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MIDDLE-CLASS MASS HOUSING

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EDITORIAL

Uta Pottgiesser & Wido Quist

Editors-in-chief

TOWARDS A HOUSING PRESERVATION CULTURE

After the two 2022-issues of the Docomomo Journal, number 66 on 'Modern Plastic Heritage' and number 67 on 'Multiple Modernisms in Ukraine,' this issue reveals another chapter of an often and diversely described theme of Modern Movement and a pressing subject worldwide: Housing.

Docomomo International has published continuously on housing issues, and the bi-annual international Docomomo conferences (IDC) have also addressed the topic of housing in many different ways. In 2000, Docomomo Journal 22[1] highlighted some of the iconic 'Modern Houses,' and in 2008, an overview of 'Postwar Mass Housing' as a "building type afflicted by large-scale redundancy and unpopularity" (Glendinning 2008, 5) was presented in Docomomo Journal 39[2]. More recent editions, such as Docomomo Journals 64 and 65 (2021)[3] entitled 'Modern Houses' and 'Housing for All' took on a different perspective, discussing the house as "the place of home, the world and container of the everyday individual and family life" (Noelle and Torrent 2021, 4). And finally, Docomomo Journal 51 (2014)[4] on 'Modern Housing. Patrimonio Vivo' and Docomomo Journal 54 (2016)[5] on 'Housing Reloaded' discussed the heritage values and the "progressive shift towards the practice of maintenance" (Graf and Marino 2016, 5), dealing with the conservation and rehabilitation of large housing estates.

This Docomomo Journal 68 continues the argument by shedding light on the gap between individual (often iconic) houses and mass housing by addressing the majority of post-WWII housing stock, namely 'middle-class mass housing' within Europe and beyond. The topic was derived from a European COST Action (CA18137) that aimed to explore the diversity of this typology with regard to design, spatial expression, construction, heritage values, and degradation.[6] This COST Action was initiated to boost the discussion and collection as well as knowledge dissemination regarding mass housing for the middle class. This Docomomo Journal facilitates this aim by publishing academic, peer-reviewed papers, thus contributing to one of Docomomo International's missions to foster interest in the ideas and heritage of the Modern Movement. Fostering interest and exchanging ideas on the conservation, history, and education of middle-class mass housing is important, as many housing estates suffer from being neglected and maintained. At the same time, the housing shortage puts increasing pressure on European societies that could be improved

or even solved by long-term preservation statutes and a subsequent reactivation and upgrading of this large building stock.

We thank all authors and experts who contributed to this current issue on 'middle-class mass housing' and our guest editors Ana Vaz Milheiro, Dalit Shach-Pinsly, Els de Vos, Gaia Caramellino, Inês Lima Rodrigues, Kostas Tsiambaos, Müge Akkar Ercan, and Yankel Fijalkow for their expertise and inspiration. In their introduction, they refer to the crucial role that middle-class mass housing played and still plays in shaping our modern cities. Authors Els De Vos, Selin Geerinckx, Ines Lima Rodrigues, and Ana Vaz Milheiro, in their article 'Modernism with a Glaze,' compare the use of Corbusian principles in mass housing in Antwerp and Lisbon and Yael Allweil and Inbal Ben-Asher Gitler elaborate on the consolidation of the middle class by design in the context of Israel. Sotiria Alexiadou sheds light on the middle-class housing development in Thessaloniki through the typical construction principle of polykatoikia. Three articles describe the post-WWII period from an Eastern European perspective: Dana Vais explains the ideal model of Socialist Modernism with the example of Gheorgheni Housing Estate in Cluj, Romania; Marina Sapunova and Sofia Borushkina compare utilitarian heritage in Moldova, Armenia, and Uzbekistan; and Romeo-Emanuel Cuc reflects on the importance of the in-between space for the collective memory in Romanian mass-housing public spaces.

Two other articles elaborate on the potential of participative processes, transdisciplinary and transnational collaboration: Müge Akkar Ercan with co-authors Claus Bech-Danielsen, Hassan Estaji, Roberto Goycoolea, Bernard Haumont, Byron Ioannou, Lora Nicolau, Paz Nuñez, and Sanjin Subic document a stakeholder workshop aiming to improve the quality of life and sustainability in the Ümesi neighborhood in Ankara. And authors Ahmed Benbernou, Alessandra Como, Olga Harea, Uta Pottgiesser, Kritika Singhal, and Luisa Smeragliuolo Perrotta, in their article *Evaluation and Criticism,* describe transversal comparative approaches using material and data of collected case studies across Europe.

Under *Heritage in Danger*, we like to highlight the article by Vlatko P. Korobar and Jasmina Siljanoska dealing with threats to The Skopje City Wall Housing Complex in North Macedonia. Finally, Maren Harnack and Natalie Heger reflect on *Hidden Champions:* hundreds of settlements in the Rhine-Maine region that are not protected but worthy of preservation. A special thank you goes to Alex Dill, who took the time to present a *Best Practice*: the restored Housing for the Elderly built for Jewish and Christian residents in Frankfurt in 1931 by Mart Stam.

We are also grateful to many colleagues in academia and professional practice for their reviews and advice. It is our great pleasure to launch this issue of the Docomomo journal, published both in print and online via www.docomomojournal.com.

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6 https://mcmh.eu/

INTRODUCTION

Gaia Caramellino, Kostas Tsiambaos, Ana Vaz Milheiro

MIDDLE-CLASS HOUSING AS A CROSS-CULTURAL AND MULTI-DISCIPLINARY PROJECT: RETHINKING CRITICAL, INTERPRETATIVE, AND METHODOLOGICAL FRAMEWORKS

The history of the modernization processes of post-WWII European cities could be observed through the lens of the emerging middle classes between the 1950s and the 1970s when housing significantly contributed to establishing and defining new social identities. Middle classes were the main protagonists of the rapid urban development and massive expansion that profoundly influenced the production of new estates, neighborhoods, and urban sectors, leaving relevant traces on the contemporary built environment of the European cities. In a sense, Europe, in its various civic configurations and cultural representations, became the symbol of progress and prosperity for the middle classes, an international formation restored and restructured by the middle classes which was meant to serve and protect according to a new post-war social contract.

During the three decades, the middle classes' political and cultural project was predominantly implemented through access to housing. A newly built environment emerged as a response to the new expectations, residential aspirations, comfort desires, consumption cultures, and living habits of the middle classes, and their mobility, residential choices, architectural preferences, and ideologies profoundly influenced the codification of new models, ideas of domesticity, building types, and housing schemes (from the single-family house to high-density residential estate). Middle classes influenced the definition of new planning and housing policies. They were at the center stage of a real estate market that sought to address the demands of middle-class customers, while architecture and planning solutions—from the finishing to the amenities—became distinctive features aimed at distinguishing the newly built middle-class estates from the working neighborhoods.

Across countries, and regardless of cultural particularities, political circumstances, and patterns of economic growth, the typical apartment of the European middle class mass housing complexes turned into a powerful center of gravity for the hyper-modern citizens that could shelter their polyvalent lifestyles, their private hopes and aspirations, in an environment that was becoming more fragmented, commodified, and uncertain than ever (Giddens, 1991). Although often controlled, boring or restrictive, everyday life in these generic middle-class mass housing apartments was successfully adapted to the new demands of self-actualization by becoming more caring and conscious but also more consuming, individualized, and narcissistic (Lipovetsky and Charles,

2005). Faster and faster, the irreversible process of postmodern mass individualization provided the seeds of the middle classes' self-destruction (Vidich, 1995); the more the European middle classes progressed via transcending their prescribed identities, the more they were dissolving.

After a period of intense investigation of middle classes in multiple different fields (Ford, 1978; Simson-Llyod, 1977; Boltanski, 1987), renewed attention to the study of middle classes was raised during the last decade in Europe and beyond. The increasing "fragilization" and re-definition of this stratified social group raised significant challenges for studying the spatial patterns of this phenomenon and questioning the relationship between middle classes and the space they inhabited, where they built their identity (Bouffartigue, 2001; Chauvel, 2006, and Sullivan, 2000). However, rather than describing an emergent phenomenon, current studies on the European middle classes seem to explain the decline of this future-less class to articulate a theory of what may possibly follow.

During the last decades, this residential environment of neighborhoods and estates originally conceived for the emerging middle classes has been affected by unprecedented transformation processes produced by profound societal, generational, and economic changes, processes of technological obsolescence, new homeownership patterns, and modes of inhabiting. Growing attention was devoted to the inquiry on middle-class housing offering local and monographic angles (Isenstadt, 2006; Sarquis, 2010, Eleb and Bendimerad, 2011). And although the challenges that each country faces are dynamic, contextual, and diverging across Europe—from Germany to Greece, from Portugal to Turkey—what is common is a shared feeling of lack of perspective; the difficulty, if not impossibility, of European citizens, self-identified as middle class, to imagine a better future for themselves and their loved ones. Beyond the social generative procedures and mechanisms of economic reproduction, which are particular to each country, one can acknowledge a common European 'space' of perceptions and memories formed by similar experiences of risks and dangers, disappointments, and defeats. Reflected in the aging exteriors of the mass housing complexes, the retreat of the Welfare State puts "the promise of democracy" (Croteau, 1995) under threat.

This issue offers a cross-cultural approach to studying middle-class mass housing and proposes a transcultural reading of the phenomenon. Crossing different political, cultural, and semantic areas, the issue reveals the need to sketch a transnational portrait and the potentialities of a transnational interpretative framework for the study of middle-class mass housing and the role that the estates played in the processes of development, growth, and transformation of European cities. By focusing on case studies from Europe, this issue does not ignore the fact that the decline of what used to be the symbol of a modern community is not just a European phenomenon. Following the discussion developed in the recent "Housing for All" issue (Tostões, 2021), we highlight Europe as a geographical area—certainly a representative one—in which aspects of a global phenomenon are still under evolution; a phenomenon that one may also study in the United States, in North Africa and the Middle-East, even in countries of the Global South. Moreover, we do not ignore the fact that the European middle class crisis is not independent of the emergence of new middle classes in countries like China, India, and other super-powers of late capitalism. In this case, the explosive socioeconomic transformation of the societies of one continent activates a tectonic movement that hits the socioeconomic foundations of another.

While different definitions and conceptions of mass housing arise when observed through the lens of middle classes, according to situations and countries representing divergent political and cultural conditions and systems of values, some common traits appear when looking at the practices behind its design and construction (Caramellino and Zanfi, 2015). Analogies can be found in the set of shared policies, professional practices, financial systems, regulatory frameworks, visions of society, ideologies, tastes, and living habits related to the production of housing for the middle classes, but also in its forms of use over the years and trajectories of changes that affect the most recent history of these housing estates.

However, the perceived differences in Europe, even when perceived in a historical time, can help draw new perspectives for action on these residential estates, especially if combined. Cyclically, Europe experiences housing supply crises leaving the middle class vulnerable to not being a priority group. In the past, architects did not consider the design of middle-class housing particularly challenging, typically enjoying more creative freedom when designing for more extreme societal groups.

Today, however, these clusters have been looked at more closely precisely because they constitute large-scale building masses in European cities designed by competent and influential professionals deeply engaged in their societies. The historiography of European architecture has changed with the study of these estates, providing tools for the actual act of designing itself.

Designing for the middle class is challenging because it is a group with expectations in the public domain. These expectations spill over into the layouts of housing units and extend into public spaces, demands for comfort that shape their lifestyle, and access to quality cultural, educational, and health facilities. The European middle classes have demanded architectural quality, having asserted themselves as the bearer of an extremely high set of expectations. This is why studying these past processes is vital to understand their projection into the present and, eventually, generate tools to understand their significance in the future.

Contrary to what was predicted a few decades ago, these mass housing estates have shaped Europe and constitute a heritage that reinforces European identity through the social differences that shape this social group. This residential environment shares many of the problems of preservation that post-war architecture presents today. There is a real danger that its heritage and cultural significance in the disciplinary field may be compromised by the practices of environmental comfort and safety that most European legislation now demands. Reflections on preservation models are more urgent now precisely because the original character of these estates is being altered so rapidly (Allan, 2021). A reflection on what we want for their future in terms of architectural significance must therefore be opened alongside reflections on their social, economic, and urban nature.

Studying this built environment reveals the need to define a new conceptual apparatus and theoretical framework. It raises methodological challenges and requires a multi-disciplinary perspective, crossing research strategies, tools, practices, and methods from different fields: architecture, urban studies, interior design, material culture, technology, social sciences, ethnography, and anthropology.

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POST-WWII MODERNISM WITH A GLAZE

A Comparison Between Antwerp and Lisbon

Els De Vos, Selin Geerinckx, Inês Lima Rodrigues, Ana Vaz Milheiro

ABSTRACT: Post World War II European modern housing often exhibited a Corbusian influence, but Le Corbusier was not embraced to the same extent everywhere, as noticed during exchanges between the University of Lisbon and the University of Antwerp in the ambit of the COST-Action 18137 on MCMH. While Belgium has several 1950s social housing projects, strongly indebted in its Unité d'habitation in Marseilles, Portugal does not. There, social housing architecture remained rather conservative, even though Corbusian features manifested themselves in some middle-class mass housing projects, such as the complex on Avenida Estados Unidos da América in Lisbon (1954-1966) designed by Lucínio Cruz, Alberto Ayres de Sousa and Mário Oliveira. While the housing blocks are on *pilotis*, they also have notable Art-Deco elements. In Belgium, free-standing modernist housing on pilotis with Art-Deco features also appears, such as the housing project at the Jan De Voslei in Antwerp designed by Jos Smolderen (1952-1967). These Modernist/Art-Deco hybrids have never been explored in depth because they are considered not radical enough. However, these cases shed light on how (older) architects mediated between traditional architecture and Modernism, between their own preferences and those of the state or housing company. They illuminate the political, social, and urban context in which these buildings were created. This paper explains why the principles Belgian architects applied to social housing were closer to Lisbon's middle-class housing than their similar buildings for low-income housing. Based on cross-referencing archival material, legislation, on-site observations, and a study of the political, urban and social context, this paper posits a re-reading of Le Corbusier's legacy in middle-class housing in Lisbon versus Antwerp.

KEYWORDS: Middle-Class Mass Housing, local Modernism, Lucínio Cruz, Jos Smolderen, high-rise, Art-Deco

INTRODUCTION: Post World War II (WWII) European modern housing often exhibited a Corbusian influence; his Unité d'habitation in Marseilles (1947-1952) proved particularly influential. But Le Corbusier was not embraced to the same extent everywhere, as became evident during exchanges between the University of Antwerp and the University of Lisbon in the ambit of the COST-Action 18137 on MCMH. During our visits to each other's city, similarities and differences inspired us to compare the modernist high-rise housing projects where the middle classes lived. Both cities, Antwerp and Lisbon, took a pioneering role in implementing modernist free-standing high-rise housing projects in their respective country. Belgium has several social housing projects indebted to Le Corbusier's Unité. But as for the Kiel estate in Antwerp, Renaat Braem (1910-2001) "provided Antwerp with a personal interpretation of the best that international urbanism had to offer at the time: a piece of Flemish Cité Radieuse, which not only had exceptional and particularly refreshing significance for Belgium at the time but which can immediately be counted among the coolest of what CIAM produced," as Francis Strauven (1983, p. 67) put it. Because Braem did an internship at Le Corbusier's office during 1936-1937, he had a clear affinity with the project in Marseilles (De Vos, Geerinckx, 2016). In Portugal, a dictatorship at that time, the situation was different. There, the architecture of social housing remained rather conservative, while Corbusian features emerged in some middle-class mass housing projects, such as the *Blocos de prédios de rendimento a norte da Avenida Estados Unidos da América*, commonly known as Av. EUA in Lisbon and designed by Lucínio Cruz and others (1954-66). While the housing

blocks are on *pilotis*, some Art-Deco is added, such as its marble finish instead of bare concrete [FIGURE 05]. This kind of detailing contradicts modernist principles of authenticity, austerity, rationality, and integrity of materials. However, in Belgium, free-standing modernist housing on *pilotis* with Art-Deco features appeared as well, such as the social housing project at the Jan De Voslei in Antwerp designed by Jos Smolderen (1952-1967). His blocks have rounded corners, circular window frames, and curved walls finished with mosaic or ceramic tiles [FIGURE 04]. Such Modernist/Art-Deco hybrids have never been explored in depth academically because they are considered not radical enough. They remain in the shadows of the internationally praised Kiel estate. Yet, these hybrid cases can give us insight into how older generations of architects mediated between traditional architecture and Modernism, between their own preferences and those of the state or housing company. In what political, social, and urban context were these buildings created? Why were the principles the Belgian architects used for social housing closer to Lisbon's middle-class housing than their similar buildings for low-income social housing? We will answer these questions based on a cross-referencing of archival material, legislation, on-site observations, and a study of the political, urban and social context of two cases. First, we will discuss the Antwerp Case of the Kiel estate and the Jan De Voslei estate (1952-1967), followed by the Av. EUA (1954-1966) project in Lisbon.

THE SPREAD OF THE LEGACY OF LE CORBUSIER IN ANTWERP

In post WWII Belgium, a democracy situated in the heart of Europe, the Modernist ideas of Le Corbusier freely circulated. Belgian architects were founding members of CIAM, Congrès international d'architecture moderne, and in the 1950s, the Belgian CIAM branch–Renaat Braem being among those involved–often held its meetings at the Higher Institute of Fine Arts in Antwerp. Although low-rise detached housing was the main typology for middle-class mass housing championed by the leading Christian democrats in government, high-rise housing did emerge, particularly in bigger cities. Instrumental to this was the Brunfaut Act of 1949, named after the Socialist MP Fernand Brunfaut. It made provisions not only for regular annual financing with respect to the construction of housing clusters by semi-governmental and recognized social housing associations but also for street layout, including paving, public utilities such as drainage, and open space planning, etcetera. It gave a boost to high-rises in the more urban areas and was part of the construction of the welfare state, that emerged in Western Europe. The welfare state combined a free-market economy with a comprehensive social security system, and a government that intervened, for example with social housing, and corrected. It was characterised by the optimistic belief that economic and technological progress would lead to general prosperity. Industrialisation and modernisation were key to this, also in the housing sector.

In Antwerp, where the Social Democrats had been in power since the Second World War, and even before that, high-rise housing was advocated according to the new urban planning concepts. Their modernity, monumentality and high level of comfort (fully-equipped kitchen and bathroom, central heating, running water, gas plumbing) were so different from traditional homes that progressive Socialist politicians used them to symbolize their enlightened policy. They were also a means to keep (middle-class) inhabitants in the city and acted as a dam against the suburbanization of the middle class towards cheaper green suburbs (Braeken 2010b).

The city of Antwerp became a shareholder of three Antwerp social housing companies by offering each a plot of land on the fringes of Antwerp, where the prices were low. These plots were situated near the ring road around the city. On the available land, a mix of low-rise houses for the elderly and large families, on the one hand, and apartment buildings for the rest were to be built. The three companies competed with each other to come up with the most impressive project. Social housing company S.M. Housing-Antwerp (S.M. Huisvesting Antwerpen) commissioned the young Modernist Renaat Braem in cooperation with Viktor Maeremans (a Socialist) and Hendrik Maes (a Catholic) for the Kiel estate (1950-1955) in the south of Antwerp. Two different firms were responsible for the developments Jan De Voslei Estate, near Kiel, and Luchtbal (1954-1962), a site in the north of Antwerp, near the harbor: *De Goede Woning* (*The Good Dwelling*) by Jos Smolderen, assisted by Henrik Maes, and *Onze Woning (Our Dwelling*) by renowned Hugo van Kuyck who designed the latter project. Each of these projects consisted of large housing blocks on *pilotis*. However, their design and the ideology behind them differ in each case.

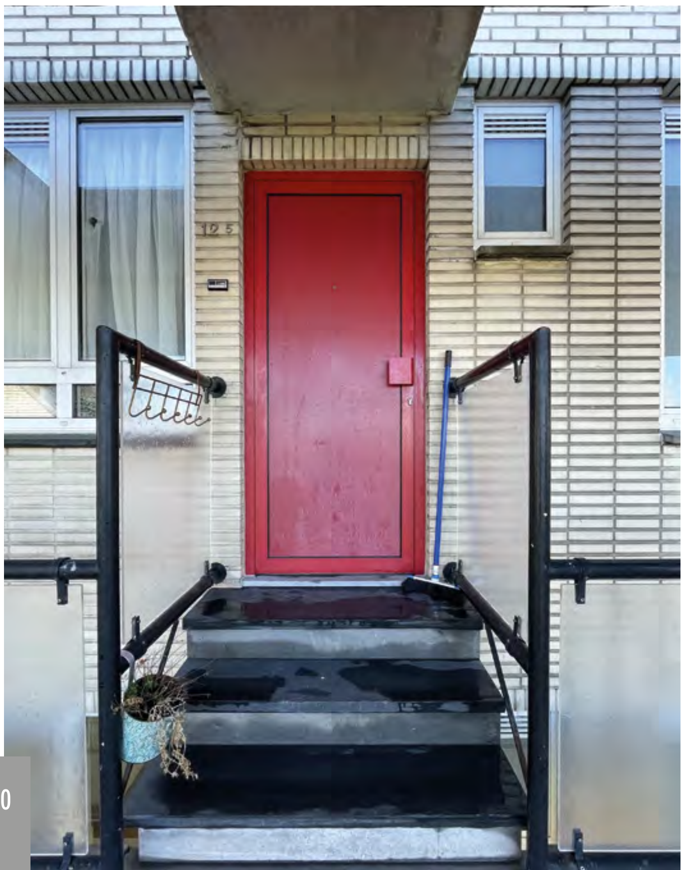
SOCIAL HOUSING IN THE KIEL NEIGHBORHOOD (RENAAT BRAEM, 1950-1955)

Influenced by his tutor Le Corbusier, Braem, by then 40 years old, created an iconic social housing complex in Kiel, Antwerp [FIGURE 01]. Braem's design revealed a clear affinity with the Unité d'habitation in Marseilles. As already discussed extensively in other publications (De Vos, Geerinckx, 2016, De Vos 2010), the nine free-standing blocks also stand on *pilotis* and adopt a similar use of colors and materials as well as architectural elements of Brutalist expression. However, Braem did not apply the

01 View of the Kiel social housing blocks on pilotis. © Tino Schlinzig, 2022.

CIAM doctrine or the ideas of Le Corbusier indiscriminately. His apartments were wide and stretched out in an elongated fashion along the façade, while the ones in Le Corbusier's Unité d'habitation were rather small and narrow. Braem consciously chose this configuration to favor the flow of air and (day) light as much as possible, which was no luxury in a country with a rain-heavy climate such as Belgium. And instead of an internal pathway, Braem designed open galleries that served the apartments. These outdoor corridors veered off from the façade and were placed a few steps lower than the residential level [FIGURE 02] so that daylight could enter the kitchen window freely along the split between the wall and the gallery, and visitors had no direct view into the apartment. Such a typology prevented prying looks from the galleries and guaranteed the residents' privacy. The apartments were very much ahead of their time. Not only were the "fenêtres en longeurs" innovative, but also the modernist, non-bourgeois layouts conceived at the planning stage. The kitchen was a small rationally-designed Cubex kitchen, and the dining table was placed such that the narrowest side was against a wall and not in the middle of the room as was typical for (petit-)bourgeois interiors. On the other hand, the flats were not as 'progressive' as the most radical ones in the Narkomfin Communal House (the F-units), which had almost no separated rooms but adopted a single large open-space layout (Buchli, 2001, 70-72). Braem still provided a separate kitchen, bathroom, toilet, and separate bedrooms. As such, they had a lot in common with the K-units of the Narkomfin building, which were designed to accommodate pre-existing bourgeois domestic layouts. In Braem's flats, the entrance was also next to

02 The Kiel social housing blocks with (left) view into the open gallery, (right) private entrance with stairs to an apartment. © Tino Schlinzig, 2022.



the rationally-designed kitchen and a toilet, similar to the plans for the Unité.

The Braem blocks were of outstanding quality and received international recognition after their presentation by Braem at CIAM IX in Aix-en-Provence. A delegation of the "Housing Committee of Sheffield City Council" visited the project, and City architect Womersley called it "perhaps the most exciting scheme inspected." Even a Soviet delegation had to come to see the housing blocks for themselves to be convinced they were really social housing (Strauven 1983, 71). As a matter of fact, one advantage of such a pioneering project was that the maximum budget had not yet been set. Therefore, Braem was able to engineer a quite luxurious housing complex with integrated art (for example, sculptures at the entrance) and landscape design that was actually inhabited by the middle class, mainly civil servants from the city of Antwerp (teachers, police officers, and firefighters). As a social utopian, he believed his buildings would free people from the burden of the past and lead to a more equal and inclusive society (Sterken 2010). With the Kiel estate, the foundation had been laid for the Cité Moderne that Braem would carry out for Expo '58 in Brussels.

THE JAN DE VOSLEI SOCIAL HOUSING NEIGHBORHOOD (JOS SMOLDEREN, 1952-1967)

In 1952, 63-year-old Jos Smolderen, assisted by Hendrik Maes, designed the Jan De Voslei project (1952-67) for *De Goede Woning* company, consisting of twenty blocks. Unlike the Braem project, it hardly received any (inter) national attention because it was less radical and progressive. Smolderen (1889-1973), twenty-one years older than Braem, was a versatile architect with a distinctly monumental vision of architecture and urban planning (Laureys 2004, 509-510). In 1914, he won the prestigious Prix de Rome and the Prix de Godecharle. Initially a staunch advocate for the Beaux-Arts tradition, in the interwar period, he developed a distinctive Art-Deco style. One of his most important works was his design for the Christ-King Church in a neo-Byzantine Art-Deco style (1928-1930). This church was part of the 1930 Antwerp World Fair, for which, as chief architect, he also designed the general plan, several pavilions, and the Century Festival arch, all in Art-Deco style. Smolderen also gave classes to Braem, amongst others, at the National Higher Institute connected to the Academy of Fine Arts in Antwerp. As the successor to Victor Horta, he taught the 'Monumental Architecture' course there, advocating for integrating various art forms in architecture (Van Nuffel 2014, p 34).

The blocks of the Jan De Voslei complex belonged to his later work during the post-war period, where he developed a stately form of Modernism that attracted the middle class that would eventually live there. The blocks [FIGURE 03], free-standing according to CIAM principles, clearly had Modernist features, concrete *pilotis*, horizontal windows, and what were, for its time, progressive features of modern comfort such as central heating, intercoms, radio and television connections as well as a fully-equipped bathroom and kitchen. However, at the same time, some elements did not fit into Modernist trappings, such as the cantilevered eaves and cladding with white natural stone slabs. Some Art-Deco elements popped up, such as its porthole windows and streamlined shapes [FIGURE 04]. In most of his blocks, he did not incorporate galleries but rather separate staircases accessible from the entrance

03 The Jan de Voslei social housing blocks with (left) a view at one of the three towers, (right) the tower rooftop. © Tino Schlinzig, 2022.

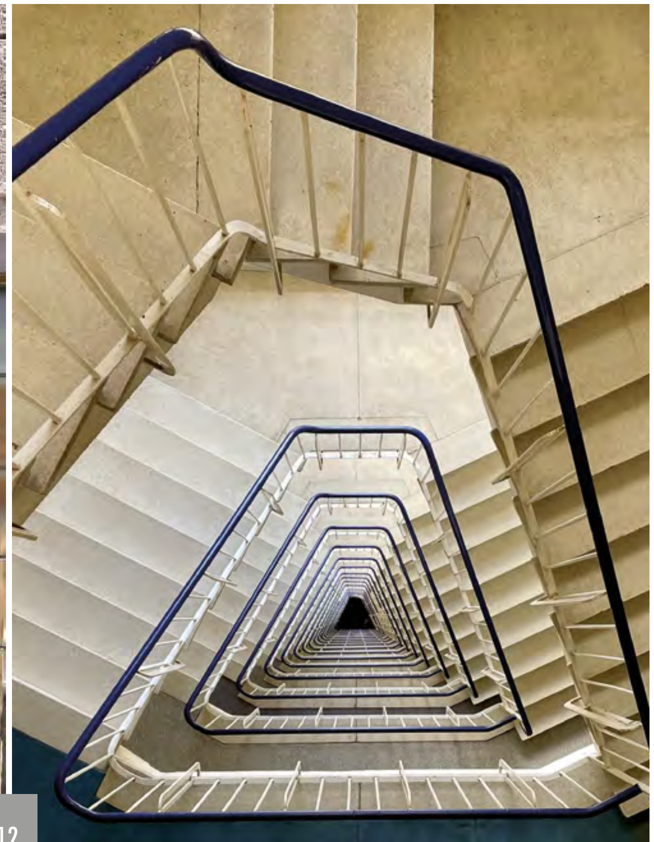
halls. The entrance blocks have rounded corners, and the curved walls are finished with shiny ceramic tiles. This kind of detailing is contrary to Modernist principles of authenticity, austerity, rationality, and integrity of materials. Also, in the interior of the apartments, there are some traditional design features. The kitchens, although well-equipped with all "mod cons," are not pure work kitchens but also equipped for eating. As opposed to the social housing blocks found in Braem's or Van Kuyck's work, they are designed to have a dining table. Secondly, Smolderen envisaged a decorative fireplace in the living room, which was unthinkable for Braem, who saw it as an element of a Catholic/bourgeois lifestyle. Smolderen was also the only one of the three architects selected by the Antwerp housing companies who was against prefabrication and sometimes applied more traditional construction methods with load-bearing walls. While Van Kuyck felt that buildings should be demolished after 30 years of use, Smolderen stated that he had conceived the neighborhood in such a way that the flats could last at least 65 to 70 years. (Van Nuffel, 113). Smolderen did not adopt the vision of the Modern Movement, which saw architecture as something of-the-moment.

In any case, the high-rise housing apartments by Braem, Smolderen, and also Van Kuyck, which arose on the city's outskirts, answered the middle class's prayers: they offered a level of domestic comfort that guaranteed an improvement in one's daily life and were aesthetically innovative. At the same time, Smolderen's blocks still contained familiar Art-Deco elements that catered to the somewhat more bourgeois middle-class tastes.

LE CORBUSIER'S LEGACY IN A DICTATORSHIP. THE LISBON CASE: AV. EUA (1954-1966) DESIGNED BY LUCÍNIO CRUZ, AND OTHERS

Portugal was under the fascist-leaning dictatorship of the Estado Novo and continued to be a "colonial empire" despite the decolonization processes taking place in other former European powers that also had colonial territories in Africa and Asia. The ideas of Le Corbusier and CIAM, associated with democracy, could not circulate freely. That would change partly in 1953. In September of that year, the city of Lisbon, for the first time, brought several notable professionals in the field of international architectural and urban culture to Portugal by hosting the III Congress of the UIA - Union of International Architects.[1] The president of the event was Sir Patrick Abercrombie (1879-1957), whose urbanistic ideas were based on modern principles, already being questioned at an international level, and which would find echoes in Portuguese practices. The Brazilian delegation also brought with it new proposals for integrating the three arts–architecture, sculpture, and painting–and conforming to new technologies reflected in contemporary design features. In the jargon of Portuguese architects, this meant the inclusion of *pilotis* and the freeing up of the city's soil, an unusual choice in the country up to that time. The year 1953 would also become famous in Portuguese circles for being the

04 The Jan De Voslei social housing blocks with (left) Art-Deco details such as porthole windows and the use of ceramic tiles and (right) separate stairs accessed from the entrance halls. © Tino Schlinzig, 2022.



date of the Honourable Mention given to a residential complex near Av. EUA, called Bairro das Estacas by Ruy d'Athouguia, Formosinho Sanchez, at the II Biennial of the Museum of Modern Art of São Paulo (Gropius et al., 1954). The Portuguese government, politically (although not diplomatically) isolated, saw the Lisbon meeting as an opportunity to show itself receptive to architectural innovation, granting permission to not only the Congress but also a series of exhibitions that would change the course of Portuguese culture indefinitely.

One of them was the traveling exhibition "Brazilian Contemporary Architecture," a propagandist initiative coordinated by the Brazilian Ministry of Foreign Affairs, held in the wake of the UIA event (Rodrigues, 1954). Among the residential projects shown in Lisbon were Affonso E. Reidy's Pedregulho and Lúcio Costa's Guinle Park (both in Rio de Janeiro) and Rino Levi's Bloco Prudência, by Roberto Cerqueira Cesar, in São Paulo, which display aesthetic affinities with the core of the Av. EUA project (beyond the desired upper middle-class clientele). This process of opening up to modernity was also reflected in the shift in the urban planning of the country's capital, which would begin to integrate the requirements of a modern layout into the formal and volumetric considerations of building design. One of those responsible for Av. EUA, architect Lucínio Cruz (1914-1999), had already had one of his projects rejected for not fulfilling the "modern" expectations espoused by the municipality from 1953 onwards (Agarez 2009; Milheiro 2011). In 1954, he would not repeat the same mistake, as we shall see.

Proposals for new urban plots were required to comply with the municipality's plans and with a modern vision. The new designs resulted from invitations to tender sent by City Hall to private developers, who were responsible for contracting the project planner's teams. As stated in an article published in 1952 in the modern style-inspired magazine *Arquitectura*, this new practice placed the responsibility for urban layout in the public remit of the Municipal Council and in the hands of private individuals, with architects being invited to develop the designs for the residential nuclei, albeit within sanitarian standards to be respected: "maximum percentage of lot occupancy; a maximum number of floors, the abolition of lobbies and, in certain cases, the very limiting cut, in plan, of the back of the future buildings, so that some would not prejudice the others, affronting them, robbing them of sun and air" (anonymous 1952, p. 10).

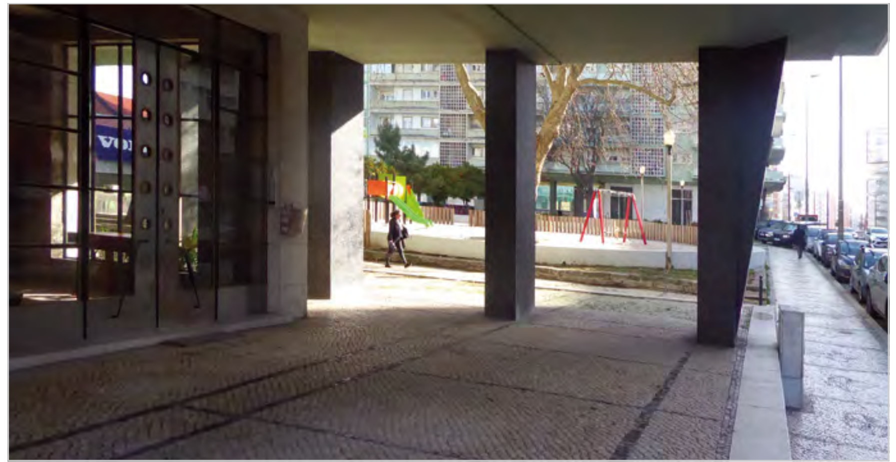
Faria da Costa was the urban planner who developed *Plano de Urbanização da Zona a Sul da Av. Alferes Malheiro*, identifying the Av. EUA as one of the main arteries of the plan, foreseeing the implementation of housing for the middle class across its entire length and on both sides (north and south) to economically recoup for the non-limited rental housing[2] that predominated other sectors of the neighborhood. Between 1945 and 1956, the layout would evolve from U-shaped residential cluster implementation to blocks bisecting with the road axis.[3] These requirements and partial plans thus transitioned from the consolidated city to unoccupied areas on its fringes, on municipally-owned land and plots, bordering the peripheral metropolitan areas still characterized by informal settlements (actually shanty-town "slums") which would soon form the great middle-class mass-housing complexes. In these tenders, where the modernization of the city's image was at stake, Portuguese architects of different generations would reflect not only technical and sanitary standards current at the time but modern languages inspired by the international circles to which they wanted to belong. This was the tendency followed across the whole of the Avenida EUA, more specifically in the "*Faixa norte do troço Campo Grande / Avenida de Roma* [northern strip of the Campo Grande / Avenida de Roma section]," as stated in official documents[4]: the existence of a modern-inspired plan, sectorized and responding to zoning, based on a rationale of housing units, with public buildings and housing blocks built over vacant land and "apparently" with the freedom of the *tabula rasa*. Learning from Le Corbusier, whose urbanistic teachings had been fundamental to Portuguese architectural culture since the first piecemeal translations of the Athens Charter in 1944,[5] the buildings were set out following the guidelines for good sun exposure, going against the alignment of the roads, and placed at right angles to the main avenues. In terms of architectural design, however, the Portuguese resisted slavishly following Corbusian proposals. In a similar spirit, they also turned their backs on the large housing units that Le Corbusier advocated for and would continue to design after the Av. EUA project. They preferred neighborhoods on a more "humanized" scale by reducing volumes and height and integrating, whenever possible, residential squares, including neighborhood amenities. At Av. EUA, residential buildings were not to exceed ten floors, the limit of which was already the result of a negotiation process with the city council to make the development more profitable in favor of private investments: "As a result of various studies of the whole (...) and with the collaboration of the city council's urban technicians, it was concluded that reducing the number of blocks to four and increasing the number of floors would compensate for the economic investment."[6]

The championing of collective housing in Lisbon had other antecedents with their roots in the debate surrounding social housing developments. Until the 1950s, social housing had been seen by architects as a less prestigious convention. This situation was to change radically after the

debates on the subject that took place at the 1st National Congress of Architecture, which was held in Lisbon at the end of the preceding decade and which was divided into two topics for discussion: "architecture at the national level" and "the Portuguese housing problem" (Sindicato National 1948). Both would influence future master planning such as on the Av. EUA project: the first would deal with linguistic, functional, and technical issues of the profession, as well as the artistic culture and academic learning in the country's two schools of architecture, while the second dealt essentially with the cityscape as a whole, despite focusing on collective housing. Portuguese architects would debate not only the deficit of available units for the most disadvantaged classes by using the solution proposed for the Alvalade neighborhood (close to Av. EUA) – of low-rise and density housing (as a case study) but also discuss the concept of multifamily housing. Even before the 1953 UIA Congress, which was central to understanding the genesis of the EUA Avenue project, younger architects had been defending openness to emerging architectural cultures since as far back as 1948, such as that of Brazil (Simões, Rodrigues, 1948; Martins, 1948, p. 170), where building housing with a Corbusian influence was common practice and implemented across all economic classes. On the occasion of the 1948 Congress, social housing was not only gaining in prestige and as a space for experimentation, hotly debated among the new generations, but also housing for the middle classes, of which the EUA Avenue complex was just one example, began to aspire to a modern visual language, even without drastically altering the internal layout of the flats to comply with modern bourgeois tastes, as we shall see.

At the beginning of the 1950s, the middle classes, who were the target demographic for this complex, were abandoning the traditional cityscape and migrating to peripheral areas where more salubrious neighborhoods were appearing, with open spaces, attractive surroundings, and modernized facilities (Milheiro et al. 2015, 110-141). However, the Av. EUA complex was still a "hybrid"; being close to the historic center, it provided an opportunity to introduce new concepts of modern living. Among its architects were those who had taken an active part in the debates at the 1st Congress of Architecture, such as Mário de Oliveira (1914-2013), who advocated for treading a more conservative path, rejecting the idea of architecture as an activity with a radical impact able to change the lives of its inhabitants. Oliveira's position was based on the idea that design should not cause psychological "discomfort" by abruptly changing the functional and aesthetic meanings of buildings and collective spaces. The other two architects in the group, Lucínio Cruz and Alberto Ayres de Sousa, were experts in their field who, like Oliveira, came from the Ministry of Overseas. They often had to deal with public representation programs, as in the *Alta plan* for the University of Coimbra, where the main academic facilities were located. In the colonies, modern architectural ideas began to take hold, alongside public architecture still featuring classicist and monumental elements of the kind practiced by Cruz and Oliveira until late in the decade. As a result, we arrive at a trio of architects active in colonial territories with a history in formally conservative architecture. They worked on the free market for private development in Lisbon, designing flats for the middle class. They were present, each in a different capacity, at the Congress, where modern concepts of collective housing were debated.

The Av. EUA complex by Cruz's team would be the logical result of the following unusual combination of interests: on the one hand, a city that wanted to be perceived as modern, a social class that saw modern design as an upgrading of taste without affecting the master plan too radically, and a group of architects trained in the Beaux-Art tradition with the ability to adapt to the formalisms of the "new architecture." The regime thus saw these undertakings as proof of its "progressiveness" without questioning the political ideology at its core. This ensemble consisted of four conceptually modern blocks on *pilotis*, with refined details at a level appropriate to the social class for which it was intended, either for first-time buyers or for the rental market, while maintaining the internal organization of the flat that left the inhabitants' lifestyle unchanged [FIGURE 06]. The opening of the floors at ground level, raised on pillars, was intended to facilitate access to the open garden spaces that take over the avenue slope. The ceiling height of the ground floor is enhanced by the dark ceramic cladding of the pillars and the refined materials in the Art-Deco design decorating the access to the flats (the concierge's office, as a result, being installed on the roof).[7] The buildings provided a generous distribution of space with typologies ranging from three to four bedrooms and with interchangeable functions that could be adapted to serve as offices, drawing rooms, etc. The corridor that eighteenth-century bourgeois housing had introduced for hierarchy-based circulation would be maintained in order to facilitate the functional organization but stood in opposition to the modern conceptualizations that proposed its abolition. A fundamental addition was making room to accommodate a housemaid who slept on the premises and occupied areas specifically designed for this purpose. Long balconies are interspersed along the length of the flats, designed to benefit from the best exposure to natural sunlight. Refusing to resort to modern solutions for circulation such as galleries, which in 1953 Nuno Teotónio Pereira (1922-2016) and Bartolomeu Costa Cabral



05 The blocks are standing on pilotis with a marble finish. © Ana Vaz Milheiro, 2023.

06 Residential ComplexAvenida dos Estados Unidos da América. © Inês Lima Rodrigues, 2023.

(1929-present) had incorporated also for the middle class into the residential Águas Livres building–which is considered the first Portuguese Unité d'habitation–, the Av. EUA's blocks would follow a conventional left-to-right plan, reducing the likelihood of creating interior collective spaces such as Portuguese architects were at the same time trying to introduce into social housing. Thus, the privacy resulting from this spatial model would guarantee the desire for reserved restraint that the Portuguese upper middle classes wished to uphold.

The residential ensemble for Av. EUA would appease the anxieties of the middle class: it offered all the novelties that guaranteed an improvement in their daily lives, an aesthetic statement of renewal that breathed new cultural life into the urban significance of these neighborhoods while upholding the sense of social privilege that keeping a maid implied and offering access to supply services (milkman, baker, etc.) that were reflected in the building through the duplication of accesses and internal circulations.

CONCLUSIONS

The challenge of developing comparative studies on middle class mass housing, in this case highlighting modern examples in Lisbon and Antwerp, allows cross-urban architectural issues to encounter several visual similarities; although the ideology behind them and the intended audience were completely different. By comparing cases from other countries, parameters resemble more precisely, such as the political regime, the position of architects, and the importance of local actors (such as the city and the state), allowing for deepening the existing knowledge on MCMH in Europe. It is essential to mention that it was possible to highlight these two complexes after the realisation of several CA18137 networking tools linked to the analysis, such as the Writing MCMH Workshop (Antwerp 6-8 April 2022); and the two Short Term Scientific Mission carried out in Antwerp (Ana Vaz Milheiro, 8-20 April 2022) and Lisbon (Selin Geerinckx, 26 Sep – 09 Oct 2022) that opened the clues to advance towards a comparative study between two European neighbourhoods and allowed to find cases that were interesting to compare.

One of the leading threads was the influence of Le Corbusier's Unité d'habitation in Marseilles and CIAM principles manifested themselves differently across different countries. In Antwerp, the social housing architectural firms, supported by the municipality of Antwerp, were the driving force behind high-rise experiments on *pilotis* with all mod-cons (central heating, fully-equipped kitchens, and bathrooms) that were the expected housing for the middle classes. These high-rise structures were emblems of prosperity and modernization. Any associations with Le Corbusier could be straightforward, as in the case of Braem, who had even interned at Le Corbusier's office. However, he elected to not reproduce the model indiscriminately, churning out version after version of the Unité d'habitation de Marseille, such as Le Corbusier himself did

in several places, but rather to create a uniquely Flemish take on the Unité, which became an international interpretation of the Cité Radieuse presented at CIAM IX in 1953. As a social utopian, he considered his Kiel estate to be a way to improve the lives of its inhabitants. The older generation of architects, including Jos Smolderen, rather went for a more hybrid conceptualization of apartment living, which juxtaposed elements borrowed from the Modern movement with Art-Deco and bourgeois home trappings.

In Portugal, ideas from the Modern movement were more likely to find their way through via the colonies. As such, they entered the country already watered-down and less radical in scope. In Portugal, the city council also played an important part in developing its outskirts to accommodate the middle class. In both cases, Antwerp and Lisbon, similar locations were used, namely on the fringes of the city but still relatively close to the city center. The cities expanded their boundaries, using new, high-quality Modernist housing models.

In all of this we can discern different positions on the part of each protagonist. While Braem was a social utopian who radically chose Modernism as a way to emancipate inhabitants and improve the circumstances of the working classes, Cruz, Ayres de Sousa and Oliveira, the first generation of modern architects, used the language of Modernist architecture as a stylistic option. They tweaked more traditional housing with certain Modernist features and, as such, created a kind of hybrid that was, to a certain extent, similar to Modernism but, at the same time, quite unlike it. Also, Smolderen's Jan Devoslei project can be considered a hybrid between Modernism and the less strident Art Deco that was popular with the middle class and a sign of good taste and prestige. Hereby, the fact that Smolderen belonged to an older generation educated in the Beaux-Art tradition probably played a role. Ultimately, it seems that the social housing development of the 1950s in Belgium strongly appealed to the middle class, which was very much in line with the city's objective of keeping them in the city. The municipality made this happen through cooperation with architectural firms specialized in social housing, while in Lisbon, the municipalities gave similar sites on the fringes of the city mainly to private developers but with the task of developing them into modern, prestigious housing estates. These hybrids of Modernism with a glaze are interesting to study because they negotiate a path between Modernism and the needs of more traditional lifestyles.

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ENDNOTES

[1] The III Congress of the UIA was held between 20 and 27 September 1953 and brought together 600 participants. Cf. Congress of the International Union of Architects (1953). UIA Portugal 1953 / Third Congress of the International Union of Architects held from 20 to 27 September, Lisbon.

[2] For framing the expression *casas de renda não limitada* (unrestricted rental housing), see Neves, Tormenta, 2020, p. 158

[3] See the initial plan made by the urban planner Faria da Costa, entitled *Plano de Urbanização da Zona a Sul da Av. Alferes Malheiro* (1945) [AML, PT/AMLSB/CMLSB/UROB/EV/0545]. [AML, PT/AMLSB/CMLSB/UROB/EV/0545], *Planta de divisão em lotes da Avenida Estados Unidos da América (1951)* (*1951*); with the successive changes to the plan approved by the Lisbon City Council until 1956, *Planta de Apresentação para a Av. E.U.A.* (CML\DSUO\1ªRepartição–Urbanização e Expropriação, [PT/AMLSB/CMLSB/UROB/EV/0248].

[4] Explanatory note written by the municipal council, in which the orientation to define the final arrangement of the Av. EUA [8 sheets] is established, signed off by Chief Engineer Luís Artur de Almeida D'Eça, 3ª Repartição – Arquitectura, CML, D.S.S.E.U., Process 11.968/55 [PT FAUP/CDUA/CC/ARQ/016].

[5] Nuno Teotónio Pereira with M. Costa Martins for the *Técnica* Magazine of the students of the Instituto Superior Técnico, 1944 (from n.147, May).

[6] Lucínio Cruz, Alberto Ayres de Sousa, Mário Oliveira, "Blocos de prédios de rendimento a norte da Avenida Estados Unidos da América - anteprojecto". Câmra Municipal of Lisbon, Memória Descritiva, pp.1-2. Cf. João Pedro Costa, *Bairro de Alvalade. Um Paradigma no urbanismo Português*, p. 112.

[7] Explanatory note of CML where it establishes the orientation to define the final arrangement of the marginal strips of Av. EUA [8 sheets], signed by the Chief Engineer Luís Artur de Almeida D'Eça, 3rd Division - Architecture, CML, D.S.S.E.U., Process 11.968/55 [PT FAUP/CDUA/CC/ARQ/016].

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MIDDLE CLASS BY DESIGN

Mass-Housing Estates and the Consolidation of the Israeli Urban Middle Class

Yael Allweil, Inbal Ben-Asher Gitler

ABSTRACT: Middle-class housing in the context of post-independence growth in Israel, where urban growth was guided by the massive construction of new neighborhoods and buildings, produced various types of shared dwellings, which became the prevailing types of urban housing. While mass housing is discussed in the context of Israel as a key device of a modernization project on the national scale, with profound consequences for marginalized immigrants and the lower classes, it has rarely been studied as a housing typology for the middle classes. Nonetheless, urban growth and national consolidation starting in the 1960s led to an emerging urban middle class whose housing was the product of diverse actors, including urban and national policy, private contractors, neighborhood associations, financial systems, architects, and planners. Yet, as the social category 'middle class' is muddled, how can we distinguish mass housing for the middle classes or middle-class housing? This paper examines the architectural features of three middle-class mass housing estates built in Israel in the 1960s. Asking what constitutes the middle class, we point to the capacity of an architectural analysis to identify the designed elements that construct a middle-class identity within the context of shared urban dwellings. The three cases briefly examined include the Be'eri estate in Tel Aviv, the Kiron estate in Kiryat Ono, and Shchuna Bet in Beer Sheba. The three estates, developed in the 1960s by commercial and semi-commercial companies explicitly for the emerging urban middle class, employ New Brutalist architectural and urban design principles in mitigating community and individuals, public and private, identity and property.

KEYWORDS: Architecture history, housing, middle class, mass housing, Israel

MIDDLE-CLASS MASS HOUSING: AN ARCHITECTURAL ANALYSIS

While social housing complexes have been associated with an explicitly reformist, socio–democratic choice towards lower-income residents, the middle class—and middle-class housing—generally lacks a clear definition. This is especially true when it is constructed and inhabited in the context of urban real estate development. While access to public housing was typically monitored by the state via various administrative conditions such as income restrictions, private ownership shaped a community in middle-class mass housing, which is less explicitly defined and remains under-researched (Caramellino, 2015).

What is middle-class housing? Although it is one of the main aspects of the urban fabric in Europe, the Middle East, East Asia, and Latin America, middle-class mass housing has been generally under-represented in urban and architectural studies. This is despite the importance of the phenomenon, of the weight that this real estate stock still holds in cities, and of the role that the buildings of the period played in contributing to the definition of cultures and housing practices over a generation (Caramellino and De Pieri, 2015; Allweil and Zemer, 2019).

As the middle class bears different social-economic and political meanings in various historical and geographic contexts—the study of the messy socio-demographic category of middle-class mass housing can benefit from a close examination of the architectural and urban actualities of this dwelling type. "When observing the architectural quality of some of the collective houses built for the middle classes," writes Eleb, "we are led to the conclusion that the characteristics of the individual house are central, because

even the dwellings in high-rises are designed in an attempt to preserve home qualities: outdoor spaces that extend the residential space, attention to storage room, or even bricolage areas, gardens and sports grounds and meeting areas surrounding the residences" (Eleb in Caramellino and Zanfi, 2015, p. 11).

In Israel, whose nation-building and immigrant housing apparatus was state-dominated since statehood in 1948 (Allweil, 2017), the introduction of mass housing for the middle classes, which previously chose detached or apartment housing, was a distinct transformation with a distinct building type and urban-architectural premise (Karmon and Chemanski, 1990, Allweil and Zemer, 2021). In this paper, we examine three middle-class mass-housing estates of the 1960s and show how their architecture and urban design created the built platform for consolidating the Israeli urban middle class. As the key asset and mode of investment for middle-class families, mass housing designed for the middle classes was capable of answering and interpreting the residential aspirations and consumption desires of the urban middle class, namely in solidifying the middle class in a young immigrant society like Israel. In this paper, we propose that the Israeli urban middle class was articulated by design, namely via the design, construction, finance, operation, and habitation of urban mass housing estates. These urban mass housing frameworks served as spaces for examining, articulating, and shaping the middle class as a way of life and social strata, thus as a communal identity. Interestingly, and in surprising contrast to much of post-WWII central Europe, in Israel, the urban layout and architecture of mass housing estates constructed and marketed for middle-class consumers employed the urban and architectural vocabulary of New Brutalism, which, in the literature and public image, is associated with social housing for the working class. In Israel, New Brutalist design principles, ethics, vocabulary, and materiality served architects and developers in designing a middle-class way of living invoking 'modern architecture for a traditional community,' employing designed features explicitly relevant for the middle class, such as privacy and identity for individuals within a community. This paper examines three settings exploring New Brutalist mass housing as middle-class habitats in Israel in the 1960s: an alternative urban block within Tel Aviv's home-block urban system, an urban neighborhood unit within a rural, suburban setting, and a middle-class estate in a desert immigrant town context. We show how each setting employed New Brutalist design principles to produce a specific middle-class community.

BE'ERI ESTATE: NEW BRUTALISM AND THE MIDDLE CLASS

Be'eri estate in East Tel Aviv was built for the purpose of housing more middle-class urban dwellers upon agricultural land annexed to the city with statehood (Allweil and Zemer, 2021). In 1958, the Solel-Boneh semi-public construction company acquired a full urban block of 13 km^2 as part of the privatization of Tel Aviv's medical-center lands and invited a team of noted Israeli architects to devise the plan. Designed by a renowned design team composed of architects Arieh Sharon, Dov Karmi, Ram Karmi, Benjamin Idelson, Isaac Melzer, and landscape architects Lippa Yahalom and Dan Zur, Be'eri estate was explicitly designed to target a new and growing section of the Israeli housing sector: open-market urban housing for the middle class. Be'eri marks the transition from small-scale developers of market-produced urban apartment houses for the middle class to the design and production of mass-housing estates by state-owned construction companies (semi-private) and on large tracts of land formerly characterizing social housing. Marking the beginning of the end of the Israeli welfare state, this market-built housing estate explores into the very nature of middle-class housing.

The unique team of architects, the Israeli Team 10, viewed Be'eri estate as an opportunity to realize its planners' urban critique of the anonymous housing blocks constructed for working class and immigrants, as well as of overcrowded apartment houses at the expense of dwelling qualities such as greenery, communal spaces, and in-between spaces (Sharon, 1970; Karmi, 1946). The design team employed explicit New Brutalist design principles, for which it won the prestigious Rokach Award for design in 1970. Designing Be'eri's urban block as a big house—maintaining one self-managed community—aimed to constitute a framework for community. Rather than subdivide the large urban block into typical Tel Avivian apartment building plots, as proposed in the Quarter masterplan of 1954, the design team proposed one estate sharing the entire block. Echoing New Brutalist estates of the time, Be'eri planners designed the estate as a big house that functions like a small city, involving various city-like common facilities shared by all residents (Allweil and Zemer, 2021).

Mitigating the public and the private, the individual and the collective, the estate comprised 192 private apartments upon the 13 km^2 shared urban plot, including an inner road, three parks, a central park, two parking areas, pedestrian lanes, and shared roofs. This crucial balance between the individual and the collective, highly discussed in New Brutalist discourse, takes shape in Be'eri in an urban-block-sized shared estate whose spatial

fragmentation is composed of four smaller frameworks of human associations graduating between city, neighborhood, and house; explicit values of the middle class. As stated by one resident, the estate's class status is closely related to its shared spaces and the community that has formed to manage them collectively: "I would like to point out that when a community of good neighbors is created the [real estate] value of apartments increases" (survey, May 10, 2020).

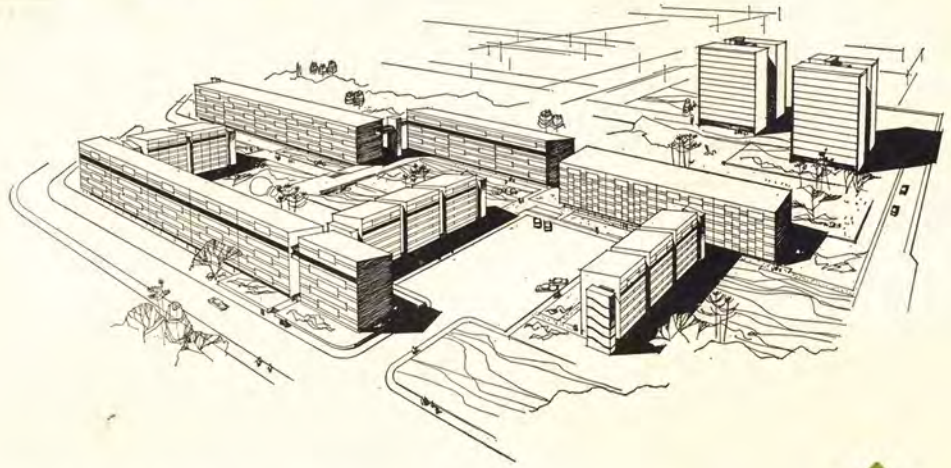
Complementing the estate's "architectural separation," the four parks vary in levels—each park is attached to a different building (Sharon, 1970, p. 1). Granulite-covered walkways frame the different parks, leaving them open for resident appropriation. While the big house constituted an urban-block-sized framework for human contact, its spatial fragmentation encircled four smaller frameworks of human associations within its boundaries, with several scales of social interaction among residents.

Contemporary commercial ads in the press marketed the estate as an opportunity for quality of life, offering spacious 3.5 and 4.5 room apartments, 100 and 120 sqm, respectively, with a list of amenities that included three-way breeze, private parking, a private telephone line, subfloor heating, aluminum screen shutters, etc. [FIGURE 01]. The apartments were marketed to a segment of society not eligible for subsidized housing, clearly marking the financial framework for buyers to be commercial banking loans for apartment purchases [FIGURE 02]. This clearly attests that

01 Be'eri estate, 1969. Note the estate's upper park at the center of the photo, overlooking the central garden and the street, with broad stairways leading to it. At the center-right of the photo, the central park extends to Be'eri Street. © U. Sharon, 1967.

כאן, בתוך תל־אביב
נבנים בנייני בארי
למכירה דירות בגדלים הבאים:
היוזם: דיור ב. פ. בע"מ
הבצוע: החברה לבניין ולעבודות צבוריות מיסודו של סולל בונה.
המקום: איזור מגורים נאה ושקט במרכז צפון העיר — רחוב בארי (ע"י הרחובות ארלוזורוב—וייצמן)
הקרקע: פרטית.
בנייני בארי
דירת 3,5 חדרים
דירת 4,5 חדרים

02 Binyanei Be'eri [Be'eri housing], Advertisement. © Davar newspaper collection, Israel National Library Newspaper Collection, 1963, 6, 28.



03 Kiron sales brochure, 1964.
© Israel Lotan archive at Israel National Library.

the estate was marketed for the middle class, indicating precisely what built elements distinguished middle-class dwellings from those of the upper and lower classes. The planning of Be'eri estate as a cooperative housing estate of 192 units, legally registered as a single shared house under the Israeli shared-houses law, was an explicit design decision intended to foster a self-managing community in the estate.

The estate has been self-managed over the past sixty years by a three-tier elected body of elected residents who represent the interests of each entry within the blocks, each block/tower, and the home-block at large vis-à-vis neighboring urban blocks and the adjacent hospital. The Be'eri home-block structure provides the built framework for a community in constant negotiations over the uses of the four parks, "homeways" (as named by Patrick Geddes), and other shared spaces. As members of the "big house," each member of the community of 192 households has a hold on an area as large as an urban block. Residents, therefore, have stakes in the use, design, and future planning of the estate itself, as well as the built environment surrounding the block. Within the block, continuous negotiations over everyday use, alterations, and management, run by elected representatives, shape the estate. Further, collective ownership of the urban block allows the residents to organize as a political community and voice their concerns and objections to changes to the urban landscape of the city.

KIRON ESTATE: COMMERCIAL MASS HOUSING AS MIDDLE-CLASS EXPERIMENT

Starting in 1963, Kiryat Ono transformed from a rural-suburban community to an urban middle-class town through the construction of thousands of middle-class units in the exploratory New Brutalist estate of Kiron. Designed by Israel Lotan, Eric Bauman, and Werner Joseph Wittkower, with landscape architects Lippa Yahalom and Dan Zur, this urban transformation reflects a profound transformation in Israel's housing culture in the 1960s. Developed by a commercial developing firm founded for this project, Kiron Company, it marks one of the landmarks of the transformation of Israel's housing production from a state-produced to a market-produced housing apparatus (Shabtai-Cyzer, 2011).

Kiron was a turning point in national housing programs in Israel, as a key experiment expanding from a semi-private to a fully-private framework, introducing, for the first time, commercial construction firms founded for the purpose of constructing mass housing geared toward the middle classes. For the first time, urban mass housing (rather than suburban detached houses) was introduced to the growing middle class, and it required an adaptation of the amenities and architectural, urban, and landscape components of mass housing in order to address the needs and aims of commercial dwellings for middle-class buyers [FIGURE 03]. Executing this experiment in a state-led framework based on a contract between the Ministry of Housing and the Kiron firm paved the way for the privatization of the Israeli housing market. It required the commercial firm to commit to construction, planning, and social standards for its clients (Shabtai-Cyzer, 2011).

As such, Kiron required a new urban, architectural, and landscape framework, later termed 'the housing group' (Yavin, 1970). Like Be'eri, Kiron incorporated Team 10 critique of the *Shikun* immigrant housing block, as well as the aspiration for modern urban housing in previously rural settings such as Kiryat Ono to propose a new way of middle-class living, enabling modern measures of quality such as greenery, ventilation, and traditional community. Designed as a self-supporting 'neighborhood unit'

for 10,000 dwellers, Kiron included housing blocks and towers surrounding a central park, accessed by pedestrian routes and surrounding parking lots, and serviced by public–communal services including schools, a clinic, and a commercial center (Israel Lotan archive at Israel National Library; Glikson, 1965).

04 Newspaper ad, 12 May 1963, marketing Kiron and detailing the apartments' amenities.
© Ha'aretz newspaper collection, Israel National Library Newspaper Collection.

קיראון

קרית גנים ללא תקדים

ליד תל-אביב בין רמת-חן לסביון

הדירה האידיאלית

-100 מ"ר-

25,000 ל"י

+17,000 ל"י משכנתא

3 או 4½ חדרים- כרצונך

הסקה מרכזית ברצפות בכל החדרים. הספקה מרכזית של גז ומים חמים. טלפון חוץ מובטח. שידור להתקנת מיזוג אויר. חלונות הזזה במסגרות אלומיניום. תריסי אלומיניום. במטבחים: מסלקי אשפה [״סליק״]. בחדרי האמבטיה: מתקן חימום אינפרא — אדום. מעליות. חדרי כביסה וייבוש מרכזיים.

3 חדרים — בהם חדר מגורים ענק ששטחו 35 מ״ר

או

4½ חדרים — לפי צרכי כל רוכש

Interestingly, the first elements constructed in the Kiron neighborhood were the commercial ones: its commercial center, which included the first supermarket outside Tel Aviv, opened in 1965. The supermarket, as well as parking lots, cinemas, and cafes, were a clear demarcation of the middle-class and commercial nature of the new neighborhood (Kiron sales brochure, 1964). Commercial advertising of the flats indicated large apartments of 100 m², with flexible division in 3 or 4.5 rooms, with amenities such as central heating and cooling systems, aluminum frame windows, mosaic floors, and private parking. Middle-class neighborhood services, including a commercial center, clinic, schools, pools, and sports facilities, and easy accessibility to the employment centers of Tel Aviv and Bar Ilan University, are highlighted in the ads. Moreover, the estate included unique apartment layouts with elements enabling internal flexibility for resident usage and individual design and the 'villa on the roof' apartment type, marketed as an urban middle-class alternative to detached housing (KiroNews, 1966). The cost of the apartments, including a hefty downpayment based on buyers' savings and commercial banking loans for a third of the apartment costs, are highlighted in the ad, indicating that the estate was marketed to a segment of society not eligible for subsidized housing, particularly to home improving high-income middle-class families [FIGURE 04, FIGURE 05].

05 One of the housing blocks in Kiron (Iris section), note varied apartment types on the right-hand building and villas on the roof on the left one.
© Kiryat Ono Municipality, via PikiWiki Creative Commons.

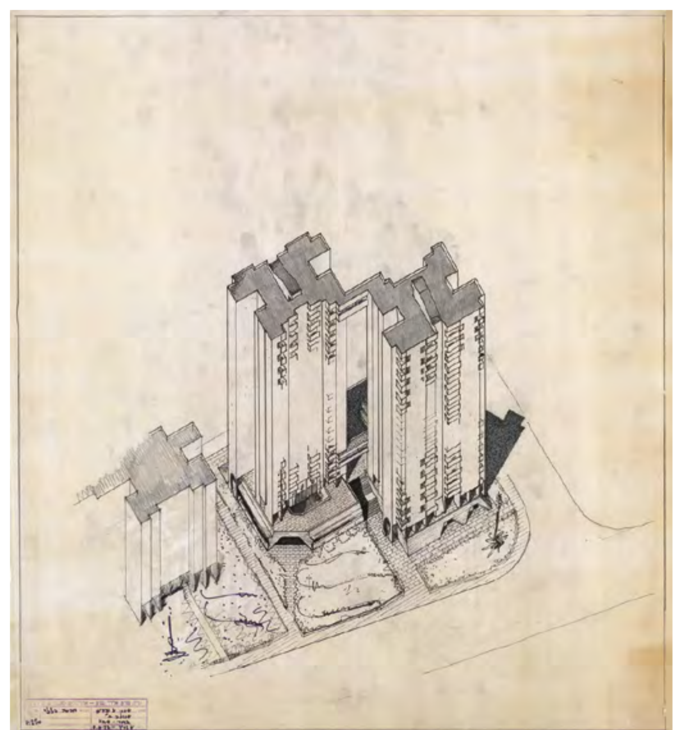
BE'ER SHEVA NEIGHBORHOOD B: MIDDLE-CLASS MASS HOUSING IN THE DESERT

Be'er Sheva Shchuna Bet ("Neighborhood B") was a state-sponsored enterprise that reflected the Ministry of Housing's new policy of encouraging the construction of middle-class mass housing by promoting larger apartments (*Sikumey Pe'ulot Misrad HaShikun, Mechoz HaNegev 1963-1968,* 1969). Designed by architects Arieh and Eldar Sharon, and constructed between 1968-1978, Shchuna Bet marked a turning point in the Ministry's approach to Be'er Sheba and the Negev region, previously planned as a peripheral urban center for the housing of new immigrants, naturally of little means and a lower social class, hence producing small and cheap mass housing units, constructed in what can be considered acute emergency conditions (Tovia and Boneh, 1999; Sleiffer, 1999). Nonetheless, the design and construction of Shchuna Bet in the 1970s, almost two decades after the mass immigration crisis of the 1950s, designated it as a middle-class neighborhood for young families, veteran Israelis, and middle-class immigrants (*Sikumey Pe'ulot Misrad HaShikun, Mechoz HaNegev 1963-1968,* 1969). Shchuna Bet can indeed be identified as intended for the middle class in both its marketing and design [FIGURE 06].

06 Schuna B, Be’er Sheva, General Scheme from Schuna B Sales Brochure, 1968-1978. © Azrieli Archive, Arieh and Eldar Sharon Collection.

The Sharons designed Shchuna Bet in roughly the same period as their participation in the design of Be’eri Estate. Sharons’ scheme for Shchuna Bet proposed a mass-housing neighborhood of 925 dwellings in several building blocks planned on a grid. Of the six apartment blocks originally planned, only four were materialized [FIGURE 07]. They included apartment buildings and two-story townhouses offering a small private patio, an entrance court, and in some cases, a backyard. The design featured significant diversity of apartments, which amounted to nearly ten different types and varied in building forms, heights, and densities, including 16-story towers that were not realized. The size of the spacious townhouses ranged from 100 m² to 115 m². Four and five-room townhouses were planned; most had, as noted, an entrance court and either a patio, a backyard, or both. A novel addition to these townhouses was a small private bomb shelter, indicating improved war readiness but also an acknowledgment of the demand for privacy even in emergency situations. In the apartment buildings, flats included no less than five types, ranging from 90 m² to 116 m², some with a pantry or walk-in closet. This wide selection indicates that the neighborhood’s design catered to middle-class diversity in individual requirements of dwelling and varied economic capabilities.

Similar to Be’eri Estate, Shchuna Bet can be identified as implementing New Brutalism (Ben-Asher Gitler and Geva, 2018). First, both neighborhood plans and architecture were conceived as one entity “woven into a modulated



07 Schuna B, Be’er Sheva, unrealized 16-story apartment buildings. © Azrieli Archive, Arieh and Eldar Sharon Collection.

08 Schuna B, Be'er Sheva, apartment buildings planned around a shared inner courtyard. © Inbal Ben-Asher Gitler, 2023.

continuum," reflecting the Smithsons' engagement with the hierarchies of human life in the city and the flow they sought to create from house to street to neighborhood, etc. (Steiner, 2011). An early master plan of Shchuna Bet shows these hierarchies: the Sharons prescribed the relationship between four existing main streets, internal streets, and pedestrian pathways, as well as the neighborhood's two public gardens and the green spaces between the apartment buildings located on its northern boundary. The neighborhood included a kindergarten, a school, and a clinic. Thus, as in the Be'eri Estate, the Sharons' design adapted New Brutalist ideas, creating a "small city" with its varied passageways and common facilities. Human association on a smaller scale was additionally created within the four apartment buildings planned around a shared inner courtyard. Privacy, which scholars identify as important in the construction of middle-class identity, was created by designing measured and narrow entrances into the inner courtyards, in the semi-circular volumes that characterized staircases and the junctions of pedestrian paths, as well as in the entrance courts of the townhouses, which provided a scaled transition from public to private [FIGURE 08].

In the case of Shchuna Bet, marketing was carried out by the two construction companies involved in its making: the first one, Shikun Ovdim ("Workers' Housing"), belonged to the workers' union, the Histadrut, and operated in conjunction with Solel Boneh. The second was the Ministry of Housing company, Shikun u-Pituach le Israel ("Housing and Development for Israel"), with which Shikun Ovdim collaborated on numerous governmental projects. Shikun Ovdim sold the apartments in Shchuna Bet by offering open market mortgages of varying rates to "established" middle-class families and newlyweds. A key goal in offering comfortable mortgages was to encourage middle-class Israeli veterans to invest in buying apartments in Be'er Sheva, rather than the extant tendency of having real estate in central Israel and renting, rather than investing, in the country's periphery (*Al Hamishmar,* 19 January 1973, 8). In the case of new immigrants, the Ministry of Housing subsidized the cost of the apartments (*Al Hamishmar,* 19 January 1973, 8). Shikun Ovdim's marketing gradually became geared toward the middle classes rather than the working class. This can be seen, for example, in its ad dated 1971 that emphasized real estate as an asset, as well as neighborhood community services (*Ma'ariv: Yamim VeLeylot,* 4 June 1971, 20-21). Additionally, the ad included detailed explanations of mortgage options and referred potential buyers to the company office located in Shchuna Bet, among other offices across the country. Moreover, both construction companies jointly marketed the neighborhood by producing glossy brochures that emphasized the generous dimensions of the apartments, displayed the neighborhood plan, and contained detailed technical specifications associated with middle-class living standards. These mark the expansion of urban middle-class living beyond the key cities, an attempt to dismantle the class distinction between Israel's economic center and immigrant, working-class periphery.

CONCLUSIONS

During the first two decades of vast immigration and subsequent housing crisis, the Israeli middle class constituted a small section of Israeli society, associated primarily with detached cottages in semi-rural urban neighborhoods. With the consolidation and stabilization of Israel's economy and society in the 1960s-1970s, state interest in diminishing its role as the key provider of citizen housing, together with extended aspirations for middle-class living standards, teamed to produce a new housing type: middle-class mass-housing estates. Why mass housing?

Developed, planned, and constructed starting in the mid-1960s, these mass-housing estates explored and experimented with the design of a new way of living: one that successfully meshed the individual and the collective, the private and the public, the rural and the urban. Interestingly, the architectural articulation of the urban middle class in Israel in this period employed the architectural vocabulary of New Brutalism, originally framed for social housing (van den Heuvel, 2015). The targeting of the middle class can be observed throughout the 1960s and 1970s in marketing strategies that highlighted amenities, financial programs, and real estate values. As the three cases of Be'eri Estate, Kiron Estate, and Shchuna Bet demonstrate, the construction of a middle-class identity was deeply associated with—and in a sense required—an architecture and urban layout that underscored the middle class as a mass phenomenon and as a community; whose living conditions and lifestyle stretch constantly between the private and the collective, the individual and society.

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MIDDLE-CLASS HOUSING DEVELOPMENT IN THESSALONIKI, GREECE

Polykatoikia: from Heterogeneous to Homogeneous and Vice Versa

Sotiria Alexiadou

ABSTRACT: Middle-class housing in Greece developed rapidly after World War II (WWII). Across all Greek cities a multi-story building type, so-called "polykatoikia" emerged because before the war, in 1929, a social and legal contract was constituted, according to which each apartment could be owned by "micro-owners". The applied General and Special Building Regulations envisioned a homogeneous city volume composed of these polykatoikias. On the other hand, the new ownership model invited a heterogeneous middle-class population to buy and reside in these apartments, in contrast to the previous homogenous one owner per building model. Thessaloniki developed differently than other cities, starting with homogeneous urban planning and city volume, but heterogeneous architectural styles that would evolve vice versa in the post-WWII era. The contemporary political–social–economic changes modified the city's development vision and population's needs related to the polykatoikia. Today, the matured state of the polykatoikias, the expected deterioration of the building stock and its environmental (in)efficiency troubles the micro-owners. The lack of common decision-making strategies to enforce building unity increases the entropy to a dysfunctional level. The paper's main goal is to investigate whether the polykatoikia model is reaching a breaking point. Will the future of the polykatoikia return to homogeneity by relying on one investor per building and be leading a decrease of polykatoikia's variety, or are there strategies that lead to the sustainability of the building type and its micro-owners? The research is based on the author's Ph.D. thesis; recent literature on the topic and in-situ observations both support the objectives.

KEYWORDS: Polykatoikia, ownership, efficiency, maintenance, Thessaloniki

INTRODUCTION: The housing sector in Greece has increased significantly since the 1950s. The rise of the middle class and the post-WWII consumerism lifestyle introduced to it through the American "soft power" strategy (Castillo, 2010) resulted in the need for improved housing conditions. The type representing the "new era" in the middle-class lifestyle was the multi-story building or "polykatoikia." The polykatoikia was the result of a bottom-up approach that allowed anyone with middle-class financial means to obtain ownership of an apartment. The building would have all the new amenities that the era offered, like elevators, a central heating system, etc. The apartment would be designed to host the new tenants with gradually obtained new furniture and home appliances related to the consumerism lifestyle (Alexiadou, 2021). The owners in these brand-new buildings had minimum maintenance expenses; there was not much physical deterioration and conservation need for technical or function issues yet, in contrast to pre-WWII constructions. They had to learn the new model of living together in a vertical system and sharing commonly owned spaces. The improvement of their living environment offered great comfort and satisfaction since they had accomplished residing in a modern apartment.

This paper refers to Thessaloniki as the second port city in northern Greece, exploring the homogeneity and heterogeneity of various aspects of its built environment deriving from polykatoikia's genesis, maturity, and future. It refers to the owners' and the tenants' social and economic profiles, exploring the differences between various levels of ownership, from independent to co-ownership. It distinguishes the differences in housing development and construction methods before and after WWII and their effect on the maintenance problems and solutions of the years that followed. The paper examines the building regulations applied to the city's landscape that generated the polykatoikia and the current set of laws or practices that affect its function and its relationship with the urban public space. It follows the architectural form transformations from before and after the polykatoikia's generation, as well as the façade transformations of some polykatoikias due to aging, maintenance, and upgrade solutions. The storyline of all the above differentiates—to a higher or lower degree—Thessaloniki from other Greek cities. The change of state of those aspects between homogeneity and heterogeneity portrays the middle-class polykatoikia of Thessaloniki.

Thessaloniki's post-WWII urban tissue resulted from the interwar International Planning Committee's urban plan under the guidance of Ernest Hébrard, established in 1919 after the Great Fire of 1917. The committee designed the future development of Thessaloniki, inside and outside the burned zone. It envisioned a homogeneous development of the city and its buildings, providing in 1920 a "Special Building Code for Thessaloniki" that was truly unique to Thessaloniki (Yerolympos, 2003). After alterations, the implementation during the interwar era resulted in a heterogenous city image. Following the tradition of "superficies solo cedit"[1] (Chatzicharisi, 2015), one owner per building would define it from top to bottom and in discussion with the architect, would decide the building's architectural style following eclecticism with morphological variations (Colonas, 2012). Building permissions were provided for different construction heights depending on the owner's needs and financial condition, leading to an inhomogeneous skyline of interwar Thessaloniki's building blocks. World Word II and the ensuing civil war in Greece, which lasted until 1949, led to a ten-year interruption of building activity that would restart in the 1950s with private-sector constructions.

Today, more than sixty years since the construction of the majority of buildings in large Greek cities, when most of the fundamental aspects of a polykatoikia are reaching a turning point, it is crucial to address the challenges. Are the communities of each building ready to offer a homogeneous answer to maintenance problems of the construction and the facilities of the polykatoikia? Will the sustainability acknowledgment concerning resource and energy efficiency provide homogeneous solutions? How does the heterogeneity balance among long, medium, and short-term tenants? Is the heterogeneity of the ownership model able to survive, or are new models needed in the future?

The core of the research is based on the author's Ph.D. thesis (Alexiadou, 2022[a]). The methodology included research in primary and secondary sources, interviews, and field observation. There was a particular focus on building regulations and polykatoikias' architectural plans of that era. The future of the buildings was approached through regulations, recent interdisciplinary literature on the topic, and in-situ observations.

THE MIDDLE-CLASS HOUSING DEVELOPMENT IN THESSALONIKI: THE GENESIS OF THE POLYKATOIKIA

The apartment building is a product of the need that arose in Greek cities to house the rising urban population (Kalfa & Theodosis, 2022). Although there was a need for rapid growth in height and densification of the Greek city, neither the urban fabric nor the building code legislations were homogeneous throughout Greece. Equally, the new ownership model's heterogeneity of "micro-owners"[2] challenged the homogeneity of the polykatoikia as a unit.

Although general building codes for Greece were established in 1929 and 1955, they did not produce the typical polykatoikia's homogeneity in Thessaloniki, since some parts of the "Special Building Code for Thessaloniki" were valid even after WWII, prevailing the "General Building Code". Important information regarding the building volume would refer to each specific plot through various regulations. The city was divided into sectors according to plot size restrictions and the specifically permitted number of building floors. Since the road system outside the burned zone was still under development, the plots would be specified as buildable or not, after the implementation of "acts of adjustment and rearrangement" that would readjust the limits of each plot in relationship with the boundaries of the street and the neighbor plots. Limitations according to the building plot type would also provide plot coverage allowance. The width of the street facing the building would arrange the number of setbacks on each building's top (Alexiadou, 2022[a]). [FIGURE 01]

All the additional regulations generated a significant differentiation concerning the essential characteristics of a building's volume, reinforcing the city's heterogeneity, which would try to hide under the modern facade of the polykatoikia. The homogeneous socio-economic framework of the future middle-class attribute would be best served by the equality and homogeneity of the typical floor and the façade of a modern polykatoikia. The new

01 Thessaloniki's interwar architecture on the left and postwar architecture (mid-1960s) on the right. The change in volume and architectural style generated a new city.
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02 The homogeneous facades of the newly built polykatoikias expressed the modernized lifestyle of its tenants and "micro-owners."
© Socrates Iordanidis Archive/ MOMus- Thessaloniki Museum of Photography, mid-1960s.

buildings follow European and American standards of postwar modernity, belonging to Jester's and Fixler's category of "Ordinary Everyday Modernism" (OEM)[3] (Jester & Fixler, 2011). [FIGURE 02]

Essential for this research is the mechanism that financed the construction of the buildings since it gave the middle class the possibility to obtain ownership in a multi-story building in the city center that hosted various uses. The polykatoikia, after the Horizontal Ownership Law (Official Gazette 4/A/4-1-1929), separated into two fundamental kinds of ownership. The independent/"divided ownership" and the common/"undivided ownership." Independent residences could be found from the ground floor to the topmost apartments, built *en retiré*. Also, stores and storage rooms usually found on the ground or underground floor could be independently owned. In this new period, the plot owner or the to-be-demolished-building owner would agree with a constructor to give land for flats through the "antiparochi" mechanism. The constructor would undertake the handling and coordination of all works, like demolition of the old property, application for building permission, and building construction. The first agreement made for each apartment building was that a percentage of the new independent properties would belong to the landlord and a percentage to the constructor. Since the height regulations permitted seven to nine floors per building, there was a significant increase of floors added and divided into apartments, resulting in a

win-win situation for both beneficiaries. Both received a significant number of independent properties within the polykatoikia and had the chance to use, sell or rent them. The constructor usually sold the apartments off-plan to ensure cash for the building's completion and business profit (Kalfa, 2020; Theocharopoulou, 2017).

In this way, the micro-owners multiplied; they bought independent properties from the contractors and sometimes from the landlords. The buyers were from the middle class (Emmanuel, 2014), who managed to ensure some savings or could buy with installment payments. They arrived from rural areas to the city as internal migrants to claim a better future. They might be former refugees due to the compulsory population exchange between Greece and Turkey after the Treaty of Lausanne (1923), who raised enough money to buy an apartment in the city center. Everyone wanted to modernize their lifestyle. The apartments offered amenities lacking in Thessaloniki's old houses (Triantafyllidis, 1968). Popular Greek films of that time advertised the amenities of the new lifestyle, such as "light, water, elephone connections" and, for instance, bathtubs in the bathroom (Georgiadis, 1964; Dalianidis, 1965).

According to the Horizontal Ownership Law, when buying an independent property in a building, one simultaneously becomes the owner of a percentage of the building's shared infrastructure, facilities, and equipment. They include the plot itself, the structural core, the common basement parts, the common *pilotis* parts, the terrace, the facades, the corridors, the steps, the entrance, and all the building mechanical systems like the central plumbing and heating system, the elevator, the power, and telephone installations, etc. There may be facilities at the building entrance, such as concierges, or on the shared terrace, like laundromats and storage rooms, or even air raid shelters in the basement of buildings, all part of the common "undivided ownership." Some of them are no longer in use since the needs of the tenants have evolved. Occupied or abandoned, these valuable zones/facilities for the building community remain grey zones in the polykatoikia due to the common ownership. (Alexiadou, 2022a). It is clear from the above that the polykatoikia was designed and constructed to function as a unified whole. The advantages of the unified building included the division of maintenance costs and the extension of each owner's personal space limits to the shared space of the building.

Since the co-ownership could be among fifteen to forty other micro-owners, depending on the size of the building, the Horizontal Ownership Law covered the basic terms of co-ownership and its management. Further details for each polykatoikia could or should be composed in an additional formal "Regulation of the Polykatoikia."[4] In the regulation, among others, specific directions were given for the building's management by an Owner's Management Committee elected by the General Owner's Assembly. The regulation better defined its common parts and the financial burden each property should contribute to the expenses agreed by the majority of the General Owners' Assembly. The financial burden was divided according to the objective construction value of the respective property and not its subjective commercial value (Ovsevian, 2022).

MATURITY YEARS OF THE POLYKATOIKIA

Sixty years later, the individual ownerships in the form of apartments, stores, and storage rooms of the polykatoikia have a different living and maintenance history and different needs than the common ownership parts. Especially when there is no "Regulation of the Polykatoikia," there might be disagreements among the micro-owners about the extent of the commonly owned parts and who is responsible for their maintenance (Chatzicharisi, 2015; Tsiami, 2018). The deterioration of the common ownership exposes the lack of a building community's ability to agree on common management due to various reasons.

The financial instability of the Greek middle class and its connection to private property affected the polykatoikia (Panagiotopoulos, 2021). New taxes on private property and income insecurity turned the dream of private ownership into a burden. Moreover, mortgages were not easy to pay off and were no longer provided (Katsinas, 2021). The relationship between owners and lessees was redefined either in favor of the owner or the lessee. Rising rent prices were not viable for the lessees and gradually forced expectations for better amenities. Decreasing rent prices made the property unprofitable and turned the owners to solutions given by financial aid programs and international practices. One was related to improving energy efficiency, while the other was related to renovations, prioritizing the apartment and not the building; increasing the levels of heterogeneity.

The expectations of living in an apartment, whether owned or rented, focus on issues like energy efficiency, among others. When most polykatoikias were built, one of the offered luxuries was the central heating system with petroleum boilers. It was not until 1979 that the Thermal Insulation Regulation mandated the thermal protection of newly built buildings (Official Gazette 362/Δ/4-7-1979). As a result, the structures before 1979 are classified higher on the energy loss scale. (Ministry of Environment and Energy, 2021). The financial difficulty of the micro-owners of paying for the central heating oil supply due to the financial crisis of the last decade and the recent energy crisis created additional problems in polykatoikia's

03 The patchwork of individual interventions on the facades. © Sotiria Alexiadou, 2022.

management. The Owners' Management Committee could not resolve them in the general favor of the tenants. At the same time, the desire for autonomy and individual heating control of each apartment (Chatzikonstantinou & Vatavali, 2020) was often manifested in the General Owners' Assemblies.

Since 2011, the government has established a financial aid program for energy saving, the 'Saving Energy at Home' Program (European Construction Sector Observatory, 2017). The energy problem in Thessaloniki was more significant than in Athens due to the city's northern seaside climate, which includes high levels of moisture, low temperature, and heavy northerly winds, especially during autumn and winter, resulting in many submitted applications (Tziogas et al., 2021). The program facilitated the owners to replace central oil heating with individual gas heating, financing part of the installation expenses. The program's other most popular supported tasks were a building envelope upgrade through thermal insulation applications and the replacement of window frames (European Construction Sector Observatory, 2017). Those interventions had the effect of canceling a fundamental characteristic of the apartment building, meaning its function as a unified whole. Since there was no longer a common energy strategy, heterogeneity developed to the extent that could lead to entropy. For example, an apartment was rated as class B after the new autonomous installations. Yet another remained in—or even dropped to—the lowest classes, Z or H, since it turned to energivorous electric power for heating without the common heating system. Different energy classes made the building have different heating life cycles throughout one day, lacking a homogeneous response that would minimize the energy footprint of the polykatoikia.

One controversial point relates to the management of the common property facade. Any changes to it, like the installation of external piping for individual gas distribution, individual replacement of frames and blinds, adding shading systems, partial alteration of the façade due to external application of insulation, etc., concern the common area of the building and should be treated as such. Individual patchworks and exposed installations disrupt the unity of the façade (Alexiadou, 2022b) [FIGURE 03]. The way that the energy-saving program was implemented until recently raises an issue both in energetic and morphological terms of maintenance. The last update of the program (Ministry of Environment and Energy, 2021) focused on the unity of the building[5], promoting the simultaneous upgrade of the building's envelope, heating system, and other energy-consuming installations. The coordinated actions—either on common areas or on individual ownerships—are supported with extra financial aid and lead to the best practice of polykatoikia's homogeneous treatment as a unified whole.

Another critical parameter for OEM middle-class housing buildings is the user's succession. Many current micro-owners have inherited their apartment from family or bought the property second or third-hand. In Thessaloniki, even though the rate of owner-occupation is high, equally high is the percentage of second ownership (Katsinas, 2021) that can be rented as an income source. In both cases, the homeowners usually conduct total or partial renovation with the help of an architect/engineering firm or just technicians or contractors. Especially in the rental scenario, the different categories of tenants alter the investment that the owner is willing to make. One category is families that reside in an apartment as long as their need for space, location, and rent affordability remains stable.

04 The types of uses in stores on polykatoikia's street-level. Left to right: Parking, retail store, vacant store, entrance of the polykatoikia, former retail store that transformed to residence convenience store. © Sotiria Alexiadou, 2022.

Another is university students residing in an apartment for only four to five years. And there are young people who live on their own for a short period. This category was eliminated by Greece's financial crisis in the last decade, creating a boomerang effect for this generation (Siatista, 2021). The previous two categories are medium-term residents who tend to live in the city center and usually have a low budget. The rise of short-term tenants and the affirmed income that they offer led many middle-class micro-owners to conduct renovations and even divide larger apartments into 30 to 50 m² apartments to rent them out for a short time through popular online platforms, as simple hosts and to a lower professional degree than in other cities (Katsinas, 2021). Despite the local administration's attempt to attract tourists (Katsinas, 2019), the fact that Thessaloniki's tourist season is shorter and in less demand than that of Athens prevented the mass intrusion (Boutsioukis et al., 2019) that is observed in the capital city (Balampanidis et al., 2021). Unfortunately, the renovations begin and end at the private ownership limits without any contribution to the commonly owned property and usually burden them to entropic levels.

The need for affordable housing in the city center created a new phenomenon: the "transformation of ground-floor stores into residences" strategy (i.e., Tiktapanidou, 2022). Due to the maximization of supermarkets that took over the sale of fresh meat, fish, dairy products, and groceries from the smaller stores, the financial crisis, and the introduction of e-commerce, polykatoikia's stores on secondary non-commercial streets remained unrented and empty for many years. This strategy not only turns ground-floor individual ownership stores into apartments but also changes the public space in front of them. For example, since there is no official outdoor space, the sidewalk pavement arbitrarily turns into a semi-public space, where you can dry your freshly washed clothes or even place a little table to spend some outdoor time. This change affects the dipole private–public since instead of the public entering a private space, meaning a retail store, the private space is occupying the public space. Even if it proves to be a solution for storeowners and tenants looking for cheaper housing in the city, there should be a general plan on the urban scale to avoid the increase of privatization at the ground-floor level that does not accord with the Greek urban profile, decreasing the diversity of uses that retail stores were offering. Even worse is the change of use from a store to parking (Tsireka, 2019) because the commonly installed non-transparent metal doors prevent the view expansion that the storefront window offers to the city [FIGURE 04]. It is crucial to involve architects who could experiment with the design process of these condensed alternative individual living spaces (Mitroulias, 2021a, 2021b) or other uses providing new layers of complexity to the city's ground level.

DIRECTIONS FOR THE POLYKATOIKA'S FUTURE AND ITS OWNERSHIP MODEL

TOP-DOWN / ALL FOR ONE

A recently developed strategy relies on homogeneity on the part of the building owner. In this case, a single investor buys all the independent ownerships of an apartment building, reaching 100% ownership of private and shared space. The investor usually has a business plan for the polykatoikia related to medium-term and/or short-term rentals. According to the location of the building, the size of the floorplan, amenities like fast internet, and the business orientation of the investor, the future tenants could be university students, digital nomads (Katrana, 2022), or

05 The transformation of the typical floor typology of four apartments (6 toilets in blue and 4 kitchens in green) to eight apartments (9 toilets and 9 kitchenettes). The building was initially designed in 1965 by local architect George Chatzinakos. The refurbishment was made in 2011 by the architecture and design firm LoT. © Image processing: Sotiria Alexiadou, 2022. Source of plans. Left: Building Permissions Archive of Thessaloniki. © Right: LoT via Archdaily, Gallery of AS67 Student Housing / LoT - 25. Retrieved January 20, 2023, from https://www.archdaily.com/529705/as67-student-housing-lot/53cdd906c07a80492d000365-as67-student-housing-lot-third-floor-plan.

06 For the original façade, the architect (G. Chatzinakos, 1965) was to provide a vague scenario of the building's tenants. In the refurbishment, the architects (LoT, 2011) had a specific vision for the use of the building. Homogeneity is expressed in both facades but in different directions. The 1965 façade is homogeneous in itself and with its surroundings (extrovert), the 2011 façade is homogeneous in itself but heterogenous with its surroundings (introvert). © Image processing: Sotiria Alexiadou, 2022. Source of plans. Left: Building Permissions Archive of Thessaloniki. © Right: LoT via Archdaily, Gallery of AS67 Student Housing / LoT - 25. Retrieved January 20, 2023, from https://www.archdaily.com/529705/as67-student-housing-lot/53cdd8c5c07a80492d000364-as67-student-housing-lot-elevation.

guests/tourists. A significant rise in university student-oriented housing has been documented in Thessaloniki (Hatziprokopiou et al., 2021).

Since the original apartments of the polykatoikia were not designed for short-term or medium-term rentals, a total renovation of the building and redistribution of the floorplans makes the facility more functional and profitable. The homogeneity in ownership accelerates the decisions, the application, and the completion of any upgrade. Certainly, the costs are not shared, but most likely, the payback of the investment is faster. The increase of possible independent rentals can rise, i.e., from four family apartments per floorplan to nine single-room student apartments, leading to a significant change in the typology of polykatoikia apartments since multiple kitchenettes and toilets are added, and the family apartment shrinks to a single-room unit [FIGURE 05]. In addition, the building typology usually changes since amenities are added in former common areas that remained out of use or had a minimum impact on the functionality of the polykatoikia. Areas on the underground floor can turn into a gym, a laundry room, or a bike parking area. The terrace easily turns into a roof garden offering extra outdoor space for gathering since the private spaces are reduced to a minimum. The facades surpass the limit of homogeneity with resembling frames, common colorization, and furniture [FIGURE 06]. All the equipment that creates the heterogenic polykatoikia's facades and balconies, such as air conditioners, gas boilers, and antennas, are part of the common facilities upgrade and are carefully interpreted on the new façade. The tenants usually do not individually alter the facades.

In this case scenario, the multi-story building loses the qualities of a Greek polykatoikia in terms of typology, morphology, and uses. It turns into an enterprise imitating the city hotels. The characteristic micro-ownership that can calibrate the social need for affordable housing (Maloutas et al., 2020) diminishes.

BOTTOM-UP / ALL FOR ALL

Another strategy for polykatoikia's future focusing on coordinating with the micro-ownership is the model of self-management and collective ownership of a building by a housing collective formed for a specific building. This model has been implemented in Central and South-Eastern Europe ("MOBA Housing Model," 2018). In Greece, it has not been applied yet. Still, since 2016, Co-Hab Athens has been formed as a research group exploring the possibilities of organizing the first "cooperative housing/collective ownership" project in Greece ("About Us_CoHab Athens," 2016). The concept is straightforward; each collective member owns stocks of the building's ownership that they reside in but does not have separate private ownership in it. Every member has a voice in the management of the building, and no independent decisions are made for each part of the building's living, working, and entertainment areas. The fundamental division of the polykatoikia in private and common areas is eliminated, and the whole building turns into a common-used-owned space.

This strategy should not be confused with cooperative housing. Even though the two strategies share common concepts, the scale of possible Co-Hab projects is smaller,

and the ownership is divided among tenants. Since such a model of ownership has not been applied to a single building, overcoming many obstacles related to laws, taxes and financial procedures like loans is vital. The Co-Habs could benefit from strategic approaches on how a cooperative housing enterprise successfully receives financial or tax aid from the state and how the neighbors develop the sustainability of the community and the building. (Profiles of a Movement: Co-Operative Housing Around the World, 2012).

This housing model could be a more prominent solution for young professionals or people transitioning from parental housing to independent living, overcoming the usual problems that young people especially face when they decide to rent, such as affordability, stability, secure tenure, etc. (Siatista, 2021). Sustained heterogenous ownership of a homogeneous group of people with common beliefs in the housing model could support the sustainability of the community and the building itself.

These two approaches abolish or absorb one of the two types of ownership in the polykatoikia. The first cancels the building's common ownership part introducing the building into an independent single-ownership model, and the second expands the co-ownership to the entire building. A third approach could renew and follow the existing model. Micro-owners could benefit from educational programs related to ownership (Saoulidou, 2022). The joint coordination between owners about the rising problems in all aspects, cosmological, physical, and environmental, could lead to holistic and articulated management for polykatoikias' future. Help from the state in terms of financial aid and support of the micro-ownership in a polykatoikia through regulating practices that led the model to entropy are to be studied further.

CONCLUSIONS

This paper focused on the main middle-class housing representative of Thessaloniki, the Greek polykatoikia. In the first part, it pointed out that the parameters which created it derived from the invitation of a heterogeneous ownership crowd to contribute to replacing the former homogeneous ownership model for the rise of a multi-story homogeneous-looking building. The diversity deriving from the regulations made the city model heterogeneous enough to fulfill different living standards.

The current challenges for the polykatoikias in Thessaloniki derive from a number of parameters that need to be included in the discussion for polykatoikias' future. Some are objective, like the aging building stock and the financial crisis, while others are subjective, like the micro-owner strategy for the future management of the individual and common properties of the building. The two ownership parts, the individual and the common, that exist in a building raise problems for the maintenance program and the efficiency of a building as a unified entity. The financial and energy crises generated major controversies among the micro-owners, resulting in a dysfunctional micro-community with problematic coordination for common solutions. Fierce debates arise in the polykatoikias when some micro-owners renovate and upgrade their individual ownership without investing in saving or contributing to the upgrade of the common property, resulting in increased heterogeneity within a building's shared or private property. Among others, the rising heterogeneity becomes evident in the originally modern homogeneous facade due to independent interventions ignoring one of the fundamental characteristics of the polykatoikia. The current state of the OEM middle-class buildings is reaching a dangerous level of entropy in cosmological, physical, and environmental aspects.

Future scenarios for the development of the polykatoikia have different directions, especially in the ownership model. The first direction is top-down, bringing us back to the homogeneous sole owner. In this case, the enterprise owner alters the building characteristics in typology and morphology and focuses on remodeling the building to attract rental tenants. The second direction is bottom-up, supporting and enhancing micro-ownership. It absorbs the independent part of ownership, creating a shared good, making ownership more accessible and with lower space dependency. Since Greek cities are coined by the polykatoikia, any direction followed for its future will determine the future of the Greek city and, consequently, of the Greek middle class.

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ENDNOTES

1 The "superficies solo cedit" is a Roman Law rule, meaning that whoever owns the plot also owns whatever is structured on the plot. This meant there could not be an ownership division between the land, the building or any part of the building. There could be only one owner of the whole. The Greek Horizontal Ownership Law, in 1929, disrupted the "superficies solo cedit" rule (Chatzicharisi, 2015) and its ownership model since each floor/apartment of the building could form an independent "divided ownership".

2 The term "micro-owner" (μικροϊδιοκτήτης in Greek) usually refers to the owner of an apartment or a store in a polykatoikia. This kind of ownership was possible after establishing the Horizontal Ownership Law in 1929. The "micro-owner" would automatically own the apartment or the store, i.e., "divided ownership," and a percentage of the common parts of the building, i.e., "undivided ownership." Usually, all the decisions for the management/maintenance of the "undivided ownership" should be made with the agreement of the "micro-owners" majority, which raises the complexity of their cohabitation

3 The global built environment that was constructed between 1945 and 1980, whose characteristic was the vast quantity and uneven quality. (Jester & Fixler, 2011).

4 The additional "Regulation of the Polykatoikia" was not popular until the 1970's. Its lack intensified future problems among the "micro-owners".

5 Unfortunately, in Thessaloniki only one polykatoikia, out of 27 that applied, was accepted in the program. (Ministry of Energy 2022-2023).

THE IDEAL MODEL OF SOCIALIST MODERNISM

Gheorgheni Housing Estate in Cluj

Dana Vais

ABSTRACT: This paper addresses the Gheorgheni housing estate in Cluj (1964-1969) as a remarkably well-preserved example, representative of a particular phase in the evolution of socialist housing in Romania. It argues, in the context of the present debates on the notion of postwar Modernism, that Gheorgheni is a proper modernist example and that this specific period in the history of Romanian socialist housing can be defined as the modernist period. This was a time when the state set up a housing production system adapted to mass scale at the national level and when the first large housing estates emerged. A young generation of architects working in the newly created regional design institutes eagerly embraced modern architecture in both its aesthetic and social dimensions. Through an analysis based on interviews with architects, photographic archival material, publications of the time, and references to contemporary debates on postwar Modernism, the paper identifies the sources that informed the Gheorgheni project and shows how it embodied the model of modernist housing in its "ideal" form–i.e., close to the classical functionalist model of modern architecture and urbanism. It demonstrates the consistency of its modernist project and claims that the coherent urban and architectural design, together with the social mixing of its residents, account for its success over time. Unlike other estates from the same period, it has suffered only minimal later interventions and is still a desirable residential area today. Ultimately, the objective is to make a case for listing the estate as a modern architectural and urban heritage monument that deserves preservation, despite the negative undifferentiating perception of postwar housing that persists in Romania today.

KEYWORDS: Modernism, functionalist city, socialist housing, 1960s, Romania

INTRODUCTION: "Modernism" is a problematic notion when used in relation to socialist mass housing. Its perspective seems too aesthetic, reductionist, and trivial faced with the complex realities these housing projects implied. Historian Jean-Louis Cohen, for instance, repeatedly declared his "hostility" towards the use of the term in relation to postwar mass developments and claimed it should be given up because it denoted style and superficial aspects, obscuring deeper implications, better expressed by the notions of modernity and modernization, the terms he preferred instead (Cohen, 2009, 2021). "Moving away from the narrative of the Modern Movement" in postwar housing developments for letting "broader architectural networks and forms of production" to come out instead (Can and Maxim, 2022, 9) is a kind of zero-sum game rationale that is often encountered today.

On the other hand, the term modernism has been rather overused in relation to socialist architecture by being extended over the entire post-Stalin socialist period–for instance, in the exhibition "Soviet Modernism 1955-1991" at the Architekturzentrum Wien in 2012. Architectural guides seem particularly attracted to this all-embracing Modernism, which includes brutalism and even the spectacular-iconic kitsch of late socialism–like Anna Bronovitskaya's *Moscow: A Guide to Soviet Modernist Architecture 1955-1991* (2019) or the guides published by the group BACU, promoted on their platform[1], such as the one for Romania and Moldova (Rusu, 2018).

This paper challenges both these views. It considers Modernism relevant to a certain stage in the evolution of socialist housing and to a particular moment of socialist urbanization. Modernism is a useful notion if used

01 Gheorgheni housing estate, Cluj, microraion 1 (1964-1965). © N. Kulin, March 1969, DSAPC Cluj.

with precision in specific situations, for cases of housing architecture in which canonic references and modernistic image were indeed an issue, and when these were also addressed beyond mere aesthetics. The problem with the notion of Modernism is its misuse rather than uselessness. This paper does not deny it remains problematic in principle and addresses it with a precise question: what exactly in the housing estates produced in 1960s Romania cannot be fully understood unless a "modernist" interpretative component is involved? This question will be answered and illustrated by the historical analysis of a representative case: the Gheorgheni housing estate in Cluj [FIGURE 01].

Cluj is a secondary city in Romania, and Gheorgheni is the secondly built large housing estate in the city. Analyzed today, it appears like a precise demonstration of the interwar CIAM's "durable legacy" (Mumford, 2019, 293): *existenzminimum* apartments, scientifically based urban design, sunlight and ventilation in every unit, walkable neighborhoods, and the four functions of the city. But Romania never had a member in the CIAM, and Modernism was a word avoided at the time. Still, Gheorgheni looks like a perfect illustration of modernist functionalist urbanism. How did that happen?

Based on photographic archival material, interviews with architects, publications of the time, and references to present-day debates on postwar Modernism, the paper investigates how Gheorgheni became, in the words of one of its architects, "a model of urbanism for the entire country" (Buzuloiu, 2023). It shows that the term Modernism makes sense when used in relation to a certain phase in the evolution of socialist housing in Romania. It also shows that Gheorgheni is an important witness of this historical phase, a rarely well-preserved—and properly modernistic—housing architecture of the 1960s and that its historical value and quality of habitation environment make it worth considering for heritage designation and protection.

MODERNISM

The notion of Modernism was applied to architecture more often from the outside and in hindsight. For instance, the 1932 *Modern Architecture* exhibition at the MOMA (the Museum of Modern Art in New York), which looked back to the 1920s European architecture from an American perspective, explicitly identified modern architecture as a new style. In its catalogue, Philip Johnson stated that it was Le Corbusier who announced it as such (Johnson, 1932, 20), Henry-Russell Hitchcock remarked the importance of ideal projects as means of architectural exploration (Hitchchock, 1932, 160), while Lewis Mumford saw "the laying down of a new basis for housing" to be one of modern architecture's "chief triumphs" (Mumford, 1932, 179). However, the early "modernists" did not call themselves so because stylistic mannerism was exactly what they fought against and also because housing, through which many of the ideals of the early modern architecture were defined, was primarily concerned with more urgent non-aesthetic issues, such as hygienic habitation and accessible mass production.

Historian Anthony Vidler remarked that it was the first generation of modern architecture historians who accomplished "the historicizing of modernism," although still not using the term for naming it; they gave modern architecture its "canon" and "its place in the history of 'styles,'" exactly "what the modernist architects themselves feared the most" (Vidler, 2008, 7). The second generation of

modern architecture historians went even further, "inventing modernism" as a postwar architectural concept–as Vidler wrote, also remarking the "inevitable collusion" between history and contemporary design with this new concept of Modernism (Vidler, 2008, 15). In other words, historical discourse and professional practice converged in defining the architectural Modernism of the postwar years.

The relationship between modernist practice and its conceptualization was highlighted by historian Adrian Forty, who remarked that language had its role in the aestheticization of modern architecture, with non-aesthetic terms of function and technique becoming, rather early on, "aesthetic terms with social denotations" (Forty, 2000, 107-108). He showed that Modernism was not just "a new style of building" but also "a new way of talking about architecture." "Modernist discourse was indeed a system," with a distinctive vocabulary of specific terms like 'form,' 'space,' 'design,' 'order' and "the tendency to render what is concrete abstract" (Forty, 2000, 19-22). Even if modern architects mistrusted language, denied aestheticism, and didn't use the term, "the world of modernist discourse" (Forty, 2000, 19) paved the way for Modernism as an aesthetic practice, legitimating the term itself.

The use of the label "Modernism" is commonplace in historical discourse today, not only in reference to interwar modern architecture, but also to the postwar period. In his history of architecture during the (long) 20th century, Cohen writes about the "global diffusion of modernism" and its diversification after WWII, remarking that even behind the Iron Curtain "the eclipse of modernism was brief" (Cohen, 2012, 310). What was called "Socialist Modernism"—again, in hindsight—is part of this diffusion and diversification.

However, in Eastern Europe, postwar architecture has been mostly described as the result of a technical-bureaucratic system, which strongly limited architects' agency and architectural expression. In Romania, for instance, the state system of design production regimented the architectural profession, as historian Ana Maria Zahariade has shown (Zahariade, 2012). This is particularly evident in housing production. Emily Pugh remarks that large housing estates in the GDR were "the product of an assembly line process" and "barely designed at all" because of the "marginalization of architects" (Pugh, 2015, 99). But despite all this, as historian Susan Reid remarked, even if, in principle, Khrushchev's turn was focused on increased production efficiency, it eventually also brought about "a new aesthetic of socialist modernism" (Reid, 2006, 268). In Romania, aesthetics became such a subject of interest by the mid-1960s that the journal *Arhitectura* dedicated two successive issues to it in 1967 (no. 2 and 3). This coincides with the time when the first modernist large housing estates became visible on the ground and started being assessed in hindsight.

Modernist aesthetics was in no contradiction to socialist architecture's ideology. If anything, Modernism was the most appropriate expression for an architecture that was strongly ideological. As Vidler explains, "architecture's role as an ideology," defined by Tafuri, referred to "something above and beyond mere building" (Vidler, 2008, 179). Although post-Stalinist housing developments were a matter-of-fact efficient architecture, they were also about something "above and beyond," namely modernity and modernization in communist terms. They needed Modernism precisely because, as Vidler explains in relation to Tafuri's concept, Modernism is "more ideological" than modernity, and it is also "its representation" (Vidler, 2008, 169, 184). Modernism in socialist housing gave expression to the ideology of communist modernity—for a while.

In socialist countries, Modernism was more like a universal ideal abstraction rather than a return to an early modern avant-garde experience. In Romania, local interwar Modernism had very few social concerns and could not become a valid model. Architects turned instead towards an "ahistorical architecture of functionalism," which reflected the "deeply universalizing aspirations for architecture worldwide," exactly like Virág Molnár writes for Hungary, where architects "institutionalized" Modernism as a "cultural link" to Western European professional discourses (Molnár, 2005, 111, 116). Or similar to what Marija Dremaite remarks about Lithuania, architects "simply wished to belong to the international community of modernist architecture" (Dremaite, 2017, 315). Throughout the socialist world, Khrushchev's Thaw unchained architects' repressed desire to be part of the free world with which Modernism was associated.

GHEORGHENI HOUSING ESTATE IN CLUJ (1964-1969)

Gheorgheni was designed by the Systematization Studio of the DSAPC–Direction for Systematization, Architecture and Construction Projects, as the regional state design institute in Cluj was called at the time—systematization being the term for urban planning in socialist Romania (Vais, 2022). The architects in charge were all young: Augustin Presecan (1933-1978), head of the project team, Vasile Mitrea (b.1935), and Aurelian Buzuloiu (b.1937). Presecan had been trained in architecture and urbanism in Moscow between 1954 and 1959; Mitrea and Buzuloiu graduated from the Institute of Architecture in Bucharest in 1960 and 1962, respectively. The fact that inexperienced architects dealt with the most important investment in the city was not uncommon at the time, as regional design institutes—created in 1957 with the mission to implement

the program of large housing estates all over the country—were populated mostly with fresh graduates.

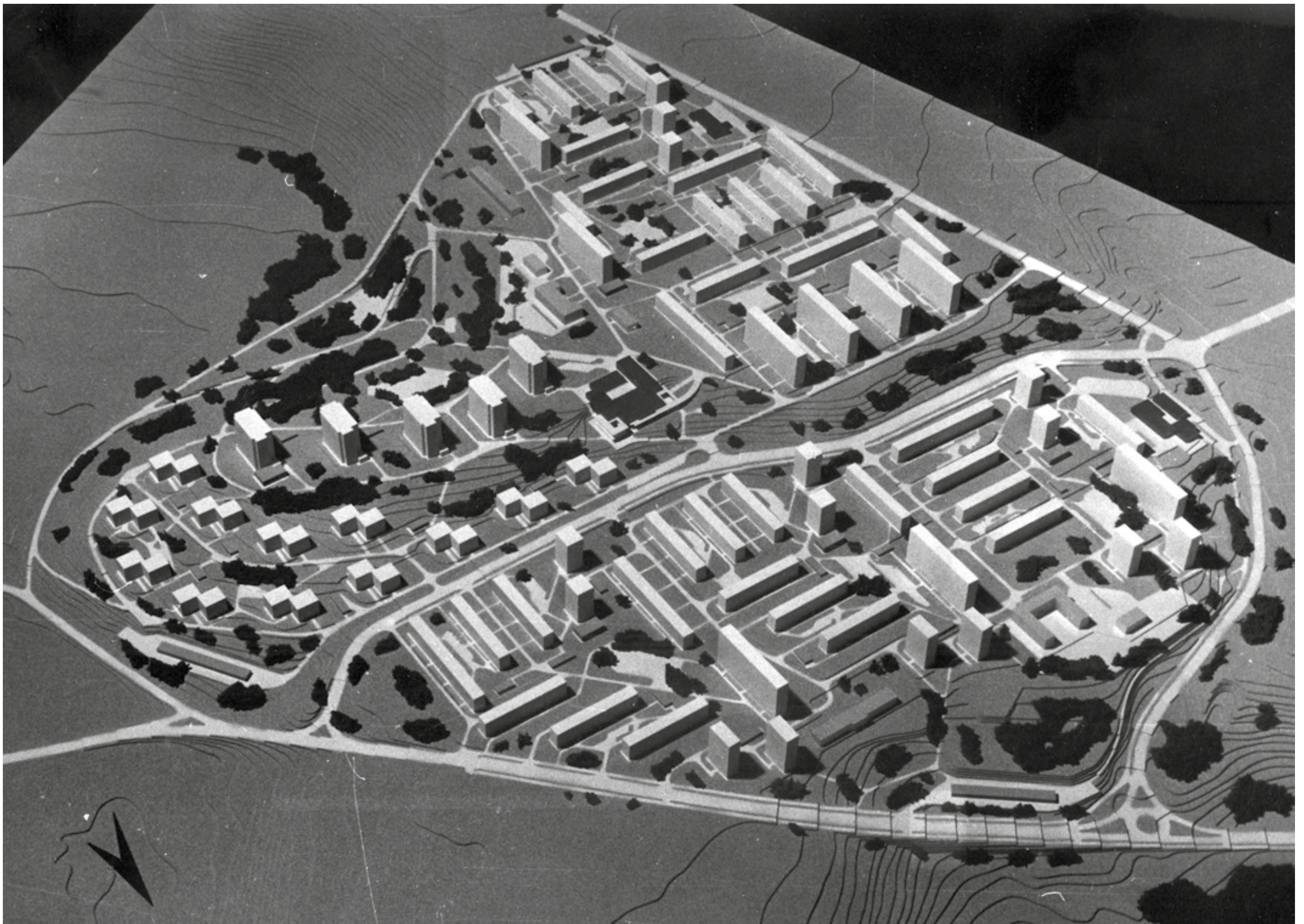
The systematization plan for Cluj was designed in Bucharest by ISCAS (the Institute for Studies in Constructions, Architecture and Systematization) and introduced in 1960. It immediately needed adjustments, and it was Presecan who was in charge of the so-called "systematization sketches" for the actual developments of the two large housing estates planned in the city, Grigorescu and Gheorgheni (Marian and Mitrea, 2021). Grigorescu estate (1961-1964) was designed by Presecan and Mitrea, and it was mostly a "pioneering design" (Mitrea, 2011, 162), given that documentation was scarce at the time and Romanian instances were still very few. But Grigorescu was set on land occupied by houses, and its design was applied partially and much altered. Nevertheless, its experience served Gheorgheni, the second large housing estate in the city but the first to be raised on almost empty land at the periphery [FIGURE 02]. Its two microraions (residential micro-districts) were designed together and built exactly as designed (microraion 1 in 1964-1965 and microraion 2 in 1966-1969). Buzuloiu joined Presecan and Mitrea, and he remembers they formed a team of one mind, controlling all aspects of the project at all scales (Buzuloiu, 2023), which accounts for the coherence of the project. Gheorgheni rigorously respected the new housing design norms introduced in 1960, local party leaders' ambition to provide a large number of new apartments in a showcase project, and the current knowledge in the field that the young architects were still absorbing.

Not much of what they had learned in the architecture school in Bucharest prepared them for this experience. Presecan received some notions of this new kind of urbanism during his training in Moscow, but they mostly learned by doing. By then, the restriction of foreign models ended due to Khrushchev's Thaw. The library of the design institute started receiving foreign architecture journals; subscriptions were made notably to *l'Architecture d'Aujourd'hui* soon after 1960—at the institute's library, but also personal subscriptions, and Mitrea had one of his own; "and this is how I found out about the neighborhood unit," he remembers. "We were much influenced by French practice" (Mitrea, 2023).

The official term for the neighborhood unit was the Russian *microraion*. But the notion was at the intersection of Western and Eastern European mass housing practice, and it meant quite the same: a walkable large urban block surrounded by streets and crossed by pedestrian alleys, including buildings for services of frequent use, along with residential buildings. An article in *Arhitectura RPR* in 1962 about the design of microraions, comparing Romanian examples to ones throughout Europe, applied the same term microraion to all of them, even to those from Switzerland, Sweden, and France (Sebestyen, 1962).

Architects intended Gheorgheni to embody the functionalist urbanism of the Athens Charter (Mitrea, 2023).

02 Gheorgheni housing estate, Cluj, microraion 1 in construction. © N. Kulin, 1965, DSAPC Cluj.

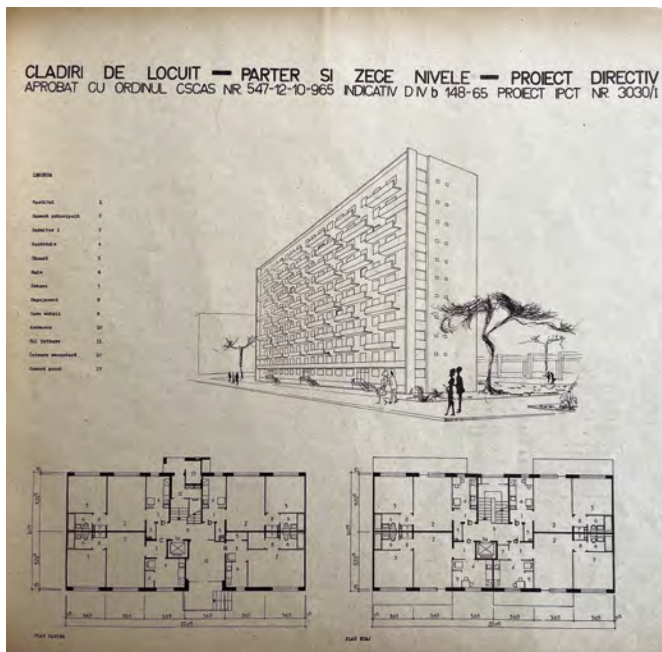


03 Gheorgheni housing estate, Cluj, microraions 1 (North) and 2 (South), model. Three housing groups are legible as subcomponents of microraion 1 (at the bottom right of the picture). © N. Kulin, 1964, DSAPC Cluj.

However, the Soviet practice was also a reference, not only through Presecan's training but also through their use of the Romanian *Architects' Handbook*, mostly reproducing the Soviet Architects' Handbook and Soviet design principles. The *Handbook* promoted scientific control over urban space organization on all scales. It defined the microraion as the second level in a systemic hierarchy: *cvartal, microraion, cartier, raion* (Chițulescu, 1958); only larger cities had *raioane*, so in Cluj, with its 185,663 inhabitants (1966), large housing estates remained at the scale of *cartiere*. *Cartierul* Gheorgheni was (at this phase) made of two microraions for about 17,000 inhabitants, living in a total of 5194 apartments in 77 buildings (Ansamblul, 1967). The smallest urban cell in Gheorgheni was not the microraion but the "housing group"– equivalent to the former *cvartal* (block), but with a free abstract form (for instance, three housing groups can be easily recognized as sub-components in the spatial organization of microraion 1) [FIGURE 03]. A housing group was composed of residential buildings, but was defined abstractly by the number of apartments that could be heated by one heating plant: up to 700 units (Mitrea, 2011, 162). Basic shared facilities–garbage collection points and children's playgrounds—were provided at the group level. In fact, the passage from *cvartal* to microraion (that is, from block to superblock), as the turn to modernist planning in socialist countries is often perceived by historians today, was a leap in scale: the merger of former *cvartal*s into the higher form of integration which was the microraion. At the level of the microraion, shared education, health, and commercial services were provided. The entire *cartier* was endowed with a commercial complex (which should have also had a cinema, not built eventually).

These shared services compensated for the smallness of the minimal-existence apartments. Gheorgheni, like all housing estates in Romania at the time, used extensively one standard type-designed apartment produced by the IPCT (the Design Institute for Type Constructions) in Bucharest. However, the type-designed building modules (called "sections") were of the "directive designs" category [FIGURE 04]. which left a certain margin of intervention to local architects who adapted them on site [FIGURE 05]; in Gheorgheni, architects Cristian Iacobi, Domnica Litvin and Alexandru Nemeș were involved in the design of the apartment buildings (Ansamblul, 1967; Gonos, 1973). The minimalist object quality of the buildings, the use of color, details, "entrances, alleys, playgrounds, putting habitation in relation to the ground"—were all carefully studied. "We searched a spatial quietness. We let the buildings breathe" (Buzuloiu, 2023).

The most characteristic feature of Gheorgheni, distinguishing it from later housing projects, is its generous



04 Directive type design, designed by IPCT (Institutul de Proiectare pentru Construcții Tip [The Design Institute for Type Constructions] in 1965. From ISART Catalogue, Album no. 3 (January 1971), project no. 3030, plate 13. © IPCT/ISART – Institutul de Studii și Proiecte pentru Sistematizare, Arhitectură și Tipizare [The Institute for Studies and Projects for Systematization, Architecture and Typification].

05 Block of flats (slab) in microraion 2, with a heating plant attached; Gheorgheni housing estate, Cluj. © N. Kulin, March 1969, DSAPC Cluj.

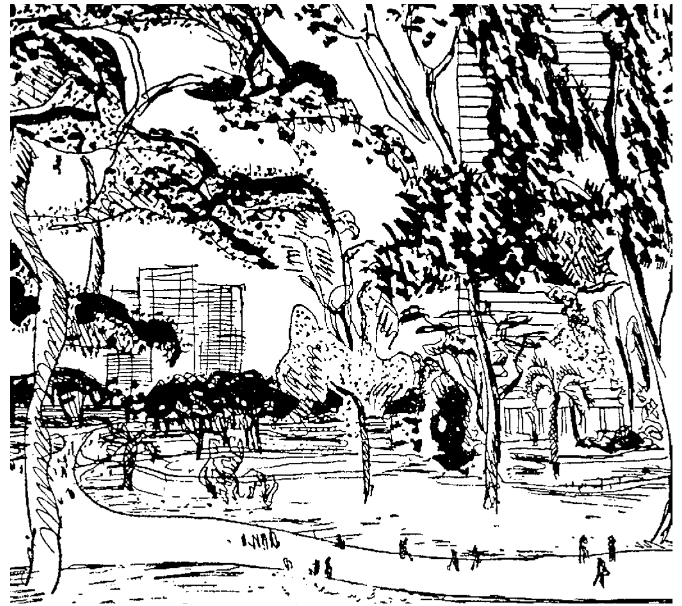
06 Distancing and green space between residential buildings (slabs) in microraion 2, Gheorgheni housing estate, Cluj. © Dana Vais, 2023.

open space. Existing health norms concerning sunlight and ventilation allowed architects a comfortable relationship between buildings [FIGURE 06]. They took the sun path diagram method from the *Architect's Handbook*, which assured the scientific base for the distancing and orientation of the buildings. Buildings were planned together with landscaping, which was considered an integral part of the urban design and addressed in each housing group; the plant species were decided with horticulture engineer Ana Micu. Besides these green areas, a garden was part of the facilities provided at the *cartier* level as a rule; the one in Gheorgheni was designed in collaboration with architect Natalia Mănduc (Mitrea 2023).

Green space, along with the sun and good orientation, was considered the essence of "hygienic habitation" since the first CIAM (Das Erste, 1979 [1928], 12-13). In the socialist city, it was also ideologically charged. The official discourse in the early years of socialism presented green space as a class element of distinction in capitalist cities: rich residential areas were full of green, while workers' habitations were deprived of it; it was the task of the socialist city's generous green areas to restore working-class dignity (Laurian, 1954, 17). With the adoption of the functionalist city model, it also connoted leisure–another sign of social progress. Green spaces became a definitory mark of the large housing estates in 1960s Romania. Their image was disseminated on postcards, which looked like they were sent from vacation at the popular seaside resorts. Indeed, the Black Sea projects, the first examples of postwar Modernism in the country, developed after 1955 and extensively presented by the journal *Arhitectura* at the time, influenced the modernist design of these early large housing estates in the country. But most importantly, the generous green spaces show that mass housing was addressed, at this stage, not only in terms of economic efficiency but also as an enjoyable environment. They conveyed optimism and a compelling image of urban modernity. "We designed the happy city; the socialist city was considered the happy city," and the inspiration was Le Corbusier's Radiant City (Mitrea, 2023).

Indeed, the 50-year-old vegetation at Gheorgheni displays this image even better today [FIGURE 07, FIGURE 08]. This is Le Corbusier's "expanse" between buildings, which allows the "flow of light" and "pure air" in the Radiant City (1935, 36). And this is also the "daily leisure" as a "direct function of habitation"–"active oeuvre, optimistic, human, bearer of 'essential joys,'" as Le Corbusier reported at the fifth CIAM on *Housing and Leisure* (Le Corbusier, 1979 [1937], 182).

07 Present-day vegetation in microraion 2, Gheorgheni housing estate, Cluj. © Dana Vais, 2023.


08 Drawing illustrating Le Corbusier's Radiant City. © Le Corbusier (1935), p.221.

It is this kind of claim that Cohen dissents. It would be confusing, he says, to think that "modernism as an experimental practice" has anything to do with the state-sponsored modernization and the process of massive production of collective housing, with buildings that might look similar to the *Unité d'Habitation* of Marseille, a "luxury high-end apartment block" inhabited by professionals, doctors, university professors, but are actually a vulgarization of these building types and a "cynical deployment of the working class outside the cities." Le Corbusier and the likes, Cohen says, insisted on "urban qualities, on a particular attention to landscape, on the individual study of the buildings"—considerations that have been "totally put aside" by the massive housing production, which "industrialized this initially innovative model" (Cohen, 2009).

In fact, professionals, who were state employees and "working people," too, inhabited Gheorgheni. Social mixture was part of the socialist city, where class identity was replaced with professional categories. Gheorgheni was built at the city margins and was an instrument of social progress for the recently urbanized dwellers, but it was not a social ghetto. It was an egalitarian environment, physically and socially. Apartments were allocated by workplace, based on waiting lists and selection criteria, such as giving priority to families with children [FIGURE 09] (and also "merits" of political compliance, such as Party membership). One enterprise or institution disposed of a certain number of apartments scattered all over the *cartier*. The process of housing distribution made it so that a university professor, or an architect for that matter, would live in the same building with a simple worker. So, it is not only rhetoric when Buzuloiu says that "we put ourselves in the user's place and designed a space just like we have liked to live in; we tried to observe the rules of living together, with respect to the human that we accommodated" (Buzuloiu, 2023).

For the architects of Gheorgheni, this "humanist" project was an experimental practice, both aesthetic and functional. They did not use the word Modernism, but they used other terms of design abstraction–e.g., space, balance, hierarchy—from "the modernist discourse" that Forty describes. As design norms after 1960 let architects "intervene in the spatial organization," they organized the abstract volumes of the residential buildings in well-studied spatial compositions. Elevators became allowed after 1960, and architects could use high-rise buildings: towers to create accents, mark centralities or let the green space

09 Inhabitants of microraion 1, Gheorgheni housing estate, Cluj. © N. Kulin, 1965, DSAPC Cluj.

10 Construction site, microraion 1, Gheorgheni housing estate, Cluj. © N. Kulin, April 1965, DSAPC Cluj.

flow, and slabs to individualize housing groups and relating to topography (Mitrea, 2023). "For us, the profession was art, urbanistic art" (Buzuloiu, 2023).

The one element of modernity that was almost entirely lacking in Gheorgheni, however, was industrialized construction. The techniques used were mostly traditional, with few prefabricated elements [FIGURE 10]. Prefabricated panels would start being applied in Gheorgheni only with the third "microraion" (by then named "housing complex unit") built between 1969 and 1972. But this extension marked the next phase in the evolution of Romanian socialist housing, with increased densities and cheaper mass production, as Cohen describes. The Systematization Law of 1974 terminated Romania's modernist model of open urbanism.

History's recuperation of Modernism came only after its recuperation in professional practice. Architect and historian Marcel Melicson has been presenting episodes of modern architecture history in *Arhitectura* since Le Corbusier's death in 1965 and edited an anthology of texts by Le Corbusier in Romanian (Le Corbusier, 1971). In his book *Modern Architecture* (1975), the only survey history of classic interwar Modernism published in socialist Romania–which did not use the term "modernism" either—Melicson presented the Modern Movement as "the main trends and ideas that built the theoretical edifice of contemporary architecture." Modern architects "anticipated the future and created the forms of which present-day architectural reality has gradually emerged" (Melicson, 1975, 8). History and contemporary architecture "collided" eventually, just like Vidler remarked. However, Melicson's book was not a source of inspiration but a sign of ending, a conclusion to the modernist credo of architectural practice in postwar Romania.

CONCLUSION

The urban design of Gheorgheni emerged at a particular moment of socialist housing evolution, and its sources were determined by that moment. Although it reflected Khrushchev's turn towards efficient building and followed the new Soviet design principles, it also took advantage of the relative liberalization after Khrushchev's Thaw and turned away from the exclusivity of Soviet models. It took its inspiration from beyond the Iron Curtain, notably from the *grandes ensembles* experience in France. But it aspired to be a universal ideal Modernism, which could transcend both camps and could fuse the socialist city with the modernist city. Gheorgheni captures this very moment in time when the Soviet-style microraion merged with Athens Charter functionalism and Radiant City imagery.

For the architects of Gheorgheni, this ideal reference was more than just the means of gaining useful knowledge for practical reasons. It was an exercise of professional freedom. What the case of Gheorgheni shows is that, despite the prevailing historical narrative about socialist housing being the product of an anonymous bureaucratic system and the architectural profession being completely marginalized, architects' agency was important at the time. The architects of Gheorgheni had the self-awareness of their pioneering mission of changing the fundaments of housing and urban design in Romania, and with the professional conscience of determining a radically new kind of environment and a new lifestyle for the people who would live there.

The Modernism that resulted developed a specific temporality. Gheorgheni is representative of a rather precise limited period in the evolution of mass housing in socialist Romania: the time of the first generation of large housing estates, a period that started with the local political sanctioning of the move away from Stalinist architecture in 1958 and ended with the 1974 Law of Systematization. This was, more generally, a period of relative prosperity and genuine economic and social progress, of which housing was the most visible accomplishment. Modernism remains associated with this optimistic period of the (long) 1960s and can be considered its marker. This is the proper period of socialist Modernism in Romania.

Unlike the housing projects of the following periods, which would become indeed more and more the product of a bureaucratic system, restrictive norms, and collapsing economy, Gheorgheni enjoyed a good balance between economic restraints and the positive value of a quality urban space. It could thus escape the densification campaigns from the 1970s on, which altered other similar estates of this period. Due to its social mix, it avoided post-socialist ghettoization. It escaped even the neoliberal interventions of the post-socialist years, preserving its artful spatial composition and generous green environment almost unscathed. Gheorgheni remains a witness to a special moment in the history of socialist housing, deserving to be recognized as a landmark of postwar modernist architecture in Romania.

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ENDNOTES

1 www.socialistmodernism.com

Residential complex Hannibal II, Günther Odenwaellers & Heinz Spieß (1973-1975), Dortmund. © Wido Quist, 2022.

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.

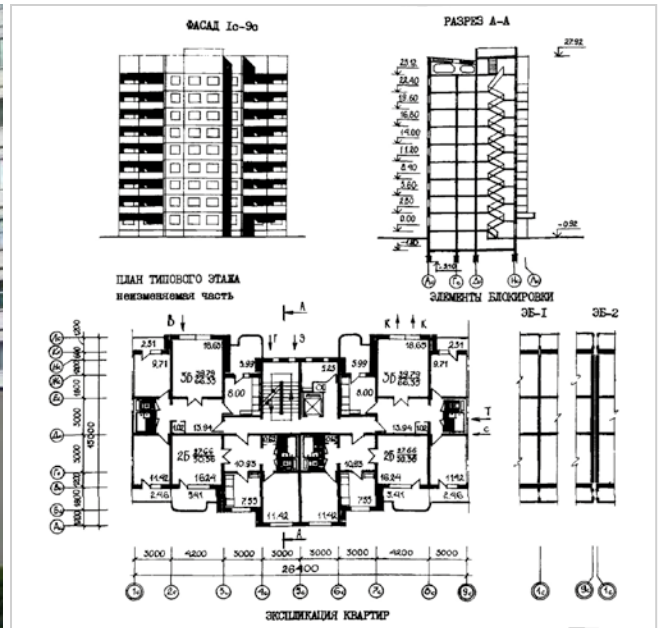
MASS HOUSING LEGACY: FACTS AND FIGURES

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 series[1] 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 m^2, including a kitchen of 6 m^2. 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 m^2. The total area of



01 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 m² for a one-room unit and 88 m² for a 4-bedroom m².

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 Chişinau, 2010). In addition,

02 Variations of mass residential series in Tashkent (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 (Cașu, 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, Soviet-era 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 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.

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.

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:

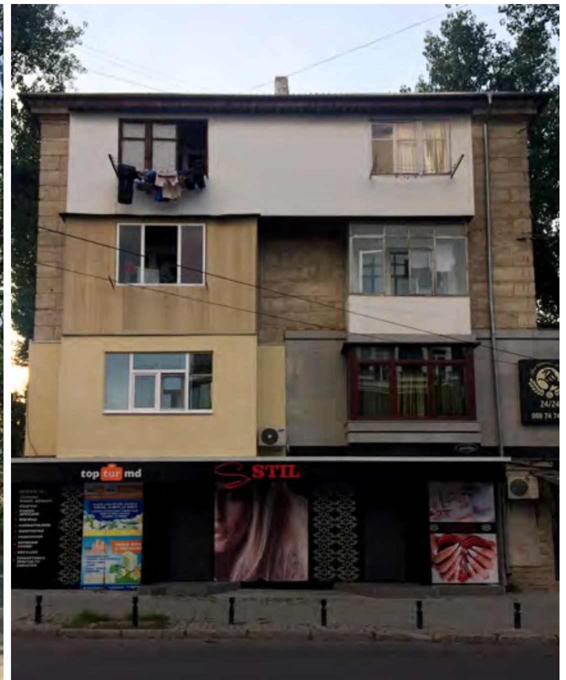
> *I don't feel that rebuilding such houses is any kind of threat to heritage. I guess it should be monitored by some emergency services, like the fire brigade, for example. But we, the heritage professionals, don't have much to do there.*

A representative of the SaveChișinău 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 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].

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

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

08 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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ENDNOTES

1 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.

Split-level housing Girondelle, Albin Henning (1965-1969), Bochum. © Wido Quist, 2022.

THE IN-BETWEEN SPACE

Romanian Mass Housing Public Space as a Playground in the Collective Memory

Romeo-Emanuel Cuc

ABSTRACT: The territorial systematization in Romania in the second half of the twentieth century has profoundly influenced the morphology of the current urban fabric, due to the pace of construction imposed by the socialist regime and related to politically forced industrialization and urbanization, thus contributing to an urban society sensitive to the subject. This paper addresses the ways in which the public space, resulting from the construction of socialist mass housing, was used, questioning how public space can be (re)gained for today's communities by understanding the disparity between the original, ordered socialist vision of housing and more informal appropriation patterns. The governmental approach to the urban development of socialist mass housing resulted in the occurrence of interstitial spaces which, having been of low development priority, were reclaimed by the nearby inhabitants, becoming free places for everyone and no one, territories that generated infinite possibilities for appropriation. Even though socialist mass housing developments were (and still are) associated with a sense of constraint, this situation generated the spontaneity with which inhabitants used the public space. In Romania, in the collective memory of generations, the iconic image of the space between the blocks is that of children playing and people socializing between *grey* buildings. With the fall of the communist regime, the responsibility of maintaining the buildings and the public space in-between was transferred to the new owners by selling the previously state-owned apartments to the population; in Romania, about 96% of homes are now privately owned. At a time when Romanian cities are facing a lack of quality public spaces, the in-between space in the mass housing neighborhoods has become a large parking area. Addressing how the public space can be (re)used must involve a clear understanding of past practices to generate context-sensitive reactions.

KEYWORDS: socialist mass-housing, urban in-between space, appropriation, collective memory, playground

INTRODUCTION: The current form of the built environment of Romanian cities cannot be separated from the story of forced industrialization and urbanization after the Second World War until the Revolution of 1989, a period in which the authoritarian political will of a dictatorial system sought "the construction of socialist society and the gradual transition to the construction of communism" (Gheorghiu-Dej, 1962, p.1). Architecture and urban planning were the instrumental fields that, under the limits imposed by the political context, "in an irreversible process of intense urbanization" (Lăzărescu, 1974, p. 22) led to the socialist reconfiguration of cities.

The architecture of mass housing was seen as a social factor (Ursu, 1976, p.14) in the entire political discourse of the time, and the construction of collective housing was one of the main architectural programs in which it was invested. Following the logic of urban planning, neighborhoods capable of offering a record number of residential units were built. Omitted from the urban planning priorities (especially after 1975), the space between the apartment buildings is, in the socialist times, a space for everyone and no one, a simple background for the imagination of communities (and, in particular, of children), a territory of freedom to appropriate a place in an oppressive political system.

The paper's subject is also addressed by the author in a broader study on Romanian socialist mass housing. It seeks to discover the nuances in the relationship between the complex political (and legislative) context, the controlled professional context (the intentions formulated in

the architectural and urban discourse), and the social context (the assimilation of the new direction by the population) to open new research opportunities. This offers new perspectives for the socialist neighborhoods by recognizing the qualities of good practice examples from the socialist period (not as a generalization), initiating new discussions regarding the possibility of classifying the socialist heritage of collective housing[1] and opening a reflection on how the public space of the socialist neighborhoods can be used today. To begin, the paper illustrates the ideological and socio-cultural ways in which socialist neighborhoods were formed. It then examines the original intentions of designing the in-between space of collective residential buildings as presented in the architectural discourse during the socialist regime. In other words, the paper addresses these two circumstances – the image of the socialist neighborhoods and the image of the architectural view regarding the design and partial programming of the interstitial space.

The formation process of Romanian cities through the construction of socialist collective housing is often associated with traumas for the traditional structures of the cities, but also the population. Still, these buildings form a large part of residential units in the country today. This impressive socialist urban fabric did nothing but provide an urban framework that was complemented by the human factor, aspects related to the identity of the place, the continuity of practices, improvisation, spontaneity, curiosity, and appropriation. An important part of the research is the illustration of the antithesis between the rigidity of the socialist dwelling and the flexibility of the places domesticated by the inhabitants [FIGURE 01]. The comparative perspective tells a story of spontaneity and imagination born out of constraints in a difficult political context. Furthermore, the paper addresses the contemporary situation of public spaces in socialist neighborhoods at a time when Romanian cities are facing a lack of quality public spaces.

SOCIALIST COLLECTIVE HOUSING – THE STORY

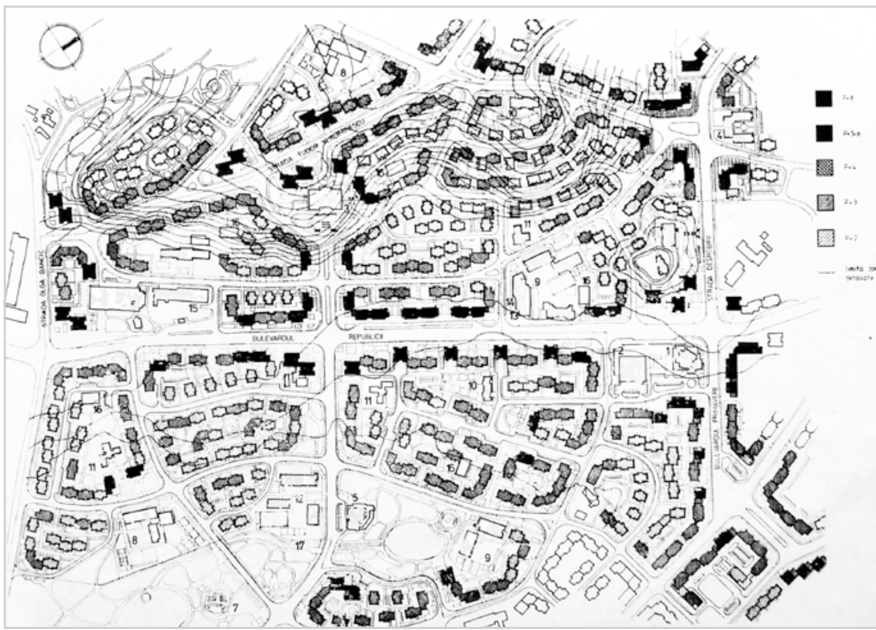
After the Second World War, the change of context meant the transition of a democratic state to a totalitarian, absolute owner involved in all areas of the state economy, including the country's architecture and urban planning, which was oriented towards quantity and uniformity. The development of standardized collective housing projects following typification, industrialization, and systematization had a decisive impact on the shape of the socialist city.

In the publication *Architecture in the communist project. Romania 1944-1989*, architect, historian and theoretician of architecture Ana Maria Zahariade (2011) proposed temporal milestones of the socialist history of the architecture in a particular perspective, referring to several stages related to the international context of the time, which she correlated with stages in the evolution of architecture and urbanism in Romania: the reconstruction after the war; the Stalinist *cvartals* that corresponded to the period of socialist realism until after the mid-1950s; the high-rise housing estates and the *microraion* (residential micro-districts) in the time of an attempt to synchronize with Western architecture in the 1960s until the first half of the 1970s when architectural practice enjoyed a certain openness towards modernism and free urban planning: "modernism was embraced, although the word *modernist* was avoided in political discourse" (Vais, 2020, p. 2) and "the terms modernism, functionalism, international style are never used" (Zahariade, 2011, p. 55); followed by the return to an absolute totalitarian regime until 1989 in a time of decline closely related and initiated by political factors translated through a process of densification.

01 Children playing in a socialist neighborhood in Bucharest. © Norihiro Harut, 1990 (Stoian, 2017).

It should be mentioned that the *Theses from July 1971 - Proposals for measures to improve the political-ideological activity, Marxist-Leninist education of party members, of all working people,* disseminated through the speech that Nicolae Ceaușescu gave on July 6, 1971, marked the end of liberalization through a new cultural revolution based on the Chinese and North Korean models (Stroe, 2015, p. 239). In 1971, Romanian dictator and head of state of the Socialist Republic of Romania from 1967 until the fall of the communist regime, Nicolae Ceaușescu, opened the 3rd Conference of the Union of Architects, and his critical speech was based on economic and nationalist arguments: "(...) the apartment buildings are dispersed randomly, they do not create precise streets and boulevards, in a clear urban planning line (...)" (Ceaușescu, 1971, pp. 3-8).

After the 1971 directives and with visible echoes after 1975 and in the 1980s, the intention to maximize the use of land in the densification process was characterized by the placement of new buildings in the green spaces of previously built neighborhoods, but also by the use of new spatial configurations - housing precincts [FIGURE 02]: "(...)



02 Housing precincts in a Romanian socialist city. © Cristea & Sandu, 2017, p. 35.

paved yards, enclosed by (...) tall buildings constructed from ambiguously shaped segments, creating, with aberrant population densities, empty, deserted urban spaces" (Zahariade, 2011, p. 62). At the same time, mass housing neighborhoods were built in the perimeter areas of the cities, the so-called "bedroom neighborhoods" (Zahariade, 2011, p. 61). Bordering the boulevards with high-rise apartment buildings generated backyards entrenched in the collective memory of the generations that have lived in the socialist mass housing developments in Romania, an ambiguous, unprogrammed (and sometimes residual) space.

The radical shift away from open-planned *CIAM Modernism* that happened during the 1970s led to a dense systematization pattern involving infilling of open spaces and building apartment blocks along boulevards (Zahariade, 2011), making the Romanian socialist experience (based on the systematization as an ideological/ urbanist concept of the *Ceaușescu era*) unique in the socialist block with generally modernist, vast open planning

dec. 1989
1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990

I
Post-war Reconstructions
filler-type interventions

II
SOCIALIST REALISM
the Stalinist *cvartals*

III
MODERNISM AND FREE URBAN PLANNING
High-rise housing estates and *microraion*

IV
SYSTEMATIZATION AND DECLINE
desnsification process - infilling of open spaces from previously built neighborhoods and housing *precincts*
bordering the boulevards with high-rise apartment buildings

03 Post-war socialist urban planning in Romania and the national spread of the phenomena associated with it. © Author, 2023.

continuing to prevail in the other Eastern European countries. This has obvious implications for the image of public spaces in Romanian socialist neighborhoods as the in-between spaces bequeathed by socialism differ radically in character pre-1970s and post-1970s. Today, some original open layouts are relatively intact, but others are much infilled and fragmented. For the Romanian case study, the socialist neighborhood is a general urban model at the national level for every urban establishment [FIGURE 03].

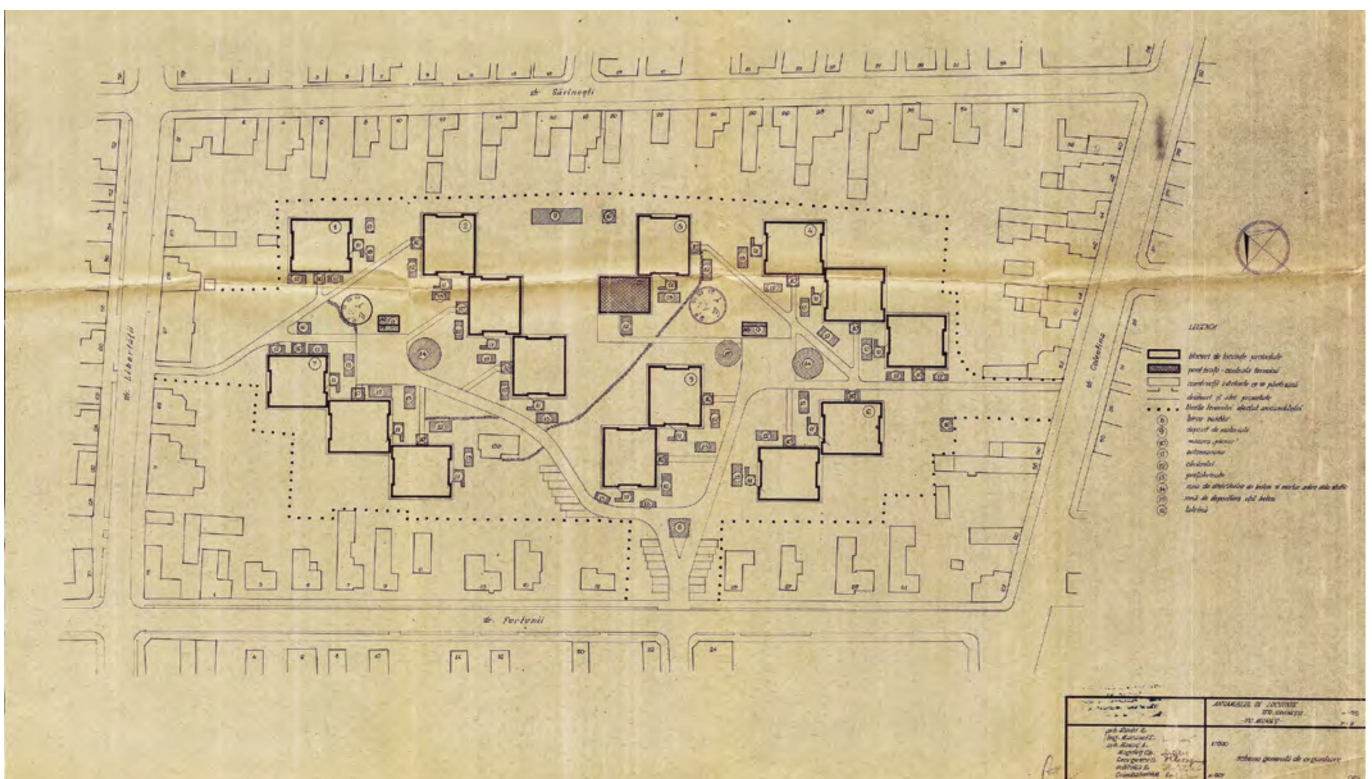
The socialist project to reorganize collective housing had a counterpart in the attempt at social uniformity. Newly built apartments were given to the population as a form of "social salary" (Locar, 1966, p. 19) and less often for purchase. Housing distribution was mainly organized through the state factories, prioritizing workers from large industrial units. The dimensions of the apartments were differentiated according to the size of the family, the birth rates, and the demographic growth (by Law no. 4/1973[2]). Architect Gusti Gustav (1962) described the socialist view related to the common property of the country: "The monopoly of private property over the urban territory is practically liquidated (...), and social property is established" (p. 5).

For a large part of the population, living in socialist collective housing was equivalent either to displacement from the villages or hometowns following the national distribution of jobs or to displacement from urban housing demolished following expropriation decrees. These new residents of the neighborhoods were being put in the position of having to form new communities and appropriate their new homes.

THE IN-BETWEEN SPACE IN THE PROFESSIONAL ARCHITECTURAL AND URBAN DISCOURSE IN SOCIALISM

The state was the absolute owner of all economic fields, and the free practice of architecture and urban planning was suspended and replaced by the state design institutes as the only places where the projects were carried out and within which political indications and directives were not optional (Vais, 2020). The administrative process required for construction took less than a year and included economic planning, systematization plan, expropriation decree, design, and work authorization. Architectural speech was concentrated in a few publications and was subject to censorship (Stroe, 2015, p. 27). The publication that constantly appeared throughout the socialist period is *Arhitectura R.P.R.* [*Architecture of the People's Republic of Romania*] magazine, which became *Arhitectura* [*Architecture*] magazine in 1965. It was the main way of disseminating information in the professional architectural and urban field of the time.

The design approach and interest in the space around the collective house buildings as presented in the period's publications fade over time. At first (in the time of socialist realism), the quarters formed inner courtyards with greenery in the collective housing complexes. The early 1960s until the first half of the 1970s is the period in which perhaps the most significant importance was given to the planned arrangement of the space around and in between the apartment buildings [FIGURE 04]. At the level of the professional discourse, the importance of outdoor



04 Playgrounds, pedestrian walkways, and planted green spaces proposed in the Aleea Săvinești neighborhood in Târgu-Mureș. © Unpublished document from the archive of the former State Design Institute of Mureș County – project no. 4453/1967.

design in satisfying the need of spending free time among the inhabitants was discussed: "the housing process of the urban community, in all its complexity, will have to be contained in a whole system of buildings and exterior design" (Gustav, 1962, p. 3). These aspects are reiterated throughout the period in a multitude of articles published in *Arhitectura (R.P.R.)* magazine, noting the close connection between the design of the exterior free spaces around the housing buildings, the living conditions (quality of life) and the new form of the "socialist city (...) as the built environment of society" (Gustav, 1962, p. 5).

Architect Victor Sebéstyen (1962) pointed to the lack of national experience in designing public space and sought to hierarchize it (from the complex's central garden to the green spaces related to the apartments). In terms of design, on the one hand, the green spaces received a major role. The importance of the landscape was mentioned since "architecture (...) cannot be conceived without a close connection with the surrounding green spaces" (Sebéstyen, 1962, p. 14) and the projects presented sought the environmental importance in the design of "the necessary micro-climate" (Gusti & Hussar, 1963, p.18). Furthermore, architect Alexandra Florian (1963) wrote an article about the need for playgrounds in housing complexes, exemplifying designed spaces for children from various cities in the country [FIGURE 05], along with a list of elements considered necessary in equipping these types of places (pp. 40-45).

If in the first half of the 1960s, the articles published in *Arhitectura R.P.R.* magazine concerning the design of the spaces between the apartment buildings illustrated an appreciative view, in the second half of the 1960s, the first criticisms appeared concerning the "huge free spaces between the apartment blocks" and the "distribution of the free spaces planted (...) evenly on the systematized territory", also pointing out the financial challenges related to the maintenance of public spaces: "the large expenses, which are necessary for these free spaces to become and, in particular, to remain what can be called a green space, cause them to be abandoned" (Ghelman, 1966, p. 34).

Since 1971, design directions have focused on cost-effective solutions (regarding financial and land use), leading to the redirection of funds previously dedicated to the design of exterior public spaces. The (then) president of the State Committee for Economy and Local Administration, Petre Blajovici (1971), raised the issue of economic efficiency: "the negative phenomena (...) of wasting investment funds in constructions (area) that do not justify themselves" (p. 2). The same aspect is reinforced by Nicolae Ceaușescu's speech at the 3rd Conference of the Union of Architects from the Socialist Republic of Romania in 1971: "in the new neighborhoods that are currently being built, as in the neighborhoods built in recent years, it is necessary to ensure the most rational use of land surfaces, an optimal density of constructions. In the process of continuous development (...) the retouching of design mistakes (...) committed in the past must be pursued" (Ceaușescu, 1971, p. 6).

The rational use of land led to the abandonment of the principles of free urban planning, and the provided green spaces within the ensembles were replaced by new buildings (in the process of densification). Within the new ensembles, the desired density led to housing estates that should have considered the design of the space surrounding the building. Gradually, in seeking densification and increasing the pace of urbanization, in the last part of the socialist period, the interstitial space remained an empty space, a platform, often paved and randomly planted. This was frequently discussed in the architectural discourse of the time, especially as a critique.

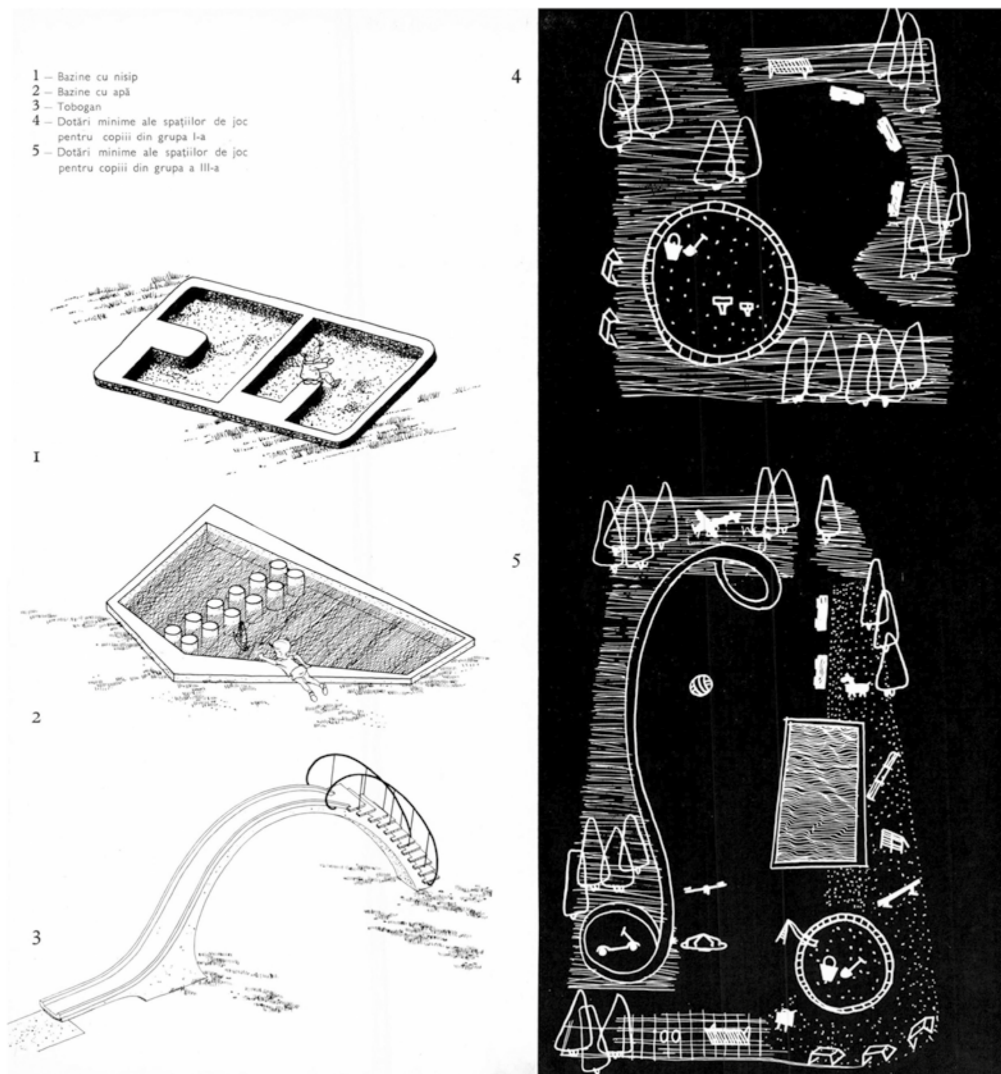
Furthermore, architect Cezar Lăzărescu (1976) identified a problem faced by socialist mass housing public space nowadays, namely addressing the parking lots [FIGURE 06], which he considered "insufficiently solved" and proposed as an alternative to the construction of "neighborhood parking lots (buildings), outside the housing complex" (p. 11). This desired solution was not realized, but the concerns of that time – "we risk, in the very near future, not being able to drive or walk on the streets anymore or destroying the green spaces" (p. 15) – are a real and important issue for the post-socialist Romanian cities.

Architect Cezar Niculiu (1981) wrote about the fact that housing "requires outdoor spaces" (p.17). A year later, architect Petre Derer (1982*)*, during the Plenary Session of the Union of Architects (with the main theme "the quality of housing"), emphasized "the importance of the vicinity, of the environment in defining the quality of housing" (p. 31). However, since economic efficiency was the main issue in "achieving the systematization details of housing complexes" (Horodincă, 1983, p. 34), the public interstitial space of socialist mass housing built in the 1980s in Romania was at a distant level of urban planning priorities.

EVERYONE'S SPACE, NOBODY'S SPACE

As Ana Maria Zahariade (2009) pointed out in *Symptoms of Transition*, "the space that forms the immediate vicinity of the home plays at least as important a role as the home itself" (p. 146). The transition between the private space of the socialist apartment and the public space of the neighborhood is perhaps best defined by the notion of the nearest vicinity.

Despite the homogenization imposed by the socialist dwellings, people responded to the new way of habitation by seeking to domesticate not only the space of the



05 Playground project in the 1960s for socialist neighborhoods. © Florian, 1963, p. 41.

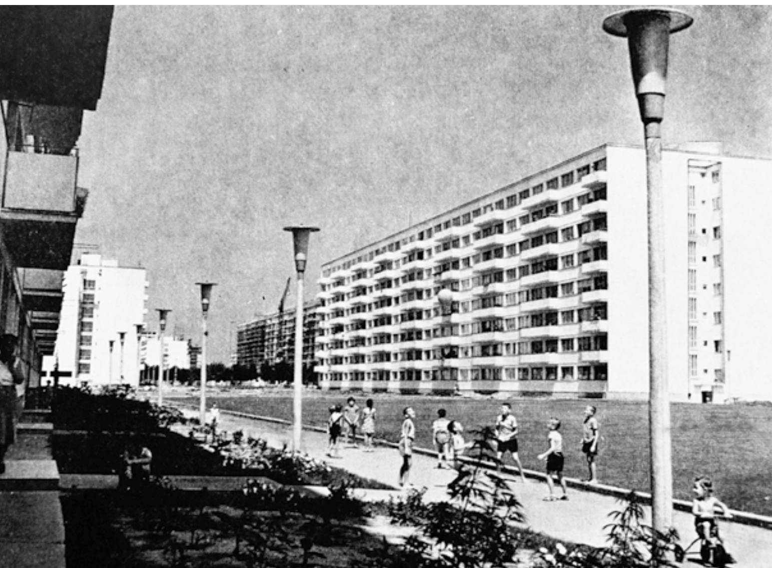
apartment but also the space around it, almost always and in all cities. The uniformity of the spaces that were assigned to them was counterbalanced by the gestures of living as symbols of freedom in the appropriation of the homes and their extensions; the entrance hall, the staircase, and the common halls were given the functions of play, storage and spending free time among objects and flowerpots, the interstitial space left between the blocks without specific programming. The free space between the apartment buildings received numerous

06 Drawings made by cartoonist Matty Aslan for Arhitectura R.P.R. magazine as a critical irony on the free space between the buildings in the socialist neighborhoods, highlighting the battle between the playground and the parking lot. © Matty Aslan (Derer, 1972, p. 10).

informal employment [FIGURE 07]. In this outdoor free area, the inhabitants planted trees or continued into this new collective type of courtyard/backyard activities previously associated with traditions and spaces of the courtyards from the villages. Meanwhile, the children built their own imaginary worlds in these spaces left undesigned, using objects and areas as props. The almost theatrical image of the in-between (public) space of the Romanian socialist mass housing was a very animated one - a non-restrictive playground next to the socialist apartment buildings, appropriated by the inhabitants with spontaneity and inventiveness in use as an antithesis of the political constraints that sought social uniformity.[3]

Anthropologist Vintilă Mihăilescu (2018) described the phenomenon of appropriating the space between the socialist apartment buildings as a paradoxical one: although a non-participatory phenomenon, the formation of the communities around the blocks was largely influenced by the possibility of further appropriation facilitated precisely by the diffuse search for the design of public spaces. "For urbanism to be imaginative to the extent that it gives up being definitive and forgets to plan everything, leaving the inhabitants the possibility of post-urban developments" (p. 29).

As an antithesis to the idea of imaginative urbanism, in the publication *Experimentul Cățelu*, Florin Biciușcă (2005) emphasized the differences between the intentionality of the design and its reality and the discrepancies between the untruthful, idyllic illustration of the public space exhibited in the projects in the specialized architectural socialist literature and the resulting spaces which, in the absence of character and sociological meaning, risked remaining deserted. However, Biciușcă mentions the iconic image of the space between the socialist blocks, a metaphor for free space and freedom of appropriation that marked the collective memory in Romania for generations. He describes the use of the space between and next to the socialist blocks as spaces whose generosity is guaranteed by the lack of rules, constraints, and profiling: "When the new neighborhoods smelled of fresh lime walls, children did not have playgrounds designed with swings and slides, but they did transform the ground between the apartment buildings into something good for long games; they would play games too ridiculous to seem important to the city planners (…). These were not sad children because nobody would teach them how to play. The only exterior facilities were some bowers with concrete benches where grandparents were supposed to sit (…). They would find themselves much friendlier spots (…)" (Biciușcă, 2005). This lack of constraint was facilitated by a social system in which children could freely enjoy the spaces between the blocks supervised not only by their parents but also by the whole community, by these "networks of adults (who) played the role of informal supervision cooperatives" (Petrovici, 2018, p. 22).



07 The image of urban life in the newly built socialist neighborhoods. © Găvozdea, 1969, p. 19.

THE IN-BETWEEN SPACE NOW?

Political pressure and the systematization of cities were the keywords in the process of building the socialist country, and the communist program generated the construction of vast uniform neighborhoods in all Romanian cities. The socialist construction of the country was abruptly stopped with the Revolution of 1989, and the apartments previously rented from the state were sold at insignificant prices to the residents; this phenomenon is also found in the history of other countries belonging to the former Soviet bloc. Meanwhile, buildings' condition has deteriorated, as has the quality of urban life. The socialist neighborhood as an urban structure outlived socialism, but the communities changed permanently. The responsibility for maintaining urban constructions and interstitial spaces was initially transferred to the population. Currently, local authorities, together with residents, are responsible for looking after the public space. This uncertain legislative status and the questioning of territoriality [FIGURE 08] over public space results in its precarious maintenance.

The interventions in the neighborhoods in the post-socialist period did nothing but continue the process of uniformity without morally rehabilitating or revitalizing them: thermal insulation of facades with polystyrene, replacing the original wooden windows with PVC ones, closing balconies, building new floors on the existing buildings and changing their shape, public space almost entirely occupied with cars, etc. These interventions were how the population understood the new freedom after the 1989 Revolution. Furthermore, urban life has other needs. The time of the residents (and implicitly of the children involved in various extracurricular activities) is structured

08 The image of the territory of all that is partially fenced off in the post-socialist period. © Andrei Mărgulescu, 2018 (for Mnemonics).

09 The contemporary urban image of a socialist neighborhood. © Andrei Mărgulescu, 2018 (for Mnemonics).

differently compared to the period when the neighborhoods were built. Reduced free time, traffic hazards, previously vacant spaces that are now parking lots and access roads, playgrounds with precise function devices made for small children, fenced, and always surrounded by adults [FIGURE 09] have transformed the public space that once was an unscheduled playground which offered the possibility of spontaneity found in the childhood games of the generation of latchkey kids. In 2018, the project *Mnemonics* that represented Romania at the Venice Architecture Biennale appealed to the collective memory related to childhood freedom of expression in the space between the socialist blocks translated as a big playground in a space not programmed for it. The children's key necklace symbolizes independence and a reminder of their only responsibility while their parents were at work and they played outside with other children.

A series of contemporary reactions (both at national and European levels) responded to these changes and sought solutions through good urban practice methods to offer communities opportunities for public space in mass housing neighborhoods. In Romania, examples such as *Urban Spaces in Action*[4], *Studio Basar*[5] projects, *Cișmigiu Civic Initiative Group*[6], *De-a Architectura*[7] program, *Mnemonics*[8] project, *Bloculmeu*[9], and others are trying to raise awareness of the impact that public spaces from socialist mass housing (still) have on the quality of urban life.

CONCLUSIONS

The architecture of the socialist period (especially that of the socialist collective housing program) is contradictory and complicated. Even though they form the majority of the country's built environment, socialist mass housing neighborhoods have a bad reputation among the population, buildings face energy inadequacies, and public spaces are given few to no options and chances for redevelopment and reuse.

Seen by generations as a space of constraint, the neighborhoods represent, in fact, a reserve of space and a resource for development, a place of inter-human relations that needs a plausible and sensitive to the question of public space future scenario.

Beyond appealing to the nostalgia linked to the iconic image of children playing next to the blocks in socialist neighborhoods, this interstitial space should not be neglected in the process of urban regeneration and revitalization in order to understand the intersection between the structure (public space, private space, semi-private space) and habitation (habitants' practices).

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ENDNOTES

1 As an example, Lazdynai neighborhood in Vilnius is an example of innovative Soviet Modernism and is listed in the Register of heritage objects of Lithuania.

2 http://www.monitoruljuridic.ro/act/lege-nr-4-din-28-martie-1973-privind-dezvoltarea-constructiei-de-locuinte-vinzarea-de-locuinte-din-fondul-de-stat-catre-populatie-si-construirea-de-case-de-odihna-proprietate-personala-308.html. Accessed Dec. 10, 2022.

3 Within the Mnemonics project, a number of professionals from different fields who lived in a Romanian socialist neigbourhood presented their views on the subject. See Voices section on https://mnemonics.ro/.

4 http://asociatia-komunitas.ro/projects/urban-spaces-action/. Accessed Dec. 06, 2022.

5 http://www.studiobasar.ro/. Accessed Dec. 06, 2022.

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IMPROVING THE QUALITY OF LIFE AND SUSTAINABILITY FOR MIDDLE-CLASS MASS HOUSING

Perspectives from a Stakeholder Workshop

Müge Akkar Ercan, Claus Bech-Danielsen, Hassan Estaji, Roberto Goycoolea, Bernard Haumont, Byron Ioannou, Lora Nicolau, Paz Nuñez, Sanjin Subic

ABSTRACT: This article presents and discusses the results of the *Stakeholder Workshop (Co) Designing for Quality of Life: Exploring Challenges and Opportunities*, which was held at Middle East Technical University (METU) in Ankara in October 2022 in the framework of the COST Action CA18137 European Middle Class Mass Housing (MCMH-EU). The workshop aimed to discover the possibilities of participatory design as a tool to address the necessary updating of the housing complexes of the Modern Movement (MoMo). The workshop, which was conducted on a cooperative housing estate, namely Ümitköy Sitesi, Ankara, Türkiye (1970), was carried out in five groups with members of different nationalities, ages, and experiences. This article argues that the public and private strategies which were followed to rehabilitate these complexes by focusing on the technical problems (construction pathologies, energy inefficiency, accessibility, parking, among others) tend to neglect, even ignore, the diverse social aspects involved. As a group of participants of this workshop, the authors of this article consider the involvement of all parties (experts, residents, housing management cooperative, and municipality) in the improvement processes of such middle-class mass housing sites as the key instrument to make these neighborhoods more inclusive and sustainable. This article evaluates the Stakeholder Workshop's co-design performance as an instrument to improve the Quality of life (QoL) and sustainability of the neighborhood. The critical analysis of the workshop results leads to several significant conclusions: Social aspirations do not always coincide with political and technical ones; technical rehabilitations are not sufficient for the total improvement of QoL and sustainability of communities; (Co-)Design may have to be approached from different perspectives and, consequently, have different results; citizens have a great potential to participate and contribute to the improvement of QoL with innovative ideas and actions of different scales. However, the socioeconomic diversity of the inhabitants and restrictive legislation are the difficulties to be considered.

KEYWORDS: Participatory design, stakeholder workshop, quality of life, MoMo transformation, social or technical improvement

INTRODUCTION: From the 1950s onwards, Modern Movement (MoMo) housing complexes were developed under particular social, economic, and technological circumstances. Along with rapid and varied spatial, socioeconomic, and environmental transformations, many mass housing sites in different localities create problems for their residents and cannot fulfill their everyday needs. Sometimes top-down planning policies and urban plans cannot address these problems, may neglect the community-level problems, and make citizens' everyday life in their neighborhoods less resilient and sustainable. The city, however, has a variety of territorial layers in terms of planning, designing, building, managing, monitoring, and controlling. These territorial layers, the quality of urban functions and services, and the everyday life of citizens are highly intertwined with their neighborhoods. Rather than waiting for urban public

services from the local and central government levels, citizens have great potential to participate and shape their environment as part of territorial behavior. Such environmental transactions can start from very simple and small-scale actions with the involvement of local citizens at the community level. This article aims to describe a bottom-up endeavor on an example of the mass-housing site Ümitköy Sitesi (Ankara, Türkiye) designed and built in the 1970s based on the MoMo principles. *The Stakeholder Workshop (Co)Designing for Quality of Life in MCMH* was held in Ankara in October 2022 on this cooperative housing estate, suffering from several problems similar to its counterparts. The workshop gathered an international group of experts, residents, and management board members of the housing estate, the *Mukhtar* (elected representative of *Ümit* neighborhood), and the municipality to improve the local community's Quality of life (QoL) and sustainability. This article investigates the opportunities and challenges of the middle-class mass housing site, the workshop process, and its outcomes. Finally, it critically analyzes the potentials, weaknesses, opportunities, and constraints of such a bottom-up, participatory planning and design approach.

A PARTICIPATORY PLANNING AND DESIGN METHOD: STAKEHOLDER WORKSHOP

Citizens' engagement and public involvement are essential in urban design and spatial planning to ensure the application of the principles of democracy and open society. At the same time, it brings more technical knowledge to the decision process and informs about the context and the economic and social background of the people that will be called to live within a new reality (Madanipour, 2006). Although housing estates have not typically been dealt with in a participatory process, it is, nowadays, becoming more usual to evaluate their performance according to the needs and aspirations of their users and decode the localized socio-cultural contexts that can allow a more inclusive development through stakeholder integration (Sharmin & Khalid, 2021). In general, the participation processes of urban design or urban transformation aim to increase not only the exchange value of a neighborhood, a housing complex, or a place under neutral objectivity but precisely the perceived value from the stakeholders', residents', or users' viewpoints. Public participation in such urban design and transformation processes can be fostered through various alternative ways like polls, questionnaires, online democracy apps, public hearings, or consultations. Among them, stakeholder workshops (SWs) appear to be one of the most efficient tools.

Since the 1990s, urban design SWs have been recognized as a new communication type between the participants in the physical planning process (Ažman-Momirski & Dimitrovska-Andrews, 1997). They help realize hands-on projects, providing a physical presence of participants and their interactions. They are dense and timely restricted to prevent disruptions from other irrelevant activities. At the same time, they evolve in an informality that facilitates open debate and free expression of views and opinions. In many cases, the discussions occur in front of maps, plans, or real sites where everything becomes visible, specific, and practically meaningful. Compared to any other participation alternative, SWs increase the easiness for citizens to react to plans and propose their ideas for future actions (UKEssays, 2018). In this sense, SWs focus on co-creation instead of reviewing given solutions.

SWs can be organized to resolve local problems such as affordable housing, mobility, accessibility, and green spaces (Pimonsathean, 2017) or to address local needs, such as developing new facilities, schools, and retail (Yale Urban Design Workshop, 2021). Likewise, SWs can be effectively used to address the issues that derive from emerging global challenges and can be transferred to local actions, such as the Urban Heat Island effect, the problems, and challenges related to health and QoL, migration, segregation in low-income and ethnic communities (Urban Land Institute, 2020). Some of these inputs come from conventions or policies at the European or global levels, such as the *EU Green Deal*, which offers a set of policy initiatives approved by the European Commission in 2020 to make the EU climate neutral in 2050, and the United Nations' *Sustainable Development Goals.*

Beyond the contents of SWs, their methodologies are equally important. Some approaches attempt to boost stakeholders' awareness of global concerns through the 'city-gaming' methodology (Naycı et al., 2022) and to facilitate a constructive debate by resolving power differences between various groups. In this sense, it is essential to ensure the liability of the SW initiating body, the quality of the participatory process, and the reliability of the SW results (Eshkol & Eshkol, 2017). Literature includes a range of smart participatory methods and tools aiming to capture the feelings and habits of people through their shared digital reactions (Salvia et al., 2021) and on purpose-made online platforms (Lissandrello et al., 2019). In any case, the scope of these participation methods and tools may support but not replace physical gatherings.

SWs are certainly not free of shortcomings. They demand committed participants during every workshop day, which is not always easy for non-professionals. Involving oneself in SWs can be even more demanding, especially when organizers seek active, thoughtful, and well-informed participants free from pre-constructed interests and visions. Besides, especially in local or residential

areas, participants are expected to elaborate on the three critical N's of a project, i.e., *n*eighborhood, neighboring, and neighbor (Shirazi et al., 2022), while the place may coexist with different conflicting conditions and interactions among residents and users. In these cases, SWs must invent ways to keep participants active but calm. Site visits or walking tours, for example, can be beneficial to promote the place-based community by integrating the three N's in a single experience (Wong, 2022).

STAKEHOLDER WORKSHOP METHODOLOGY

The SW, hosted by Middle East Technical University (METU) in Ankara, was organized collaboratively with University College London. It brought 28 experts from eleven countries—Cyprus, Denmark, France, Iran, Italy, Jordan, Pakistan, Serbia, Spain, Türkiye, and the USA. The expert group included architects, urban planners and designers, civil engineers, interior architects, landscape designers, and specialists on housing policies, with different professional experiences, skills, and knowledge of the qualification of middle-class mass housing sites. Around ten residents living in the middle-class mass housing site participated in the workshop. The expert group comprised 18 women and eight men, with different expertise levels ranging from master's and Ph.D. candidates to more senior academics. The resident participants included three women and seven men between 40 and 50 years old. Three residents represented the management board members of the housing cooperative.

As one of the oldest middle-class mass housing sites in *Ümitköy* with a lot of problems and potential, the project site, namely Ümitköy Sitesi, was selected in July 2022 together with METU and the *Mukhtar*. The management board members' willingness and enthusiasm to cooperate was another reason for selecting this site as the focus of the SW. During August and early September, action research was conducted to gather data about Ümitköy Sitesi. Through the interviews with the manager and vice-manager and the site visits, a group of researchers from METU collected the maps and plans of Ümitköy Sitesi, explored its history, the socio-demographic profile of the residents, and the spatial, social, environmental, legal, and ownership potentials and problems. They prepared a presentation to introduce the site to the expert group. This preliminary research revealed several potential issues to be addressed in the SW, such as needs for energy and water consumption efficiency, solar energy use, waste recycling, community gardening and co-producing, and QoL strategies for apartment blocks according to the residents' needs. Before the workshop, the coordinating group prepared the workspaces, the field trip to Ümitköy Sitesi, and the necessary documents and materials to work with. They set up five working groups (WGs), including international and local experts, and informed them before their arrival. Also, they explained to the participating residents the program and the steps to be followed in three days.

The workshop was carried out in five groups with members of different nationalities, ages, and experiences and was conducted under three parts: i) introducing the project site with its problems and potentials and describing the co-design process methodology; ii) application of the procedure in a proposal to develop improvement strategies of the cooperative housing estate in collaboration with residents, housing management associations and municipality; and iii) sharing the outcomes of the workshop and evaluation.

On September 30, after welcoming speeches, an introductory lecture on Ümitköy Sitesi was delivered to the expert group. Question-and-answer sessions followed this part. Each WG conducted a who-is-who session to get to know each other. In the afternoon, the WGs visited the project site and initiated a productive dialogue in the community center with the cooperative management members about the problems and potentials of the housing estate. After the site visit, the WGs continued their discussions at the university, and each group decided on the specific theme(s) to address the QoL and sustainability issues of the site. On October 1, each WG worked with Ümitköy Sitesi residents at METU and discussed their design-based solutions to some problems of the site with design sketches and some examples from real-world projects. In the morning of October 2, the WGs finalized their presentations on the focused theme and vision. In the afternoon, each WG presented their projects to the SW participants, including their design-based policy solutions in English and Turkish.

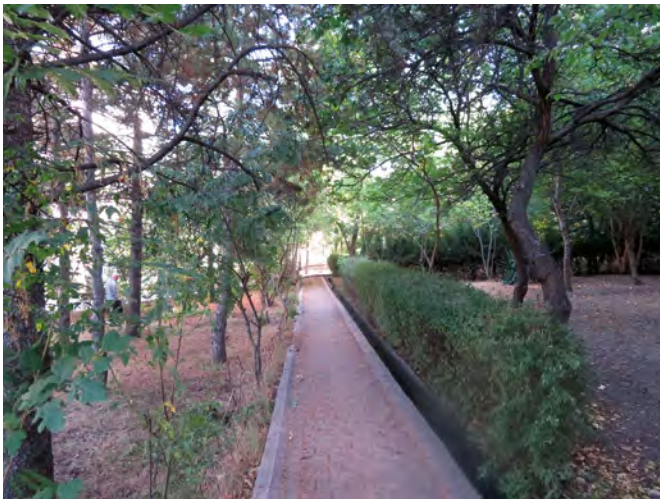
A MIDDLE-CLASS MASS HOUSING SITE IN ANKARA: ÜMITKÖY SITESI

Ümitköy Sitesi is located in *Ümitköy*, one of the most popular and prestigious middle-class mass housing suburbs on the west corridor of Ankara. It is around 14 km from the city center Kızılay and 16.6 km from the historic city center Ulus. The site is in the most accessible and central part of *Ümitköy*. It is within a 15-20 minutes walking distance or 5-10 minutes driving distance to the metro, bus, and minibus stops, and many shopping, education, health, entertainment, religious services, and small parks. Yet, the walkability of this area is poor and requires some amendments to improve accessibility for pedestrians.

Ümitköy Sitesi was built by a housing cooperative in the 1970s; the first residents moved into their houses in 1976 and 1977. Covering a 4.72-hectare land, it consists of 35 apartment blocks with five floors, and each apartment block includes ten apartments with a total of 350 housing

01 Ümitköy Sitesi, its spatial layout showing community service spaces and its legally delineated boundaries, and its surroundings. © Google aerial map, 2022.

02 Five-storey apartment blocks with their private gardens bounded by fences with bushes clearly providing a separation between public and semi-public spaces of Ümitköy Sitesi (left) and the entrances of an apartment building providing a social gathering place for neighbors (right). © Müge Akkar Ercan, 2022.



03 Inner pedestrian walkways with drainage canals and common green spaces in Ümitköy Sitesi © Müge Akkar Ercan, 2022.

units [FIGURE 01]. The buildings cover only 18% of the housing estate. In comparison, 82% of the site comprises common spaces, including a pedestrian walkway network, large common green spaces, including playgrounds, parks, car-parking areas, a building for a central heating system, and another small building for cooperative management [FIGURE 02, FIGURE 03].

Buildings are structurally strong but look old and worn out. Some buildings' façades show cracks. Each apartment has one living room, three bedrooms, a kitchen, a bathroom, a separate toilet room, and two balconies facing the back and front of the building. Around 1,000 people live in Ümitköy Sitesi. The tenancy rate is high. 30-40% of the residents are the first owners of these apartments. Being in their 70s and 80s, they live alone. A high number of senior residents raises an urgent need to adapt the buildings and apartments according to their needs, such as an elevator for each apartment block.

Common green spaces show a variety of mature trees, including pine, oak, apple, apricot, plum trees, and vineyards. They also host cats, dogs, hedgehogs, foxes, sparrows, pigeons, magpies and crows, green parrots, and

occasionally canaries. Each apartment block has its private garden providing social spaces for its residents. Although residents grow some vegetables and fruits, the soil quality is not high and fertile. The residents expressed their need for sports fields, such as basketball and volleyball courts.

Inner streets laid out on a cul-de-sac system provide sufficient car-parking spaces. While the municipality controls the design, development, and management of these inner streets and considers these public spaces part of an open street pattern, Ümitköy Sitesi suffers from privacy, security, and safety problems. Residents want clear demarcated boundaries of their estate as the inner streets, shared spaces, and car parks are used by outsiders. Some even damage street furniture and landscape, leave their waste and make noise at night.

The renewed central heating center with an underground heating tunnel network is an essential feature of collective life. The electricity, water, natural gas, and internet network also use the same tunnel network. Drainage canals provide the potential for rainwater collection and watering gardens. But thermal insulation, heating, and humidity cause mold on the interior walls, especially in north-facing apartments. Since the apartments have no hot water service, each apartment needs a hot water boiler. Some residents want to switch their apartment block's heating to an individual boiler system to heat their apartments according to their needs and affordances. However, cooperative management considers this tendency a threat that can jeopardize the collective community spirit. After sudden and heavy rains, some ground-floor apartments are flooded when the rainwater drainage system gets blocked.

The community of Ümitköy Sitesi is not ethnically or religiously diverse, but there exists a variety regarding income levels, ages, household size, tenancy or occupancy, and ownership types. Some residents struggle to afford the high renovation costs of their apartments. Thus, finding medium-term funding alternatives for such community members is essential to improve the QoL and sustainability of the neighborhood. The residents also have difficulty reaching a shared decision on whether the housing site should be completely knocked down and one big contractor should build much denser but newer apartment blocks or whether the existing buildings should be renovated through the residents' efforts with the help of small and medium-scale contractors. The differences in residents' opinions on such issues have divided the community into sub-groups with opposing views. Neighboring relations have also weakened due to these continuous opinion differences among the community members. Nonetheless, the municipal council makes urban renewal decisions, and there is no such renewal decision for this neighborhood. All community members must agree on renewing the 35 building blocks and apply for the municipality to start a legal transformation process.

NEW PERSPECTIVES FOR IMPROVING SUSTAINABILITY AND QOL OF ÜMITKÖY SITESI

The five expert groups developed several alternative design solutions to improve the QoL and sustainability of the Ümitköy Sitesi community through community engagement.

WORKING GROUP 1 (WG1) – BOLD MOVE

WG1 was interested in community engagement within the estate at great risk of deterioration if a renewal strategy is not put in place soon. Although earlier tenancies, with a lower percentage, still maintain a sense of belonging, recent tenants feel less attached to the area. To bring back a healthy communal life, WG1 aims to address *how a strategy can regenerate a community whose members want to stay here, live together, and sustain the estate as a collective place*. The group used the site visit to take notes and photographs from the site, ask questions and make voice recordings of the residents (with their approval). The evaluation revealed that the Ümitköy Sitesi's value is a secondary feature for the residents because of the buildings' and outdoor spaces' poor structural conditions. WG1 considers several structural improvements necessary for upgrading the estate and suggests a strategic plan called *the Bold Move*. It was considered that only a decisive strategic refurbishment plan could attain the long-term future of the estate as a high-value neighborhood which could, in turn, support community engagement and enhance the sense of attachment to the site. Accordingly, WG1 proposes the following three critical interventions for the community: improve communal services, upgrade the buildings (structural conditions, climatic performance, vertical accessibility), and upgrade the environmental character of the open space. There was a suggestion that the latter could be achieved through the restructuring of the open space (now all publicly accessible) into private (attached to ground floor apartments), semi-private, and public spaces; thus, increasing the security and sense of belonging and also distributing the responsibility for maintenance. The group also supports the idea of a 'bold move' with a proposal for possible revenue generation from the site itself through an intensification of parts after restructuring, either by adding to existing blocks or building new housing to pay for the extensive building and outdoor space refurbishments [FIGURE 04].

WORKING GROUP 2 (WG2) – STRATEGIES FOR BETTER-SHARED GROUNDS

WG2 notes the lack of communication and social activities between old and new residents, apartment owners,

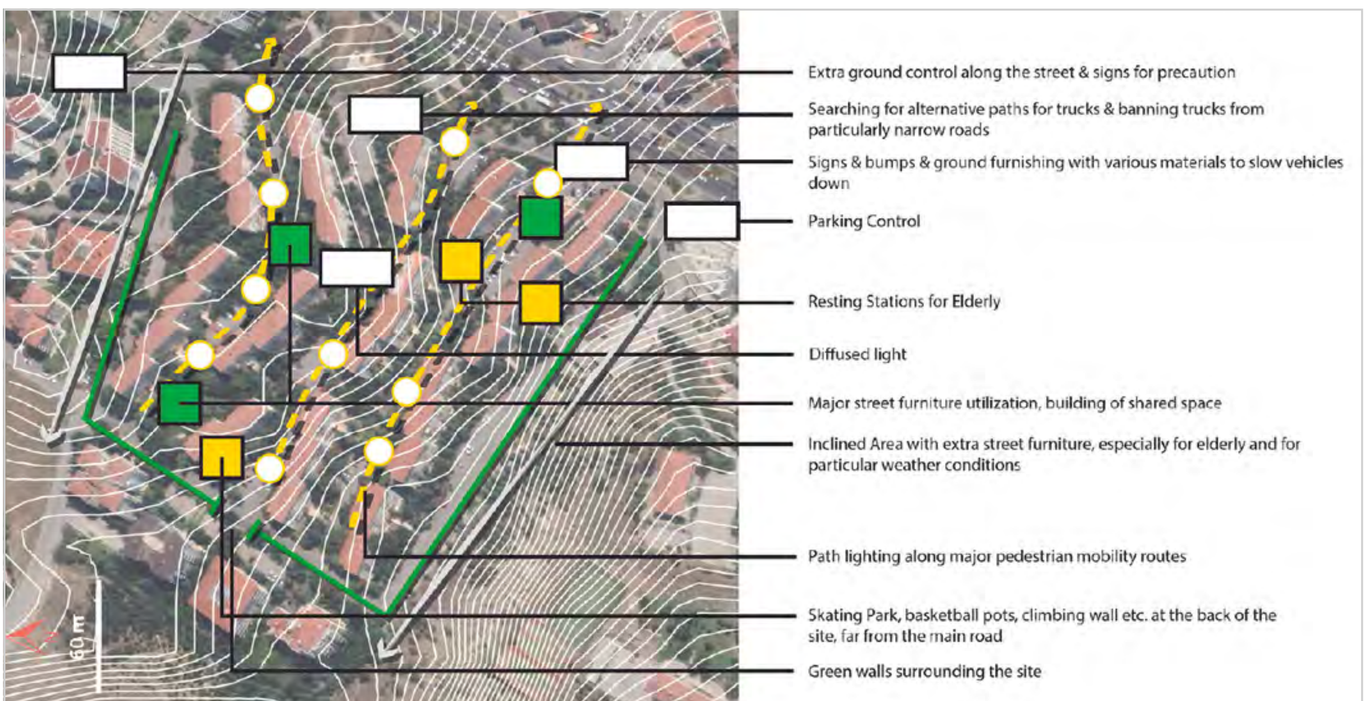
04 'Bold move' scheme proposed by WG 1, showing the design ideas of improving the open space network, environmental quality, common spaces, backyards of buildings and building the new row houses to develop a self-finance method for the refurbishment of Ümitköy Sitesi. © Authors and workshop participants, 2022.

and tenants to preserve a collaborative culture and shared spaces for young and older people. They also noticed underused green spaces in the housing site. Focusing on the public and common spaces of Ümitköy Sitesi, WG2 suggests a series of strategies that will improve the quality of underused green spaces, integrate shared outdoor and indoor spaces, and tackle the feeling of insecurity [FIGURE 05].

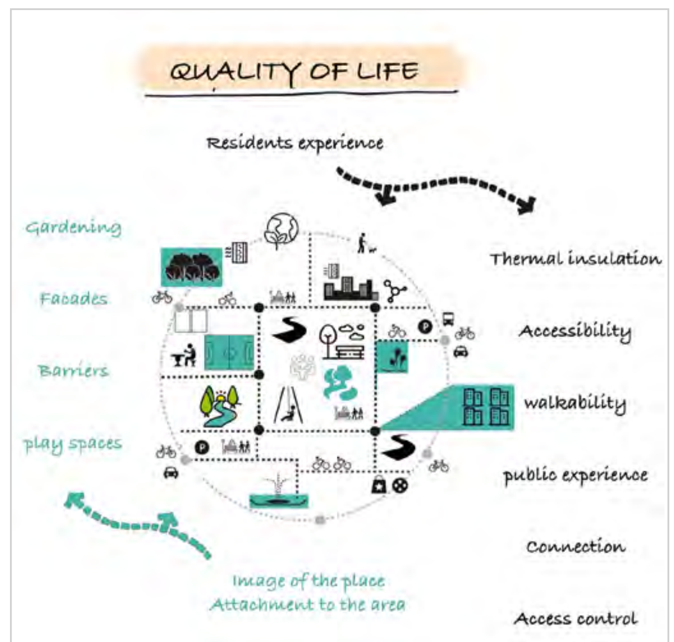
WORKING GROUP 3 (WG3) – RETHINKING THE IMAGE

WG3 recognized that reduced QoL on the site is clearly visible in its deteriorating image, facades, and public spaces. The proposed solutions were closely developed with residents to address the most urgent needs and quickly change the symbolic representations and daily uses of places. The suggested approach is progressive so that first improvements, modest and inexpensive but immediately appreciated, lead residents to support more extensive

05 'Strategies for better-shared grounds' scheme proposed by WG 2, presenting the design ideas of improving the quality of underused green spaces and tackling the safety and security problems in Ümitköy Sitesi by integrating different types of shared outdoor spaces and adding new facilities to ease the daily life of residents. © Authors and workshop participants, 2022.



transformations. The discontinuous pathways of the site do not fit modern-day use, which led to a plan addressing quality, connectivity, and modes of transport adequate for residents of all ages. A plan was devised to renew vegetation with species that do not prevent the growth of other vegetative covers and to increase soil quality by collective organic waste composting and help community cohesion. As stakeholders were mainly concerned with energy efficiency, WG3 developed solutions within this context. Investments in façade renewal are urgently needed not only for energy savings but as a significant factor in improving the image of this middle-class mass housing. Solar energy was of particular interest to the stakeholders, and the buildings' orientation is recognized as a unique advantage. WG3 also suggests solar energy use to solve the hot water problem of each housing unit and provide sustainability for ÜS. Using data provided by the World Bank (2020), WG3 foresees that using photovoltaic panels can be self-sustainable, reaching net zero during one year cycle [FIGURE 06].



06 'Rethinking the image of Ümitköy Sitesi' conceptual graphic proposed by WG 3, presenting the main intervention areas and the aspects which will be improved in the common spaces and the buildings in Ümitköy Sitesi to change the image of the estate.
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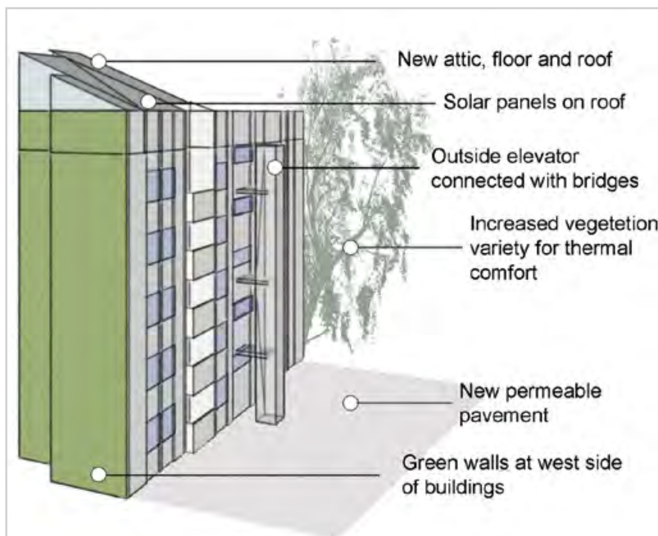
WORKING GROUP 4 (WG4) – BRIDGE

WG4's first impression of Ümitköy Sitesi was its low population and density, with almost 60% of residents above 60 years old. This condition also affects the viability of any upgrading effort. One of the ways to (re)activate the neighborhood is to increase its population and age diversity with an external and an internal 'Bridge' strategy. Externally, the Ümitköy neighborhood can act as a bridge on the urban scale by increasing its openness and connecting with the surroundings, increasing accessibility, especially for pedestrians. A green transport network for bicycles, scooters, and pedestrians is proposed to connect nearby commercial places such as Galeria shopping mall, mass housing sites such as Mutluköy Sitesi, different building blocks, open spaces, and unintegrated less-used spaces. The connectivity and accessibility of this green 'bridge' network for bicycle and scooter users and pedestrians can be designed carefully by respecting the privacy, safety and security needs and sensitivity of the Ümitköy Sitesi community. Internally, on the building scale, WG4 suggests flexible apartments that can change the spatial configuration of the buildings according to the new needs of the young generations and create the same extra income for the current owners. The idea of viable apartment renewals will make the neighborhood more attractive to new residents. Therefore, the 'Bridge' idea is used as a connector between old and new generations and lifestyles in the Ümitköy Sitesi case [FIGURE 07, FIGURE 08].

WORKING GROUP 5 (WG5) – GARDENING SCHOOL

WG5 focuses on four main QoL problems of Ümitköy Sitesi often seen in middle-class mass housing: buildings that do not meet current accessibility and energy-efficiency standards, neglected public spaces, and a lack of urban life due to aging and gentrification. The accessibility and energy-efficiency problems related to residents' comfort can be primarily solved with technical solutions. In other words, they can be cured depending on available economic resources. There is no universal answer for the latter problems, and the solution necessarily requires active residents' collaboration. This is where co-design appears as a fundamental tool. When thinking together with the Ümitköy Sitesi residents, WG5 realized the necessity of having a vision for the future, summed up in one critical question: *How do residents imagine their neighborhood in 20 years?* Their answer helped them define the strategies to achieve this vision through realistic phases. The estate's residents aspired to a place with a better QoL, more comfortable housing, and more social activity. The buildings have pathologies, and the complex is a dormitory town. To bring people, activity, and resources, WG5 proposes to develop in the inter-block spaces—large, underutilized, and neglected— an activity that will serve as a trigger to create a place with more sustainable and socially inclusive spaces. In agreement with the residents, WG5 opted for a gardening school that would be co-managed by an NGO (i.e., drug rehabilitation), the cooperative itself, and the local authority. A process that would begin with the community production of compost and the self-building of a classroom can continue with the teaching of gardening and landscaping and the development of nurseries for aromatic and decorative plants, display gardens, and a florist's shop. Eventually, a greenhouse and a flower restaurant would be built. These elements, distributed throughout the complex [FIGURE 09], would make it a dynamic point of

07 'Bridge': Connection with surrounding neighborhoods proposed by WG4, presenting conceptually how to establish an external bridge through a green network for bicycle and scooter users and pedestrians between Ümitköy Sitesi and its surroundings. © Authors and workshop participants, 2022.



08 Six renewal interventions for buildings referring to the 'flexible apartments idea' as proposed by WG4. © Authors and workshop participants, 2022.

09 'Gardening School for Ümitköy Sitesi' proposed by WG 5, presenting the new Gardening School vision, with a series of production and practice gardens and other common spaces, bringing co-learning and co-producing environments for the community and turning the neglected shared spaces into sustainable and socially inclusive places. © Authors and workshop participants, 2022.

attraction. The resources would allow for the technical upgrading of the buildings. The generalizable idea is to develop a permanent facility or activity, in this or similar MoMo neighborhoods, that will improve the environment and social cohesion in a sustainable way.

CONCLUSIONS

The *Stakeholder Workshop (Co)Designing for Quality of Life: Exploring Challenges and Opportunities* created an opportunity to bring together the residents of Ümitköy Sitesi with international and interdisciplinary expert groups and the municipality. Although collective decision-making for

such cooperative housing sites is typically considered an obstacle to solving shared problems due to the high number of property owners, this hands-on experience has proved that such SWs can be greatly helpful in revealing common problems, discussing alternative solutions between stakeholders and experts, and reaching optimum solutions to resolve the community problems through co-creative means. SWs also allowed stakeholders to see the challenges of making these optimum solutions real. Such negotiation and co-creation practices are also beneficial for communities to develop a collective spirit toward the common benefit of the community. Local leaders of communities must continue such bottom-up endeavors in cooperation with local authorities, universities, and civil society organizations to achieve successful and sustainable regeneration schemes for middle-class mass housing sites.

It is possible to note several strong sides of this SW: i) Organization of a compact, efficient and productive workshop by preparing background material and initiating conversation with the management board members of the housing cooperative, ii) participation of experts from different cultures and urban design/planning practices across a vast geography (Europe, East, etc.), which brought the local and oversea views and knowledge together for creative solutions to the problems, iii) participation of young and senior professionals which helped the transfer of knowledge and experience between them, iv) use of a well-selected example as the representative of the MoMo transformation to work on and learn from its potentials and challenges, v) revealing different viewpoints of each group which opened several issues for a rich debate and created potential approaches for an evaluation at later stages; vi) residents' participation and their amazing hospitality which impacted on the dynamics of the workshop throughout, vii) adequate number of experts and participants to conduct a pilot SW to formulate a continuous and sustainable participatory design process.

Besides, the deliberate formation of the groups with researchers from different backgrounds, experiences, and ages was also very positive, as it significantly opened up both the perspectives of analysis and the proposals for intervention. The size of the WGs, with five to seven participants, allowed all to express their opinions, understand each other's competencies, and create relationships important for future collaborations. Within each WG, the mix of locals/foreigners, young/older, and experienced/less experienced consultants from the north/south regions opened up the opportunity for a debate on issues from very different viewpoints and generated 'positive energy' during the working sessions. The number of WGs (limited to five) allowed all WGs to make their presentations and stakeholder consultation possible within a single session.

Having sufficient prior documentation and the definition of the theoretical framework made it possible to go deeper into the issues addressed. Using English as a *lingua franca* allows interaction but reduces the nuances of the different cultural environments. The case study resembles other MoMo complexes built throughout the world. However, the research and site visit of the neighborhood, accompanied by experts from different nationalities and the Ümitköy Sitesi residents, showed the differences in the way of living and valuing their estate. Giving voice to the users provides essential data for a complete understanding of the architecture and its social and environmental impacts.

The following four concerns have been identified across all five WGs:

- The physical characteristics of the site cause accessibility and connectivity problems for older people and parents with young children,
- Open spaces and their vegetation are seen as potential but require some renewal ideas for exhausted soil and new facilities for socialization and physical exercise,
- The poor distinction between public, semi-public, and private spaces which leads to the privacy, security and safety problems can be discussed in relation to the existing dialectics between seeing, being seen, and hiding that require more creative design solutions rather than present hedges with bushes around the estate.
- Buildings' thermal insulation including buildings' wall materials, window frames and balconies, street lighting, which raised security and safety problems, and inadequate rainwater drainage infrastructure causing flooding of the ground-floor apartments were other common concerns of WGs to improve the QoL and sustainability of the community.

The (Co)design methodologies presented by the different WGs were similar. In contrast, the design proposals differed regarding the sequence of activities and the extent of attention given to these concerns. The WGs proposals differed through three strategies: a) improving the built environment qualities such as accessibility, connectivity, energy improvement, parking, etc.; b) enhancing the common and individual experiences in public space; c) incorporating facilities and activities to energize the neighborhood. These three strategies, complementing each other, enriched the debate by showing different ways of understanding, configuring, and managing the habitable space.

Besides, the MoMo transformation approaches derived from the WGs were mutually inclusive. They included proposals ranging from soft to hard, from attitudinal to built-environment transformations, and from residents-led soft improvements of shared space to the critical restructuring of ownerships. The workshop opened up the opportunity

for the involvement of the local authority presence. Indeed, the workshop's process and projects gave a clear message about how valuable the place is at present and how much more value can be added. Perhaps the workshop strengthened the management board's commitment to pursuing a transformation in the estate's environment.

Nonetheless, the SW had some weaknesses and constraints. The workshop was short for a reiterative process of back and forth with residents' groups through which WGs could have tailored design ideas more to the estate's realities. More time was needed for debating issues and understanding the existing condition. The SW experience revealed that such events should be programmed as a series of workshops to achieve a concrete outcome, such as a straightforward improvement program for the community. The participation from the residents was relatively small. The future participatory phases should include several resident groups with different ages, gender, and concerns to provide comprehensive improvement strategies. As a cooperative housing estate, including a high percentage of residents in the design process will be crucial for representing different voices from the community and finding egalitarian and just solutions for all through democratic and participatory ways. For evaluating the WGs proposals, it became evident that more multidisciplinary inputs from different fields (engineering, environmental design, construction, legal advice on ownership constitution, etc.) will be crucial to developing future transformation strategies. Finally, the results of the SW should be recorded electronically and disseminated in various ways to keep the bottom-up initiative alive.

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Transversal Comparative Approach to Middle-Class Mass Housing

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ABSTRACT: The COST-Action (CA 18137) on Middle Class Mass Housing in Europe (MCMH-EU) has established a transnational scientific network to document the productions of middle-class mass housing built in Europe since the 1950s in order to investigate this specific topic and share knowledge. Considering that middle-class mass housing dominates most of our cities, the research translates into the study of the extensive development of cities in Europe after World War II. The breadth of the theme and the differences between the countries make it difficult to construct a systematic and unified criticism of middle-class mass housing, albeit concentrating on the post-war period. The COST-Action has the goal to build a network to gather research representing the pooled knowledge and experiences from the network of multidisciplinary researchers. So, transversally throughout the Working Groups, an inventory of case studies, a collection of articles, and studies on the policies were produced. This paper elaborates on the collected and produced material and data in order to trigger comparisons and reflections on the approaches and methodologies to face the complexity of middle-class mass housing topic. The comparison was built by using different methods intersecting multiple points of view and following specific thematic tracks that seek to deconstruct the complexity of the middle-class mass housing topic into singular aspects. This paper presents the results of data analyses, visualisation techniques and comparative studies to identify massification processes, morphological structures, demographic and policy developments. It shows a combination of several methods to build a cross-sectional and systematic approach to the diverse knowledge envisioned to develop a methodology for future research. This can be especially useful for future developments and insights towards joint or individual European guidelines, laws and policies to improve the dilapidated housing stock, current housing situation and to compete the housing crisis in general.

KEYWORDS: Inventory, comparative analysis, mass housing neighbourhoods, policies, interdisciplinarity.

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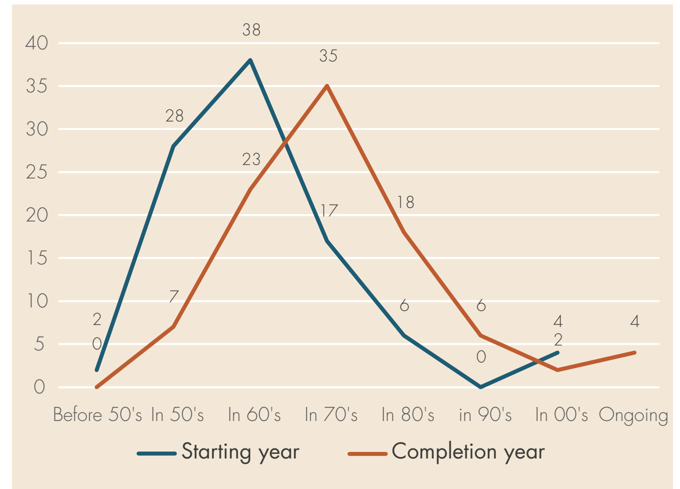
INTRODUCTION: Middle-Class Housing has been explored as a specific typology in urban and architectural research (Caramellino and Zanfi, 2015) and stands next to a larger body of research which focuses on affordable or social housing (Hess et al., 2018) in particular on mass housing (Glendinning, 2021) and on larger housing estates in former socialist countries (Hess and Tammaru, 2019). Studies are often highlighting the differences between Western States and former (Eastern) socialist countries as well as contras northern (Scandinavian) and southern European models of housing. Within this scope middle-class mass housing has been produced in different formats and forms of expression in Europe since the 1950s as a result of the housing shortage after WWII — thus comparable to the enormous and famous efforts of modern settlements after WWI in the 1920s and 1930s all over Europe. Post-WWII middle-class mass housing has been developed in different socio-economic and political contexts, therefore any direct comparison between countries is considered difficult.

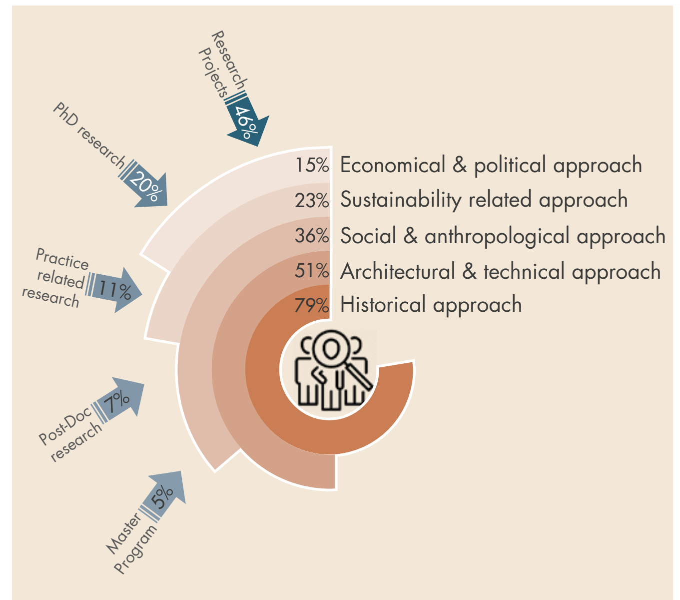
To investigate this phenomenon further, several researchers from different fields and countries across and beyond Europe were involved in the COST-Action from 2019-2023 with 151 members from 33 member states, among them 14 Inclusiveness Target Countries (ITC). Significant findings from a statistical point of view were achieved through the analysis of the collected case studies: out of 97 cases 95 were analysed. The peak of middle-class mass housing planning and production was reached in the 1960s-1970s which corresponds to the period of the

"Trente Glorieuse" (Fourastié, 1979), the boom period of the thirty years [FIGURE 01]. It was characterized by strong economic and industrial growth, in particular within Western Europe, and accompanied by the realisation of new towns and new suburban settlements conceived on the principles of the Modern Movement. Similar to the interwar-period, the hierarchization of the work flowed with the construction of buildings on concrete slabs over natural ground and prefabrication was emphasised in order to "provide housing for the greatest number and improve the citizens' living conditions, as a symbol of a modern and democratic society" (Tostoes, 2021) in Europe and beyond. Even though the peak of activity was in the 1970s, the 1980s continued to be a relevant period; in particular in Eastern European and socialist countries the development was delayed by about a decade due to slower and lower economic development. Together the majority of the middle-class mass housing stock is between 40-80 years old and shows significant needs to be "ennobled" (Glendinning, 2008).

Interdisciplinarity is one of COST's strategic instruments, and in fact being fundamental to cover the multi-faced middle-class mass housing phenomenon. In order to unravel the background of the participating researchers, it was essential to distinguish the research areas and themes related to middle-class mass housing. Information about ongoing and finished research projects was collected and evaluated:[1] Out of 33 member states, 61 research projects from 27 (out of 33) countries were provided and analysed. The analysis aimed to illustrate the main research areas and gaps that offer a potential for further collaboration: 88 study areas could be localised, out of which 90% are in Europe. 61% of those study areas are within the researchers' own countries and 39% of the research is dealing with study areas outside their home countries, a heterogenous topology in scale and focus, hardly connected on national or European level. In addition, [FIGURE 02] shows that historical research is dominant with 79%, followed by architectural and technological approaches in 51% of the projects. Social and anthropological research was relevant in 36 % while, both sustainability-related, and economical and political approaches rang much lower with 23% and 15% of the projects. Some projects carry out extensive studies covering more than one approach. The analysis also reveals that most of the research is rather academic and scientific (research projects, PhD, post-doc), only 11% of the cases are practice-related and 5% are linked to educational programs. As a result, the carried analysis reveals that the middle-class mass housing phenomenon is mainly studied from a historical and architectural approach, compared to environmental economic and political approaches.



01 Construction periods of the case studies collected in COST-Action MCMH based on 95 retained cases out of 97 received (blue line: starting year, orange line: completion year). © Authors, 2022.



02 Diagram reflecting the MCMH research framework and research approaches. © Authors, 2021.

As a result, the authors aimed to trigger a reflection about the current status and future actions based on a comparative analysis of the material and data collected in the three Working Groups of the COST-Action: an inventory of case studies (WG1), a collection of narratives: images, videos, interviews and critical texts and articles (WG2), and a collection and overview of policies enriched through articles and studies (WG3).

COMPARATIVE APPROACH AND METHODS

The comparative approach starts by investigating the two terms of the project acronym that are the cornerstones of the research: *Middle Class* and *Mass Housing*. Both are two complex issues that are difficult to define, having a breadth of meanings that is difficult to summarise in a single and determined concept. The breadth of the theme and the differences between the countries seems to make it impossible to construct a systematic and unitary critique of middle-class mass housing, even within a fixed historical time, that of the post-war period. The definition of *Middle Class*, which refers specifically to

sociology, is arduous and manifold among the various countries and has undergone variations modifications over time (Atkinson et al., 2013; Holgers, 2020; Kocka, 1995; Rose, 2016). Nevertheless, the term is also seen through an architectural and urban approach rather than a sociological one—identifying with it the occupancy of those buildings, which are not related to social housing or luxury buildings, thus, in essence those built for a large part of the population. The term *Mass Housing* identifies the specificity of the large size of production. Moreover, reflections on the term *Mass Housing* may involve issues of density and size, that in fact, necessarily lead to a comparison with the urban realities in which they are inserted (Haughey, 2005; Yeung, 1977).

To investigate the two terms in an interdisciplinary way, several methods were involved: mass study (method 01), data analysis (method 02), and social contextualization within public policies aimed at middle-class mass housing (method 03).

Method 01: The reflection on the term *Mass Housing* led to an investigation of the massification process, namely the main three development patterns: a) height expansion as *vertical massification*, i.e. through towers, b) horizontal expansion represented by large housing blocks as *horizontal massification*, and finally c) *repetition of elements* with progressive additions. This means that *Mass Housing* can in fact also be defined by the repetition of elements that are not large in themselves, i. e. through the repetition of medium-sized residential buildings or even over the repetition of detached buildings and of single-family houses that, for example, become a *Mass* in the great extension of the urban suburbs.

Method 02: Additional information data, which outlines the case studies regarding the historical classification, extension, private or public processes, etc., were selected, registered and also visualised in charts. The charts represent valid tools to clarify differences and common elements among countries, e.g. through the interpretation of the complexity and diversity of urban spaces by reducing them to a clear description of spatial and compositional themes. Among these is the relationship of proximity—distance regarding the consolidated city, roads, infrastructures, the relationship with open and common spaces, etc. The themes were then visualised using morphological drawings that served as a base to build a system for comparing and measuring the phenomenon.

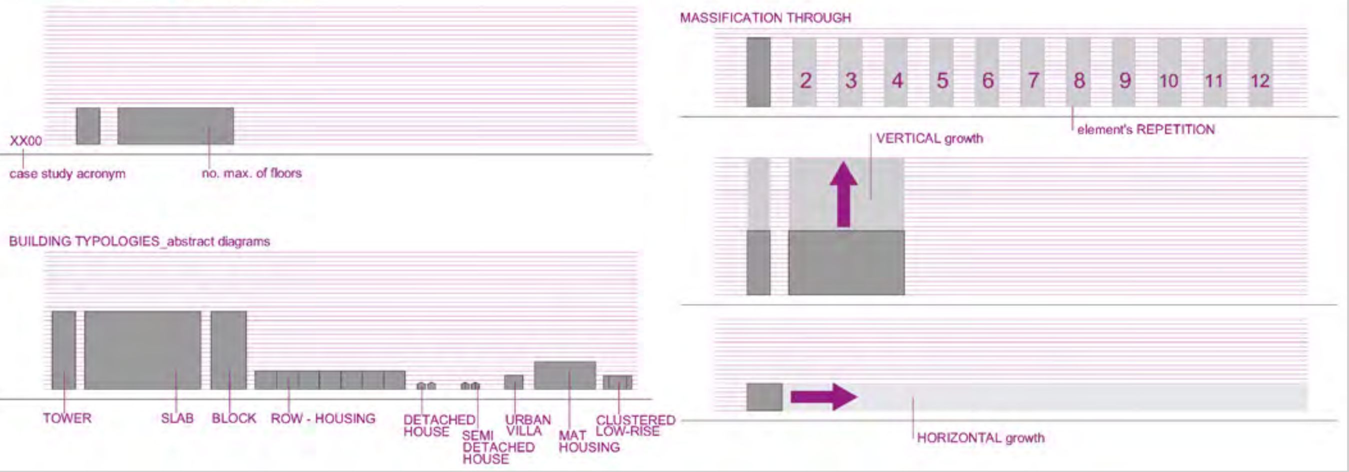
Method 03: Finally, the main public policies were explored, through which the most representative case studies were analysed. The interpretative drawings combine the sociological and historical aspects with the policies of several countries with the goal to get insights into the relationship between policies and housing evolution.

METHOD 01: MASS STUDY

Method 01 focused on the case studies looking at them only as built complexes, studying therefore specifically the *Mass*. The investigation analysed the *mass measurement* and also, through a *morphological analysis*, the relationship with the city and the urban patterns. The different case studies were traced back to one or more patterns of massification concerning architectural solutions. Diagrammatic drawings were developed to show the extent of the case studies' patterns, thus visualising the type and scale of the middle-class mass housing productions from different countries.

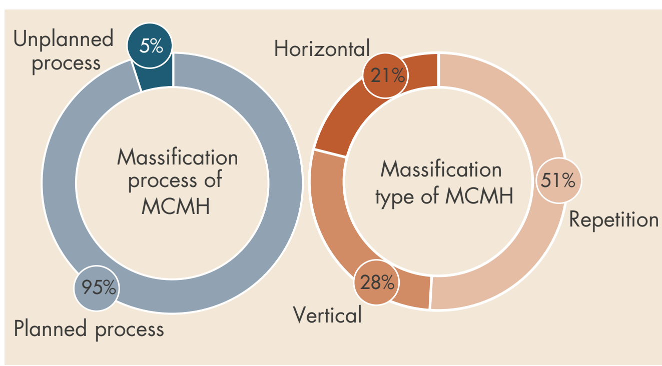
The collection of case studies that formed the basis for the analysis also included graphic and visual materials such as photos and drawings. However, the considerable dissimilarity and non-homogeneity of information determined the redrawing of all the case studies by choosing a predetermined manner of representing the massing process, namely redrawing based on a diagrammatic representation. Diagrams are explored in contemporary times as an analysis and design tool, for their ability to synthesise issues abstractly and thus to prefigure approaches and developments (Como et al., 2014; Corbellini, 2015; Eisenman, 2005; Van Berkel- Bos, 2006; Vidler, 2005). From this point of view, it seemed a useful tool to simplify the complexity of Middle-Class Mass Housing characters to create a comparative visualisation between cases. Therefore, the object of the diagrammatic representation was defined. The section is the type of representation chosen as the most appropriate for investigating a measurement from several points of view. The section was represented as a schematic drawing including the real data, such as the number of floors in each building, however, it simplifies some issues. The forms of building typologies and the process of massification have been represented abstractly according to prior-defined rules [FIGURE 03]. Thus, the diagram becomes a strategic tool to use due to its ability to measure the real data and its interpretation. In this application, the diagram measures the process of massification in a non-quantitative way but rather as a visual and comparative overview between case studies with different backgrounds.

By comparing several case studies, the methodology provides an impressive visualisation of issues such as scale, height and type of growth. The visualisation allowed us to immediately identify extreme conditions and imagine their impact on the city. For example, it is possible to observe overwhelming horizontal growth in some case studies from Lithuania with row housings and slab blocks. The phenomenon of mass housing presents the characteristics of repetition and horizontal growth with the construction of multiple low-rise residential buildings. The



03 General rules for the diagrammatic re-drawing of the case studies in the section representation for the mass measurement. © Authors, 2022.

04 Diagrams of the massification processes related to the 16 case studies with simultaneous evidence of horizontal growth, vertical growth, and repetition. © Authors, 2022.



05 Diagrams reflecting the massification process and type of the analysed MCMH. © Authors, 2022.

diametrically opposite case, for example, is in Bulgaria where the massification process is determined by the repetition of towers and blocks with vertical growth determined by high rise multi-story buildings [FIGURE 04].

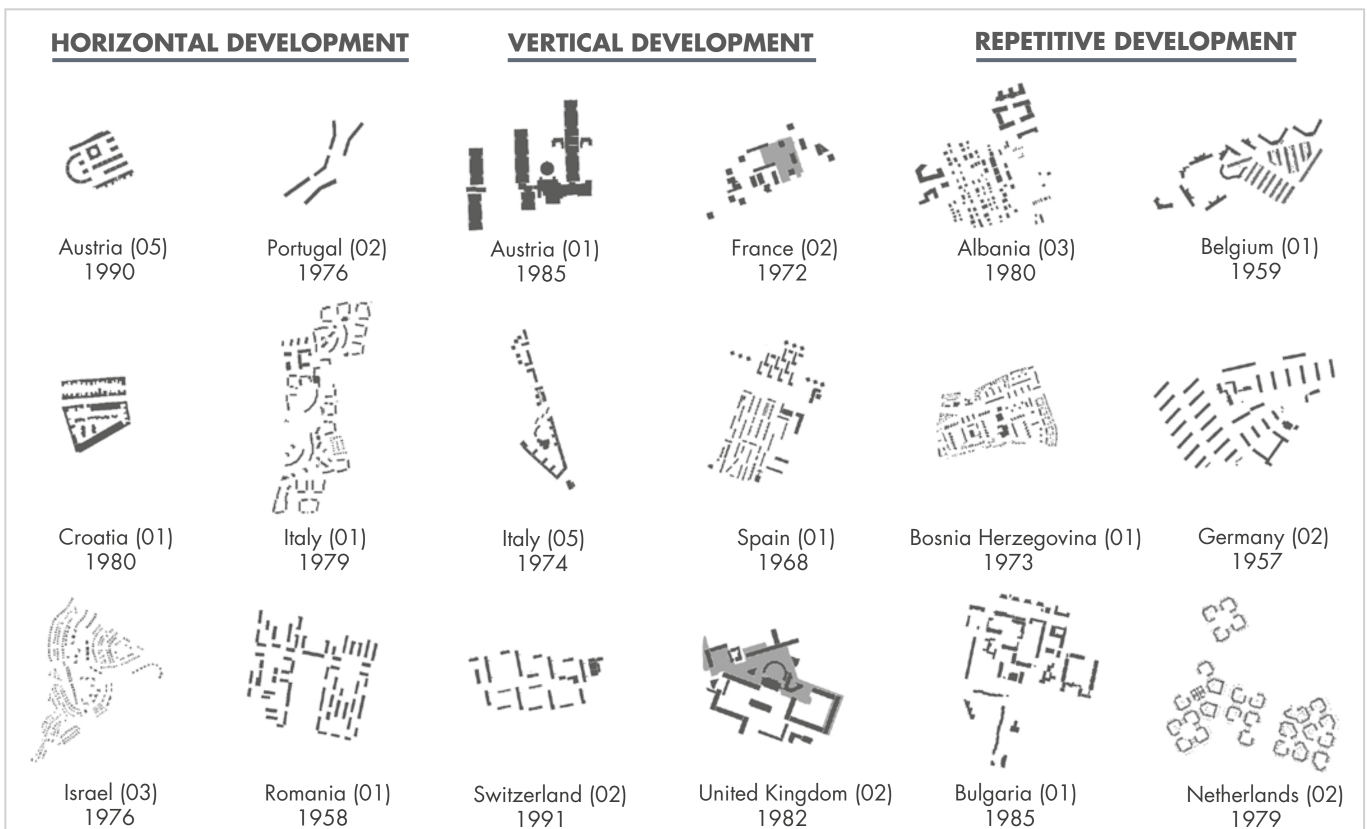
Within the collection of case studies provided by 27 countries, a total of 93 sections were redrawn. Out of these, 17 case studies represent horizontal growth, 18 cases vertical growth, and 41 repetition of individual buildings. Out of the total received case studies, 16 present a concurrence of factors that determine the massing process.

To recover the missing information regarding the massification type, it was considered to combine the analysis of the height of the buildings, their footprint and their repetition on the site for the classification of the case study into one of the three categories of massification that were predefined. This led to a qualitative distribution of all the case studies into three categories according to the massification process: horizontal, vertical and repetitive development.

Accordingly, 51% of the known case studies[2] are characterised by repetitive development. The other two types share the remaining half [FIGURE 05]. It should be noted that a case could combine several types of massification. Repetition is a design criterion that involves the planning with the repetition of volumes but also the uniform character of the single volume, for example with the repetition of opening in the facade that strongly influences perception and imaginary association with mass housing (Plouchart, 1999). Even if we found that 95 percent of middle-class mass housing was built under planning processes, we have two examples referring to middle-class mass housing as an unplanned process: the case of the *polykatoikia* in Athens and other Greek cities (link to Alexiadou) which developed extensively as an unplanned and private process, and another one involving illegal buildings in Southern Italy.

The *morphological analysis* had the goal of visually comparing and interpreting the middle-class mass housing phenomenon from an architectural and urban perspective. This study is part of a long tradition of morphological analysis of cities (Oliveira, 2016; Fleischmann, 2022) and visualises the qualities of the existing structures, the potential of common spaces, and the impact of future interventions (Dragutinovic et al., 2023).

A fewer number of case studies—18—were selected from the three categories of vertical, horizontal and repetitive type of development to produce the figure-ground drawings for these 18 cases on the same scale,



06 Scale comparison of the 18 selected case-studies. OS maps 1:5000 and drawing oriented as true north (upright). © Authors, 2022.

geographical orientation and graphical quality. These sets of drawings helped in establishing a base to define the architectural and urban comparison criteria of diverse typologies across the middle-class mass housing built from the 1950s-1990s [FIGURE 06].

As a result of this exercise, the argument about the varied understanding of what is *Mass housing* became even more prominent. For instance, it is easy to notice that cases like Forellenwegsiedlung in Salzburg (Austria 05) and Alto da Barra in Lisbon (Portugal 02) have a significantly small footprint in terms of housing density if compared with the cases such as, Barbican Estate in London (United Kingdom 02) or De Werven in Almere (Netherlands 02).

In the second step of this methodology, a more focused approach was adopted to observe the relationship of housing with the urban infrastructure in the city. For this study, a set of the three most representative cases from each development category was chosen and analysed with the help of open-source geographical platforms. These three cases were then redrawn using the same scale, highlighting some of the key aspects, such as, solids versus voids, blue and green spaces, main streets along the housing periphery and major transport connections in the context: Segrate in Milan (IT 01), Olympiades in Paris (FR 02), and Woonunits in Antwerp (BE 01). Additionally, to observe the geographical location of the housing within the urban context, a simplified city map was drawn indicating if the housing was in the centre, periphery or outskirts of the city. All drawings and diagrams were then compiled in a visual fact sheet indicating the urban context, period of construction, type of housing policy, massification process and urban morphology [FIGURE 07].

This exercise led to some intriguing observations and possible future research questions. Two of these three mass housing projects were located on the city periphery and both of these cases in Paris and Antwerp have a similar yet distinct vertical and repetitive character. What was even more interesting to notice is the difference in the number of dwellings, for instance, Olympiades in Paris has 3200 dwellings versus 696 in Woonunits in Antwerp and if then compared with their built versus green spaces, it is arguable that Woonunits possibly offers a better life quality as the urban configuration allows for more green and probably social spaces compared to extremely high-rise spaces offered in Olympiades to the middle class. Similarly, if Woonunits is compared to Segrate, which is built on the outskirts of Milan, Segrate offers large green surroundings and interconnected neighbourhood spaces despite the very high number of dwellings (2600).

Hence, this methodology represents a chance to increase the knowledge of the case studies collection and to observe the middle-class mass housing district in relation to the urban patterns.

IT 01
Milano 2, Segrate (Milan)
1970 - 1979
Planned Process
Private Housing Policy
Middle Class
Repetition
Dwellings: 2600

Location map

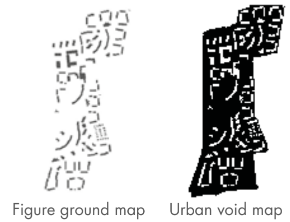
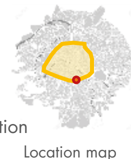


Figure ground map
Urban void map

Urban Context Map: Blue & Green and Major streets

Schematic section

FR 02
Olympiades, Paris, 13e
1967 - 1972
Planned Process
Public Housing Policy
Middle Class
Vertical growth & Repetition
(as per observation)
Dwellings: 3200


Location map

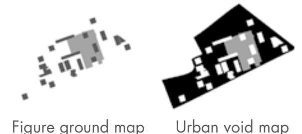
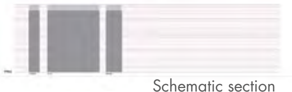


Figure ground map
Urban void map

Urban Context Map: Blue & Green and Major streets

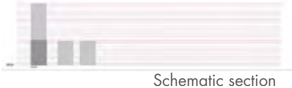

Schematic section

BE 01
Woonunits
Kiel/Braemblokken ,
Antwerp
1951 - 1959
Planned Process
Middle Class and others
Vertical growth &
Repetition
Dwellings: 696

Location map

Figure ground map
Urban void map

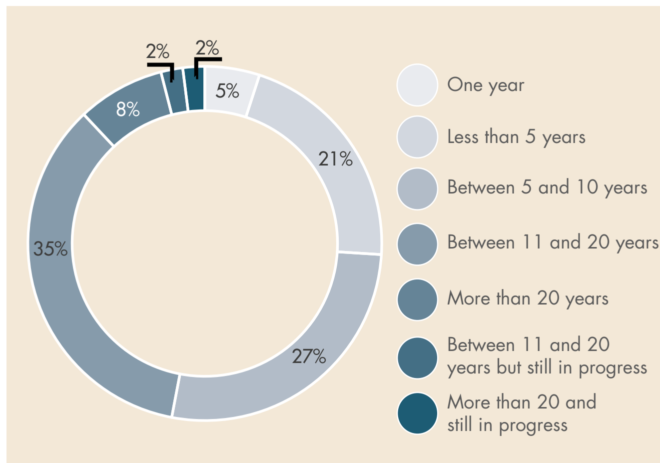
Urban Context Map: Blue & Green and Major streets


Schematic section

07 The visual fact sheets compare the three case studies from Italy, France and Belgium. © Authors, 2022.

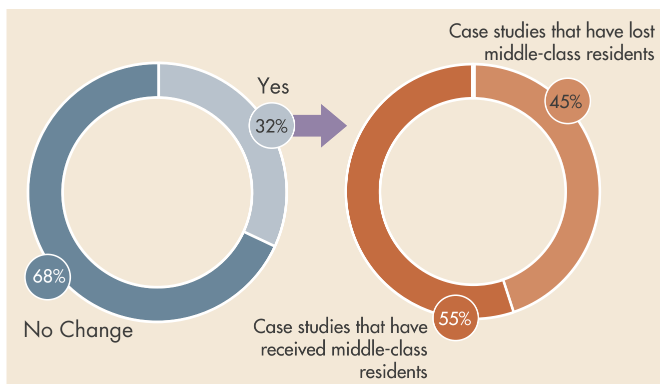
METHOD 02: DATA ANALYSIS

The statistical analysis of the data collected from 97 case studies served as a primary basis for comparative analysis (Frey 1991, 1992). Significant findings from a statistical point of view are the comparison of construction periods, the types of dwellers, the types of promotion and ownership (public and/or private) deployed for realisation. The

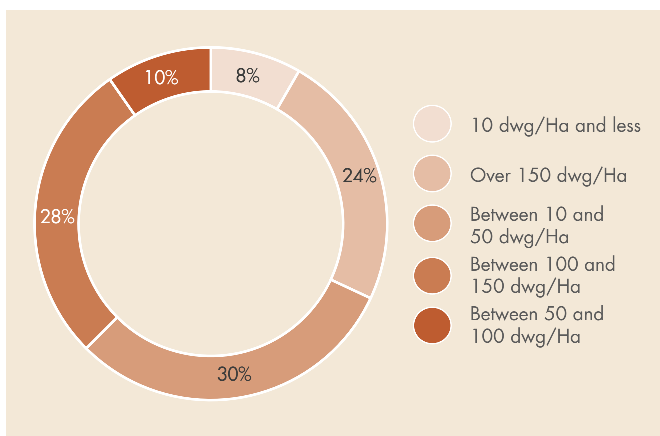


08 Diagram showing the duration of the construction period based on 95 cases. © Authors, 2022.

09 Diagram showing the proportion of original dwellers class (left in orange) and current dwellers class (right in yellow) of the provided case studies. © Authors, 2022.



10 Middle class movements in the 32% of projects that recorded a change in the social class of their residents. © Authors, 2022.



11 Density of dwellings per hectare. © Authors, 2022.

analysis of the construction period allows us to apprehend the value of the work involved in the realisation of mass housing. The idea is to be aware of the economic and material investment required to realise them, as well as the difficulties that can characterize the process. The study thus revealed long construction periods, defined by the starting and the completion year shown already in [FIGURE 01] and summarised in [FIGURE 08]: 8% were finished only after more than 20 years, 35% of the cases needed between eleven and 20 years for completion, and 27% lasted between five and ten years. Only 26% of the cases were built in less than five years, despite the desire to deliver large quantities of housing as quickly as possible.

The public sector was the largest investor in urban and real estate development in middle-class mass housing in Europe based on the countries surveyed in the period from 1950s-1990s. There are also some countries where the private sector dominated the market, such as Italy and Portugal. We found a low percentage of partnerships (less than 16%), which could be explained by the fact that the projects studied mainly date from the 1960s and 1970s when this type of combined public-private promotion was less common, but also by the strong economic and industrial growth that Europe experienced during this period of the "Thirty Glorious Years" (Fourastié 1979).

Statistical data reflects information regarding the share of the middle-class among the dwellers in the mass-housing ensembles. Almost 70% of mass-housing developments were for the middle class, which was reduced by 5% since the buildings were first inhabited [FIGURE 09]. However, it was found that in only 32% of the surveyed cases, the social class of the residents changed. On this part, 45% of the dwellings originally intended for the middle class have lost this category of the population. Meanwhile, the other cases have experienced an influx of middle-class dwellers [FIGURE 10]. Therefore, based on the samples, it can be assumed that there is a kind of rebalancing over time between the losses and gains of middle-class residents in mass housing.

Almost half of the middle-class mass housing was located on the periphery of the city. The study shows that nowadays most of middle-class mass housing became part of the city centre. Considering that at the beginning of the development of middle-class dwellings only 17% were located in the city centre, today their presence is almost doubled to 31% of the stock due to the process of urbanisation and urban sprawl over half a century (Fourcaut 2006, 2012).

The last striking point in the statistics relates to the issue of housing density. An average of 63 dwellings per hectare was identified across the countries studied [FIGURE 11]. This average is well below the minimum threshold defined by the

Cerema report (Bocquet, 2022) to identify mass housing, which it sets at 100 dwellings per hectare. Only 38% of the case studies identified meet this definition. Statistically speaking, a low density does not necessarily mean a low number of dwellings and vice versa. Thus, if we look at the number of dwellings, 51.3% of the case studies correspond to the definition of mass housing given by Lacoste (1963). The latter defined a minimum of 1000 dwellings to be considered as such. However, we have examples that do not meet either definition, but which the members of the COST-Action have identified as mass housing such as *Nova Oeiras*[3] in Lisbon which, with its 149 dwellings, has one of the lowest densities we have recorded with 3.75 dwellings/ha. This contrast calls into question the definition of mass housing in each state and among researchers themselves, and the importance or otherwise of the notion of density or the number of dwellings in these definitions. This is an opportunity for COST-Action members to work on a new definition of mass housing in Europe.

METHOD 03: SOCIETAL CONTEXTUALIZATION WITHIN PUBLIC POLICIES

Public policies play a crucial role in the leverage of contemporary urban and architectural interventions and they offer the possibility of comparing research through a common framework of information. This research aims to consider middle-class mass housing as an effect of public policies that predated its maximum spread and, therefore, understand the middle-class mass housing role in the long term.

The country representatives were asked to construct a national synthesis about the main urban policies that have had influences in developing middle-class mass housing as an urban phenomenon in the 20th century. The information was collected through general data such as the name of the law, the acronyms, the author/body, the date, the title and subtitle, and the main objectives and measures. The national policy-frameworks were visualized in order to compare political orientations, intentions, and the main bodies involved in the middle-class mass housing diffusions (Aalbers, 2012; Clapham et al., 2012; Moreno Monroy et al., 2020). It was integrated into a common timeline with the main events that characterized the entire 20th century, such as WWs I and II, the birth of the European Economic Community (EEC) and the establishment of the European Union (EU). Based on the common timeline, each country added specific events that were crucial for national urban policies about housing such as civil strife, the transition from monarchy to republic, or the fall of dictatorship regimes.

Keywords describing objectives and measures were then identified from the list of public policies. These topics made it possible to build a methodological framework with key issues that can be addressed in urban policy analysis, certainly including policy actors, promoters, beneficiaries, actions, types of incentives, etc. The visualisation along the timeline, with the national laws concerning middle-class mass housing, showed the close relationship between historical events and housing policies. The comparative approach firstly was a simple juxtaposition between timelines from different countries, secondly, it was used as a starting point to intersect national frameworks and make the comparison a little more complex.

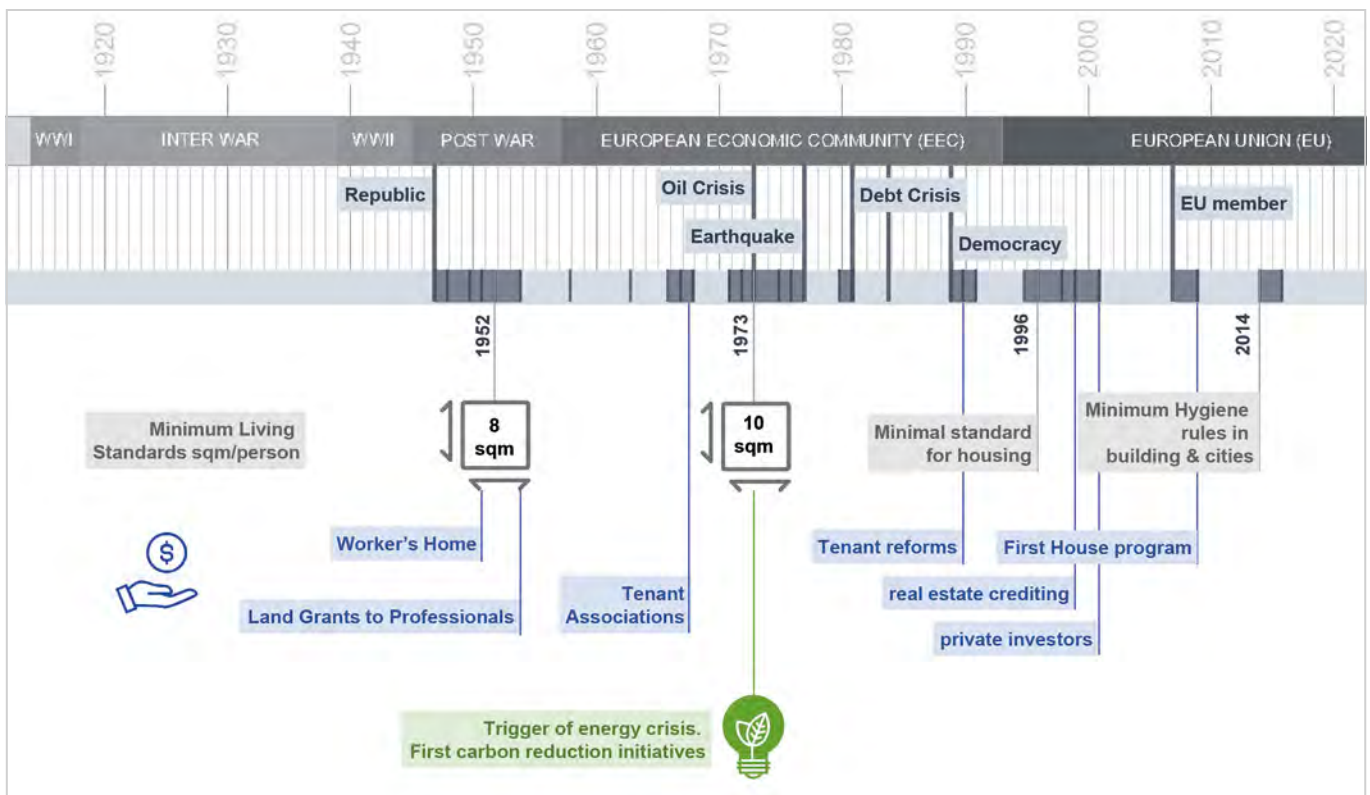
The analysis moved forward organising comparisons among clusters of countries geographically defined. These comparisons were then discussed in specific working group meetings which revealed huge differences that characterize geographically distant countries. For example, within the South Group, including Italy, Spain, Portugal and Greece, a major common thread was that middle-class mass housing has been incentivized through numerous economic campaigns to promote private ownership. So, the condition for the development of middle-class mass housing is quite coincident with the home ownership collective venture. Analyses and comparisons between countries' national policies were expanded by combining these data with further investigations on specific themes such as minimum living standards, financial aid, actions towards carbon reduction, etc. [FIGURE 12].

As a result, these visual comparisons pointed out some groups of countries with common patterns in addressing similar issues, such as the promotion of new housing and then the sponsoring of urban redevelopment through economic incentives, or energy efficiency and sustainability issues that became part of the national agendas at the same time for many countries. For example, the cases of Poland, Hungary, and Romania, despite their political and historical differences, have a similar timeline that shows coincidences of mass housing production linked to a change in the form of government, and they addressed the problem of urban renewal and energy around the same time [FIGURE 13].

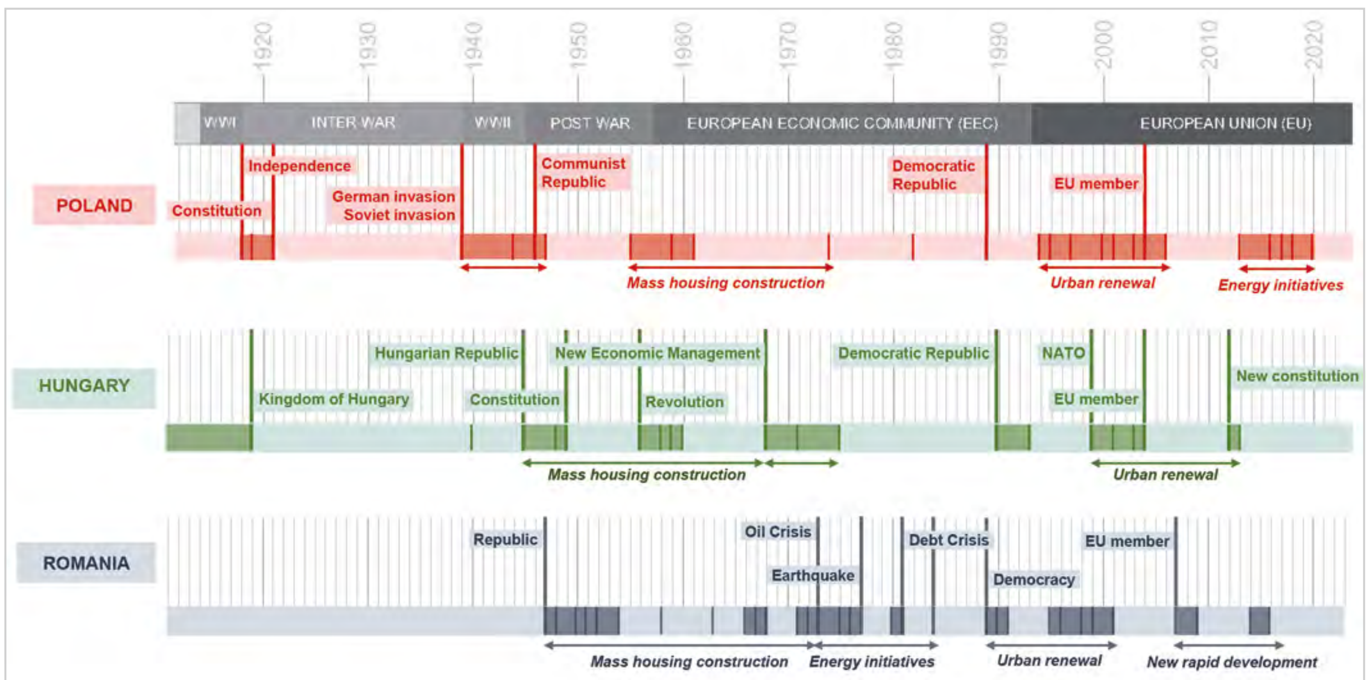
CRITICAL REVIEW AND DISCUSSION OF THE RESULTS

The involved methods triggered an interpretative and comparative analysis based on the informative and descriptive work of common data collections. The initial reflection on the difficulty of tackling the study to the extent of the middle-class mass housing phenomenon led to methodological evaluations. Through comparison and transversal observation between places and themes, it was possible to understand some underlying and common issues of the case studies.

Method 01 contributed to reveal the specificity of the middle-class mass housing phenomenon connected to the



12 Proposed thematic analysis: illustrated examples from National Policies in Romania. © Authors, 2022.



13 Thematic outline of country clusters. Poland, Hungary, and Romania cluster case-study. © Authors, 2022.

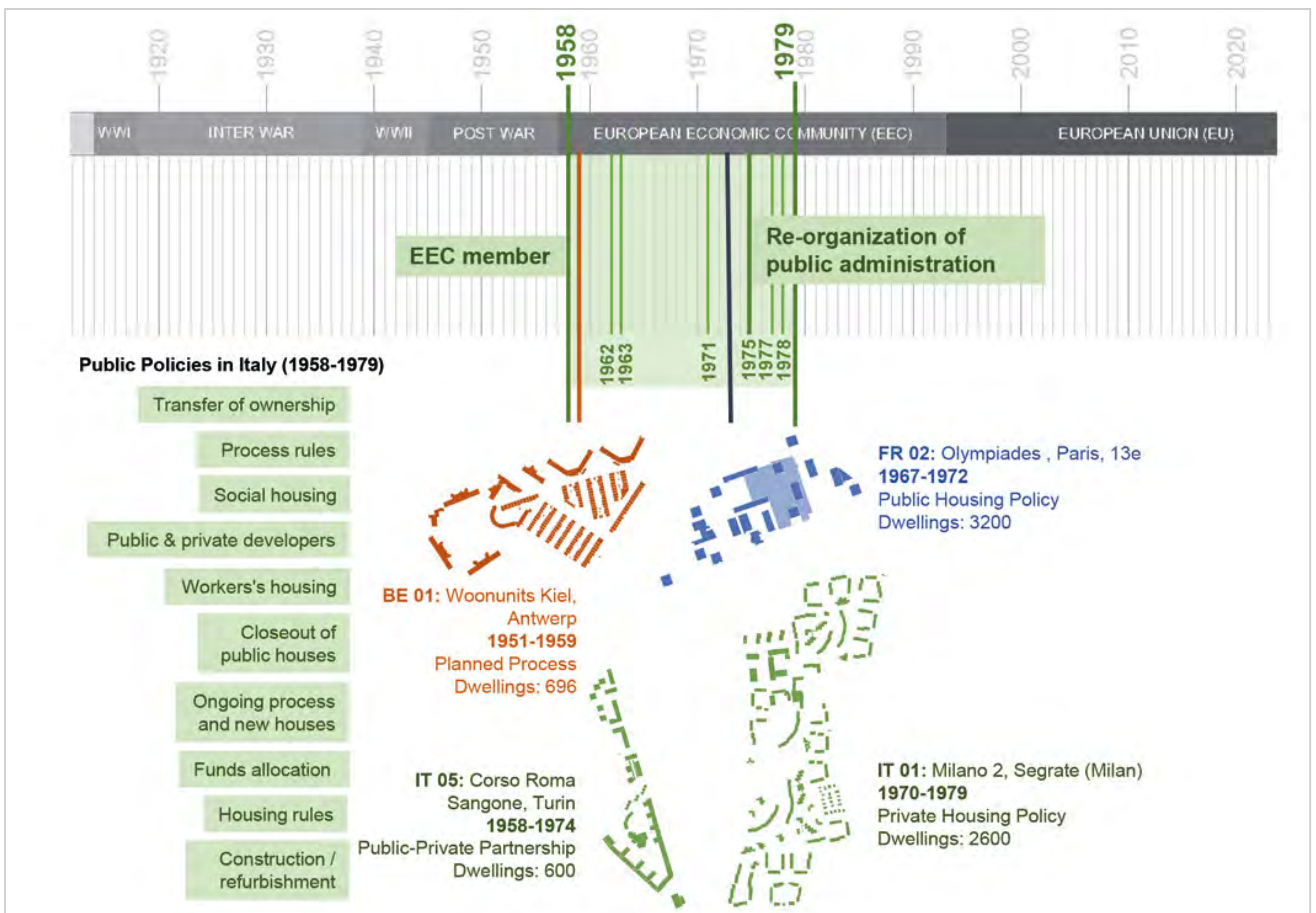
term *Mass Housing*. The diagrams illustrate the different measures of mass among case studies and helped in observing the process of massification. The visual comparisons clearly show that only in some cases the massification is determined by a single process, i.e. either vertical, horizontal or repetitive growth, and for most cases the process is intertwined. For example, the processes of horizontal growth and repetition or vertical growth and repetition co-occur in the same case study. In fact, the repetition of individual buildings is the most common aspect of massification, while the process is more complex, and it is not possible to identify a single aspect involved because it is most likely determined by a combination of conditions. Hence, diagrams of *Mass measurement* were very effective in investigating the *Mass* aspects, however, as they purely focused on the built mass, had no understanding of the relationship with the city. This also led to the need of developing a study on the relationship between the middle-class mass housing and the city following a traditional practice of urban morphological analysis. This showed the diverse housing typologies among the collected case studies and represented a chance to elaborate on the underlying role of middle-class mass housing within the urban context. Overall, it was considered quite

useful to compare the geometries and complexity of the urban districts; however, it also highlighted some major limitations for synthesizing the middle-class mass housing phenomena. Firstly, the project boundaries were not precisely marked in some cases, which made it difficult to analyze the context. Secondly, the drawings produced were limited to two-dimensional plans, while the *Mass measurement* focused on sections and the process of massification. While the *morphological analysis* focused on some selected cases, the *mass measurement* diagrams and the *data analysis* could make comparisons among a large number of case studies.

Method 02 shows comparisons on the period of realisation of the European Mass Housing, mainly concentrated in the 1960s-1970s time frame. It also showed that the middle class is a fluctuating phenomenon: buildings originally planned for the middle class changed their inhabitants, and buildings which were originally social housing became homes of the middle-class; nonetheless it was noticed that over time there was a rebalancing of use. This result seems to contradict studies that have observed a loss of the middle classes in this type of housing and their impoverishment, describing a phenomenon of polarization (Chauvel 2004, Hess et. al. 2018, Bugeja-Bloch et al., 2021, and Lelévrier, 2018). This rebalancing is a very important result of this study, which should be explored in more detail, because, over and above the possible error in the data, this would allow us to take a critical look at the urban renewal operations and urban policies aimed at maintaining the middle classes in large housing estates that have been carried out in several European countries, such as France (Lelévrier 2014).

Method 02 also focuses on the location of the middle-class mass housing: initially in the periphery, nowadays mainly within the city. In fact, buildings initially built on the periphery of cities or in the suburbs have, over time, been absorbed by urban growth. Regarding density, in the initial results, this distinction is made with the Western countries recording the highest and lowest densities, while the Eastern countries are more in line with the overall recorded average. Regarding the process of massification, it is clear that it was mostly planned and only in a few countries—such as Italy and Greece—there are a large number of unplanned processes.

Method 03, focusing on policies, elucidates the historical time frames and the comparison among countries, rather than case studies. Through this method it was possible to describe a country's identity related to the phenomenon and in the meantime connect it to the European context, by linking housing policies with historical events.



14 Urban and architectural characteristics comparison of scale and typologies between settlement and countries. © Authors, 2022.

In this study, the comparative approach constructed a common framework through visualizing policies, mainly by observing their temporal progression and the main themes synthesized in keywords. This allowed us to compare the relative timelines among countries and to observe the middle-class mass housing phenomenon through a series of actions promoted through specific national policies. This method has proved to be successful in spotting common processes, historical recurrences, and most recognized urban policy strategies which led to the basis of formulating common narratives on the European middle-class mass housing phenomenon.

In general, it was noticed that architectural and urban issues became clear through methods 01 and 02, while economic and sociological issues were shown only in methods 02 and 03. In each track of investigation, that is for each applied method, it was not possible to arrive at a total critical understanding of the phenomenon, though all methods clarified several aspects of it.

Future development of research on an even more systematic basis with more information and refinement of data could lead to a deeper interpretation by increasing comparative possibilities and therefore clarifying theoretical issues. The development of research would increase transversal relationships and interpretative possibilities, that are new and further methods to be applied. It could, in fact, be possible to select additional tracks of study within the inventory of case studies and make it possible to intersect tracks of research.

One of the future goals would be to engage the national researchers for more specific discussions regarding the selected case study that covers a specific public policy and/or a major political and historic event in that country. This will help in achieving the larger goal of accomplishing the middle-class mass housing research. It would be important to use the visualisation comparison as a tool to explain transversally fundamental issues about middle-class mass housing such as typologies, design, and policies, and contextualise the processes in a common timeline. [FIGURE 14].

CONCLUSION

Finally, the systematic and common reflections between the different countries could form the basis for a strategic development analysis of conservation or transformation operations. The large complexes and intensive interventions carried out after WW II, characterized by a modernity aspect often in decay, have left open questions and problems that are still struggling to become part of the contemporary city. The large dimension, which manifests itself in the scale of production or in excessive growth, explodes urban, visual and landscape relationships, invading landscapes and urban voids, designing a city that has yet to be understood. Middle-class mass housing neighbourhoods are places of urban transition; they tell the story of a period of transformation of the city, a period of post-war reconstructions and urban developments. These being the response to housing and social needs, they are the places of the city that are privatized, occupying voids or natural spaces. Today, they are places in need of transformation, often the subject of controversy over the choice of demolition and replacement or regeneration. They practically invite us to reflect on the original meaning of the operations and their relevance in the contemporary city.

The MCMH-EU discrimination seminar "*Lieux et Enjeux 1*" on the issue of urban renewal in mass housing organized in Paris in 2021, focused on the analysis of architectural and urban strategies of restoration and rehabilitation of this heritage of the modern movement and the identification of the different social processes that seek to maintain or attract the middle classes. More broadly, it has sought to cross-reference the narrative strategies and narratives that fuel projects and debates around renovation, rehabilitation and heritage, in relation to history and collective memories of the heritage defined as middle-class mass housing in Europe built between the 1960s and 1970s (Glendinning, 2008).

To enhance the development of policies and to foster implementation, it seems necessary to connect architectural and historical research closer with economic, political and sustainability related approaches, and with stakeholders from those fields. Also, a gap in connecting scientific research to educational programmes could be identified. This may require further investigation into the structure and content of current educational programs in particular related to the conservation, rehabilitation (Prudon, 2011, Graf and Marino, 2015, and Milovanović, 2022), and upgrading of existing middle-class mass housing estates (Docomomo International, 2022). It is also necessary to update the narrative and compare current strategies to build bridges between countries. The main goal should be to use our knowledge, as multi-faceted researchers, professors, designers, and urban planners to influence cultural and political debates at the European level and contribute to influence the policymakers

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ENDNOTES

1. The work was carried out by COST-Action members Luisa Smeragliuolo Perrotta, Ahmed Benbernou, Olga Harea, Uta Pottgiesser and Müge Akkar Ercan.
2. Based on 63 of the 97 case studies provided.
3. We suppose that the peculiarity of this project, identified as mass housing, lies not in its size, but in its architect: Luís Cristino da Silva, one of the pioneers of the modern movement in Portuguese architecture.

New Belgrade, Belgrade.
© Kostas Tsiambaos.

THE SKOPJE CITY WALL HOUSING COMPLEX

A Disregarded Cultural Heritage

Vlatko P. Korobar, Jasmina Siljanoska

ABSTRACT: The 1963 earthquake in Skopje, North Macedonia, prompted an international response culminating in the Town Planning Project financed by the UN Special Fund, which resulted in a new master plan for the city. An international competition for the reconstruction of the Skopje city center was launched as part of the project. The Kenzo Tange entry, which won three-fifths of the first prize, became a representation of the new Skopje. It relied on an autofabulation approach, using elements like 'city gate' and 'city wall' as important parts of the concept. One of the major features was the City Wall housing development which encircled the central business district (CBD). This paper examines the initial proposal and the phases it passed through to become a new development plan for the center. In this process, Tange played a significant role, defining major planning aspects of the complex, which was later completed according to projects by local architects. The City Wall supported housing as permanent activity in the center and introduced a housing complex of towers and blocks, which became a prominent feature of the Skopje skyline. Although it had to be adapted to the existing conditions and some of the original ideas had to be abandoned, the City Wall complex stood the test of time. Unfortunately, especially since the late 1980s and throughout the 1990s, a number of interventions and alterations have compromised its appearance and some of the basic ideas. The paper argues that the City Wall complex should be proclaimed a cultural heritage, and immediate action should be taken to prevent irreparable damage and to preserve the City Wall as an important and recognizable image of Skopje's townscape.

KEYWORDS: Kenzo Tange, city center plan for Skopje, City Wall housing complex, symbolic cityscape image, disregarded cultural heritage

INTRODUCTION: At the time of the Skopje earthquake in 1963, architecture in the world was going through a redefining period, which was simultaneously abandoning the production of space resulting from the superficial reading of the Modern idea and formulating bold new approaches to urban and architectural space, often initiated, but not limited to the technological advances of the time. The demise of the Congrès Internationaux d'Architecture Moderne (CIAM) and the succession of Team X did not lead to the substitution of the four functionalist categories with "an alternative set of abstractions… (but) searched for the structural principles of urban growth and for next significant unit above the family cell" (Frampton, 1982, p.271). The evident pluralism of Team X protagonists led to multiple approaches to establishing a sense of place by means of architecture, which resulted in a plethora of approaches to urban issues at the beginning of the 1960s.

Following the devastating earthquake, the United Nations Special Fund launched the Skopje Urban Plan Project, a joint international effort to reconstruct the severely damaged city. An invited international competition for the city center was organized as part of the comprehensive activities that followed. Its outcome often stands out as representative of the whole planning effort, which, despite its importance, mistakenly symbolizes the complex operation of the Skopje Urban Plan Project, which resulted in a new Master plan for the entire city.

Four domestic and four international teams took part in the competition. The four teams from former Yugoslavia were led by Edvard Ravnikar from Ljubljana, Miščević and Wenzler from Zagreb, Aleksandar Djordjević from Belgrade, and Slavko Brezovski from Skopje. The

four international offices included Maurice Rotival and Associates from the USA, Luigi Piccinato and Studio Scimemi from Italy, Kenzo Tange from Japan, and Van den Broek and Bakema from the Netherlands. The entries reflected the varied urban design scene of the time. The works of Van den Broek and Bakema, Tange, and Ravnikar echoed the initial Team X ideas reflected in some of their convergent spatial solutions. Maurice Rotival based its entry on a modified form of a megastructure, while Luigi Piccinato's work reflected the postulates of the Association for Organic Architecture he formed with Zevi, Ridolfi, and Nervi after WWII. All other entries were variations within a broader interpretation of the Modern Movement.

THE INVITED INTERNATIONAL COMPETITION: ITS OUTCOME AND CONSEQUENCES

The International jury split the first prize between the teams of Kenzo Tange (60%) and Miščević and Wenzler (40%). In its report, the jury noted that the entry of Kenzo Tange "has dealt with many aspects of the plan in a serious, original and inspired way," while the entry of Miščević and Wenzler was evaluated as "modest in its proposals, avoid(ing) exaggeration, whether it be in height of buildings, size of open spaces or location of use zones" (Skopje Resurgent, 1970, p. 373). This decision obviously led towards a compromise that was to be reached among members from both teams, burdened with the obligation to prepare a development plan for the city center.

In the period after the earthquake and to this date, Kenzo Tange's proposal has been almost solely connected with the comprehensive planning effort for the reconstruction of Skopje.[1] This was a result of its clear concept and the powerful structures and imagery of the project. It was a physical representation of both former Yugoslavia and the UN striving to show what a joint international involvement of this magnitude can produce; in the case of former Yugoslavia, as a leading country of the "third world" and in the case of UN as a unifying international force in a divided world.

01 Model of the competition entry of Kenzo Tange. © Skopje Resurgent, UNDP.

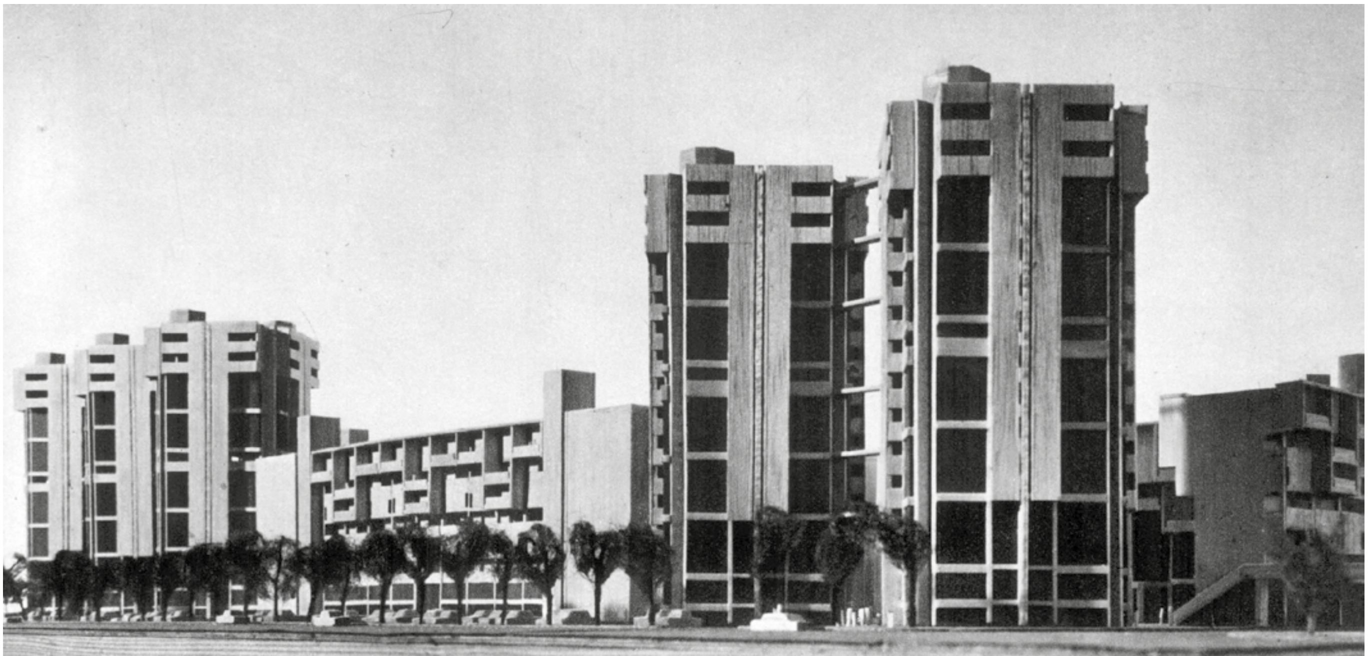
Kenzo Tange and his team made a bold statement about the city's future. It followed Tange's credo that he later formulated clearly in his acceptance speech when receiving the Pritzker prize: "…there is a powerful need for symbolism and that means that the architecture must have something that appeals to the human heart" (Kenzo Tange, 1987).

Before being involved in the Skopje competition, Tange already had connections to and participated in some of the activities of Team X (Frampton, 1982, p.274) but was better known for his Tokyo Bay project of 1960. This project initiated the entire Japanese Metabolist movement, which, reacting to the pressures of constant growth and overcrowding of Japanese cities, turned to constantly growing and adapting megastructures.

Tange's Skopje proposal has several main features, including the City Gate, acting as an important urban interchange; the City Wall, encircling the inner ring of the center; and the Old and the New Axis, two distinct axes, facilitating the structuring of the city center clearly and unambiguously. In Tange's words:

> *the City Gate is the Transformer. It is the physical system which transforms the scale and speed of an ever-developing civilization to consistent human scale. The City Wall is the Vessel, determined by walking distance, which contains the heterogeneous mixture of old and new and stimulates them to create the higher urbanities. The City Gate and the City Wall will become the symbols of the New Skopje.*
>
> (Report on City Centre Planning, 1966, p.19)

02 The City Wall housing complex in the model of the competition entry. © Report on City Centre Planning, ITPA.



03 The City Wall Housing complex as part of the model of the final version of the City Gate complex. © Skopje Resurgent, UNDP.

The New Axis extending in the East–West direction comprised a raised pedestrian deck and connected clusters of important state, cultural, and commercial spaces. At the main city square, it intersected with the existing Old Axis, which became the new pedestrian spine of the center. The introduction of the new axis complemented the planned development of the entire city, which was transformed from a central to a linear layout extending along the Vardar River [FIGURE 01][FIGURE 02].

PLANNING REALITY: TURNING THE WINNING PROJECT INTO A WORKING DEVELOPMENT PLAN

The completion of the detailed urban plan was entrusted to a mixed team comprised of representatives of the two awarded entries and local representatives. Separately, the Kenzo Tange team was involved in planning the City Gate area, which was part of the detailed plan of the city center.

This plan became known as the "ninth project" (or variant) following the eight competition projects. It was recommended that the ninth project should utilize the valuable ideas from all entries, but it should mainly follow Tange's project. During the process, a number of changes were made, as the city center plan was superseded by the master plan, and the competition brief was deemed outdated with a number of new buildings added.

The design of the City Wall took several forms during the process as a result of wind-tunnel testing and critical reports regarding "the obstruction of transverse views and air currents by the height and continuity of the 'city wall' apartment blocks, (and) the incongruous scale of some proposed developments" (Skopje Resurgent, 1970, p. 314). This led to a complete abandoning of the part of the City Wall on the left bank of the Vardar River, as well as a transformation of the initial chain-type layout of apartment blocks of various heights, which still incorporated the raised pedestrian deck.

Finally, the City Wall was transformed into a housing development with towers and apartment blocks, without the proposed pedestrian deck, with shops at ground level and green areas within the individual segments. In his later recollections, Tange expressed his astonishment at the fact that their 1:500 drawings soon became construction projects for the City Wall without their involvement, which in his view, would have resulted in a subtler urban ensemble [FIGURE 03]. In its present form, the City Wall incorporates old buildings which were not planned to be part of the development but became its permanent feature, as the financial means for full completion of the project were no longer available.

THE CITY WALL HOUSING: THE IDEA, THE SYMBOLISM, AND THE BUILT STRUCTURE

Tange treated the City Wall as a defining element of his competition proposal. It stretched on both banks of the Vardar River, opening the possibility for growth according to future needs. On the contrary, the old quarters in the city center were not expected to grow but to "continue their metabolic change inside the wall" (The Japan Architect, 1967, p. 38). Inserting housing within the City Wall was seen as an expression of permanence in the city center. It contained a row of housing blocks of the same height, with residences on the upper floors and shops and neighborhood facilities accessible from a pedestrian deck in the lower, trapezoid-shaped part. The residential blocks were connected by bold vertical cylindrical shafts containing the entrances to the dwellings. They strongly resembled the cylindrical tower of the old Skopje Fortress, symbolizing the connection with the city's distant past. Pairs of shafts formed entrances to the inner quarters. Coupled with the

04 Model of the "Ninth Project" or the final version of the city center plan. © Skop e centar – Gradski dzid, ZSKS.

design of the blocks in the City Gate, the City Wall was a clear expression of the Japanese Metabolism of the time.

In the next stage, the City Wall was reduced in length and shape and was planned as a chain-type layout with parallel blocks enclosing an inner space. Tange felt that "Though the concept of the City Gate and City Wall and of the old and new axis as presented in our competition plan has changed considerably, the effect of a symbolic image for the people of Skopje remains intact" (The Japan Architect, 1967, p 45).

The final stage in which Tange's team was involved saw yet another change in the shape and organization of the City Wall complex, although its position within the city center remained unchanged [FIGURE 04]. The position of the "residential wall" rests along a ring road planned at the beginning of the twentieth century. However, its wider area coincides with the territory where two different development concepts for the city met, one with a radial-concentric and the other with a linear street network. These two concepts represented two different periods of city development, one before and another immediately after WWII. The City Wall area tried to respond to this situation by defragmenting the existing urban fabric, connecting the temporal layers of the city center, and proposing visual and physical enhancement of the area where the two planning urban matrices overlapped.

As soon as the detailed plan for the center was completed, the Institute for Housing and Communal Management of Skopje, responsible for the construction of new housing areas in the city, commissioned major local architectural and construction firms to complete the City Wall complex. The architectural projects of the blocks were completed by a team that included N. Bogachev, S. Gjurikj, Lj. Malenkova, A. Serafimovski, S. Simovski,

and V. Kjoseva. The projects for the two types of towers were completed: for tower "M" by A. Serafimovski, V. Ladinska, D. Dimitrov, R. Mincheva, and S. Gjurikj from Makedonija proekt and for tower "B" by A. Smilevski from Beton. The four largest construction companies, Beton, Granit, Mavrovo, and Pelagonija, were involved in building the City Wall complex.

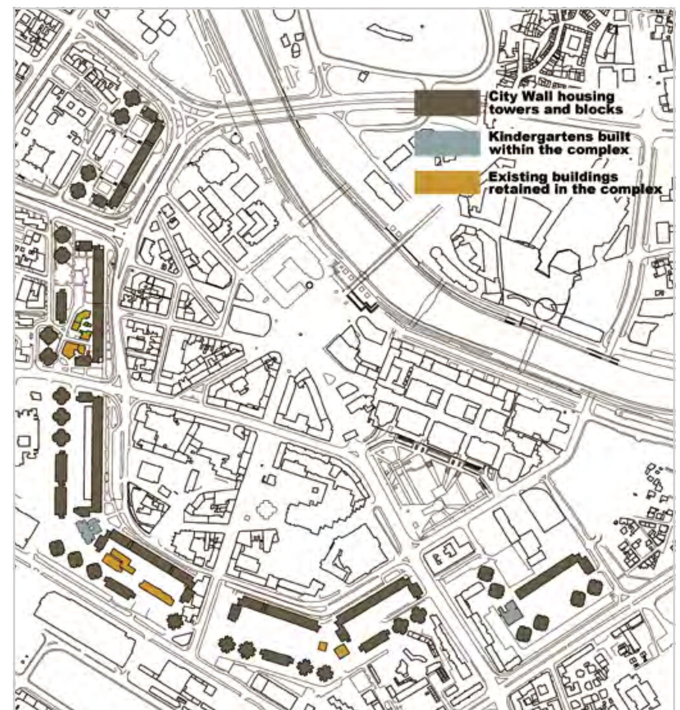
The Institute for Housing and Communal Management of Skopje was also responsible for distributing the completed housing units and acted as an intermediate organization between the general housing policy and the end users—the "working people." All companies and employees were obliged to set aside 4% of their net income for housing investment. Usually, the companies bought the apartments and distributed them according to established criteria, enabling their employees to purchase apartments by giving them housing loans or redirecting them to banks for affordable long-term housing loans. Most of the apartments in the City Wall were bought by their occupants using the latter option.

The City Wall was designed as a double residential structure for nearly 8,000 dwellers, occupying 1,814 apartments of different typologies, ranging from studios to five-bedroom apartments, with an area of 25 to 150 m^2. The housing development consists of 45 meters high towers and blocks with a height of 24 meters. They are placed parallel to each other, enclosing an inner space that serves as a green refuge for the dwellers, safeguarding them from the busy city center activities.

The two types of buildings added diversity to the composition, but the real reason for introducing towers was the need to improve the cross-aeration of the area. The towers were placed in groups of two or three, located on either side of the streets intersecting the extended structure of parallel blocks along the ring-road.

The ground floor and the mezzanine were planned for various commercial activities and business premises, with entrances mainly from the pedestrian areas along the main road. In addition, the towers and blocks had common premises such as a room for house council meetings and children's activities, a two-room apartment for the housemaster, a workshop with storage, a room for bicycles and baby carriages, a common drying room, etc.

The double structure on the outside mainly faces the inner ring road, towards which all entrances are oriented, while the inner space is a predominantly pedestrian area. Both sides and experiences are well integrated by pedestrian passages which are often placed so as to connect the remnants of the old street network. They also allow an easy transition from the public to the semi-public space of the residential community.



05 Existing state of the City Wall housing complex with buildings that have been retained. © Authors, 2023.

This open semi-public space is used for greenery, playground corners, walkways, mixed-use zones, parking, small urban parks, etc., while several kindergartens and an existing primary school were incorporated into the complex [FIGURE 05]. Within this space, several service streets were introduced, providing motorized access to the housing and commercial units. Parking of vehicles is organized as surface and underground parking space. Unfortunately, the promenade that was supposed to stretch from one end to another within the complex was never fully implemented.

At present, the area in which the City Wall is located accommodates a large number of citizens and activities. This is a result of its immediate vicinity to the central business district and to major public institutions and amenities. The morphology of the physical structure, which is permeable and open to the city and the mixed-use of the ground floors, provides a high level of interaction of the residents with the adjacent public spaces and easy transition of pedestrians through the City Wall area.

In fact, the City Wall housing area serves a double purpose. It clearly separates the CBD from the rest of the wider central area and provides a full daily cycle of activities in the center, while the notion of a "wall fortress," in its contemporary interpretation, provides a meaningful image and becomes a symbol of the city form [FIGURE 06] [FIGURE 07] [FIGURE 08].

THE CITY WALL AS A CULTURAL HERITAGE

The City Wall mass housing development manifested itself as a supreme exponent of the conceptual, ideological, and social ideas of the time it was created, the mid-1960s and early 1970s. Changing paradigms on the

06 General view of the City Wall housing complex. © Maja Janevska-Ilieva, 2023

07 The inner semi-public space of the City Wall housing complex. © Maja Janevska-Ilieva, 2023

international scene, generally conceived as a revision of the principles of the functionalist city, heavily influenced the city redevelopment of Skopje after the earthquake and the organization of housing complexes.

The City Wall housing complex represented a completely new concept of housing development of its time. It is one of the two most striking structures in Tange's plan and the only structure that was implemented according to the plan. Kenzo Tange's urban design signature of the project enhances its value. Although the original concept underwent many alterations during its implementation, its symbolic and metaphorical image is still preserved today. It remains to be an irreplaceable defining element of the city center urban form.

The city redevelopment after the earthquake has always been associated with the idea of human solidarity. The City Wall stands as an iconic image of that period, which symbolizes the city's resilience supported by impressive international aid.

At the same time, it is a narrative of nostalgic utopia because the complex represents the period when public mass housing was a prevailing model of housing construction, stemming from the basic ideological and social aspirations of the time. This nostalgic narrative is further enhanced by the fact that it was among the last housing complexes built before they became a feature of the past, replaced by the speculative building of individual high-rise buildings and incremental urban changes in the 1990s.

These are the main reasons why the City Wall, as a valuable urban and architectural complex, should undoubtedly be considered a cultural heritage of both urban design and architectural value.

For the first time, recommendations for the City Wall to be granted a protection status as cultural heritage, relevant to urban planning and development of the city, were presented in the Conservation Outlines completed in the initial phase of preparation of the General Urban Plan for the City of Skopje in 2012. On the basis of the recommendations of the Conservation Outlines, it was proposed that the City Wall should be protected as a cultural site and urban area, a significant cultural heritage with a second-level protection regime. Unfortunately, no further legal actions were undertaken to valorize the City Wall; thus, even the status of potential cultural heritage had to be repeatedly elaborated in all consecutive Local Development Plans.

08 The pedestrian area along the City Wall housing complex, facing the inner-city ring road. © Vlatko P. Korobar, 2023

Hopefully, the new General Urban Plan, which is in the early stage of preparation, will be more sensitive to the significance and value that the City Wall complex has for the city and its memory.

THE CITY WALL AS HERITAGE IN DANGER: CURRENT STATE

All housing complexes from the 1970s and 1980s have been exposed to major alterations after the system change in 1991 and the transition from social to private property. This process created problems in maintenance and

especially reduced the quality of common spaces and premises. The original plans and buildings went through transformations which generally increased the density. The City Wall's coherency as an urban site and area of specific values was compromised by inserting new buildings in its vicinity or by widening the original footprint with additional structures and vertical communications, alternative roof constructions, façade alterations as well as insertion of parking areas in the common space in-between the blocks.

The City Wall still remains the main symbolic city image structure of good urban life quality and social integration, even though some original ideas have been corrupted with spaces appropriated or not well maintained. The continuity of pedestrian circulation throughout the inner green and semi-public spaces has been interrupted and "invaded" by increased motor circulation and higher parking standards. The original idea of having a continual promenade along the entire length of the City Wall, entirely immersed in greenery, was compromised at the very beginning of its completion.

The quality of the inner open, semi-public space within the City Wall is continually jeopardized by new investors and their need for additional infills. Unfortunately, the tendency of gray public spaces to overcome green areas is growing daily. Analyses for the western segment of the City Wall record a high total of surfaces for pedestrian and vehicle movement (62,97 %), while the proportion of the total surface of open public space for use as parks and green areas, children and sports playgrounds, etc., is only 11,36 % (Korobar, Siljanoska, 2018).

A specific feature of the housing areas and big mass housing complexes built immediately after the earthquake was that they were conceptualized and evolved around the concept of pedestrianized areas and streets. Generally, a problem persists with their quality maintenance, preservation, and improvement, which presents a threat to the wide variety of public spaces. The City Wall experiences this same problematic situation as most of the complexes developed in that period. Negligence in preserving the City Wall built structure and maintenance and subsistence of the semi-public spaces puts this complex—a potential cultural heritage—in danger [FIGURE 09].

09 Alterations carried out by the dwellers, including sloped roof cover, enclosing parts of the terraces, adding new balconies, turning bay windows into balconies and other changes and additions to the facades © Vlatko P. Korobar, 2023.

CONCLUSION

The aftermath of the Skopje earthquake saw an unprecedented international relief effort led by the United Nations at the beginning of the Cold War period. Promoted as a city of international solidarity, Skopje became known as the place where American and Soviet soldiers met for the first time after the Elbe in WWII. In many respects, the comprehensive town planning project, supported by the UN Special Fund, represented a groundbreaking exercise involving well-known planners and architects from around the world.

As a result of the invited international competition for the Skopje city center, Kenzo Tange and his team, as winners of 60% of the first prize, were fully involved in preparing the plan for the center. Two defining elements of their competition entry were the proposed City Gate and City Wall, which were to establish the new city structure representing the city's new image as a result of its post-earthquake reconstruction.

The City Wall is the only segment of Tange's proposal that has been almost fully completed, thus, signifying the important period in the city's development, which began in the mid-1960s. This makes it a complex of special importance, which should be preserved as a significant part of the recent history of Skopje. Special attention should therefore be paid to the urban design and architectural integrity of the City Wall, but also to the developments that take place in its vicinity and might compromise its intended status within the center and impair the context it provides.

Unfortunately, the significance of the City Wall complex has not been recognized by the city's authorities, and despite the efforts to proclaim it a cultural heritage, its status has remained unchanged. This has led to further actions which produce, in some cases, irreparable damage to the complex due to inadequate development control.

The current condition calls for immediate action and recognition of the City Wall complex as cultural heritage, which would preserve its status as a defining element of Skopje's skyline and its symbolic value for the city.

ENDNOTES

1 The sentence comments on the fact that Tange's proposal has been THE epitomization of the entire reconstruction project for Skopje, although in fact, the UN Town Planning Project was a much larger undertaking which apart from the city center competition and project, included a master plan for the entire city which involved Polservice from Warsaw, Doxiades Associates from Athens and ITPA from Skopje. In other words, it is a simplification and reduction of the comprehensive planning exercise which took place after the earthquake.

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HIDDEN CHAMPIONS

Perceptions, Values, and Preconception of large-scale post-WWII Housing Estates in Frankfurt Rhine-Main Region

Maren Harnack, Natalie Heger

ABSTRACT: Large-scale housing estates were the most significant and largest single investments implemented in many municipalities in the post-WWII period. They were emblematic of modern urban development until criticism of modern housing became widespread and reached Western Germany in the wake of the fundamental socio-critical movements shaking Europe around 1968. This criticism primarily reflected the voice of middle-class academics, who fed it into the media as well as into the architecture and planning discourse, which continues to dominate to these days. We will argue that this criticism stands in the way of recognizing large-scale housing estates as important testimonies of post-WWII history worthy of preservation. In times of tight housing markets, this criticism also enables significant alterations to the estates' urban fabric as well as densification to generate additional homes without incurring land costs. As a result, we currently risk even the outstanding examples being altered beyond their ability to function as cultural monuments. This paper combines literature, archive material and extensive surveys of large-scale post-WWII housing estates in the Frankfurt Rhine-Main region to trace the changing perception of this housing type over time and its implications for the formal listing process. Whilst the current German legislation allows for the best specimens of large-scale post-WWII housing estates to be listed but factors outside the professional field prevents the authorities in charge from doing so. At the same time the benefits of listing would extend beyond the realm of building preservation to include better acceptance within the general public and improved identification for the residents. Two examples from the Rhine-Main Region will exemplify the challenges related to the preservation of large-scale housing estates.

KEYWORDS: Housing estates, Frankfurt Rhine-Main Region, Germany, post-WWII modernism, heritage listing

INTRODUCTION: Frankfurt am Main was no exception to the general course of housing development in German cities. Due to explosive and badly accommodated urban growth during industrialization, overcrowding and poor-quality was a common experience for many of Frankfurt's residents. Although with the 1920s housing program under Ernst May 12,000 residential units were created, it was not nearly enough to significantly alleviate the dire situation. The war-time ravages merely exacerbated an already atrocious situation and Frankfurt soon needed to absorb and house not only its own population but large numbers of displaced persons arriving from eastern, formerly German regions. Frankfurt regained its pre-WWII size with 563,000 inhabitants by 1951 and surpassed 600,000 inhabitants in1953 to reach 691,000 in 1963 (Müller-Raemisch 1998, 407ff.).

In this situation, modern, large-scale housing estates provided comfortable, healthy and affordable housing for many people for the first time. In addition, the urban planning principles with its airy open spaces reacted to the experience of the war-time bombings and firestorms, in which dense old cities had become traps for many inhabitants. At the same time, the prosperity grew and fueled the consumption of housing in quantitative terms, whilst also increasing expectations in its quality. In this situation, the extensive development of new housing estates on the outskirts of the city was a logical step. Unlike in more central areas, the rapid availability here allowed optimized, serial housing types to be efficiently planned and built in large numbers, supplemented by amenities such as schools, kindergartens, shopping centers, sports facilities and churches. In many ways, the resulting neighborhoods reflected post-WWII German society and its ideals.

GENERATIONAL CHANGE AND CHANGING VALUES

Around 1968[1] various social changes emerged which contributed to a lasting discrediting of large-scale post-WWII housing. Two converging lines of criticism will be analyzed briefly below.

Numerous theorists have dealt with the connection between consumption and self-expression (for example: Veblen 1902, Maslow, 1943, Schulze, 1992). For housing, this change in values meant that instead of comfort, safety and health, the younger generation looked for interest and stimulation in their living environment. The new-build housing estates on the city fringes were unable to offer these qualities, as they were built images of the social ideals of *Fordism* and embodied a societal model increasingly perceived as unjust—women were expected to look after home and children, trapped far away from the city and the workplace. The progressive criticism of modernity essentially opposed this model (Siedler et al. 1964; Mitscherlich 1965; Lembrock 1971; Blake 1977; Conrads,1974 or Wolfe 1981). Old *Gründerzeit* neighborhoods, which had continued to deteriorate since WWII, became interesting for young people in terms of self-realization, a good life and stimulating experiences beyond Fordist lifestyles. They provided space for creative appropriation and reinterpretation that affected the development of neighborhoods and urban spaces (Reckwitz 2012, 287ff), and housed a comparatively mixed population. In addition, the *Gründerzeit* floor plans suited new, experimental forms of living, such as flat-shares—unimaginable in post-war family flats. In Frankfurt the *Westend* area was a site of intensive and sometimes violent battles to protect this old housing stock. Before the war it housed the better-off strata of society and remained largely untouched by the war, containing many architectonic gems. After WWII, it soon came under intensive redevelopment, often with high-rise office blocks. Students (and also migrant workers) rented the previously grand homes at often low prices, while the building were awaiting demolition. Whilst residents and conservationists soon realized that the redevelopment would destroy the little amount of historical urban fabric left in Frankfurt, the city's officials were rather slow to understand that the public opinion had shifted.

When eventually the remaining parts of *Westend* were protected from demolition and from conversion to offices, the newly built housing estates had suffered a significant blow in reputation. From the left spectrum, post-war housing estates were increasingly criticized as an extension of *Fordist* principles into private life. In this interpretation, the estates were oriented only towards the reproduction of the workforce, purposefully isolating residents—especially women—from the political and cultural urban processes unfolding more or less spontaneously in the old neighborhoods. In addition, it was assumed that the housing estates were deliberately designed with little stimulation in order to maximize the profits of the construction industry, thus showing contempt for the residents. The fact that the housing estates hugely improved the quality of everyday life for many residents was often forgotten (Krüger 2014).

The criticism voiced by the more progressive, left-wing social groups and the associated reinterpretation of *Gründerzeit* neighborhoods would not have been so powerful had it not been supported by the other end of the political spectrum—with opposing arguments, but with very much the same result. For conservative critics, the housing estates were lawless places where drug addiction, crime and violence were rife and uncontrollable. The bestseller *Wir Kinder vom Bahnhof Zoo* (Felscherinow et al. 1978) and the subsequent film located in Berlin's *Gropiusstadt* created a significant media coverage. Without taking a closer look at the causes of the statistical anomalies, large-scale post-WWII housing estates were identified as places of deviance and public disarray.

BLIND SPOTS

As different as the lines of criticism were, in the end they led to a firmly negative image of large-scale post-WWII housing which continues to have an effect today. They are in contrast with a sometimes clichéd, positive view of the old *Gründerzeit* building stock. These lines of criticism were followed by concrete political changes and lead to the end of large-scale housing developments and to the shift back towards the European city, favoring small-scale parceling and mixed-use. The changes also included funding programs that had, and still have, the goal of preserving, improving and upgrading historic building stock. Much-criticized post-WWII housing estates were not included in stock renewal or improvement programs. In some cases, construction was even stopped in mid-flow, thereby adding to existing problems. Either the shortfall of residents compromised the viability of any infrastructure that had already been built (such as in the New Town of Wulfen) or part (or all) of the planned infrastructure was delivered far later than planned, not to the extent initially expected, or even not at all (such as the S-Bahn to Hamburg Steilshoop). The post-war housing estates' structural deficits have only been addressed and partly remedied since the launch of the *Bund-Länder-Programm "Soziale Stadt"* funding program in 1999.

The persistently negative image of modernist housing estates has led to a lack of comprehensive knowledge about this type of neighborhood. And although especially the late, large-scale housing estates—conceived as entire neighborhoods—have been among the largest and most

expensive investments German cities undertook in the post-WWII years, none of them has yet been listed. The last systematic research was undertaken by the German Federal Government (Deutscher Bundestag,1994) but only considered estates of more than 2500 units, leaving out the vast majority of smaller ones, starting at 500, 800 or 1000 units.

In a later study, the Baden-Wuerttemberg state conservation authority had commissioned a survey for late modernist housing in the Tübingen-Stuttgart Area, resulting in a few listings of individual buildings and small, predominantly middle-class neighborhoods. In North Rhine-Westphalia a survey of 20th century housing estates has been started out and was partly published (Pufke 2021): listing in this federal state is divulged to the level on municipalities, which often choose not to follow the recommendations of the state authority. Apart from this, a number of *Siedlungen* has been documented in individual publications, such as *Märkisches Viertel* in Berlin (Jacob and Schäche 2004) or *Neuperlach* in Munich (Hild and Müsseler 2014).

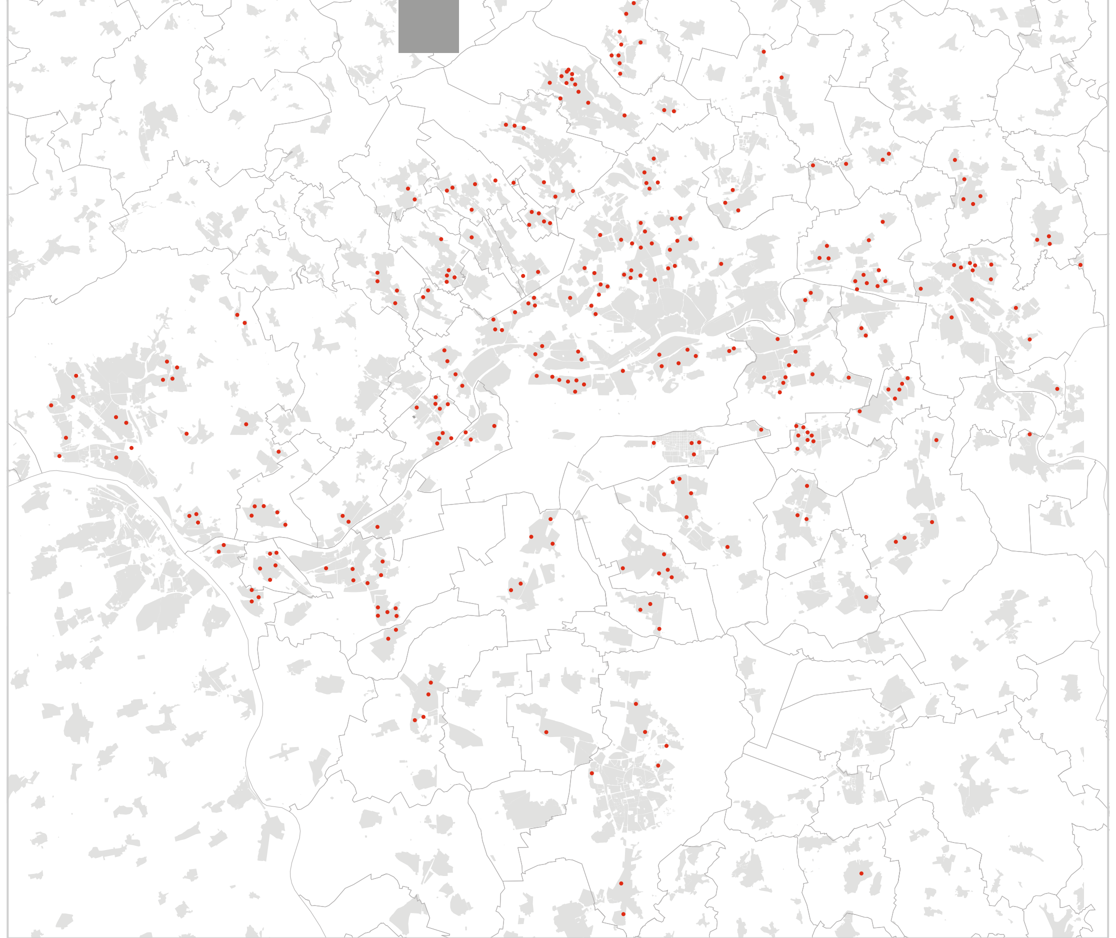
LARGE-SCALE HOUSING IN THE RHINE-MAIN REGION

A comprehensive survey of the Frankfurt Rhine-Maine region undertaken since 2015 has yielded more than 400 cases of developments, that can be understood as "large-scale". A main tool of research was the systematic use of google earth as a means to find even the most obscure specimens, that have neither been published nor gained attention in any other way. For this survey, the actual number of residential units for a development to be considered large was not fixed, but depended to some extend to the surroundings. Hence in smaller municipalities a lower number of units would be considered large-scale than in the major cities of the region, such as Frankfurt, Darmstadt, or Wiesbaden. Subsequently all estates were visited and documented using a combination of public transport and bicycle. The on-site inspection allowed us quickly to establish whether an estate has been conceived as a coherent, integrated neighborhood or whether it is a mere accumulation of houses that lacks an overarching concept as well as consistent greenery. In addition to the estates, we found a small number of large buildings we would consider megastructures, most of them developed as private, upmarket co-operative apartments [FIGURE 01].

As a result of the survey, we could determine that only a small minority of the examples could be considered *Siedlungen* with coherent planning, design, and management in place. Of these, seven examples from the 1950s are listed as cultural monuments, six of them are located in Frankfurt: Albert-Schweitzer-Siedlung (1950–56), Fritz-Kissel-Siedlung (1951–54), Postsiedlung (1951–58), Dornbuschsiedlung (1954–59), Heinrich-Stahl-Straße (1957), and parts of the Ferdinand-Hoffmann-Siedlung (1959). One example is located in Kronberg: Siedlung Roter Hang is mainly consisting of single-family homes and, different from the Frankfurt ones, does not contain any social housing. No example of the later period, i.e. the 1960s and early 1970s has been listed, and none of the megastructures. But although the survey has created extensive knowledge about the regional stock and has established a methodology that could be applied to other regions of Hesse, the conservation authority has neither listed any further examples nor has it embarked on or commissioned systematic research into the cultural heritage of post-WWII mass housing in Hesse.

This negligence is especially grave as the existing estates are under intense pressure. Housing is becoming increasingly scarce in European metropolitan areas including the Frankfurt region, and municipal as well as national governments announce ever increasing goals for new housing construction. Whilst the *Gründerzeit* neighborhoods are now barely affordable, the lush green spaces of the post-WWII large-scale housing estates are increasingly viewed as potential building plots. They are often owned by municipal, other publicly or semi-publicly owned housing companies which specialize in providing subsidized or low-cost housing, and which are held accountable to achieve housing construction targets by their public owners. Using green spaces in large-scale housing estates for infill development is often considered a sustainable option, as no additional streets are needed and expensive land acquisition is avoided, thus reducing housing costs in an over-heated market.

This creates little opposition outside the large-scale housing estates, as they are largely seen as outdated, along with the *Fordist* model of society they embody. But contrary to public belief, the importance of post-WWII modernist housing development lies at least partly in its recognizable *Fordist* character. *Fordism* embodies the social ideals of its time and in this sense, housing estates are important historical testimonies to our recent history. The best examples showcase historic dwelling concepts, urbanist ideas, architectural positions and construction technologies. Accordingly, it seems self-evident that some of them must be preserved and protected for future generations. However, this does not happen, although their significance in terms of urban planning, art and history—three out of five possible criteria for listing[2]—would undoubtedly allow this, for example in the case of Ernst May's Schelmengraben in Wiesbaden or Walter Schwagenscheidt and Tassilo Sittmann's Nordweststadt in Frankfurt. These two settlements we consider two of the best examples of late large-scale housing estates in the Frankfurt Rhine-Main region (Harnack et al. 2020).



01 Results of the survey on large-scale housing Frankfurt Rhine-Maine region with more than 400 cases of developments. © Maren Harnack, Frankfurt UAS, 2019.

TWO EXAMPLES: NORDWESTSTADT AND SCHELMENGRABEN

The Nordweststadt, built from 1962-68, is located directly north of the famous Römerstadt (1927-28), and contains approximately 7,500 homes. Its main planner, Walter Schwagenscheidt, was part of Ernst May's team in Frankfurt in the 1920s and had been developing the *Raumstadt* concept since then (Schwagenscheidt 2013 (1949)). Contrary to the dominant views of that time, Schwagenscheidt suggested to arrange buildings perpendicular to each other so that they would enclose communal green spaces that would encourage social life between different buildings. Nordweststadt was meant to connect the three existing sub-centers Praunheim, Heddernheim and Niederursel and its main shopping precincts was intended to serve all three. Planning commenced in the late 1950s and in 1961, the competition with a high-profile jury including Ernst May elected no winner. The second prize was awarded to Gerhard Rittmann and Helmut Krisch, the third to Walter Schwagenscheidt and Tassilo Sittmann. Ernst May favored the Rittman-Krisch-project because it used strict *Zeilenbau* (row building), whilst the chief city planner preferred the Schwagenscheidt-Sittmann-design because of the more community-oriented positioning of the buildings which was finally commissioned to become the urban development framework plan [FIGURE 02].

Access for vehicles and pedestrians is separated, allowing pedestrians to move safely through green routes connecting schools, churches, shops and other amenities. Although the landscaping (designed by Erich Hanke) creates continuous, park-like greenery [FIGURE 03], public and private areas are nuanced and legible. The undulating landscape design also hides the vehicular access and leads pedestrians imperceptibly upwards to the bridges that span the streets. Playgrounds, schoolyards and recreational spaces are woven into the pedestrian network.

Nordweststadt is a very rare example of urban design, landscaping and traffic planning complementing each other and forming an aesthetically and practically highly satisfying environment of outstanding quality. This is underlined by the high architectural quality of the public buildings: all churches and two out of three school have been listed as cultural monuments. Despite this, the rest of the neighborhood remains unlisted, even the immediate vicinities of the listed buildings [FIGURE 04].

Schelmengraben in Wiesbaden was planned by Ernst May from 1961 onwards. After emigrating to Africa during the Nazi era May returned to Germany in 1954 and became the chief planner for the *Neue Heimat*—a non-profit construction and housing company—before starting his own practice in Hamburg in 1956. In 1959 he won the urban design competition for the Parkfeld Siedlung in Wiesbaden and consequently was commissioned to design a comprehensive development plan for the entire city. His plan included the extensive redevelopment of historic neighborhoods as well as four large scale estates at the fringes of the city (Parkfeld, Klarenthal, Schelmengraben and Sonnenberg, which was not built). The entire plan was published and generously distributed to inform residents (May 1963). Schelmengraben is

02 In Nordweststadt the specific arrangements of buildings create a succession of semi-enclosed green spaces that characterize the housing estate. © Forschungslabor Nachkriegsmoderne / OSM, 2019.

located on a hill west of Dotzheim and contains approximately 2,500 homes. It combines high-rise point blocks and *Zeilenbau* (row building), which is situates perpendicular or parallel to the streets and thus creates semi-enclosed communal green spaces. Schelmengraben borders on the Taunus Forest and a ravine (the *Schelmengraben*) which provided the name for the estate [FIGURE 05].

Pedestrian routes connect the communal spaces to the landscape as well as to the center. The landscape was again designed by Erich Hanke who relied on local species such as the pine trees from the forest nearby and created the impression that the forest extends into the estate. In Schelmengraben, the buildings are architecturally simple, but small recesses and rich colors prevent any monotony. Although most of the buildings have been post-insulated and lost some of their architectural detail, the overall design idea can still be experienced, especially as the trees have matured and a lot of the detailing of entrances

03 View of the Nordweststadt embedded in its lush greenery. © Ben Kuhlmann, 2019.

04 In Nordweststadt a mix of building blocks of between three and eight floors as well as higher point blocks create a visually interesting cityscape. © Ben Kuhlmann, 2019.

05 The plan of Schelmengraben shows how some buildings are following the main streets, whilst others are arranged perpendicular. © Forschungslabor Nachkriegsmoderne / OSM, 2019.

is intact [FIGURE 06] [FIGURE 07]. The high-rises mark the entries to the neighborhood. Another high-rise, the so-called *Rotes Hochhaus* (red high rise), marks the now largely derelict center, visually connects it to the older *Märchensiedlung*, and is a generally well-known landmark [FIGURE 08].

Although neither Nordweststadt nor Schelmengraben is formally listed, they both are to some extend protected from inappropriate changes. In Hesse each building or area which corresponds to the legal definition of a cultural monument is *eo ipso* a cultural monument and thus enjoys protection. The list, or inventory, serves only to provide information about this fact. Accordingly, being a monument is an inherent characteristic of a building, or an area and not the result of being listed.[3] This legal definition somewhat reduces the urgency of the formal listing process, as cultural monuments do not require listing in order to enjoy protection. Furthermore, it allows heritage authorities to influence plans for unlisted monuments simply by threatening formal listing—thus opening up a space for negotiation, which would be significantly smaller once an item is on the list becoming an object of public scrutiny. In many cases, this strategy leads to acceptable results and avoids public controversies about the appropriateness of designating any given object as a cultural monument. This has happened in both of the above examples.

In 2017, the owners of Schelmengraben had planned to add roughly 1,000 residential units to the estate, a plan fiercely opposed by the residents.[4] The heritage authority of Hesse then contacted the owners for an informal talk about possible heritage restrictions. The involvement lasted throughout the planning process and various conflicts became apparent, especially as the owners were quite inflexible regarding the dimensions of the planned buildings. The densification project was eventually stopped for other reasons than the heritage value of the settlement. In the process, a maintenance plan for the landscaping was developed and the colors of the buildings were readjusted.

06 In Schelmengraben, buildings follow the slope of the landscape. © Malte Sänger, 2018.

07 The greenery is characterized by landscape steps and native trees. © Malte Sänger, 2018.

08 The center with the 'Red High-rise' is a well-known landmark in the whole of Wiesbaden. © Malte Sänger 2019.

In Nordweststadt, no comprehensive plans are currently being followed. A design competition in 2011 yielded a first prize, that was extremely respectful to the existing fabric, but none of it was actually built. Since then, housing in Frankfurt has become increasingly scarce, but it is generally understood that Nordweststadt, although not listed is a cultural monument, is not appropriate for significant densification. As in Schelmengraben, any additional building would be subject to consultation with the heritage authority. However, small changes are happening all the time, especially in the green spaces. The old interlocking pavement is replaced by more modern paving, landscaped stairs and single steps are eliminated to make the environment barrier-free and modern benches are being inserted. This changes the overall impression significantly and we suspect that these changes would not happen to the same extend if Nordweststadt was formally listed.

STATUARY MONUMENT PROTECTION AS A STRATEGY

The informal processes described above protect estates to some extend and make listing less urgent. But this strategy in Hesse has also resulted in hardly any estates being officially recognized as cultural monuments. We are convinced that this lack of official recognition very likely influences public opinion to remain critical of post-WWII estates.

Informal conversations on different levels of heritage management suggest various reasons for this omission. Most importantly, housing estates are still not sufficiently recognized by the general public, who often condemn post-WWII monuments as 'ugly' and 'eyesores' and frequently criticize listing post-WWII buildings, accusing heritage authorities as being elitist and unworldly. In theory, such public comments do not play any role in listing. In practice, heritage authorities need to listen to the public to some degree, else it is likely that heritage legislation will be adapted to public opinion in the long run. In contrast to much of the general public, residents of large-scale housing estates often like their homes and living environments.

Although it is widely accepted that mundane typologies such as interwar worker housing or industrial facilities need to be listed, large-scale post-WWII housing estates are still being avoided, whilst their public buildings such as schools and churches have in many cases been added to the inventory almost in their entirety. In Nordweststadt all five churches including the attached kindergartens, libraries and administrative buildings as well as two out of three schools are listed in the inventory. Currently, listing focuses on the building stock of the 1970s and the 1980s, having skipped the large-scale housing estates in question here. German heritage management is largely devolved to the federal states, making it almost impossible to present exact figures for the whole country. Housing estates are rarely compared across different federal states, making it more difficult to locate the most outstanding specimens.[5]

CONCLUSION

The fact that urban researchers are now academically concerned with 1960s and 1970s housing, clearly indicates that large-scale post-WWII housing is not simply a historical fact, but also subject to re-evaluation. This opens up the possibility of re-interpreting and re-occupying this kind of city, as described by Andreas Reckwitz (2012), regardless of the original intentions and framework conditions. This can also give rise to new competition and conflict similar to that observed in Gründerzeit neighborhoods, which—like the re-evaluation from the late 1960s onwards—could predominantly play out in the field of cultural differences. On the one hand, this increases the need to generate and distribute knowledge on the context within which large-scale post-WWII housing was conceived. On the other hand, formal recognition as cultural monuments would highlight the estates inherent qualities and provide their residents with the cultural capital attached to living in cultural monuments—an asset usually exploited by middle-class property-owners rather than social housing tenants.

ACKNOWLEDGMENTS

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ENDNOTES

1 Criticism of modern settlement construction begins before 1968 and continues after 1968. Nevertheless, the year 1968 is so closely associated with longer-term political and social upheavals that it is used here as a reference.

2 The other two being technical and scientific significance (Hessisches Denkmalschutzgesetzt §2 (1). For a more comprehensive discussion of heritage and post-swar planning see MEIER, H.-R., "Denkmalschutz für die 'zweite Zerstörung'?" in: FRANZ, B. & MEIER, H.-R. (2011).

3 In other federal states (Bundesländer) of Germany such as North Rhine-Westphalia, the status of being a monument depends on being listed in the inventory.

4 See e.g. https://www.fr.de/rhein-main/wiesbaden/neue-wohnungen-wiesbaden-13549112.html (last accessed March 2023), or many other online articles

5 The last official national inventory of large housing estates was published by the German Government in 1994. It was unreliable in some respects and exclusively focused on estates with more than 2,500 dwellings, omitting many smaller estates with similar qualities (and problems). See DEUTSCHER BUNDESTAG, Drucksache 12/8406: Unterrichtung durch die Bundesregierung. Großsiedlungsbericht 1994. Bonn, 30 August 1994. At state level, such inventories are mostly missing as well.

Maren Harnack *studied architecture, urban planning and social sciences in Stuttgart, Delft and London. She was a research assistant at the TU Darmstadt and the HafenCity University in Hamburg before becoming a professor of urban planning at the Frankfurt University of Applied Sciences in 2011, where together with colleagues she initiated the Post-War Modernism Research Laboratory. Since 2008, she has run the office urbanorbit in collaboration with Mario Tvrtkovic. At Frankfurt UAS, Maren Harnack has been involved in numerous research projects.*

Natalie Heger *is a substitute professor for urban planning and design at the Frankfurt University of Applied Sciences. She studied architecture in Berlin and Barcelona and previously worked as a stage and costume designer. With the interdisciplinary cooperative u Lab, Studio für Stadt und Raumprozesse (Studio for City and Spatial Processes), she works at the interface of architectural practice and theory and in the field of urban planning. U Lab researches topics such as climate-friendly and public welfare-oriented urban development, circular society and participatory design. Natalie Heger is a member of the Post-War Modernism Research Laboratory and is currently researching housing and quality of life in large housing estates.*

HOUSING FOR THE ELDERLY

The Henry and Emma Budge Home in Frankfurt am Main

The banking family Emma and Henry Budge established their foundation in Frankfurt, Germany, as a civic initiative, aiming to build a contemporary, modern residential home for the elderly. Under the direction of Ernst May, appointed as city architect in 1925, the City of Frankfurt announced a unique competition in 1928 as part of its program Das neue Frankfurt: A retirement home for Jewish and Christian residents, primarily for people of the "educated middle class". Architects Mart Stam, Werner Moser, and Ferdinand Kramer, members of the planning team Das neue Franfurt, won this competition with their innovative contribution. From 1928 to 1930, they realized a type of housing for the elderly that was exemplary for its time and for later retirement homes.

Via Mart Stam, this project flowed into the teaching of the Bauhaus construction department in 1928-1929. On behalf of Mart Stam, Ella Bergmann-Michel produced the famous documentary film about the home *Where do Old People Live?* in 1930-1931.

Special quality features of the two-story housing complex with 100 apartments were the interesting typology, the very consistent architectural language, colorfully designed, light-flooded rooms aligned along large common garden courtyards, and common areas as a social and architectural center. Equally remarkable were the iron skeleton construction in the central wing, the bulkhead construction method using prefabricated elements as partition walls between the rooms, and the cost and construction time savings due to the rational construction technology.

Under the growing influence of the National Socialists and after the expulsion of Ernst May and his Frankfurt team, the denunciation of the social commitment and a propagandistic denigration of *NEUES BAUEN*, designing Modern Movement architecture, took place in an infamous way. At the same time, the National Socialists showed the buildings to foreign visitors as their achievement. After the destruction during the war, the building was used as a hospital for the U.S. Army.

A very exemplary renovation of the ensemble was carried out in 2001-2002, planned by Dirk Hoppe Architects from Darmstadt, Germany, with the participation of the State Office for the Preservation of Historical Monuments, Dr. Christoph Mohr, the expertise and advice in preserving historical monuments of Prof. Dipl.-Ing. Ruggero Tropeano, Zurich. With minor changes in detail, for example, in the building services and the accessible design of the rooms, the continuity of use as a high-quality retirement home was restored, and this valuable example of modernist architecture was secured. An example of BEST PRACTICE.

03 A complete publication of the Emma and Henry Budge Home was published in issue 7 of the magazine DAS NEUE FRANKFURT, available online: http://digital.stadtgeschichte-ffm.de/0000019307/0001. © SDG.

Alex Dill

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01 From the movie „Wo wohnen alte Leute?" („Where do old people live?") by Ella Bergmann-Michel, 1931. © Ella Bergmann-Michel, Sünke Michel, 1931.

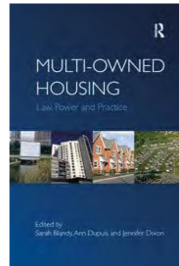
02 FCentral common areas as the social and architectural center of the residential complex. © Alex Dill, 2010.

BOOKS AND REVIEWS

PLANNING IN THE FACE OF CRISIS. LAND USE, HOUSING, AND MASS IMMIGRATION IN ISRAEL

2002
RACHELLE ALTERMAN

The book analyzes how Israel aligned its land, planning law and housing policies to intake the mass immigration of Soviet regime refugees/immigrants just before the collapse of the USSR and a bit afterwards. The Jewish immigrants and family members came from many parts of the former USSR – many from both Russia and Ukraine. The numeric challenge was astounding: Israel's population at the time was 4.5 million, and the expected wave was 1.5 million –a 33% increment. (The final numbers were somewhat lower because after the Russian regime and economy stabilized, the wave declines). In retrospect, the intake and absorption of a million immigrants turned out to be very successful – certainly in term of the massive construction of housing and urban integration.



MULTI-OWNED HOUSING: LAW, POWER AND PRACTICE

2010
SARAH BLANDY, ANN DUPUIS, JENNIVER DIXON (EDS.)

This internationally edited collection addresses the issues raised by multi-owned residential developments, now established as a major type of housing throughout the world in the form of apartment blocks, row housing, gated developments, and master planned communities. The chapters draw on the empirical research of leading academics in the fields of planning, sociology, law and urban, property, tourism and environmental studies, and consider the practical problems of owning and managing this type of housing. The roles and relationships of power between developers, managing agents and residents are examined, as well as challenges such as environmental sustainability and state regulation of multi-owned residential developments. The book provides the first comparative study of such issues, offering lessons from experiences in the UK, the US, Australia, New Zealand, Israel, Hong Kong, Singapore and China.

POST-WAR MIDDLE-CLASS HOUSING. MODELS, CONSTRUCTION AND CHANGE

2015
GAIA CARAMELLINO, FEDERICO ZANFI (EDS.)

Post-war middle-class housing played a key role in constructing and transforming the cities of Europe and America, deeply impacting today's urban landscape. And yet, this stock has been underrepresented in a literature mostly focused on public housing and the work of a few master architects.

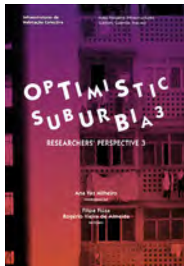
This book is the first attempt to explore such housing from an international perspective. It provides a comparative insight into the processes of construction, occupation and transformation of residential architecture built for the middle-classes in 12 different countries between the 1950s and 1970s. It investigates the role of models, actors and policies that shaped the middle-class city, tracing geographies, chronologies and forms of development that often cross national frontiers.

This study is particularly relevant today within the context of «fragilization» which affects the middle-classes, challenging, as it does, the urban role played by this residential heritage in the light of technological obsolescence, trends in patterns of homeownership, as well as social and generational changes.

BALTIC MODERNISM. ARCHITECTURE AND HOUSING IN SOVIET LITHUANIA

2017
MARIJA DRÈMAITÈ

This richly illustrated monograph discusses post-war modernist architecture in Soviet Lithuania which, together with other Baltic republics, has been seen as exceptional, appropriating Western cultural models much faster and with greater passion, and was labelled *the Soviet West*. Nevertheless, the matter of identifying the specific architectural traits that distinguished modernism in the Baltic region from that of other Soviet republics is not a simple exercise, and the specifi city of socialist modernism clearly requires a socialpolitical approach. In this book research on Soviet Lithuanian architecture relies on the relationship between official planning discourse and local social practice, and the wide range of historical actors in planning practices.



OPTIMISTIC SUBURBIA 3. THE RESEARCHERS' PERSPECTIVE 3. MASS-HOUSING INFRASTRUCTURES (LISBON, LUANDA, MACAO)

2018
ANA VAZ MILHEIRO, FILIPA FIÚZA, ROGÉRIO VIEIRA DE ALMEIDA (EDS.)

In this book, the results of the research project funded by the Fundação para a Ciência e Tecnologia Homes for the biggest number: Lisbon, Luanda, Macao [PTDC/ ATP- AQI/3707/2012] are presented. The current publication continues the "Optimistic Suburbia" cycle, which, in the previous two volumes, privileged the students' vision. The first, published in 2015, collected a series of pedagogical experiences developed by the researchers with the students within their Curricular Units, given by the Integrated Master in Architecture of ISCTE – University Institute of Lisbon and by the Technical University of Angola. The geographic scope of the subjects were the cities of Luanda, Lisbon and Macao. The second volume, published in 2016, focused on Lisbon and its Metropolitan Area, starting from the challenge of analyzing the Portela Urbanisation, a private undertaking thought for the middle-class that, in the 1960s and 1970s, sought the Portuguese-capital suburb to live. An Optimistic Suburbia drawn by architects and built by private promoters within public rules, before those same practices accelerated and became vulnerable after the revolution of April 1974 and after the African decolonisation process in the following year.

The end of the project is also the moment to give voice to the researchers. What it is gathered in this third volume are part of the works that they, and some of the students they supervise, have been developing in the various stages of the project, a body of work that is capable of illustrating the different studies and their distinct times. In addition to the general objectives of the research project, which are somehow clarified in the first texts, each researcher was able to find an area of freedom to deepen a singular aspect within the various thematic lines that were available

THE FUTURE AS A PROJECT: DOXIADIS IN SKOPJE

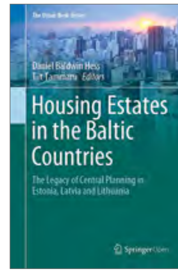
2018
KALLIOPI AMYGDALOU, KOSTAS TSIAMBAOS, CHRISTOS-GEORGIOS KRITIKOS (EDS.)

The Future as a Project; Doxiadis in Skopje brings into the spotlight the story of Skopje's reconstruction after the 1963 earthquake, and its modern heritage. It presents Constantinos A. Doxiadis' work in Skopje, which includes a detailed survey of the affected areas, reports, housing studies, thoughts and diagrams for a new master plan, and his collaboration with other planners. Furthermore, it features the work of Kenzo Tange for Skopje's city centre, and showcases a series of modernist buildings authored by leading Yugoslavian architects, that still stand in the city today. It positions the reconstruction within the context of Yugoslavian modernism (Maroje Mrduljaš). Finally, it presents some of the latest revivalist interventions in the city of Skopje and the challenges they have presented for architects and citizens alike (Kalliopi Amygdalou). This edited volume was published to accompany an exhibition of the same title (Benaki Museum, 20/12/2018 – 17/2/2019), which was co-organised by the Hellenic Institute of Architecture, the Museum of the City of Skopje and the Benaki Museum, with the support of 'Athens 2018- World Book Capital' and the Greek Ministry of Culture and Sports.

UNDERSTANDING POST-SOCIALIST EUROPEAN CITIES: CASE STUDIES IN URBAN PLANNING AND DESIGN

2019
MELINDA BENKŐ,
KORNÉLIA KISSFAZEKAS (EDS.)

In this book, after the general introduction (Amoeba Cities) eleven neighbourhoods, cities or regions are used as case studies to assist in understanding the changes in post-socialist Europe's physical environment. First, there are stories about centres (from Belgrade, Brno, and Budapest), then papers focusing on large prefabricated housing estates situated in the transition or outer zone of a post-socialist city (Bratislava, Tbilisi, Lviv and Varna) and, finally, studies into the urban and architectural impact of different socialist policy phenomena (in Russian lands, the Vojvodina Region, a Wroclaw suburb and the area of Lake Balaton).



HOUSING ESTATES IN THE BALTIC COUNTRIES. THE LEGACY OF CENTRAL PLANNING IN ESTONIA, LATVIA AND LITHUANIA

2019
DANIEL BALDWIN HESS,
TILT TAMMARU (EDS.)

This focuses on the formation and later socio-spatial trajectories of large housing estates in the Baltic countries—Estonia, Latvia, and Lithuania. It also explores claims that a distinctly "westward-looking orientation" in their design produced housing estates that were superior in design to those produced elsewhere in the Soviet Union.
The first two parts of the book provide contextual material to help readers understand the vision behind housing estates in Estonia, Latvia, and Lithuania. These sections present the background of housing estates in the Baltic Republics as well as challenges and debates concerning their formation, evolution, and present condition and importance. Subsequent parts of the book consist of:

- demographic analyses of the socio-economic characteristics and ethnicity of housing estate residents (past and present) in the three Baltic capital cities,
- case studies of people and places related to housing estates in the Baltic countries, and
- chapters exploring relevant special topics and themes.

THE HOUSING PROJECT. DISCOURSES, IDEALS, MODELS AND POLITICS IN 20TH CENTURY EXHIBITIONS

2019
GAIA CARAMELLINO,
STÉPHANIE DADOUR (EDS.)

Throughout the twentieth century housing displays have proven to be a singular genre of architectural and design exhibitions. By crossing geographies and adopting multiple scales of observation – from domestic space to urban visions – this volume investigates a set of unexplored events devoted to housing and dwelling, organised by technical, professional, cultural or governmental institutions from the interwar years to the Cold War. The book offers a first critical assessment of twentieth-century housing exhibits and explores the role of exhibitions in the codification of notions of domesticity, social models, policies, and architectural and urban discourse. At the intersection of housing studies and the history of exhibitions, The Housing Project not only offers a novel angle on architectural history but also enriches scholarly perspectives in urban studies, cultural and media history, design, and consumption studies.

ADAPTIVE RE-USE
STRATEGIES FOR POST-WAR MODERNIST HOUSING

2020
MAREN HARNACK, NATALIE HEGER, MATTHIAS BRUNNER (EDS.)

In prosperous regions, housing markets are under significant pressure. With the focus on preserving land and developing brownfield sites, post-war housing estates are being earmarked for densification, as their density is perceived as rather low and the ownership is often concentrated in the hands of only a few publicly owned housing associations. In this setting, post-war estates are in danger of losing their characteristic spatial structures and landscaping. Adaptive Re-Use discusses strategies for the development of post-war housing by referring to European case studies from the period of 1945 to 1975. The contributions in this edited volume show how housing estates from different European countries are listed and preserved, and how architectural fabric can be adapted to meet today's needs.

MASS HOUSING: MODERN ARCHITECTURE AND STATE POWER

2021
MILES GLENDINNING

"It will become the standard work on the subject." (The Society of Architectural Historians of Great Britain) Literary Review. This major work provides the first comprehensive history of one of modernism's most defining and controversial architectural legacies: the 20th-century drive to provide 'homes for the people'. Vast programmes of mass housing - high-rise, low-rise, state-funded, and built in the modernist style - became a truly global phenomenon, leaving a legacy which has suffered waves of disillusionment in the West but which is now seeing a dramatic, 21st-century renaissance in the booming, crowded cities of East Asia. Providing a global approach to the history of Modernist mass-housing production, this authoritative study combines architectural history with the broader social, political, cultural aspects of mass housing - particularly the 'mass' politics of power and state-building throughout the 20th century. Exploring the relationship between built form, ideology, and political intervention, it shows how mass housing not only reflected the transnational ideals of the Modernist project, but also became a central legitimizing pillar of nation-states worldwide. In a compelling narrative which likens the spread of mass housing to a 'Hundred Years War' of successive campaigns and retreats, it traces the history around the globe from Europe via the USA, Soviet Union and a network of international outposts, to its ultimate, optimistic resurgence in China and the East - where it asks: Are we facing a new dawn for mass housing, or another 'great housing failure' in the making?

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Docomomo International has six International Specialist Committees (ISC) comprised of experts on Registers, Technology, Urbanism+Landscape, Education+Training, Interior Design, Publications working under Docomomo International's supervision. An ISC will consist of approximately five specialists of different countries as well as a chairperson appointed by the Council.
https://docomomo.com/iscs/

ISC/REGISTERS

The docomomo ISC/Registers was created to engage national/regional chapters in the documentation of modern buildings and sites. Its mission is the development of an inventory of modern architecture, including both outstanding individual buildings and 'everyday' examples.

- Louise Noelle (chair, docomomo Mexico), louisenoelle@gmail.com
- Horacio Torrent (vice-chair, docomomo Chile)

ISC/TECHNOLOGY

The mission of the docomomo ISC/Technology is to promote documentation and conservation through studies of, and research into, technology, and into the material qualities of modern architecture. The committee organizes seminars; it also supports and participates in workshops related to the technology of modern buildings.

- Robert Loader (co-chair, docomomo UK), studio@gardenrow.net
- Rui Humberto Costa de Fernandes Póvoas (co-chair, docomomo Iberia/Portugal), rpovoas@arq.up.pt

ISC/URBANISM & LANDSCAPE

The mission of the docomomo ISC/ Urbanism+Landscape is to promote research, documentation and protection of modern ensembles and environments, as opposed to individual 'setpiece' monuments. In practice, our current work focuses almost exclusively on research and documentation.

- Ola Uduku (chair, docomomo Ghana), o.uduku@liverpool.ac.uk
- Miles Glendinning (vice-chair, docomomo Scotland), m.glendinning@ed.ac.uk

ISC/EDUCATION & TRAINING

The docomomo ISC/Education+Training has the mission of educating to protect "by prevention". This means to preserve not by action-reaction to specific threats, but by creating a general awareness and appreciation of modern buildings in the younger generation, general public and the society at large. The workshops in the framework of the Docomomo International Conferences are increasingly successful and prove that young people like to be involved in assignments concerning modern heritage. The ISC on Education and Training would like to provide these young people the possibility to excel in the Documentation and Conservation of modern heritage.

- Andrea Canziani (co-chair, docomomo Italy), andrea.canziani@polimi.it
- Wessel de Jonge (co-chair, docomomo The Netherlands), w.dejonge@tudelft.nl
- Daniela Arnaut (secretary, docomomo Iberia/Portugal), daniela.arnaut@ist.utl.pt

ISC/INTERIOR DESIGN

The docomomo ISC/Interior Design focus on Interior Design, an issue of major relevance for the Modern Movement and Modern Living. Interior Design gives us important spatial, ideological and aesthetic information necessary for a full awareness and experiencing of Modernity. The Modern Movement considered Interior Design as being in close relation with architecture and the other arts. This implied the demand for a new aesthetics in response to new technology and a need for a total work that embraces all the expressions into a unitary (and also utopian) environment for humanity. The Modern Interiors' identity is characterized by a strong and coherent style which results from a unity between architecture, furniture, design, decorative arts, utilitarian objects, equipment, textiles and light.

- Bárbara Coutinho (co-chair, docomomo International), barbara.coutinho@tecnico.ulisboa.pt
- Zsuzsanna Böröcz (co-chair, docomomo Belgium), zsuzsanna.borocz@kuleuven.be
- Marta Peixoto (secretary, docomomo Brasil), marta@martapeixoto.com.br

ISC/PUBLICATIONS

In order to have more coordination between the ISC's and other docomomo bodies regarding publications, the Advisory Board unanimously agreed on the creation of a Docomomo International ISC/Publications, integrating all the ISC chairs and the Docomomo International Chair. This may concern their content and editing status (indexed) but also the use of funding and external resources and the contacts with publishing houses.

- Ana Tostões (chair, docomomo Iberia/ Portugal)

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