UTILITARIAN HERITAGE

Questioning current Debate on Socialist Mass Housing in Moldova, Armenia, and Uzbekistan

Sofia Borushkina, Marina Sapunova

ABSTRACT: While modern heritage is often discussed as a critical resource for sustainable urban and social development, the future of such housing is often limited not by technical but rather by cultural, historical, or socio-economic constraints. In cities with a socialist past, mass housing provided individual apartments for a number of Soviet families and tended to create particular spatial qualities. However, with the collapse of the socialist system, attitudes towards such housing began to transform. This paper is a reflection on the range of perceptions of this heritage, attitudes towards it, and difficulties in shaping contextually informed renewal policy approaches. To what extent do traumatic experiences of the past and the rational use of resources in the present mutually influence each other? This article introduces the controversial debate based on the cases of three former socialist countries: Moldova, Armenia, and Uzbekistan. On the one hand, the ubiquity of mass housing in post-socialist countries fostered tolerance for such a typology. On the other hand, large housing estates are a constant reminder of the traumatic experience of the socialist experiment. This essay discusses the present and the future of large residential estates based on reports, policies, media, and collected expert interviews on approaches to working with mass housing areas. Together, the three contributions and joint reflections attempt to add to the debate about the past, present, and future of middle-class mass housing in various social, cultural, and political conditions.

KEYWORDS: Mass housing, urban renewal, post-socialism, Soviet legacy, housing heritage

INTRODUCTION: The history of Socialist mass housing has taken a variety of trajectories depending on the local policy objectives, social approval, economic constraints, and governance model. This study expands the research perspective of modernist Soviet mass housing, which is simultaneously a living heritage, a tangible reminder of a troubled past, a dominant urban landscape, an asset, and simply a place people call home. Drawing on the cases of Moldova, Uzbekistan, and Armenia, this essay attempts to locate the role of Soviet-era mass housing in the present. Highlighting both commonalities and regional variations of housing estates in three countries, this research challenges the "monolithic" understanding of Soviet mass housing, especially in its current state and interpretation. The specific objective of this paper is to establish preliminary insights into the possibilities and limitations of mass housing renewal projects in countries with a Soviet past and state-dominant mass housing development.

Researchers have repeatedly emphasized the difference in the status, attitudes, and prospects for the revitalization of mass housing in the former Eastern and Western blocks (Monclús & Díez Medina, 2016; Rowlands et al., 2019). However, there are also considerable differences within countries with a socialist past. While perspectives on socialist-period mass housing are a relatively well-developed topic for many Central and Eastern European countries (Herfert et al., 2013; Hess & Tammaru, 2019), a number of countries with a socialist past tend to remain outside the core of research interest. Since the focus of this special issue is Europe's mass housing, Moldova is chosen as the central subject of the paper.

Geographically a European country, Moldova nevertheless remained on the periphery of European attention for a long time and was granted EU candidate status only in June 2022. In this article, the perspectives of Soviet-era mass housing in Moldova will be examined in parallel with

two other countries with a socialist past and Soviet residential heritage: Armenia and Uzbekistan. Over the past thirty years of independence, the former Soviet countries, on the one hand, still share the significant common trauma of Bolshevik rule. On the other hand, each has accumulated a self-governed experience of housing reform. In addition to a common past, these countries have only recently started to face the problems of aging mass housing due to a relatively late period of construction. Geographically located outside of Europe, Armenia and Uzbekistan share the same challenge of working with Soviet-era built-up areas as Moldova, allowing us to draw parallels and give broader insights into the housing legacy issue.

The research engages a comparative case study analysis as the primary method and analyses policy initiatives, public discussions, media publications, and expert opinions on the topic of the possibility and necessity of working with Soviet-era mass housing in the respective country. An important primary data source was a series of expert interviews held at the end of 2022 and the beginning of 2023, which supplemented and verified the information obtained from various sources. This paper is structured as follows: first, it provides factual information on the state of Soviet-era mass housing in Moldova, Armenia, and Uzbekistan, then it juxtaposes current debates on such housing in each country and concludes with preliminary insights and critical trajectories for the future research.

MASS HOUSING LEGACY: FACTS AND FIGURES

All three countries have been under Soviet rule and influence for decades. The Moldovan Autonomous Soviet Socialist Republic was established in 1924; in 1940, the Soviet Union annexed Bessarabia to form the Moldavian Soviet Socialist Republic. Armenia was incorporated into the Union of Soviet Socialist Republics, USSR, in 1922; in the early 1920s, Uzbekistan was formed as a Soviet member state. Despite significant regional variations in housing policy and provision during Soviet rule (Andrusz, 1990), the ideas of egalitarianism, distribution, unification, and an industrial approach to housing highly influenced cities in Armenia, Uzbekistan, and Moldova. After the 1950-1970s, mass panel housing became the dominant type, assuring a social contract with the population on the housing provision. In the post-Soviet period, all three countries announced privatization programs, transforming them into a 'super-homeownership' system (Stephens et al., 2015), with an average of 90% of the private share in apartment buildings. Today, more than thirty years after the collapse of the USSR, Soviet-era mass housing still dominates the urban landscape in the cities.

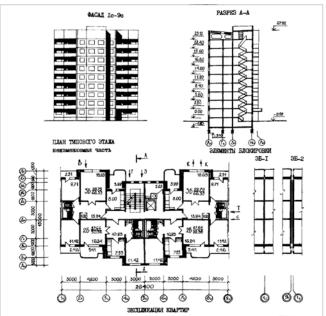
The housing stock in these three countries is characterized by a low age of residential buildings compared to

Western European countries: for example, in Moldova, it averages only 38.1 years (Cujbă et al., 2020). In the case of Moldova, massive housing construction began in the 1960s and accelerated towards the end of the Soviet period (UNECE, 2002). A great deal of older housing stock was destroyed in WWII, while only 13% of the housing stock in Moldova was built after 1990 (Sîrbu & Cujbă, 2022). A similar pattern can be observed in Armenia: the loss of historic buildings due to earthquakes and demolitions, huge housing additions during the Soviet era, and less construction activity after the transition period. About a third of all existing housing in Armenia was built in the two decades of 1951-1970 and nearly half in 1970-1990 (Statistical Committee of the Republic of Armenia, 2021). Approximately every second apartment in Yerevan and every fifth apartment in Armenia is in a panel building (UNECE, 2017). In Uzbekistan, the rate of mass housing construction during the Soviet era increased gradually and reached its peak in the two decades of 1971-1990, when about half of all housing built under Soviet rule was commissioned (UNECE, 2015).

Soviet-era multi-family housing in these countries consists mainly of large standardized housing estates built between the 1950s and 1980s. The state controlled the production cycle from design to construction, financing, and housing distribution. To make construction cheaper, an extensive network of design institutes and factories for producing prefabricated constructions was formed throughout the USSR during the same period. In each of the three countries, plants for the mass production of prefabricated panel elements were suited to local needs. The most common type series from the Soviet period were residential buildings of four to five stories (mostly 1950s-1970s) and nine stories (mostly 1970s-1980s) with apartments typically ranging from one to four rooms. The layout was often compact, with a small kitchen and shared bathroom. Only in the last series in the 1970s did the kitchens increase to eight to ten square meters, and the bathroom became separate. The design prioritized cost and speed of construction.

Soviet mass housing construction in Moldova consisted of the Khrushchev series¹ of four to five-story buildings until 1962 (311 and 464) with one to three-room apartments with a total area between 30 and 60 m², including a kitchen of 6 m². Together with the updating of building codes in 1962 and later in 1969 and 1981, the series 5-9 stories and 9-14 stories appeared: 102, 1-464MS (B), 135, 143 and 92MSB (Ginsar & Isichko, 2009). Among the most sought-after layouts today is series 143 [FIGURE 01], a 9-story multisectional series with apartments ranging from one to four rooms, including a large balcony, separate bathroom, and kitchen from 8 m². The total area of





11 The 9-story residential series 143. Typical facade on Mircea cel Batran bd in Chisinau (left, adapted). © A. Murvanidze, 2010 via Wikimidea Commons. Plan and section as developed by Moldgiprostroy in Chisnau in 1982. © TSITP Stroitel'nyy katalog, 1982, p. 35-38.

the apartments varies from $36-39 \text{ m}^2$ for a one-room unit and 88 m^2 for a 4-bedroom m^2 .

Although mass housing in the Soviet Union was largely standardized, regional variations are often underestimated (Drėmaitė, 2019; Erofeev, 2019). The best illustration is the capital of Uzbekistan, Tashkent [FIGURE 02], which became a field of housing experiments during post-earthquake housing reconstruction (Glendinning, 2021). More than anywhere else in the USSR, Uzbekistani serial housing expressed local identity in the planning and facade solutions (Meuser & Zadorin, 2015)—a style later termed "seismic modernism" (Meuser, 2016). Uzbekistan's common residential series were the four-story multisectional 1-310i/64, 1-310TSP [FIGURE 03] with extended apartment typology and kitchen size up to six m2, and later in the 1970s, multi-story P-3, P-44, K-7 series were introduced. The average size of apartments built in Uzbekistan was 20% larger than the USSR average (Pilipenko, 2022) due to higher average household size (45% of families with five or more people). In the Armenian SSR, the average apartment size was 14% larger than the USSR average, and in the Moldovan SSR, it was 5% larger (Pilipenko, 2022).

Armenian mass housing is unique in its adaptation of typical housing series by local architects (Safaryan & Safaryan, 2020) and use of local materials for facade cladding (Ivanov, 2020). Here, mass-housing construction began with the five-story 1-450 series and its variations with on-to-three-room apartments, a small kitchen of 5-5.5 m², and a combined bathroom. From the 1970s, block-section series of four to nine stories, including the A1-451 KP series and multi-section series 129 and 111, were developed with summer rooms, loggias with kitchens, and common room access. (Azatyan et al., 2014). However, due to the shortage of living space, summer rooms often become a way to increase living space through glazing [FIGURE 04].

Physical deterioration of buildings is the most critical problem of Soviet-era housing: during the transition period, the maintenance of buildings and infrastructure was severely underfunded (Stephens, 2005). For example, according to a 2010 survey, more than half of the apartment buildings in Chisinau have not had major repairs for 35 years, resulting in average wear and tear of over 65% (Primăria Municipiului Chișinau, 2010). In addition,





02 Variations of mass residential series in Toshkent (left: Afrosiyob street, right: 13th block of YunusAbad), Uzbekistan. © E. Gladkova, 2023.



03 Typical section of a 4-story residential building in the Chilonzor-11 neighborhood, Tashkent, Uzbekistan. © E. Gladkova, 2022.



04 A mass residential building in Yerevan with an added top floor and individually glazed balconies. © M. Karaselnikova, 2022.

Soviet-era apartment buildings are often subject to semi-legal self-extensions and infill development. This adaptation of post-Soviet housing areas is, in many ways, not simply a squatting of public space but has far more severe risks. In Armenia, particularly in an earthquake-prone region, self-construction poses a physical threat to people's lives. However, only 20% of the apartment buildings in Yerevan could withstand severe seismic risk, another 60% could be strengthened with additional measures, and another 20% are unsuitable for use in terms of seismic resistance (Japan International Cooperation Agency, 2012). The physical obsolescence of buildings raises concerns about the future of Soviet residential neighborhoods.

However, the problems of physical obsolescence of buildings are not the only determinants of the future of Soviet mass housing estates. The approaches toward large housing estates, even of comparable characteristics, are largely contextual (Hess et al., 2018). Preservation, reconstruction, demolition, or any other action depends on society's attitude toward the Soviet past, involving a complex and sometimes shifting perception of the Soviet legacy. For example, in Tartu, large housing estates are becoming less popular among Estonian speakers who seek to leave such areas (Leetmaa et al., 2015); in Riga, large housing estates are understood as "a troublesome legacy of the previous period, which has become a reality in the housing situation of a significant part of the population" (Treija & Bratuškins, 2019). An even sharper example is the contradictory public perception of Soviet housing areas being destroyed during the urbicide following the Russian invasion of Ukraine (Ilin, 2022). The complexity of dealing with the past dictates a broad spectrum of actions concerning the mass housing renewal today, from ignoring the problem of an aging stock and encouraging new development to the financially unsecured debate on the total replacement of the old mass housing.

The Soviet housing legacy, as well as reflections on the Soviet period, its tragedies, and achievements in all three countries under consideration, have never been unidirectional. While the politics of memory of Communism after 1989 in Moldova have been quite ambiguous (Caşu, 2015), studies show that the Moldovian urban society gradually re-orients toward national ideals, sidelining socialist and Soviet heritage (Axenti, 2017; Romanova, 2021). The physical and perceptual transformations of public spaces in Yerevan indicate that the re-evaluation and reinterpretation of the Soviet past are also taking place in Armenian cities (Grigoryan & Margaryan, 2018). The de-Sovietization of urban space also took place in the cities of Uzbekistan; however, the official interpretation of Soviet history does not always match the citizens' understanding (Tsyryapkina, 2020). In this regard, the housing heritage is juxtaposed between Soviet state-led ideology and control over private life (Меерович, 2008) and the ensuring of living space for the population. This contradiction critically reflects residential heritage values before the fork of its utilitarian qualities and collective memory.

MASS HOUSING TODAY: PERCEPTIONS AND DEBATES

After analyzing policy documents, existing renewal and planning strategies, reports, and media and talking to experts in the three countries, the key takeaway is that modernist mass housing is primarily recognized much more as a legacy of an enormous financial burden to deal with in the upcoming years than as a heritage. First, to financially ensure maintenance, second to renew the infrastructure, and then to improve the energy efficiency of the existing housing estates. At the same time, Sovietera mass housing is not much represented as a separate entity in the daily public debate. The non-critical level of physical deterioration allows the authorities to postpone large-scale interventions. The place, role, and market competitiveness of such housing nowadays rather depend on how much the preferences and requirements of families have changed, the condition of the buildings, and what alternative housing market is currently being offered.

Due to the over 90% of privatization rate, the owners of the apartments are primarily responsible for their maintenance. However, capital repair programs in these countries, as in many other post-Soviet countries, are hampered by irregular fees, a "poor home-owner" problem (Van Assche & Salukvadze, 2012), and the inability of the state to fully secure owners with financial support to maintain their homes. This encourages a process of piecemeal replacement [FIGURE 05] of front doors, windows, balconies, and roof fragments, making houses look like a patchwork, depending on the taste and wealth of the owner. In Armenia, household size and multigenerational

05 5-story apartment block with additional windows, additional balconies, and an upper floor in the central district of Yerevan, Saryan street.

M. Sapunova, 2023.

family type force owners to invest more quickly and frequently in residential extensions (Sargsyan, 2013), while income inequality deters the purchase of an additional apartment. In this self-organization, however, a process of re-establishing private and public (shared) space between neighbors in the neighborhood and owner and municipality responsibilities is evident.

In Moldova, the mass housing of the Soviet period is not homogeneous in quality, so its attractiveness to residents varies. Despite the recent construction boom observed in Chisinau, housing in Soviet panel buildings is still considered an acceptable and reliable choice. Moreover, families adapt apartments to their needs by building attics, vertically and horizontally combining apartments, and arranging separate entrances [FIGURE 06]. These "improvements" have led further away from the standard mass typologies towards customization. However, such Soviet buildings continue to retain a social mix since a two- or three-story luxury apartment can be found inside a relatively affordable uildingg. While the more traditional life in a detached house is seen as increasingly attractive in Moldova, mass housing, often well-located, is a kind of billet that owners can already tweak to bring closer to their dream dwelling. Consequently, the areas of mass housing are not stigmatized by local residents. Although local activists and heritage professionals pay increasingly more attention to modernist buildings, mass housing lies outside the discussions, even within professional circles. A Chisinau heritage specialist commented:

I don't feel that rebuilding such houses is any kind of threat to heritage. I guess it should be monitored by some emergency services, like the fire brigade, for example. But we, the heritage professionals, don't have much to do there.

A representative of the SaveChişinău association commented:

On October 19, 2022, we published an article calling for dialogue on possible approaches to the redevelopment of mass Soviet housing estates in Chisinau. It seems that this was basically the first attempt to talk about this in Moldova, apart from the development and real estate circles.

She concluded:

The article, however, generated a huge response. We didn't even expect this. It seems that the question of what will happen to these houses in ten or twenty years is gradually appearing in people's minds, but no one is ready to discuss it seriously yet.





06 Self-alteration of the facade of residential buildings in Chisinau, Ion Neculce street (left), Mihai Eminescu street (right).

© M. Sapunova, 2017.

A former Chisinau official confirmed:

There is no separate policy on mass developments—and there can hardly be one, as we have half the city living like this. Besides, they are all owners—let them deal with their problems if they have them. The city authorities have enough problems with transport and new development.

Soviet mass housing in Armenia is still the dominant type of apartment building, despite recent policies encouraging new development with mortgage support and tax refund programs (Baghdasaryan, 2019). New development does not influence Soviet-era housing renewal but leads mainly to the loss of more historic buildings (particularly in Yerevan). Soviet-era housing renovation stays mainly on the owners' shoulders, whose self-organization or individual micro-finance renewal projects do not become part of state programs for the renovation of built-up areas (Pilosyan, 2020; Stephens, 2005). A five-story Soviet-era building might give a family a sense of security due to its relatively low height and be a possible residential choice. However, Soviet-era housing is undoubtedly an aging housing stock, which is documented by reports calling for improved energy efficiency and seismic resistance.

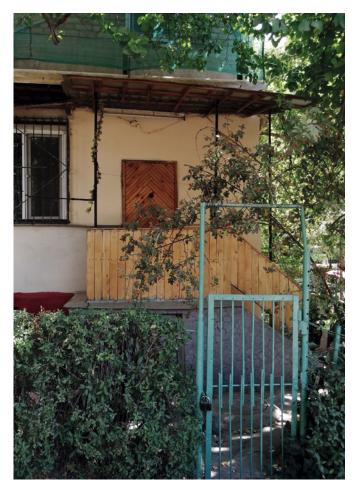
In interviews, experts raise the issue of housing renovation as an untapped potential that needs to be adequately assessed. It is primarily a question of choosing an efficient and financially secure approach. Current studies do not provide precise estimates of reconstruction costs and, more importantly, reliable estimates of the effects. The discourse on the cheapness of demolition compared to renovation is lost on home-owners, for whom the situation remains the same. The issue of gradual and soft renovation of built-up residential areas is nevertheless raised by experts who draw attention to the potential for the self-organization of



07 Small repairs and transformations of the shared entrance hall of a mass housing block (Yerevan) © M. Sapunova, 2022.

residents to transform their space. However, these transformations often stand outside the legal field or the joint agreements of society about the boundaries and re-evaluation of private and shared space [FIGURE 07].

In Uzbekistan, in turn, both Soviet mass housing and contemporary high-rise housing are rather opposed to the more traditional neighborhood of mahalla (traditional housing) (Dadabaev, 2013). When choosing where to



38 Self-adaptation of the ground floor of one of the Soviet housing series with the organization of a separate entrance to the apartment, taking over part of the adjacent communal territory, and rearrangement of the balcony. (Tashkent, YunusAbad -14). © E. Gladkova, 2022.

live, families are more likely to choose either a more individualized and Europeanized lifestyle in an apartment building or a more traditionally rooted low-rise mahalla. Criticism of Soviet-era mass housing refers mainly to its size, in that there is typically not enough space in such housing to accommodate large families [FIGURE 08]. In addition, apartments in such buildings are not seen as a way for families to invest, unlike apartments in new buildings popular with individual investors. Of these three countries, it is Uzbekistan's mass housing of the Soviet period that is most widely acknowledged for its heritage, probably because of its outstanding historical and architectural characteristics. Thus, Chisinau and Yerevan cannot boast of such a large number of recent books, publications, and events devoted to their mass architecture as Tashkent (as an example, see Meuser, 2016). "Specialists highly value such architecture. However, residents, of course, perceive it simply as housing. I don't know if the problem actually exists—it may just be a fact," commented a local real estate expert.

To summarize, mass housing in all three countries is not really associated with the Soviet era but is perceived as a rupture from historical, authentic residential typology. The desire or unwillingness to live in Soviet-era mass housing has more to do with the physical characteristics of the building (wear and tear, location, room size) than with the image, the social composition of neighbors, or

architecture. New buildings are much more responsive to the contemporary demand for size and type of apartment. At the same time, they only offer a partially new quality of communal areas, sometimes depriving the residential block of a courtyard altogether, in stark contrast to the communal areas provided in Socialist housing. Such a transformation stimulates critical and appreciative rethinking of modernist shared space qualities, which is also a highly contextual and time-consuming process.

MASS HOUSING TOMORROW: CONTEXT-SENSITIVE APPROACH. CONCLUSION AND DISCUSSION

This study examines the perceptions and debates surrounding socialist-era mass housing in three countries, Moldova, Armenia, and Uzbekistan, to assess the potential and limitations of possible housing renewal projects. This study tried to challenge a "monolithic" understanding of Soviet mass housing as a homogeneous heritage, observed both in its materiality and its perception as legacy. The MCMH-EU project has demonstrated that mass housing was never a uniform entity and has varied even more due to local social, political, and ideological factors decades after the construction: this is also true for housing estates outside the EU and Europe. Besides adding knowledge to housing research in certain geographical areas, this study shows that: first, mass housing still dominates the urban landscape and housing provision of these countries; second, it is not represented as a separate entity in the political debate; and third, socialist housing is perceived by all key local actors as a utilitarian rather than an ideological entity. These three positions open the potential for a sophisticated dialogue on the renewal or heritage re-evaluation approaches.

In recent years, a number of publications have pointed out that political and ideological components in housing and heritage research should be considered more (Hutson, 2019; Jacobs, 2001), demonstrating uniqueness in the seemingly generic housing (Snopek, 2015) or regional diversity in—at first glance—homogeneous residential complexes (Drėmaitė, 2017). However, in countries with a socialist past, recurrent appeals to the Soviet past of residential complexes may be necessary and meaningful in some contexts while superfluous and even harmful in others. This study demonstrates that, despite country specifics, in all three cases, mass housing is seen as an integral component of the housing system, while its Soviet-ness is outside the debate. In Moldova, as well as in Armenia and Uzbekistan, which are considered parallel to it, city authorities, the expert community, and citizens share a utilitarian attitude towards mass housing, which provides a certain context for its transformation or re-evaluation.

On the one hand, this virtual lack of a historical and ideological component and understanding of large residential complexes does not allow such housing to be understood as heritage objects. On the other hand, it gives more freedom to change. Understanding the value of mass housing as a living heritage, the successful part of its spatial solutions, recognizing its dynamic side, and its ability to be transformed, interpreted, and shaped allows researchers and policy-makers to move away from the "mass housing = Soviet Union" notion, with all the positive and negative connotations associated with it in a particular country. By focusing on the intangible values of such neighborhoods and the physical ability to adapt to today's urban community, a more productive debate can be achieved on the present and future of such neighborhoods in post-socialist cities. Perhaps a return to a more practical and utilitarian approach will be welcomed, first and foremost, by the residents themselves. As one interviewee summed up this attitude succinctly: "This is my house, and I live in it, and I need to fix it up. What does the Soviet Union have to do with it?"

We suggest that this paper be viewed not only as a set of outputs but also as a call for more context-sensitive research, policy, and solutions. Sometimes context-sensitivity, meaning "depending on context" or "depending on circumstances," falls into the trap of digging deeply into history while losing the essence of the citizens' problems, experiences, and needs. In our understanding, context-sensitivity is a way to consider debates, connotations, and understandings specific to a particular place at a particular time. Mass housing nowadays faces a number of problems, sufficient to solve without sometimes artificially adding more, while the residents wait somewhere "in-between" state renewal and self-organization.

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Sofia Borushkina is a Ph.D. candidate at the Politecnico di Milano and a recognized student at the University of Oxford. She has a background in urban planning and economics. Her research focuses on urban and regional policy, urban planning, housing, and urban governance. She is a member of the MCMH-EU Working Group.

Marina Sapunova is research assistant and a Ph.D. candidate at the Karlsruhe Institute of Technology, and co-founder of MÊTRE—an investigative documentary project about housing and urban regeneration. She has a background in urban planning, teaching, and research within cross-disciplinary teams and self-initiated projects. Her research interests include urban governance, urban planning, zoning legislation, housing and property policy, and its (post)-socialist transformation.

ENDNOTES

See 464 Khrushchev series facades and floor plans in SHEVCHENKO, L. (2022). Mass housing in Ukraine in the second half of the 20th century. docomomo journal, (67), p.75.

