

# 1. The Future of Modernist Housing

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## The Housing Question

In cities, almost no topic is as intensely discussed as housing. The attractiveness of cities and the resulting steady influx of new residents have led to shortages in the housing supply. Above all, there is a lack of affordable accommodation. The higher demand has led to tensions in the low-price segment of the housing market, which, in turn, have led to an increase in rent burden for lower- and middle-income groups. The need to build affordable housing is also a topic of intense discussion in the large cities of Germany, Russia, and Ukraine. The release of formerly state-owned and communal housing onto the private market, exploding rent prices, and a lack of new construction cumulatively mean that inhabitants are becoming increasingly worried about having a roof over their head.

In Germany, some initial steps have been taken by public administrations and politicians to cope with this problem. These steps include the (re-)establishment of municipal housing associations, testing and initiating new models for allocating and developing land, and a great deal more. Housing cooperatives have become popular again. But further steps must follow. Above all, local communities face the task of building new dwellings that meet the needs of the population. This requires proposals for innovative concepts of use, innovative building types, and innovative architectural design concepts. In addition, the development of inclusively designed residential space in cities must be addressed. Moreover, issues of housing are always a political and social question that must be answered in a differentiated manner in view of the divergent situations in each city.

*Figure 1: Mass housing district “Kupchino,” St. Petersburg, Russia.*

*Figure 2: Microrayon Nr. 7, Sayansk, Russia.*



Source: Barbara Engel.

The shortage of residential space in many large cities and the question about how this can be alleviated takes us to the existing large residential housing estates. These settlements are of great significance when it comes to providing living space for broad sections of the population now and in the future—after all, millions of people live there. The situation on the housing market in the large housing estates of former East Germany has changed enormously in the past years. While demolition was still being propagated in many places some years ago and, at the same time, numerous incentives were created elsewhere to encourage people to move into large housing estates, attention is now focused on refurbishment, and even the potentials of densification are evaluated and tested as new buildings are erected to secure and further develop the existing housing stock (see Grunze 2017: 233).

In Russia and Ukraine, the housing situation in the large residential estates is different—vacancies in large housing estates never played a role to any relevant extent. Instead, a demand for further development still exists: due to the low average living space per person, which in Russia is less than 18 m<sup>2</sup> (Maslennikov 2019) and in Ukraine is less than 14 m<sup>2</sup> of floor area (State Statistics Service 2018), more living space is needed. However, in Russia and in Ukraine, the residential neighborhoods that were built in the 1950s and 1960s face a great deal of criticism. Many of these buildings, which were constructed across the entire territory of the former Soviet Union and in former Eastern Bloc countries, urgently need refurbishment. Today, investors see the opportunity to make large profits in areas with moderate building densities by

adding high-rise buildings or even by replacing existing buildings with denser urban structures. Demolition programs designed to eliminate the existing residential stock in large housing estates have already been set up by the state in many cities (Lovkin 2016). In Ukraine, the housing supply situation is worsening. After independence was declared in 1991, a gradual process of mass privatization got underway. In a housing sector that was already struggling with shortages of available housing, the demand for housing rose as a result of further stimulation due to urbanization (see Durmanov 2010). This has been exacerbated by the bad state of the housing infrastructure. More and more people are living in informal and illegal circumstances. This also gives rise to the question of how large housing estates from the Soviet era can be altered in such a way that they can contribute effectively to the housing supply (see Bibik and Dril 2017).

*Figure 3: Self-constructed additions to enlarge the living space in Cheryomushki, Odessa, Ukraine.*

*Figure 4: Entrances in a mass housing district in Kharkov, Ukraine.*



Source: Ekaterina Gladkova.

Source: Nikolas Rogge.

Large housing estates potentially have a valuable role to play in providing housing. The dwellings there are highly adaptable, making them suitable for designing a living environment with few barriers. Additionally, the estates have a high proportion of open spaces, which becomes increasingly relevant when thinking of climate-resilient neighborhoods. They offer extensive and varied housing options and living conditions that are interesting for different groups in the population. In addition to comparatively low rents, the com-

prehensive range of existing amenities and services that the estates offer are very important for certain types of households (see Altröck, Grunze, and Kabisch 2018: 5). At the same time, the districts require extensive renewal and improvement to make them capable of responding to new societal, functional, and technical needs. It is necessary to make technical improvements to the aging building stock, to expand the mix of dwelling types and offerings, and to create an attractive environment. The requisite renovation strategies necessitate measures at different levels and different scales—including an improvement of the spatial-structural organization and orientation, a redesign of the open spaces, and new mobility concepts and services. Additionally, planning strategies and instruments, regulations, and laws must be adapted.

*Figure 5: Self-constructed parking between tree stumps in Cheryomushki.*



Source: Nikolas Rogge.

## Trilateral Scientific Cooperation

*The military conflict in Ukraine in 2014 have had a severe impact on the political situation in Europe and prompted the Volkswagen Foundation to launch a call for trilateral research proposals in order to strengthen the cross-border cooperation among scientists and scientific institutions from Germany, Russia, and Ukraine through a unique funding measure and thus contribute to rapprochement, confidence-building, and understanding in the region.*

The research consortium from Germany, Russia, and Ukraine—professionals from Karlsruhe Institute of Technology, Siberian Federal University Krasnoyarsk, Irkutsk National Research Technical University, Kharkiv National University of Civil Engineering and Architecture, and Odessa State Academy of Civil Engineering and Architecture—received the first research grant for the period from 2016 to 2018. The objective of this trilateral project was to understand large housing estates from the 1960s and 1970s in terms of their sociopolitical and cultural aspects as well as their current status. Previously implemented concepts of transformation were analyzed, critically reflected in trilateral comparison, and brought into a wider context. Evaluation of individual experiences was aimed at generating an impetus for further urban development of these neighborhoods and for improving planning methods and strategies. Exceptional research was conducted that not only reached scientists but also had a strong impact on the communities themselves and the inhabitants of the housing estates.

Based on the first project, which had laid a solid theoretical foundation, in 2020 the research team received the grant in a second call for proposals with its project “The Future of Modernist Housing: Living Labs Socialist City,” which focuses on the topic of housing in large housing estates. The utilization of large housing estates as a valuable resource for the future housing supply in cities requires innovative and practicable strategies and concepts. Promising approaches to solutions for sustainable redevelopment can only be developed through dialogue between the academic community and practitioners from the realms of politics, business, and civil society.

The broad range of different types of large socialist housing estates, with their specific spatial and sociocultural residential qualities and their symbolic connotations, have received very little consideration and discussion to date. Spatial studies have often failed to place their results within a social context that would have made it possible to perceive and assess the role of the inves-

tigated large housing estates with regard to their instrumental, sociocultural, and economic framework conditions as well as the requirements of the city. Economic research often does not show the spatial impacts or significance of regulative decisions and interventions made at the economic level.

*Figure 6: Selforganized private gardens in Kharkov, Ukraine.*

*Figure 7: Parking garage beneath a yard after renovation, Dresden, Germany.*



Source: Ekaterina Gladkova.

Source: Nikolas Rogge.

The core question dealt with by the project was how the existing living space in prefabricated settlements can be secured for the future and further developed in a sustainable manner. The aim was to map out the spatial qualities and deficits of the housing estates—in terms of both the living space and the residential environment—in order to develop recommendations for action on this basis. How can the often monostructural estates be altered in order to turn them into lively, socially, and functionally diverse districts? How can spatial and cultural identities be reinforced? What potentials for densification can be identified and where must open spaces be secured as important supplementary living spaces? How can existing buildings be converted so that the character of the estates remains intact? How can the existing buildings be altered so they meet today's living standards? Can large housing estates, based on their standardization, serial production, and rationalization, also play an exemplary role for new, future residential construction projects? Envisaged key components of the research project were two living labs that were to be established in two selected housing estates in Irkutsk (Russia) and Odessa (Ukraine), where

research was planned to be done “on site,” accompanied by an ongoing dialogue with the different stakeholders.

As part of the research project, the conference *Dialogue on Large Housing Estates: Experiences and Perspectives* was organized in April 2021 to set the conceptual frame and foundation for the project. The conference discussed the topic of living in large housing estates from an interdisciplinary expert perspective. In three thematic sessions, various perspectives on the situation and prospects for the sustainable development of large housing estates were presented and discussed. The constructional-spatial and design aspects of large housing estates were examined here—that is, the supply of dwelling typologies and manifold technical aspects—and the sociocultural, economic, and instrumental aspects were also taken into focus. By evaluating international housing projects, the aim of the conference was to gain insights that can be used for large housing estates in Russia and Ukraine.

The speakers and those taking part in discussions were experts and young academics from the disciplines of architecture and urban planning as well as open-space and transport planning, along with experts from the housing and real estate sector as well as politics and the public administration—from Germany, Eastern Europe, and other countries. The conference brought valuable information and insights. It was not meant to present final solutions, but to inspire and to give the opportunity to learn from each other, to exchange experiences, and to develop new ideas.

Not until 2022, after the conflict in Ukraine intensified, did our joint project come to a standstill. But we continue to believe that cooperation must prevail. Every author in this publication condemns the war, and we do not want to let politics dictate who we can work and be friends with. Despite the current political conflicts, the authors share a common understanding that the only way to a prosperous future is through cooperation and dialogue. Through active partnership, solutions can be found to the common problems that should be at the center of our striving.

contributions to the conference give an international perspective on the future of modernist housing that has scientific and practical significance for many countries, well beyond Russia and Ukraine. The book at hand documents the reports presented and thus reflects the international context of the prospects for modernist housing. By sharing the international experiences and the work elaborated during the conference, we hope that this publication will support the sustainable transformation of large housing estates and lay the ground for further collaboration in a peaceful future.

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