre [Fig.1]. Twelve hectares of Dzerzhinsky Square – now Svobody (Freedom) Square – were allocated for the erection of the huge modernist Gosprom building (the State Industry Building; 1925-1927, [Fig.2]), the House of Projects (1935) [Fig.3], and the House of Cooperation (1924-1954, fig.4), as well as the Central Committee of the Communist Party of Ukraine (1932) (#5 on figure 5) and the "International" Hotel (1932-1935, #4 on fig.5). The project of the latter was awarded the Grand Prix at the 1937 World Exhibition in Paris in the chapter of architecture.

Simultaneously, large modernist housing estates were constructed for the employees of this administrative machinery. The residential area situated behind Gosprom comprised of numerous housing estates, including Krasnyj Promyshlennik (Red Industrialist), Dom Spetsialistov (House of Specialists), Krasnyj Knizhnik (Red Bookman), Khimik (Chemist), Tabachnik (Tobacconist), Novyj Byt (New Living), new enough comfortable residential buildings in the so-called 'quiet midtown' district [Fig.5].

The process of the colossal residential development was also spurred by the establishing of tens of new administrative, designer, science and research, educational and medical institutions from 1925 till 1935 in Kharkov and the nearby suburbs. The above include the X-ray Academy, the Chamber of Weights and Measures, the Chemical Technology and Veterinary Institutes, numerous higher educational establishments (the expansion of the oldest Kharkov University; the establishment of the Institutes of Civil Engineering, Communication, Utility, Railway, and many other new high schools), and telecommunications agencies, including the constructivist masterpieces of the Central Post Office and Automatic Telephone System buildings [Fig.6].

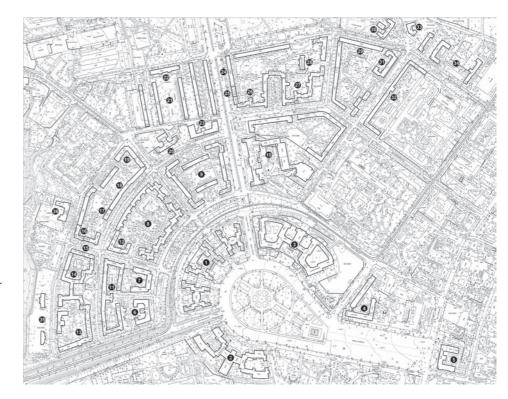
Furthermore, Kharkov as the capital became the building site for massive industrial development. In accordance with the dogmas of 'scientific communism', the new authorities strived to create a social support for themselves by concentrating the industrial proletariat in the new capital⁸. In the early 1930s, no other city in the USSR could boast having such a massive build-up of new hi-tech industrial facilities. Huge new plants and factories were constructed, among them the Aircraft Manufacturing Plant, the Tractor Plant, the Turbine Plant, the Coking Plant, the Precision Engineering Works (FED). Other plants were reconstructed and reequipped, for example, the Agriculture Machinery Works Serp i Molot (Sickle and Hammer) (the former Helfferich-Sade factory), the Heavy Electric Machinery Plant Elektrosila (Electric Force), the Komintern Locomotive Works (later the Malyshev Tank Factory) and many others.

8 After the capital was relocated to Kiev, the latter did not experience such accelerated industrialisation. Having seized the power in the 1929 coup d'etat, Stalin's regime relied on the support of the Party, as well as of the military and bureaucratic officialdom and nomenclature, whereas the working class was seen more as a source of possible social disruptions.

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[Fig. 5] Kharkov governmental complex and its residential area (1924-1939). Layout. (Source: the scheme by N. Antonenko): 1. State Industry Building (Gosprom), 1925-1928, arch. S. S. Serafimov, S. M. Kraviets, M. D. Felger, engineer P. P. Rottert; 2. House of Projects, 1935, arch. S. S. Serafimov, M. A. Zandberg-Serafimova; 3. House of Cooperation, 1932-1954, arch. A. I. Dmitriev, O. R. Munts; 4. "Internatsional" hotel, 1932-1935, arch. G. A. Yanovitskyj; 5. the building of the Central Committee of the Communist Party (Bolsheviks) of Ukraine, 1932, arch. J. A. Shteynberg; 6. Tabachnik-Knizhnik (Tobacconist-Bookman) residential house, 1926-1931, arch. A. Z. Kogan, P. I. Frolov; 7. Voenved (Defense Ministry) residential house, mid 1930s, arch.V. N. Petit; 8. Krasnyj Promyshlennik (Red Industrialist) residential complex, 1929-1930, arch. S. M. Kravets; 9. Dom Spetsialistov (House of Specialists) residential complex, 1934-1936, arch. L. S. Lemesh; 10. Morphological body of Medical Institute, 1937, arch. V. A. Estrovich; 11. Krasnyj Pechatnik - Dom Profrabotnika (Red Printing Worker – House of Trade Union Worker) residential house with a club building, 1930s; 12. Krasnyj Khimik (Red Chemist) residential house, late 1920s, arch. Yu. V. Ignatovskyj; 13. Voenved (Defense Ministry) residential house, 1937-1938, arch. P. Ye. Shpara, consultated by A. N. Beketov; 14. Shveynik (Sewing Industry Worker) residential house, 1930s, arch. A. Z. Kogan; 15. Residential house of municipal operational part, 1930s; 16. Krasnyj Partizan (Red Partisan), mid 1930s, arch. A. V. Mezherovskyj;17. Teacher's residential house, 1930s; 18. July Plenum residential house, early 1930s, group of architects under the supervision by prof. P. K. Chernyshev; 19. residential house, 1938-1939, arch. M. L. Movshovich, G. I. Lebedinskyj; 20. secondary school, 1936; 21. Novyj Byt (New Living) residential complex, 1926-1930, arch. N. F. Pokornyj; 22. residential house, late 1930s, arch. L. G. Lyubarsky; 23. kitchen-factory of Novyj Byt (New Living) residential complex 1926-1930, arch. N. F. Pokornyj; 24. Pyat za Tri (Five in Three) residential house, late 1920s; 25. residential house, 1927, arch. A. V. Linetsky; 26. Krasnyj Brodilshchik (Red Fermenter) residential house, 1926-1928, arch. P. Z. Krupko, G. D. Ikonnikov; 27. Kofok (abbreviation for October Confectionery Factory), 1928, arch. P. Z. Krupko, G. D. Ikonnikov; 28 - day-care centre, 1930s; 29. residential house, 1938, arch.A. A. Shumilin, N. A. Shishkina; 30. secondary school, 1938; 31. Slovo (Word) residential house, 1927-1930. arch. M. I. Dashkevich; 32. House of Pilots, residential house, 1930s; 33. House of Artists, residential house, 1930s; 34. Red Professor's residential houses, 1930s; 35. two day-care centres, 1930s; 36. secondary school, 1938.



The new enterprises and factories required adequate social and cultural infrastructure. It was the development of the infrastructure that resulted in the emergence of the entirely new phenomenon of the *mass construction*, which was unheard of in Russia before the Revolution. Hundreds of thousands of square metres of dwelling space were created in an orderly manner for government employees, university professors, specialists in science and technology. There was also a large-scale construction of student dormitory complexes and settlements for the workers of large plants: Svyatopolye (30,000 inhabitants), Raygorod (40,000 inhabitants), Novyj Kharkov (50,000 inhabitants) u Privolye (60,000 inhabitants) and other settlements. In the suburban village Novaya Bavariya, a housing estates named Krasnyj Oktyabr (Red October) was constructed. Construction work included hospitals for workers, palaces of culture near large plants, dozens of professional clubs (e.g. clubs for railroad workers, builders, teachers, workers in the fields of communication, in the food industry), as well as stadiums and palaces of sports.

There were four successive stages in residential housing from the middle of the 1920s till the first half of 1930s. Similarly to Moscow and other capitals and big cities, residential housing in Kharkov began as an implementation of the 'garden city' concept, which was soon rejected and replaced with the concept of 'housecommune', which was seen as the most important tool for communist living remodelling and formation of the 'new man'. Unlike Moscow, where the latter concept was translated into a whole series of experimental buildings, Kharkov experiences the 'house-commune' concept's implementation as a single incident. The major part of the residential complex construction was completed in the framework of a 'residential combine,' which was more realistic than 'commune house' concept at the same time preserving a whole range of the latter's social and technical principles. Finally, the residential infrastructure of new industrial giants was created in Kharkov in the framework of 'socialist city' ideology that formed the attitude to the city and city development in the USSR for the next half of the century. The historical and architectural interest to the residential housing of the period while Kharkov was the capital lies in the specific examples of buildings that were constructed with the implementations of each of these successively changing ideological clichés.



[Fig. 6] Automatic Telephone System building, 1930-1931, arch. P. I. Frolov. Source: prof. A. Bouryak's personal archives.

Garden City Concept

The starting point of the long sequence of urban planning experiments conducted by the Soviet authorities was the implementation of the garden city idea that was not new, but, on the contrary, well-known abroad and in the Czarist Russia. The idea was offered by Ebenezer Howard back in 18989. In fact, it was totally bourgeois, and it is not a mere coincidence that Henry Ford implemented the garden city concept in his experiments in social security for skilled workers in the event of an economic crisis¹⁰. Unlike both Howard's and Ford's, Soviet garden cities were planned without any mutual form of ownership, and, surely, without either land or buildings being private property, as well as without entrepreneurship as the foundation of city development.

The Soviet garden city was constructed solely for the purpose of providing the state-wide system of industrial production. An industrial facility was located at the heart of such settlements. It provided jobs for the inhabitants, determined the number of the employees and workers needed, as well as was the source of social and cultural life of the settlement. Residential buildings in such garden city did not belong to a group of co-owners but was in state ownership and was allocated free of charge to the workers and the employees. Furthermore, it was public authorities, who decided how many flats and of what type were needed, as well as how many canteens, kindergartens, schools, technical school, and enterprises that address leisure and everyday needs are necessary to maintain the production work¹¹.

In the 1920s, state/party authorities were interested in learning and drawing on the experience of the Western countries concerning such settlement construction. The articles that were published in architecture and construction magazines and journals in the early 1920s explored this issue¹². Soviet magazines were primarily attracted by the mass low-rise housing construction in the Netherlands: Betondorf complex (1923-1928), Hoek van Holland (1924-1927), and Kiefhoek (1925-1929). All of them had some similar features to the first Soviet workers' settlements.

During the revolution and civil war years, in the period from 1917 to 1921, new construction in Kharkov, as well as in other Soviet cities was practically non-existent. The infrastructure of municipal facilities suffered a major crisis. However, during

- 9 Howard E., *Garden Cities of To-Morrow*. London, 1902.
- Hirsch J., "From the fordist security state to the competitive nation-state-international regulation, democracy and radical reform", in *Journal for Philosophy and Social Sciences* 36 (1). Berlin, 1994, 7-21.
- 11 Меерович М. Г. Рождение и смерть советского города-сада // Вестник Евразии. СПб., 2007.
- 12 Современная архитектура. М.: Госиздат, 1927. N. 4-5.

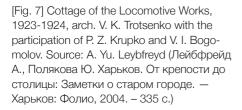
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El legado de la vivienda masiva moderna Modernist Mass Housing Legacy

CATHERINE DIDENKO ALEXANDER BOURYAK NADIIA ANTONENKO

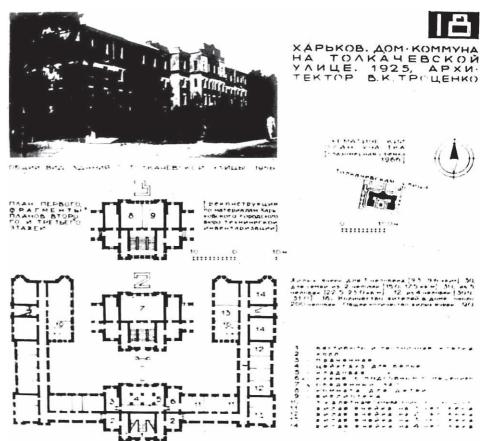
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[Fig. 8] House-commune in Tolkachevka district, 1925, arch. V. K. Trotsenko. Source: prof. A. Bouryak's personal archives.

- 13 Меерович М. Г. Квадратные метры, определяющие сознание: государственная жилищная политика в СССР. 1921-1941 гг. Stuttgart: lbidem-Verlag, 2005. 210 с.
- 14 Чепелик В. В. Український архітектурний модерн. / Упорядник З. В. Мойсеєнко-Чепелик. – К.: КНУБА, 2000. – 378 с.



that period, drastic redistribution of the existing real estate was carried out. It was allocated to the public institutions, workers and the urban poor. It was at this time that the phenomenon of the so-called 'communal flat' emerged. It meant that each room of large flats designed for the propertied classes was inhabited by new lodgers¹³.

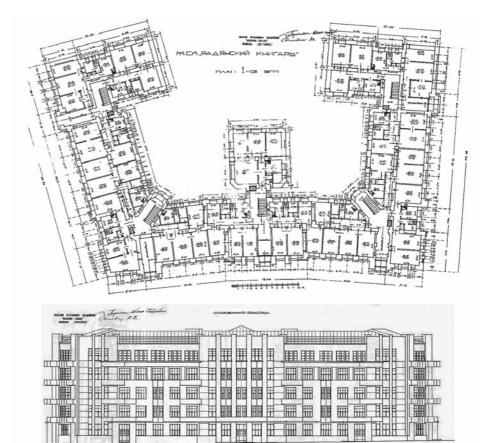
The first attempt to tackle the massive deficit of residential space in the post-revolutionary Kharkov was the construction of settlement for workers that was started in 1922. Such settlements were erected in Plekhanovskaya Street and Moskovskiy Avenue. It was intended for the workers of Elektrosila-1 (Electric force-1) (former General Electricity Company; later Kharkov Electromechanical Plant) and the Locomotive Works (later the Malyshev Factory). The settlement of the Locomotive Works (1923-1924, arch. V. K. Trotsenko with the participation of P. Z. Krupko and V. I. Bogomolov) consisted of two- and four-section cottages that were designed, correspondingly, for two or four families of four/five people each. The cottages consisted of three-room flats of 41-45 m². All in all, 35 cottages having 140 blocked flats with individual entrances were constructed in three settlements.

Soon, however, housing workers in cottage houses was declared uneconomical, and, beginning from 1925, instead of constructing cottages, three- and four-storey blocks of flats were erected in suburban workers' settlements. They appeared, for instance, in the village of Novaya Bavariya (New Bavaria), in the Lysaya Gora district, as well as to the south-east of the Locomotive Works (Artema village).

Kharkov 'garden city' housing projects were far from technical and cosmopolitan aesthetics of the Modern movement and was a version of the so-called 'Ukrainian Art Nouveau' that was popular at the beginning of the century¹⁴. Such architecture combines the technics of rational planning with the symmetrical compositional arrangements and the use of ethnic decorative motifs [Fig.7].

One can state with a great degree of certainty that the cottage housing construction was halted not for economic but, more likely, for ideological and political reasons. It is hard to imagine a place of residence that would promote more directly the replication of private-ownership psychology than one-family houses with plots of

[Fig. 9] Tabachnik-Knizhnik (Tobacconist-Bookman) residential house, 1926-1931, arch. A. Z. Kogan, P. I. Frolov. Source: CSSTAU, funds 1-24-6-5, 1-24-6-2.





[Fig. 10] Novyj Byt (New Living) residential complex, 1926-1930, arch. N. F. Pokorny. Source: photo by K. Didenko.

land. The petit bourgeois ideal of the garden city clearly contradicted the radical view of the first post-revolutionary years with ideas of labour armies, communalisation of living, and ideological attacks against the institution of the family. It was the first but hardly the last instance in the history of the Soviet residential housing when political expediency was masked with considerations of cost effectiveness.

House-Commune Concept

In the mid-1920s, architects offered the architectural concept of 'house-commune' that was aimed to become a drastic solution to the housing problem. The concept allowed the authorities to make a decisive step towards the communalisation and industrialisation of the everyday living. At the core of the concept lay the idea of saving the maximum amount of time for people's personal self-development. The necessity of such residential housing construction was rooted in the acute housing crisis, in severe cost-cutting policy, as well as in the need to renounce the vestiges of the old and to transition to new living¹⁵. The attention was focused on searching economic planning concepts that would be in the spirit of collectivism: minimalistic residential units without bathrooms but with kitchens and water closets that the inhabitants of the same floor shared (or with niche kitchens and industrial sanitary facilities). On the other hand, accommodations for public gathering that were designed for social activities and entertainment were vast. Bath and laundry complexes, as well as kitchen factories all grouped in a separate block, were designed to satisfy the washing, laundering, and cooking needs.

The first and only house-commune in Kharkov designed to accommodate 2,000 people was constructed in Tolkachevka district in 1925 (arch. V. K. Trotsenko). It was erected even earlier than the first commune houses in Moscow (1926-1928). Unlike the Russian examples, the Kharkov house architecture was distinctly different in its realism and pragmatism. Designed in reserved forms of late Art Nouveau, it is a multifamily hall of residence with a shared kitchen and water closets, where each room opens into the central corridor¹⁶ [Fig.8].

- 15 Меерович М. Г. Квадратные метры, определяющие сознание: государственная жилищная политика в СССР. 1921-1941 гг. Stuttgart: Ibidem-Verlag, 2005. 210 с.
- 16 Лейбфрейд А., Полякова Ю. Харьков. От крепости до столицы: Заметки о старом городе. — Харьков: Фолио, 2004. — 335 с. — ISBN 966-03-0276-2.

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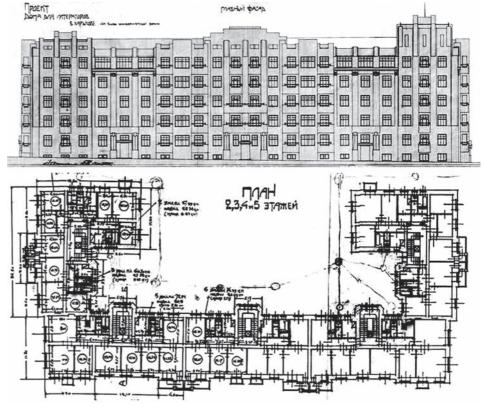
[Fig. 11] Krasnyj Promyshlennik (Red Industrialist) residential complex, 1929-1930, arch. S. M. Kravets. Source: photo by K. Didenko.

[Fig. 12] Dom Spetsialistov (House of Specialists) residential complex, 1934-1936, arch. L. S. Lemesh. Source: photo by K. Didenko.

[Fig. 13] Slovo (Word) residential house building, 1927-1930, arch. M. I. Dashkevich. Source: photo drawing – CSSTAU, fund 1-24-7-8.







Residential Combine Concept

Since 1927, the scale of construction work in the USSR had increased dramatically, the state explored enormous possibilities that were created by centralization of management and design, coupled with complete governmentalisation of production facilities. Numerous cooperative design and building societies were created at large plants, factories and branch departments. All of the above constituted the organisational and production foundation for the large-scale construction of residential combines in Kharkov in the 1920s.

Much like commune houses, residential combines were large complexes consolidated in a joined structure residential housing with consumer, social and cultural service providers. They united not only convenience stores, canteens and kitchen factories, bath-houses and laundries, but also clubs, schools, public libraries and reading rooms, kindergartens and nurseries¹⁷. What distinguished the residential combine concept was the new understanding of designated use. The focus was shifted from individual development that was the target of commune house design to the processes of public production.

The residential unit was now considered to be a part of a large technological complex. In order to involve women in the production process as much as men, the former needed, primarily, to be freed from the household work by means of public canteens,



[Fig. 14] Kommunar (Communard) residential house, 1929-1932, arch. A. V. Linetskyj and V. I. Bogomolov. Source: prof. A. Bouryak's personal archives.

kitchen factories, laundries, dry-cleaner's, etc. Secondly, the state strived to take over the crucial function of child upbringing, starting with nursery and kindergartens to schools and care homes that allowed twenty-four-hour residence, technical schools and higher educational institutions. The separation of parents and children, and drawing the latter into the system of 'scientific upbringing' was supposed to sharply accelerate the formation of the 'new man' free of the "capitalist vestiges".

The architectural composition of a residential combine progressed from residential combine quarter to residential combine as a complex of separate buildings. In Kharkov, this progress can be explored using the example of houses situated in the district that is included in the urban planning complex of Dzerzhinsky Square.

In his competitive design of the government centre (1924), architect V. K. Trotsenko planned the construction of a residential neighbourhood network in the radial pattern behind the administrative building complexes of the round segment of the Dzerzhinsky Square. The active development stage began in 1927. Multi-storey blocks of flats that were erected differed in service complexes, and each design project was unique. The following residential houses and complexes were built: Tabachnik-Knizhnik (Tobacconist-Bookman, 1926-1931), Krasnyj Brodilshchik (Red Fermenter, 1926-1928), Novyj Byt (New Living, 1926-1930), Kofok (abbreviation for Oktyabr Confectionery Factory, 1928), Pyat za Tri (Five in Three, late 1920s)¹⁸, Slovo (Word¹⁹, 1927-1930), Krasnyi Promyshlennik (Red Industrialist)²⁰, 1929-1930), Krasnyj Khimik (Red Chemist, late 1920s), Krasnyj Pechatnik - Dom Profrabotnika (Red Printing Worker - House of Trade Union Worker, 1930s), Shveynik (Sewing Industry Worker, 1930s), Voenved (abbreviation for Defence Ministry²¹, mid 1930s), Krasnyj Partizan (Red Partisan, mid 1930s), Dom Spetsialistov (House of Specialists²², 1934-1936), etc. There was a network of service providers for the district including a cinema club, three day-care centres, four secondary schools²³, and a kitchen factory [Fig.5].

The first residential buildings erected behind Gosprom were more or less traditional multifunctional housing constructions in the perimetral building structure of quarters (Tabachnik-Knizhnik, Krasnyj Brodilshhik, Pyat za Tri). For instance, the five-story building Tabachnik-Knizhnik (1926-1931 arch. A. Z. Kogan, P. I. Frolov) was erected jointly by cooperative societies Tabachnik and Knizhnik, as well as by the all-Ukrainian share building society of NKVD²⁴ USSR Ukrpaystroy. The plan of the building looks like the big letter 'E' [Fig.9]. The height of the building is 23.7 m; it has 75 flats (275 rooms). There are 5 stairwells equipped with lifts. A small park was planned in the courtyard.

- 18 i.e. to complete a five-year plan in three years.
- 19 Housing estate for members of the Union of Writers.
- 20 Neighbourhood complex for the employees of the State Industry Building (17 stairwells).
- 21 Residential building for the Ministry of Defence.
- 22 A complex consisting of four huge residential buildings for the employees of the Palace of Projects.
- 23 Two separate school building and one included in the structure of the residential combine Krasnyj Promyshlennik.
- 24 NKVD the People's Commissariat (Ministry) for Internal Affairs that later became strongly associated with massive repressions of the second half of the 1930s, at the beginning of the 1930s, was far from being a solely punitive agency. During those years, NKVD performed, in particular, the essential function of managing urban spatial development, provision of urban amenities, all of which it inherited from the prerevolutionary Russian Ministry of Internal Affairs.

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[Fig. 15] Residential house of Malyshev Works, 1931, arch. G. A. Yanovitskiy, E. A. Lymar. Source: photo by K. Didenko.



The exception to the construction pattern of the late 1920s is the housing estate Novyj Byt (1929-1930, by arch. M. F. Pokornyj), that was a simplified implementation of the house-commune concept. It consisted of five parallel residential buildings-plates that stood separately from the block of service providers [Fig.10]. The complex comprised five parallel slab blocks of flats (three of them had four sections and the other two had five) surrounded by abundant greenery. The project illustrated a common example of cross ventilation. Just before the beginning of the WWII in 1939, the 'draft' was blocked by the construction of a five-storey residential building. The Novyj Byt flats had water closets; however, there were no kitchens anywhere. It was planned to replace them with a common four-storey kitchen factory that was situated near the school in the next neighbourhood. The top floor was structured as a gallery; the windows of all flats here looked east. Every second stairwell of the residential buildings had a lift. Notably, in the five slab blocks of flats, the two stairwells that were planned for families had lifts, the remaining three that were designed for single people or childless couples did not have any.

The housing estate Krasnyj Promyshlennik designed, as it has already been mentioned above, for the employees of the State Industry Building, was constructed in 1930 (by arch. S. M. Kravets, one of the authors of Gosprom building). The complex was erected following the perimetral building pattern with elements of consumer services. It constituted a huge neighbourhood following the circular bend of Pravdy Avenue between Anri Barbyusa and Romena Rollana radial streets.

It consists of two buildings that are separated by entrances to a huge courtyard park [Fig.11]. Residential sections located at the three corners of the neighbourhood are seven-storey. The rest are five-storey and face Pravdy Avenue and Borisa Chichibabina Street. The stairwells of seven-storey 'towers' have lifts. The residential building Krasnyj Himik that was constructed a bit earlier is on the corner of Anri Barbyusa and Borisa Chichibabina streets. The construction works of the Krasnyj Promyshlennik buildings were carried out by Ukrpaystroy Trust under the contract with state share society Ukrainskiy Krasnyj Promyshlennik dated 31 May 1929.

The flats in Krasnyj Promyshlennik have from three to five rooms, a kitchen and a water closet. The rooms are from 15 to 20 m². All in all, there are 292 flats, two or three at every landing. In the seven-storey towers, the flats that are located at the corners of the square have spacious corner balconies; there is a vast and well-lit hall on every floor of the stairwell, which is warm in winter and stays cools in summer.



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6	City organization		
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[Fig. 16] Krasnyj Luch (Red Ray) residential complex, 1929-1930, arch. G. G. Vegman. Source: photo and scheme by N. Antonenko.

[Fig. 17] Basic scheme of the "normal city" life organization. Source: the scheme by B. Yerofalov (Ерофалов Б. Город и регион: местные и региональные нормативные системы // Труды Международной Академии Бизнеса и Банковского Дела. Понятие о городе. // Сборник статей. – Тольятти 1994. – С. 103. – Серия «Городские программы»):

1. city tissue; 2. bearing points of city life; 3. life support network; 4. special services; 5. city policy; 6. municipal power.

The neighbourhood design with a wide drive-through had appeared in the Tabachnik-Knizhnik neighbourhood by the mid-1930s after the completion of the construction of residential houses of Krasnyj Pechatnik – Dom Profrabotnika with a cinema club, Voenved and the neighbourhood of Krasnyj Knizhnik. The plan of Shveynik had an intricate configuration of a 'beetle' (#14 on figure 5) and consisted of 13 stairwells. The passage through the neighbourhood was enabled by an arc.

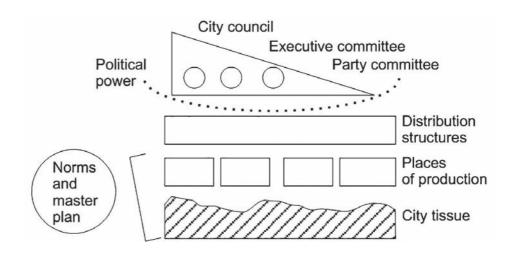
On the corner of Pravdy and Lenina avenues, one finds the housing estate Dom Spetsialistov (1934-1936, arch. L. S. Lemysh, [Fig.12]). The complex was erected for the employees of the Palace of Projects and the future Palace of Cooperation. Just as Krasnyj Promyshlennik, Dom Spetsialistov takes up the neighbourhood. However, its plan looks more modern. The Dom Spetsialistov buildings front Pravdy and Lenina avenues, Borisa Chichibabina and Romena Rollana streets. The plates of residential buildings having latitude and meridian orientations are surrounded by the greenery of a vast courtyard park. On the plan, the building looks like two Cyrillic letters 'Π' that are turned to each other with their bases. Between them, there are two parallel linear buildings. The complex consists of five- to seven-storey buildings, all stairwells of which are equipped with lifts. As a rule, the daylight-lit landings have two flats each being cross ventilated. The bathrooms and water closets are also daylight-lit. There are 291 flats in the complex with four or five rooms in each. The five-room flats even have a valet room. On the first floors of the buildings that front Pravdy Avenue, shops that sold consumer goods and groceries were situated. The entrances to the consumer service providers were located along Pravdy Avenue and Romena Rollana Street.

The Slovo building is located a little further on Kultury Street [Fig.13]. Just as Krasnyj Promyshlennik and Dom Spetsialistov, it was constructed for privileged residents. The building was financed by men of letters in 1927-1930 (i.e. even before the creation of the Union of Soviet Writers) upon the project of the architect M. I. Dashkevich, Ukrgrazhdanstroy (Ukrainian Civil Construction) Institute. The plan of the building resembled the block letter 'C'. It is a five-storey building with five stairwells and 66 three- and four-room flats. Above the fifth floor, showers and a solarium were installed as consistent with the design.

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[Fig. 18] Basic scheme of life organization in the "socialistic city". Source: scheme by B. Yerofalov (Ерофалов Б. Город и регион: местные и региональные нормативные системы//Труды Международной Академии Бизнеса и Банковского Дела. Понятие о городе. // Сборник статей. – Тольятти 1994. – С. 101. – Серия «Городские программы»).



The initial design was modified at the construction stage; the changes concerned the number of windows in the rooms, as well as the location of partition walls. Due to the fact that the terrain falls to the north-east, one four-room and three three-room flats were added on the semi-basement floor of the first and second stairwells. Lifts were added accordingly. The remaining space of the semi-basement was taken up by a boiler room with auxiliary facilities and storerooms for each flat, which is characteristic of this period and remained typical for 'department-level' residential housing up until the late 1950s. Landings, bathrooms, and water closets are daylight-lit. Kitchen and water closet windows overlook the courtyard. The entrance hall has two exits — one on each side of the building — that is why the surface area of the rooms on the first floor (about 15 m²) is less than that of the rest of the floors (18-19 m²). The living rooms and bedrooms are 3.28 m high. The building has brick load-bearing walls and cast-in-place concrete floors with metal joists.

From the 1920s till the first half of the 1930s, housing estates similar to Kharkov residential combine buildings were constructed in numerous Central European cities. However, their funding was provided from municipal budgets. Such was the case in Warsaw, Vienna (during the so-called *Rotes Wien* (Red Vienna period, when socialists formed the Vienna municipal government), and in other cities. Those were affordable housing complexes with different sets of social and consumer service providers, as well as with large courtyard parks that often took up whole neighbourhoods. Magazine and journal publications of the second half of the 1920s suggest that, during this period, foreign and Soviet architects shared their experience in the field of municipal construction²⁵.

In the late 1920s and early 1930s, cooperative residential buildings for the employees of state departments were built overall in the downtown area, mainly in Nagornyj (Upland) district. The so-called Kommunar (Communar) building was erected on Girshmana Street for the members of the Council of People's Commissars (the Government of the USSR) by arch. A. V. Linetskiy and V. I. Bogomolov, 1929-1932 [Fig.14]. The development and execution phases were carried out by the Ukrpaystroy and funded by Kommunar cooperative building society. On the plan, the building looks like a horseshoe; it has 10 stairwells and 50 three- and four-room flats. Seven-storey towers flank the semicircular courtyard. Eight stairwells of the five-storey part of the building face the courtyard. The seven-storey parts are equipped with lifts (stairwells No. 1, 2, 9 and 10). The building has brick load-bearing walls and wooden floors. The semi-basement floor was designed to house a boiler room and a coal storage room, as well as a laundry in the right wing of the building. The rooms for doorkeepers were situated in the basement.

The more comfortable flats were designed for party officials and government employees, as well as for the senior executives of institutions, organisations,



[Fig. 19] Layout of Kharkov city in 1929. Source: scheme by arch. V. Ponomarev (Kharkov, "Kharkivproject" Institute).

and state industry plants. Such flats are located in residential buildings Krasnyj Bankovets (Red Bank Employee) on Artema Street (arch. V. A. Estrovich, 1928), Malyshev on Pushkinskaya Street (arch. G. A. Yanovitskiy, E. A. Lymar, 1931 [Fig.15]), for former political convicts on Girshmana Street (arch. N. M. Podgornyj 1935), for the employees of the Southern Railway on Privokzlnaya (Railway Station) Square (arch. A. N. Beketov, 1925-1936), Tsegelnik (Brickmaker, arch. P. I. Frolov, 1929), residential building for the employees of the Supreme Council of the National Economy on Pushkinskaya Street (arch. N. D. Plekhov, A. A. Tatsiy, A. G. Postnikov; engineer A. S. Vatsenko, 1931-1933), Voenved on Sumskaya Street (arch. V. P. Kostenko, 1928) and many others.

Flats for workers and technicians were erected closer to their place of work and were characterised by more economical design solutions. One of the first examples of such kind of buildings is Krasnyj Luch (Red Ray) for the workers of Elektrosila-1 on Moskovskiy Avenue (graduate of Vkhutemas, the Higher Art and Technical Studios), by arch. G. G. Vegman, 1929-1930. Krasnyj Luch is the example of the logical constructivist architecture in residential building [Fig.16]. The complex consists of four- and five-storey buildings of laconic architecture. The floors are 2.6 m high; no lifts were installed. Small flats (one of the first examples of flats with minimal surface area) have a compact layout (for instance, the entrance to the bathroom is through the kitchen). There are two or three flats on every floor. The rooms are 10 to 15 m², and each flat has a water closet and a kitchen.

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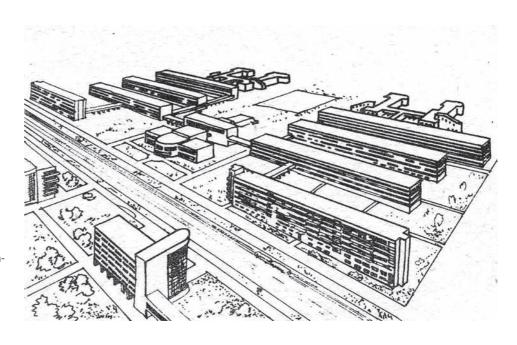
El legado de la vivienda masiva moderna Modernist Mass Housing Legacy

CATHERINE DIDENKO ALEXANDER BOURYAK NADIIA ANTONENKO

Residential Housing in Kharkov (Ukraine), 1920-1935

[Fig. 20] Novyj Kharkov (New Kharkov) residential combine, 1930-1932, group of architects under the supervision by professor P. F. Aleshin). Source: prof. A. Bouryak's personal archives.

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Socialist city ("Sotsgorod") as the reflection of the social and industrial system of the USSR

The socialist city concept was being formed in the period from the 1920s to the early 1930s simultaneously with the wide implementation of 'residential combines.' It was during this time that the 'socialist reconstruction' was launched. The subsequent idea of the 'socialist city' was, to a considerable degree, the translation of the successful living organisation scheme of the residential combine into the spatial scale of the whole city. The present decade is marked by the increasing interest among Modern movement researchers in the phenomenon of the socialist city, as well as by the general interest in the organisation, content and results of architectural activity in the context of the centralised administrative management and complete governmentalisation of the design system as a whole. The most characteristic examples of this area of research are the works by B. Yerofalov²⁶, D. Khmelnitskiy²⁷, M. Meyerovich²⁸, I. Kazus²⁹, Yu. Kosenkova³⁰, as well as G. Andrusz³¹, V. Buchli³² and others.

The *sotsgorod* concept (socialist city) became the methodological foundation for the creation of reconstruction master plans and for the unfolding of the large-scale rebuilding of Soviet cities³³. One of the first was the plan for the socialist reconstruction of Kharkov. Created in 1931-1932 under the supervision of arch. A. M. Kasyanov and the head of Kharkov Giprograd Institute (research and planning institute in the field of spatial and urban planning) professor A. L. Eyngorn, this master plan determined the city development pattern for decades. Unlike a 'normal' new European city [Fig.17] that is characterised by planning and development based on local community initiatives, the socialist city in the system of Soviet communism [Fig.18] was regarded as a cog in an integrated manufacturing machine of 'people economy' and, consequently, was itself a manufacturing unit. It was the Soviet state who posed as the main economic entity of the country, the major priority of which was expanding production capacity while applying the principle of national budget saving.

Furthermore, the city was understood as one of the economic mechanisms that maintain the closed cycle of reproduction. The socialist city tissue became an infrastructural mechanism of the production system. It included residential and functional patterns of distribution i.e. trading and customer service in social and consumer spheres (public health, public catering, utility services), as well as in social and cultural spheres (entertainment, sport, education). The traditional central points of urban life — local, ethnic, and religious communities, clubs for social



[Fig. 21] Residential house on Mira Lane, 1930-1933. Source: photo by K. Didenko.

groups and urban subcultures, churches, synagogues, mosque and so on — were replaced in the socialist city with technologized forms of leisure organisation such as factory and plant clubs, branch-specific palaces of culture, and pioneer palaces. Vocational colleges, technical schools, and higher educational establishments were also branch-specific. They were located mainly near the corresponding plants and factories.

The creation and functioning of socialist cities were managed by the political superstructure that operated on behalf of the state through party structures, government authorities, city councils and their corresponding committees. There was no alternative for such centralised government because resources of all types — financial, natural, human — were under absolute party and state control. Design criteria were derived from neither architectural nor urban planning spheres but were predetermined by external factors — resources of the distribution system, military plans, money supply, and equipment of the industry sector³⁴.

At the same time, both location and scale of residential building in the socialist city were determined by social and political, as well as ideological considerations even more than by the economic one. The social system stability was ensured by the state system of wealth distribution, in which residential space became one of the main tools for manipulating the population. While social equality was professed, an elaborate system of social hierarchy was quickly formed in the Soviet society. De facto, participants of the socialist construction in both manufacturing and managerial systems were unequal, and residential housing accurately mirrored this inequality. The social stratification in the USSR was almost as rigid as the social class division in the pre-revolutionary Russia.

Soviet residential architecture preserved clear evidence of the above. The quality of architectural solutions, the difference in the level of comfort, and, finally, the location of the residential buildings and complexes are direct indicators for determining the social group they were construction for. Deviations from this logic could appear in the turmoil of the new society formation, but the subsequent social functioning consistently rectified them. For instance, in Sokol village in Moscow, which was there an attempt of garden city realization, the cottages that had initially been built for workers were gradually redistributed to the intellectuals.

In Kharkov while it was the capital, the buildings erected for the highest ranking communist executives were, as a rule, equipped with lifts; there was a kitchen, a water closet and a bathroom in every flat. In Dom Spetsialistov, for instance, there were even valet rooms. The flats had, generally, from three to five rooms. The design of the modest-looking four-storey residential building for the members of the Political Bureau of the Central Committee of the Communist Party (Bolsheviks) of Ukraine on Krasina Street included not only lifts but also back entrance staircases and militia (Soviet police) lodges instead of concierge desks at every entrance. Housing estates for workers were constructed outside the central part of the city and were characterised by more modest living conditions. As it has already been mentioned above, there were no lifts in Krasnyj Luch building. Furthermore, flats there had mostly two rooms that were smaller than those in Nagornyj district buildings. The buildings in the residential combine Novyj Kharkov (New Kharkov) (also called HTZ - Kharkov Tractor Plant - socialist city, later HTZ village) not all flats had kitchens because the project included the construction of a network of cultural and consumer service providers on the territory of the estate and, among other buildings, a kitchen factory.

The transition in the construction works in the capital to the new urbanistic scale also determined a fundamental withdrawal from the morphology of neighbourhood

34 Косенкова Ю.Л. Градостроительное мышление советской эпохи. Поиск устойчивых структур // Вопросы теории архитектуры. Архитектура и культура России в XXI веке: сборник научных трудов и докладов на Четвертых и Пятых Иконниковских чтениях. – М.: URSS. С. 359–369.

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housing development. The shift can be perceived in the evolution of the residential combine design in the new downtown of Kharkov: from the perimetral building pattern of Krasnyj Promyshlennik to the passable perimeter of Dom Spetsialistov, and, finally, to the unconnected parallel buildings of Novyj Byt.

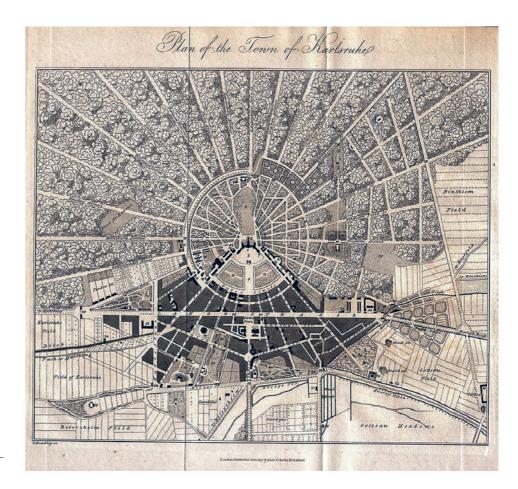
Centric, in fact, classicism-like layout of the governmental centre – compare with [Fig. 22, 33] – is replaced with clearly modernistic design of the new industrial area situated on Moskovskiy Avenue — Kharkov 'linear city.' There, industrial sites and large housing estates with service providers are built in parallel bands along transport routes that were laid in the green area of sanitary protection [Fig.19].

The largest of these estates was that of the residential combine Novyj Kharkov, erected in 1930-1932 for the workers of the Kharkov Tractor Plant on the territory where Losevo village used to be (also called HTZ socialist city). The design was developed by a group of young architects under the supervision of Professor P. F. Aleshin in the design office of the NKVD. Novyj Kharkov was planned as a satellite town of Kharkov with the population of 100-120 thousand people. It was supposed to be relatively independent of the capital. The neighbourhoods of the new residential estate were 'lined' with four-floor flat-type residential buildings [Fig.20]. It was planned to connect them at the second-floor level via passages with heating (the plan was not implemented). All second floors were planned for various service providers. Behind the residential buildings were located two-storey buildings of kindergartens that were also initially designed to be connected with the residential buildings via passages with heating. The district club was located in the centre of the housing estate, which, too, was to be passage-connected to the residential buildings to form a unified space. There were schools, club-canteens, hospitals, bathhouses, laundries and cinemas nearby. In the main building of the club, as well as in kindergartens, staircases were substituted with ramps.

Within a short period of time, eight halls of residence, twenty-eight four-storey residential buildings with four or six stairwells, and two large four- and five-storey buildings, as well as buildings for social, cultural, and customer service providers, were erected in the area between Mira and Vtoroy Pyatiletki Streets, Frunze Avenue and Mira Lane. The halls of residence are seven-storey corridor-type buildings without lifts. There are one or two kitchens and the same number of sanitary units with toilets and showers on every floor. The four-storey buildings are more comfortable; there are four two- or three-room flats on every floor in each of the four or six stairwells. They have water closets and bathrooms but no kitchens. The floors are 2.7 m high (and 3 m from floor to floor of the next storey). Nonetheless, flats differ in the degree of comfort and, consequently, also differ in their surface area.

The residential building at 20 Mira Street was erected in 1930-1933 [Fig. 21]; it consists of four- and five-storey units. All in all, it has 38 stairwells and 288 flats. The flats have two, three, or four rooms, as well as full-sized kitchens and water closets. The surface area of two-room flats is about 60 m^2 , three-room flats are about 80 m^2 large; the ceilings are three metre high.

The building at 191 Moskovskiy Avenue consists of T-shape units each comprising two parts that are shifted in respect of one another by half a storey. It allowed to separate one of the parts into an individual volume and make it five-storey, thus, increasing the number of flats in the buildings. Five-storey parts face the courtyard; living-room and bedroom windows of the four-storey units overlook Moskovskiy Avenue or Beethoven Lane, whereas kitchen, bathroom and water closet windows overlook the interior part of the neighbourhood (as in Slovo building).



[Fig. 22] Plan of Karlsruhe city centre (Germany, XVIII century). Source: http://www.karlsruhe-antiquarisch.de/Plane_/Plan_of_the_Town_of_Karlsruhe_/P5150920-2.JPG.

Conclusion

Socialist city as a new form of urban lifestyle formed mainly in the late 1920s. In the 1930s, it became widespread ubiquitous in the USSR, and Kharkov, as Ukraine's capital, was one of the first ranges, where it was experimentally tested. This model continued its existence in the post-war time as well. While official style clichés were successively changing (Constructivism — Soviet Art Deco of the 1930s — post-war triumphant 'Stalin Style' — Neomodernism of 1955-1975), the socialist city model underwent significant morphological changes, which, nonetheless, did not alter its fundamental social functional meaning.

Post-war Soviet 'town building'³⁵ inherited both key concepts of residential architecture of the 1920s-1930s — 'residential combine' and socialist city. Housing estates, structurally similar to the 'residential combines' of the new Kharkov downtown, were used in the after-war city reconstruction for construction works on the main streets and in historic areas. In essence, Moscow high-rise buildings of the early 1950s in their functional aspect are also modifications of the before-war residential combines for the privileged residents.

After 1955, when the Soviet state promoted simplification and alignment of design methods and construction industrialisation, the socialist city that took the shape of standard-design residential areas together with large-panel housing technologies became firmly established in the Communist bloc countries, as well as in a number of 'third world' countries that were under the Soviet influence.

Mass residential housing that appeared in the USSR in the 1920s made an imprint upon the lifestyle and the architectural appearance of all Soviet cities and towns. The majority of urban population on the post-Soviet territory still live in the wreckage of the socialist city. This fact alone makes research into its genesis essential not only for understanding the meaning of the Modernist architecture history but also for exploring ways of future socially responsible urbanism.

35 Management approach that perceives the city as an architectural creation of the utmost scale; 'town building' (rus. gradostroitelstvo) is equally far from the Western city planning that applies economic and sociologic methods for managing spatial development, and from urban design, the integral part of which are participation programmes, i.e. people participation in design decision-making. Contrary to popular belief, a town building cannot be considered as a purely Soviet phenomenon because such twentieth-century urban experiments as L. Costa and O. Niemeyer's Brasília or Le Corbusier's Chandigarh are marked with distinctive characteristics of the town building approach.