Strategies of the revitalization of mass housing areas in post-Soviet Ukraine

Zur Erlangung des akademischen Grades eines Doktors der Ingenieurwissenschaften (Dr.-Ing.) von der KIT-Fakultät für Architektur des Karlsruher Instituts für Technologie (KIT)

genehmigte Dissertation von

Iuliia Frantseva

Hauptreferent: Prof. Dr.-Ing. Barbara Engel Korreferent: Prof. Alexander Bouryak ScD Tag der mündlichen Prüfung: 12.02.2024



This document is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License (CC BY-SA 4.0): https://creativecommons.org/licenses/by-sa/4.0/deed.en

Contents

Co	onten	ts		iii
Fo	rewo	rd		5
1	Stat	e of ma	ss housing areas in Ukraine	7
	1.1	Introdu	action	7
	1.2	State o	of the research (review of existing knowledge)	10
		1.2.1	Soviet researches	10
		1.2.2	The contemporary approach to renovation and revitalization	11
		1.2.3	International research on the development of mass housing	12
	1.3	Purpos	se of the study and research questions	14
	1.4	Metho	dology	15
2	Dev	elopme	nt of mass housing areas in Ukraine	19
	2.1		y and ideology of mass housing	
	2.2		n of planning institutions in USSR	
	2.3	Micro-	district and the Socialist city	27
		2.3.1	The late 1950s- early 1960s: refining of the standardization	29
			The 1970s: enlargement of the layout	
			The 1980s: enlargement of the micro-district layout	
		2.3.4	Development after 1991	41
3	The	curren	t situation in prefabricated settlements in Ukraine	43
	3.1		tions of mass housing development	
			The privatization process and district development	
			Legislative transformations	
			Urban planning institutions and policymakers	
			Planning instruments	
	3.2	Case s	tudies – Ukrainian districts	
		3.2.1	The development history in the 1960-1990s	
			Spatial Structure and Urban Layout	
			Programming and Function	
			Property and Management Structure	
			, 11	
	3.3		ng revitalization policies and transformation practices	
			Changes initiated by municipalities	
			Expert and third-party initiatives	
			Public initiatives	
	3.4		ms and Challenges	
			Legislation issues	
			Problems of planning practices and institutions	
		3.4.3	Management problems	121
4	Red	evelopn	nent of mass housing estates in East Germany	125
	41	Mase 1	nousing in GDR	125

4.2	History of transformation (chosen programs and tools)	128		
	4.2.1 Development of legal base and revitalization programs	129		
	4.2.2 Functional transformations			
	4.2.3 New horizontal management units	142		
	4.2.4 Tackling social polarization			
5 Dis	cussion of the strategies	157		
5.1	Conditions of experience transfer	157		
5.2	Comparison of approaches to district revitalization	163		
	5.2.1 Exclusive/comprehensive approach			
	5.2.2 Single, short-term actions/long-running projects	164		
	5.2.3 One actor/multiple actors' interactions			
	5.2.4 Absence of control/control and transparency	166		
5.3	Requirements for the revitalization strategies	167		
5.4	Suggestions for the scenario of revitalization	170		
	5.4.1 Focus on peculiarities within the area of mass housing development	170		
	5.4.2 Proposed scenario for district development	171		
5.5	Conclusion and future research	177		
List of	Figures	181		
List of	Tables	185		
Glossa	ry	186		
Appendix I Public interviewing: sample				

Foreword

In front of you lays the dissertation «Strategies of the revitalization of mass housing areas in post-Soviet Ukraine» It has been written to fulfill the graduation requirements of the Architecture Faculty of Karlsruhe Institute of Technology.

I decided to conduct this study because its subject, mass housing areas, and their problems, was well-known to me from my personal life, but yet I had many unanswered questions as a researcher. I started this writing genuinely believing that the state should provide a safe and comfortable environment for its citizens. In the course of my study, I realized how much depends on the joint work of the local government, initiative groups, and the population. This research was difficult due to the lack of statistical and other kinds of information, but I could finally find the answers to the research questions I identified at the beginning.

I would like to thank my supervisors, Ms. Prof. Dr.-Ing. Barbara Engel and Prof. Alexander Bouryak, Sc.D., without those this work would not be possible. I also would like to thank colleagues from the «Unloved Heritage: Socialist city» project by Volkswagen Stiftung thanks to whom I was able to collect valuable information for my work and who kept me motivated during the whole time of writing.

The last but not least, I would like to express my sincere gratitude for the help I received from my husband, Dr.-Ing. Salar Tavakkol, and my friends, Daniel Ataei, Dr.Parisa Bakhtiarpour, Dr.Farid Farajolahi, Arkadiy Shuplzakov, for their support and assistance.

I hope you enjoy reading it.

1 State of mass housing areas in Ukraine

1.1 Introduction

High housing demand after World War II was a pressing issue for those parts of Eastern Europe, where housing construction was delayed compared to the restoration of the industrial sector. In the Soviet Union and the countries of Eastern Bloc, this decision produced a wide gap between development rates in industry and housing. Only in the 1960s, with a new political course, the pace of housing construction sharply increased. As a cheap and quick alternative to traditional brick construction, prefabricated multistory houses took center stage in Soviet housing. The gigantism of new residential districts was in contrast with the human scale of the old city center. In addition to ascetic functionality, new spatial solutions were utterly different from the old urban fabric. Thus, a completely different image of the "modern Soviet city" was introduced.

The Ukrainian Republic has played a crucial role in the industrialization of the Soviet Union. Huge industrial regions, such as the Donetsk coal basin (Donbas), industrial centers of Kharkiv, Kyiv, Dnipropetrovsk, Lviv, and Odesa, needed prefabricated housing for their workers. Giant monodistricts and mono-cities of Cheremushki and Tairov (the 1960s) port workers districts in Odesa, plants worker's district Saltovka in Kharkiv (1970s) industrial satellite district Troyeschina in Kyiv (late 1980s) Prypyat (1970), Yuzhnoukrainsk (1975), Slavutich (1986), satellite cities of Nuclear Power Plants, appeared to serve the great industrial boom, completely consisted of prefabricated and model project buildings. Roughly 40% of housing stock in Ukraine belongs to the category of mass housing, among which 23% of the city housing stock was built between the 1960-1970s, equating to 72 million square meters of floor space. Almost the same amount of floor space was added in the 1980s (Oliynyk 2009; Karamzina 2018).

Due to the shortage of money supply, the development of the standardized mass housing areas stopped in Ukraine completely at the beginning of the 1990s. As a result of economic stagnation, expenses for landscape and social infrastructure development were cut years before. Nowadays, large settlements, cut off from the city center, have become unpopular. As determined by the «Normative terms of operation for residential buildings of mass construction»² developed by Moscow Central Research and Design Institute in 1985, panel and brick houses, built before the 1960s, must have been demolished between 2005 and 2020 (The First Institute for Independent Evaluation and Auditing 1997). According to the same norms, modular prefabricated houses, which most of the city's districts consist of, have an operational cycle ending between 2055- the 2080s.

Just as in the case of Ukraine, most of the East-European cities are burdened with gigantic panel housing blocks. The prefabricated panel settlements still occupy large parts of the cities and serve as a home for a significant part of the population. It was formerly thought that spatial potential and long service life made it possible to give a positive outlook about the future of these areas. On the

¹ Hereinafter in this document curly quotation marks will be used for informal terms and direct quotes.

² Hereinafter in this document double-angle quotation marks will be used for the official names and titles of regulations.

contrary, maintaining the large settlements demands great financial resources; therefore, demographical changes and the shrinking of the cities pose a real problem. Governments in different countries had to implement specific measures to revitalize these districts and include them in the modern urban context. The methods differed from minor repairs to complete restructuring of buildings as it was done in Poland and the Czech Republic, complex revitalization of quarters, and changes in functions like in East Germany, to complete demolition, as it was in the case of Russia. Following the mass development of Western countries, the districts of the former USSR became-subject to harsh criticism. Opponents of modernist architecture claim large housing estates to be a fomenting ground for vandalism and street crime, remembering the experience of Pruitt-Igoe and other unsuccessful developments. Mass housing complexes on the West often served as social housing, creating areas with weak social data. Anonymity and lack of public control, and economic segregation influencing housing politics turn these districts into ghettos.

Meanwhile, in Europe's developing countries, the preserved social structure has led to the fact that apartments in areas of mass housing are still considered a good investment and reliable housing option in the ratio of prices and quality to the masses of the population (Tsenkova and Turner 2004; Gorczyca 2016; Urban 2012). Despite the strong, established association of modernism as a failed style and a legacy of communism on the West, there are very successful examples of reuse to this type of housing worldwide. In many cases, however, further usage of Socialist mass housing implies sufficient change in their structure and technical characteristics. If buildings receive additional features, the district's spatial potential often remains out of sight of the users and professionals. There have been constantly raised questions about the expediency of industrial housing preservation in East Europe in recent years. Realizing potentials and gaining the second wind for the industrial housing estates is an important problem for the modern urbanists' discussion. Since old mass housing developments are losing their attractiveness much faster than their operational capacity, the discussion about complete demolition and new development arises more often. It becomes evident that developers and municipal institutions eventually have to pay attention to the transformation of these districts.

Most East European countries started renovation measures already in the 1990s: in Germany, Czech Republic, Poland, Hungary, Estonia, and some others, housing districts were renovated, restructured, or even partly dismantled and rebuilt in the next two decades (Leetmaa et al. 2018; Nedučin et al. 2019; Rietdorf 1991, 1997b). Those actions demanded political will, significant investments, and cooperation from the community. Compared to most former Eastern Bloc countries, Ukraine suffers a setback in terms of housing renovation. After its independence renewal in 1991, Ukraine has never had a comprehensive state or municipal renovation program to cover the mass housing developments. Existing residential districts need modernization and reconstruction. The factors affecting the unsatisfactory state of the environment of mass development are numerous and vary in each specific context.

Despite the above, the areas of mass prefabricated housing have enormous potential for further development. These areas demonstrate low buildings concentration, and in the context of the city's growth, should be densified with the addition of commercial, cultural, and other functions, but seldom attract investors due to the bleak environment. Although a large amount of housing built in the current post-Soviet housing areas is having many problems, they are considered affordable, and the demand remains stable high (Horbal N. I. et al. 2019). The renovation of mass housing developments in Ukraine is discussed on the legislative level, but districts constructed during the

1970s and 1980s are not legally required to be included in the renovation process. Single cases of reconstruction are the subject of local initiatives. Until a complex renovation program is created, it is unclear, which direction the mass housing districts are supposed to develop in the future.

The potentials of panel housing, such as flexibility of layout and openness, remained unrealized. In contrast, vacant space has been used to create illegal additions to increase private apartments and businesses. Chaotic commerce, lack of street lighting, spontaneous parking, and poor social data have created a reputation as "crime-ridden neighborhoods" and "ghettos" for years to come. Open spaces developed a sense of insecurity from outsiders, and the clutter in courtyards created an unfriendly atmosphere. These features have long been associated with mass housing construction in Ukraine and Eastern Europe. In what follows, they will be discussed in more detail and compared with measures to overcome them in different countries.

The revitalization of mass housing was better demonstrated in the former German Democratic Republic cities. Despite the complex history of mass housing development, both socialist and post-socialist, it seems that Germany has largely succeeded in achieving revitalization. Although the two countries cannot be directly compared, the German experience may also be valuable in deciding on mass housing development in Ukraine. Collection and analysis of the revitalization project examples in Germany help define the positive impact of the intervention and investigate mistakes and failures.

When comparing East German and Ukrainian mass housing settlements, many factors should be taken into account. These districts represent a unique type of industrial epoch housing, and with the coming of the post-industrial era, both countries faced rapid changes. The difference in the approaches to transforming the districts' environment is an interesting material for the study and can become a basis for the future development program.

Spatial flexibility, physical and economic parameters contribute to the fact that micro-districts will remain for many years as an integral component in the structural basis of many East European cities and Ukraine as well. Ukrainian post-Soviet housing areas have a chance to become a starting point of the new urban transformation. The revitalization process has many obstacles: the lack of a detailed legislative framework, effective management, and the lack of interest from the residents. Remaining aside from political or professional discussion, the population of these neighborhoods plays a significant role in the daily transformations. Social structure and cultural context are essential factors in this process. Renewed discussion about the destiny of mass housing areas opens up significant opportunities for local communities and researchers in developing programs and strategies for the transformation of post-Soviet neighborhoods.

In 2021, Ukraine marked 30 years of Independence and the departure from Soviet dogmas in cultural life and architecture. It seems that enough time has already passed to rethink the role of socialist modernism and the value of mass housing. Like other countries, Ukraine has already gained some experience in the development of industrialized neighborhoods. However, as the practice has shown, many aspects have remained ill-conceived. The new age brought new demands and challenges to this type of housing. Modern urban trends require functional diversity and sustainable social dynamics in the city centers and former dormitory towns. They need rehabilitation from the social prejudice and multiple «improvements» introduced by generations of users. The challenge is to transform an urban legacy of the USSR to make it attractive for a new generation of

users, which will revive the image of a prosperous community. In the current situation, there is no renewal program or specific regulations developed for these districts. Now, questions about the future of socialist mass housing, revitalization methods, and practical and theoretical approaches still are not yet solved.

1.2 State of the research (review of existing knowledge)

Research on the state of mass housing is a multi-layered issue and should be observed in the context of city development theories of the 20th-21th centuries. The literature review is divided into three main research lines, according to their geographical and temporal characteristics.

1.2.1 Soviet researches

In the Soviet Union, there was practically no critical view of contemporary architecture. Most of the publications were devoted to spatial and technical planning and construction techniques. A body of literature points out a critical review of Soviet urban development, which appeared in the Perestroika period beginning of the 1980s –the 1990s, a time of ideology relief and change in the USSR. A detailed description of principles and spatial structure of micro-districts and city planning strategies together with issues about city's socio-cultural and socio-economical development was covered in numerous publications in USSR, among others by Smolyar (1980), Glazychev (1984; 1988; 1995), Bylinkin (1986) and Jargina (1986), Gutnov and Lezhava (1977), forming the basis of the theory of urban planning in the latter decades of USSR. Urban panning groundwork represented by Kosytsky in collaboration with Yargina and Vladimirov (1986) gave a detailed overview of the spatial structure and imagining principles for large settlements and satellite cities.

The existing system of settlements and the construction norms became a subject of criticism by many Soviet authors. They stated that the system of micro-district does not provide individuals a comfortable living environment and led to the demoralization of the urban realm. A critical reevaluation of the industrial housing achievements in the USSR and cities micro-district division is represented in the book «Evolution of town planning" by A. Gutnov (Gutnov 1984). First, among the Soviet researchers, Glazychev problematized the unity of the object-spatial environment with inter-human relations (1984; 1995). In his book, written after the political and economic course change in Eastern Europe, «Urban Environment. The technology of development» (Glazychev 1995), alongside the classification of problems, the city's development programs were discussed. The great value of this book is that it serves as a tool for understanding the processes that occurred in the city's land ownership distribution system after the collapse of the Soviet Union. The sociology of architecture for a long time remained the undeveloped topic in Soviet urban researches. Problems of reconstruction of city quarters, built during the first «wave" of mass construction reviewed in the book «Residential blocks" by Krashennikov (1988), where the author explores the relations between space and people in an urban context.

1.2.2 The contemporary approach to renovation and revitalization

The research on the post-Soviet territory is characterized by a critical review of the existing theoretical and practical knowledge and a search for ways of further development. Revitalization, previously discussed in the context of old city centers, is now more often mentioned in the context of mass industrial housing settlements.

Modern Russian researchers cover the significance of preserving and modernizing Soviet era settlements to further develop Russian cities. Mark Meerovich, in his critical works about Soviet housing politics, pointed to the ideological background and ties of Soviet urbanism with the foreign experience. In his books, he points out, the modern problems of housing are enclosed in the housing allocation policies of the past (Meerovoch, 2001, 2008).

Most of the works represent a critical view and reflection on socialist construction and planning but refrains from specific predictions. Kositsky and Blagovidova (2007) revised and reviewed the development of the city's master plans in the second part of the 20th century. Bronovitskaya summarizes the history of Soviet urban development in her article, «Open city: Soviet experiment» (2013). Problems and perspectives of mass housing discussed by Kalabin and Kukovyakin outlined possible ways for development by introducing various systems of industrial housing construction (2017).

Many Ukrainian researchers pursue comprehensive study of revitalizing urban areas concerning economic and social factors, activism, and political will. While raising the question of soviet legacy reconstruction and revaluation, it is necessary to address the publications of individual authors and the experience of modern analytical centers and institutes. Among these are «Mistosite» – online urbanist platform, covering problems of urban development, reform, and policymaking at the local level, «CANactions Magazine», a collection of urbanism and architecture-themed publication, giving deep insight on the transformation process in big cities, «Spilne» (2013-2019), a series of socio/critical magazine dedicated to modern tendencies in Ukrainian cities.

The Series «Urban studies» published by Heinrich-Böll-Stiftung Ukraine contain articles of many cross-discipline scientists on modern transformation, privatization, commercialization, and social aspects of mass housing development in Ukrainian cities (2012-2016).

Much work is focused on studying new phenomena that have arisen in neighborhoods with a change in the economic model. Economic conditions and changes in the housing market are discussed in a series of articles by Vlasenko (2016) and Lyasheva (2018, 2019), although the latter concentrates on the issues of the socio-demographic trends, including gentrification and house affordability. Mezentsev et al. research economic and demographic trends and their challenges posed by post-Soviet transformations, such as socio-spatial polarization in the big cities (2015, 2020). Critical articles on revaluation of Soviet heritage in Ukraine written by Tyminsky (2013a); Shevchenko (2017, 2019) in their research, tend to find the place of Ukraine in the global urbanists' debate, reviewing the history of Soviet housing and questioning its future. In a series of publications, Simon Shirochin (2018; 2017) discusses the housing issue and refers to the unpopular issue of Ukrainian mass housing estates' historical and cultural value and Ukrainian modernism. The author dedicated publications to the mass housing estates of Kyiv, where he examines the planning findings of Soviet architects and their implementation, and also questions the further fate of this heritage.

Discussion about the potential development of mass housing and socialist cities rose among the Ukrainian urban community at the beginning of the 2010s. Conditionally it is possible to divide publications according to their vision for transforming the mass housing areas. There are two main approaches to the renewal of post-soviet heritage. The most popular of the two concentrates on the physical approach, the development of spatial and technical values of the buildings and space, and an approach that focuses on people, cooperation opportunities, and cultural development programs.

Denysenko, in his article «Update and preservation of the housing facilities by renewal and reconstruction of the buildings of first industrial housing period» (2012), studies renovation strategies for the updating and maintaining of the housing stock across the city of Dnipropetrovsk. The study contains an analysis of the quantitative indicators to measure the extent of reconstruction and priority areas. O.Gnatyuk and A. Oreschenko, in their article «Spatial transformation of residential district post-socialist city (case of Vinnytsia)» investigate functional transformations on the periphery of the big cities. Authors tend to define special cases of spatial transformations, countrywide and global trends in the transformations process, however, not specifying tools and methods that could be used for professional intervention (2017). Issues of post-socialist development in Kyiv and major cities addressed by Skubytska (2012), Kravets and Sovsun (2012), investigate economic indicators and functional transformations in micro-districts with the advent of the era of consumption, referring to the phenomenon of the «urban void».

Debates about the «right to the city» the civil society and their participation in the process of transformation of both historical and post-Soviet buildings and public space are developed in publications by Heinrich-Böll-Stiftung Ukraine (2017). Shlipchenko and Tyshchenko discuss possibilities of «democratic space" development in the public space of post-Soviet cities, a connection of urban development with grass-root movements, and local democracy (2017). Creative potential, social development, and activism in terms of post-Soviet city transformation as well as drawbacks of the imperfect management system and miscoordination of transformation proposals discussed in articles by Ilchenko (2013) and Tyminsky (2013a). A few publications on the results of specific projects issued directly by their authors will be discussed in the following chapters.

1.2.3 International research on the development of mass housing

Discussing the international view on the problems of mass housing development would be impossible without mention the indisputable authority of Anthony French and James Bater. Among European authors, working on the history of Soviet urbanism and its legacy works of French (1995), and Bater (1980) is taking a central place, discussing similarities and differences between post-Soviet and Western cities and theoretical models and practical implementation of Soviet city planning. The Socialist theory of urban transformation was also thoroughly studied by Shaw (1987) and Fisher (1962). The authors interpreted the main features of socialist planning, based on standardization, the definition of the city's size, center, and units. Aspects of transforming the economic systems and housing markets in East Europe, as well as Ukraine, were discussed in the World Bank report by Bertrand M. Renard (1996). In recent years, academic interest in mass housing has increased. Researches from East Europe explore different aspects of social and spatial development and the potentials for growth. Ukrainian mass housing is often viewed in the context of its neighbor countries. Tsenkova and Turner explore the housing reforms, their success and failure in

East Europe and particularly Ukraine (2004). In the series of articles, Temelová (2014, 2015, 2016) concentrates on the urban social problems in the new neighborhoods of the post-socialist cities. Social issues were also discussed by a Polish researcher, Katarzyna Gorczyca (2016).

A significant part of this work is devoted to the study of the German experience in the revitalization of mass industrial development areas. Therefore, much attention was paid to the German-language literature dedicated to the mass housing districts in GDR and their further development. These above works of research are focused mainly on the study of trends, principles, and approaches of a residential environment formation in East Germany and their transformation after the Reunion of Germany.

Approach to the architecture, city planning theory, and housing development in former GDR is represented by groundworks of Schmidt and Flierl (1965;1967;1971), Flierl(1998). The authors were paying attention to the planning and aesthetics in the light of political change. Books by Holger (1998), Durth (2007), Düwel (1995), helping even a better understanding of the ideological underpinnings of the construction of panel neighborhoods and the theory of mass housing. The works by Hannemann (2000), Keller (2005), Dörhöfer (1994) should be mentioned in the context of social and economic changes in the districts of East Germany.

Development of housing districts, planning theory and practice in Germany are highlighted in the works of Müller, A. Kahl, and others (1997). Häußermann (1996), describes the change of social structure, changes in the everyday organization, usage patterns, new forms of social segregation, and re-introducing of private property that influenced the development of post-GDR Germany. In terms of modernization and sanitation of the panel housing, the German approach is represented in work by Hartmut (1999), questions about preserving, and the role of panel housing mentioned in the work of Holfeld (1996), the promising books for my research are works by Rietdorf, (1991;1997). Socio-spatial dynamics in mass housing of post-socialist Eastern Europe were analyzed by Neugebauer and Kovács (2015). Development trends between Germany and Ukraine are compared by Nimeyer (2020). The German revitalization experience will be discussed in the following chapters.

With all the diversity of the above scientific works, possibilities of mass housing areas revitalization in Ukraine are not adequately considered. There are no comprehensive methods and criteria for assessing the quality of the residential environment, public space, legal background and management regulations. The disclosure of the values of industrial, residential structures and spaces is inadequate. Nevertheless, the large quantity of research work and proposals in Ukraine, after a brief retrospective analysis, shows a tendency to reduce urban renewal only to eliminating obsolete buildings and replacing them with new ones. A set of principles and methods for forming a residential environment that responds to the modern occupant's socio-psychological, visual, and behavioral needs need to be developed based on the international experience. Existing in-world practice design solutions cannot be universally applied in Ukrainian reality and must be adjusted to the market and legal conditions, and must pass the adaptation stage. Ukraine needs a theoretical development of a set of measures to improve the quality of residential neighborhoods. This work is an attempt to collect theoretical ideas and form them into a single strategy.

1.3 Purpose of the study and research questions

This study is dedicated to the specific problem of insufficient attention paid to the revitalization of mass housing developments in Ukraine. This work aims to elaborate on theoretical background and practical guide for post-Soviet mass housing districts revitalization in Ukraine. The result should contain several possible decisions for district development, which could become a core proposal for a national revitalization program. To make these suggestions required a comprehensive study of national and foreign experience. This research has the following tasks:

- Creation of historical overview of mass housing in Ukraine during the period of the 1960-1990s and the insight into the earlier historical periods for better understanding.
- Analysis of the current state of mass housing areas in Ukraine including actions and programs done for their revitalization.
- Identification and analysis of the current problems of mass housing districts in Ukraine.
- Collection of the examples on revitalization projects and the theoretical background from Germany.
- Selection of the key tools, methods, and conditions that influenced the district development and investigating their connection to the social and economic situations.
- Based on the studied material, deciding on the possibilities of their implementation in Ukraine according to the social, economic, and technical conditions in each studied situation.
- Creation of recommendations for a strategy of district development based on studies material.

The research objectives include the collection of a large amount of information and data analysis. To systematize the received information, this study is looking for answers to the following questions:

- What are the current critical problems of Ukrainian mass housing areas?
- Which main factors do affect the development of mass housing areas in Ukraine?
- Which lessons can be learned from the comparable German experience?
- Which scenarios for revitalization are possible to implement?

The theoretical and practical significance of the study

This work is dedicated to both the study of the Ukrainian and German experience in housing areas revitalization. As a result of this study, a system of measures and approaches is developed to increase the attractiveness of residential areas and extend their service life.

The theoretical significance of this work lies in a holistic approach to the problem. The topic of the work reflects modern demands on information about city development in post-Soviet cities and cities of the former German Democratic Republic. Collection and analysis of this data help better understanding the processes in the modern post-Soviet housing areas and ways of their further transformation and preservation. The research combines work with different kinds of information, such as social and economic backgrounds, housing market statistics, infrastructure, and mobility. The feature of the work is a dialog between academic observation and practical implementation.

This paper contains a set of experience-based recommendations that can contribute to creating f sustainable, high-quality habitats, taking into account current socio-economic conditions. The practical significance of the work lies in the combination of the newest approaches and designs for revitalization, providing the formation of a sustainable, high-quality living environment. It is based on the complex concept that considers the new socio-economic conditions, the current legal base, and the situation in urban planning.

The main aim of this work is to provide a theoretical guide for the redevelopment process of the post-Soviet mass housing areas, which could be applied to different situations and serve as a prototype for many Ukrainian cities. Recommendations could be used as a basis for the further transformation of cities and upgrade for the legal background.

1.4 Methodology

The research provides a holistic approach combining mixed, applied methods, primary and secondary data, and deeper contextualized insights to achieve the research goal. There are the three main groups of research activities in this work, they will be discussed respectively.

Theoretical methods – research includes historical-geographical analysis and systematization of theoretical works, guidelines, and codes of mass housing areas construction, sanitation and following development, in Germany and Ukraine in XX- first decade of XXI centuries.

- The <u>system analysis method</u> allows considering the development process of the planning structure of the city and its parts in conjunction with the national housing and planning policies.
- The method of historical chronology made it possible to organize the studies material regarding the periods of its appearance.
- <u>The contextual method</u> was helpful while studying the content of periodical press and expert opinions.

Empirical methods include visiting the selected districts in East Germany and Ukraine, in order to compare the observed situations.

• The case study method is an in-depth data collection and examination of particular urban development cases in the territory of Ukraine. Photo fixation of an existing situation and examination of the district's inner space, building codes and documentation, the study of projects, as well as state revitalization programs used for a collection of maximum information.

- A <u>method of comparative analysis</u> is used to identify distinctive features during the comparison of the districts.
- <u>Interviewing</u> qualitative data collection on the level of satisfaction and involvement gathered in a series of face-to-face structured interviews and an interned-distributed questionnaire.
- <u>Analysis</u> includes statistical, graphic-analytic systematization, and other types of processing of collected data.
- <u>Designing a suggestion</u> for the concept of the revitalization in form or guidelines for future development programs in Ukraine. Composing a scenario of the transformation. Summary structure of the study.

The structure of the work is the following:

The first chapter gave an overview of the state of mass housing areas, and the depth that this problem is studied in the professional literature. It posed research questions and set the objectives.

The second chapter includes a detailed historical overview of mass housing development in the USSR and its counterparts, with special attention paid to the Ukrainian Socialistic Republic. The emergence of the terms "micro-district" and "mass housing" are included. The analysis of spatial basic features of districts built in different periods of mass housing construction in Ukraine, theoretical approaches, legal framework, design features are presented.

The third chapter is dedicated to describing mass housing areas in Ukraine in their current state from Ukraine's declaration of Independence in the 1990s, until the end of the 2010s. The greater part of the chapter is devoted to a detailed analysis of the problems that arose after the collapse of the USSR and the new conditions in the urban environment. This chapter discusses the main factors affecting their development, including legislative inefficiencies, planning culture, social activity, and management. It includes the answer to the question: "What problems are facing Ukrainian mass housing districts nowadays?" This chapter also includes an overview of international projects to tackle the housing crisis in Ukraine and efforts to increase the sustainability of the buildings and their environment.

The fourth chapter includes a detailed overview of revitalization programs and measures taken in Germany. The detailed study of the revitalization experience was conducted during the examination of the housing areas of East Germany (former GDR) and the progress of programs Stadtumbau Ost and Soziale Stadt. In this chapter, questions – "Which methods and tools are used for revitalization in Germany?" and "What could be learned from German experience of mass housing revitalization?" – are discussed.

The fourth chapter is additionally dedicated to the discussion of the German experience of mass housing area revitalization. The chapter draws on the methods and tools that could form the core renovation strategy for Ukrainian sites. It includes a detailed study of legal background and maintaining mechanisms, funding models, and community engagement of measures taken between 1995-2015. This part of the study includes the review of the results of already finished revitalization projects, including fields, which were not successfully improved.

The fifth, closing part of the work, summarizes the findings of the case studies. It represents the author's attempt to create a recommendation list for future renovation strategy, considering various approaches and tools possible to apply to examined situations. The proposal contains both general recommendations and theoretical suggestions on the district's environment improvement and offers solutions for different districts. Suggestions are given for the block revitalization on the examples of particular Ukrainian districts.

2 Development of mass housing areas in Ukraine

2.1 History and ideology of mass housing

The ideas of mass housing, popular between the 1960s and 1980s in the countries of the Eastern Bloc, originate in the concepts of collective housing of the 1920s, which underwent numerous technical and ideological changes.

The development of mass housing in the Soviet Republics was largely tied with the political paradigm of worker class dominance, which appeared at the beginning of the XX century. One of the early Lenin's projects stated that the new order does not support the old way of living (one person – one room). Workers should rather live like soldiers in army barracks (Izmozik and Lebina 2010). Already the avant-garde of the 1920s claimed architecture as a tool for shaping the new society (Urban 2012). Based on universal equality, this new order created a demand for a new type of dwelling organization, so-called «communal housing». As stated in the «Typical regulations on the communal house», professional unions were meant to live under one roof, as a collective. The new house should satisfy all the cultural and physical needs of the new workers' generation (Bylinkin and Ryabushin 1985). Most architects imagined it as a superblock, i.e., a group of joined houses, including everyday cultural and household services of the population: kindergartens and nurseries, schools, dining rooms, stores of necessities (Khan-Magomedov 2001). The search for cost-effective ways of urban planning forced Soviet leadership to look for new ways of urban transformation, which would fit into the socialist philosophy, fix flaws of the former model of the planning system, and unite the new working-class society. The same as housing, the settlement system was reviewed. The future look of «City of the Socialist Man» became a subject of massive debate already on earlier stages of the system transformation (French 1995). As Bater stated, urban planning in the Soviet Union was a political process, and a decision was made as much to reflect the reality as they do specific norms or general principles of physical planning (1980). According to Fisher, following socialist theory, the city is the core of the ideal communist community a centralized, highly standardized, and uniform type of social organization (1962).

The new economic politics forced mass migration of villagers into large cities, seeking jobs and better life. These and other circumstances had lowered new housing standards: "In 1922 the housing minimum was established on the minimum of 9 m² per person" (Bater 1980). As Meerovich mentions, already in 1926, this norm sank to 5 m² per person (2008). Thus, accommodation of any kind became a new luxury, a mark of the social level, the «appropriate behavior», and a commitment to the Soviet leadership. There were two basic ways to receive a flat: first was to obtain a warrant for the use of state housing from the housing committee of the communal services department (of the local government) or receive a warrant for the use of housing from a state institution, enterprise, or public organization (based on the order of the administration of these organizations and being – in most cases a worker in one of them)(Meerovich 2008). These conditions reinforced the practice of settling buildings with professional or creative unions and collectives.

Soviet architecture was based on mass production similar to ideas of American industrial theoreticians Frederick Winslow Taylor and Henry Ford at the end of the XIX - beginning of the XX centuries. Left Fordism corresponded political requirements of the Leninist view of socialism («Socialism = Electrification [speak industrialization] + Soviet power»). The industrialization of the building construction fits into this concept; it embodies scientific-technical progress (Hannemann 2000). Therefore, the transition to full-scale industrial construction was only a matter of time. Soviet architects were working on different approaches for the standardization of housing. In this context, it is necessary to mention the close professional ties of Soviet architecture with CIAM and Western technology lines.

During the early days of the unification efforts, construction of smaller individual projects was criticized. In 1927, a delegation of Soviet architects visited the exhibition «Die Wohnung» in Stuttgart, Germany. Projects of prefabricated (panel) worker's settlements by Ernst May (Siedlung Praunheim, Frankfurt am Main, 1929) and Bruno Taut (Britz, Berlin, 1933) inspired the recreation of typical working-class districts, with one crucial detail: their direct connection to the industrial core (Meerovich 2011). In return, western architects tended to visit USSR to implement their ideas. However, due to economic reasons, prefabricated concrete buildings were not technically possible until the post-war period.

Although the supreme goal of providing housing to all laborers was declared, not everyone was meant to receive an equal share. At the beginning of the 1930s, the new residence permit system was established, legalizing the dependence of housing on the workplace. Residence permits became dependent on regular employment (Bater 1980). That meant upon being let go of a job, people should immediately leave the accommodation for the families of working people, voluntarily or by force (Meerovich 2008). The powerful elite proclaimed equality for all. In practice however, tools such as forced evictions were used to force citizens into working against their will. The idea of social leveling dictated new sanitary regulations for the accommodation.

The residential block «Promin» (1929–1932, architect G. Wegman) was constructed in Kharkiv for the workers of the Kharkiv Steam-Building Plant. The innovative component of the project was the development of a large proportion of objects that worked for the socialization of everyday life (always emphasized by constructivists). These were kindergartens, a school, a department store, a canteen for 1000 people, a club, and even a shooting range. At the same time, public spaces that would meet the needs of the public in these areas were either not planned or delayed in implementation due to a lack of funds (Skubytska 2012).

A bright example of housing built exclusively for workers union was Ukrainian Sotzgorod, Novy (The New) Kharkiv, or the Kharkiv Tractor Plant (KhTZ) settlement (architects P. E. Shpara, F. I. Amosov, E. H. Greenberg, Y.V. Dolbyr). A large workers district with a population of around 113000 inhabitants was constructed in the early 1930s. According to the idea, a new Socialist city should be ".. a complete organism thought out and calculated from beginning to end ..." (Alyoshin 2000). The idea of a linear city after Milyutin was implemented in the settlement. The industry was separated from the housing with transport arteria and green stripe (Figure 2.1). The buildings were proposed to be joined together with service facilities in one giant commune complex, which had never happened (Didenko 2018). Subsequent transformations show that the idea of a factory city and a communal house turned out to be difficult to achieve in practice. As chief architect Alyoshin stated, it was built to the maximum comfort of services for the population because this

service is equal, and the contrast of luxury and poverty was eliminated [in Socialist cities] (2000). However, the difference of social strata was present: in the center were located elite residential buildings for the engineering personal of KhTZ, closer to the village's periphery placed accommodation for workers. The degree of comfort, architectural decision of residential buildings, their location in the settlement system are differentiated according to the status of future residents (Didenko 2018).

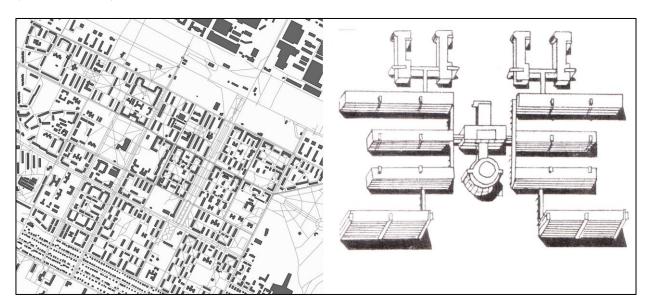


Figure 2.1 Socialist city «New Kharkiv». On the left: a modern plan of development. Source: Open Street Map. On the right: Axonometry of the housing complex, drawing by V.Alyoshin, 1929-1930.

Examples of better housing units were so-called "houses for specialists", created to promote carriers in various branches: arts, technic, culture. Unlike the commune houses, implying all their population into one technological process, ignoring private property and personal needs, these buildings resembled much of the old way of living. Each family had a flat, consisting of 3-4 rooms. These upgraded buildings were a propaganda trick; a way to promote a new way of living was accessible for "ideologically correct ones" (Meerovich 2008). Many examples of the modernist "houses for specialists" could be found in the former capital of Soviet Ukraine, Kharkiv. The so-called Red Houses, erected in the constructivist style, with a height of up to 7 floors with isolated, well-appointed apartments, were built according to individual plans, creating a closed neighborhood. Social infrastructure: kindergartens, schools, and shops were built much later. This principle became a basis for the micro-zoning system, according to which many districts of Kharkiv were built up in later years (Golden pages Kharkiv 2011).

Nevertheless, this practice did not last long as individual projects were widely criticized due to the high construction cost. As Bylinkin reported, "already on the first convention of Soviet architects (1937), the economic aspect of the construction and the time commitment were discussed" (1985). Over time, the Soviet leadership condemned the practice of communal building construction. The architects' fault was the high price of the new construction and the extremely utopian projects, which did not have enough facilities for communal living: laundries, bathrooms, canteens, kindergartens (Milyutin 1930).

World War II prevented further development of the building industry, and until 1954, housing inequality became even more acute. The book «National Economy of USSR» demonstrates an even more depressing decline in the quality of housing conditions in this period: 3.1 m² per person in 1945 and 4.2 m² in 1949, which equals the amount of 1937 (Prokopovich 1952). At the same time, the first wave of modernist style, more suitable for industrial construction, fell out of favor with the country's leadership. Another drawback of post-war housing was its elitism and departure from the concept of universal equality. Looking at the main city avenues of that time (for example: Kutuzovsky Ave in Moscow, Povitroflotsky Ave in Kyiv, or Moscow Avenue in Kharkiv), the unusual unevenness of the building is striking to the eyes: modest and dilapidated individual houses disappear behind the ranks of the grand "Stalin's Empire" style ensembles (Shevchenko 2019). Those buildings were constructed by individual plans and decorated with precious materials, which reflected the time and price of construction. Until the late 50s, USSR had not developed a comprehensive state housing program to suit the population growth. Only in 1956, with the beginning of Khrushchev's era, the first «Plan» (a unified system of settlements) was ever launched. In subsequent decades, the housing development in USSR was strictly regulated by the newly created «Gosgrazhdanstroy» (State Committee for Civil Construction and Architecture) (French 1995). Following its creation, the decree «On the development of housing construction in the USSR» set the task to end the housing crisis in the country and consolidated the course for the construction of economical apartments for housing one family (Zhuravlev and Naumova 1975). While a significant part of the population still was living in barracks or communal flats, Khrushchev houses with individual kitchens, tiny rooms, and low ceilings were accepted as a long-waited relief. The number of rooms in a flat was dependent on the number of family members, their age, and sex. The designed apartment sizes are based on an average of $14 - 15 \text{ m}^2$ in total or $9 - 9.4 \text{ m}^2$ of living space per person (Kibirev and Olhova 1970). The smallest flat size by 1958 equals 16 m² (single person), the biggest – 40 m² for a large family (State Committee of the Council of Ministers of the USSR in Construction 1958). However, as French puts it, flat was a big step back to the "bourgeoisie" time, when a family, not a worker's union, was considered the basic unit of the society (French 1995). To make renewal and new construction faster and provide the working class with equal minimum accommodation, the idea of panel housing came to light. "Building cheaper, qualitative and more beautiful!" - Khrushchev formulated the idea of new construction (as cited in (Düwel 1995).

Prefabricated panel blocks were chosen due to several factors:

- speed of the production and construction
- science-based technology, accessible for groups of low-qualified workers
- opportunity to provide an equal standard dwelling for every worker.

The Khrushchev era meant the end of the Stalinist compact city. The development had shifted to the outskirts and "free grounds" (Urban 2012). Khrushchev's reform has changed the theoretical idea of the city in the realities of the new housing policy. The city no longer was seen as a system of ceremonial, parade squares, central and secondary streets, which demonstrated the Soviet stratification of society. The city began to be interpreted as a comfortable shared space for the entire population – ordinary workers, employees, and urban cultural workers (Meerovich and Antonenko 2018).

Panel housing, to a certain extent, provided equal conditions to the workers of many branches and was widely propagated. However, big industrial enterprises played a leading role in the formation of housing estates located in connection to industrial quarters, as workers needed to find adequate shelter in the proximity of potential employers. This goal was achieved thanks to the state monopoly on land and top-down planning practices. Meanwhile, the investment in single-family housing was almost stopped. This housing catered to the needs of the population that were unable or unwilling to gain access to the panel block apartments (Gentile 2015). In case if the enterprise was relocated, workers' families were relocated as well and had to start a new search for the dwelling. Usually, this housing remained on the margins of cities or included in the panel districts.

The appearance of the cities has changed by new built-up edge areas, which were easy and cheap to build and connect to the existing street network and production sites. The results were impressive. In the period from 1956-the 1960s, twice as many dwellings were built as in the previous five-year period. Main volumes of housing construction in the past seven years (1959-1965) were concentrated in the Russian SFSR, the Ukrainian and Kazakh SSR; these union republics account for 87% of the total volume of housing construction, and the part of Ukrainian SSR accounted 15% (Samchenko 1991). In 1961-1965, the amount of housing only in Ukrainian SSR, being set into operation, equaled 300 million m² of floor space. In the 10th Five-Year Plan (1976-1980), the amount grew already to 413,8 million m² (Oliynyk 2009). The majority of industrial mass housing areas were erected between the 1950s-1990s as districts with enlarged scale or free layouts. Ideas of panel housing were actively propagated inside the Soviet Union and in the neighboring countries, experiencing its economic and political influence – Poland, Hungary, Czechoslovakia, and others. In the Socialist countries, large-panel construction was expanded to almost exclusively applied technology (Hannemann 2000). One can observe the resemblance in architecture between USSR and East Germany. In both states, the city development was implying residential housing construction, which was seen solely as extensive construction in the fields around the cities (Flierl 1998). This likeliness demonstrates common tendencies of future development.

The main document that regulated the housing system in Ukrainian SSR was the Housing Code, ratified by the Resolution of the State Committee of the USSR (1983). The document regulated the provision of citizens with housing through flats distribution in the state and public housing buildings. It also regulated the so-called «housing queue»: citizens in need of better housing conditions were registered to receive housing and included in a single state register of citizens needing improvement (Fedoriv and Lomonosova 2019). These queues only increased the competitiveness of getting housing, leading to years-long wait time, speculative activities, as well as jealousy towards "luckier" neighbors and colleagues.

Although equal housing conditions were a core of fluctuating ideology line, even mass housing of the 1960-1970s often included «improved projects» and apartments for administrative workers, privileged party members, and professionals, not available for the proletariat. Opposite to social-democratic states, where social housing was distributed to the poorest members, balancing the inequalities created by the capitalist economy, in the USSR, housing politics was called to create a loyal stratum of society (Shevchenko 2019).

The state housing policy itself has shaken the ideals of «collective housing». All of the above phenomena were expressed at the household level as a high level of suspicion to neighbors and

colleagues, defensiveness concerning own housing, and ignoring public space. These social features of socialist neighborhoods will be discussed in the following chapters.

2.2 System of planning institutions in USSR

Until the late 1980s, Soviet planning was inflexibly bureaucratized. The structure of the construction branch in the Soviet Union was an integral part of central planned national economics. As Friedmann mentions, city general plans, and the process leading up to them, were classified documents. Physical planning was understood as a problem of urban design and was handled by enormous planning institutes (Friedmann 2005). Decree of the Council of People's Commissars of the RSFSR 1919, it was stated that the construction is subject to state control, and the state became the sole customer and the sole owner of construction projects (and buildings) in the USSR (1921).

The soviet system aimed to control housing construction through a complicated vertical hierarchy of ministers and institutions (Figure 2.2), sometimes creating «dual subordination", that did not allow an effective control over resources (Underhill 1976). State dominated in control for finance, material supply, land distribution, and construction process. In the context of centralized planning, the ministries had primarily a purely executive function and had little influence on the general housing policy (quotation Renaud, 1996). This process was carried out by the industrial sector. As a result, the volume, quality, and even the speed of housing construction depended directly on the growth of industrial production and reflected the relevant priorities laid down at the state level (Vlasenko 2016). There was a specific Committee responsible for a series of five-year plans governing all aspects of the economy of the country — Gosplan (the State Committee for Planning) (Kazanskiy 2017).

With the beginning of Khrushchev's housing reform, new construction industry and planning branches had to be created to serve the new economic plan, matching growing construction volumes. A centralized system replaced different construction organizations that belonged to different departments.

State Committee for Capital Construction of the USSR (Gosstroy), formed in 1950, existed in direct dependence on the Board of Ministers of the USSR and was in charge of the whole construction brunch of the country.

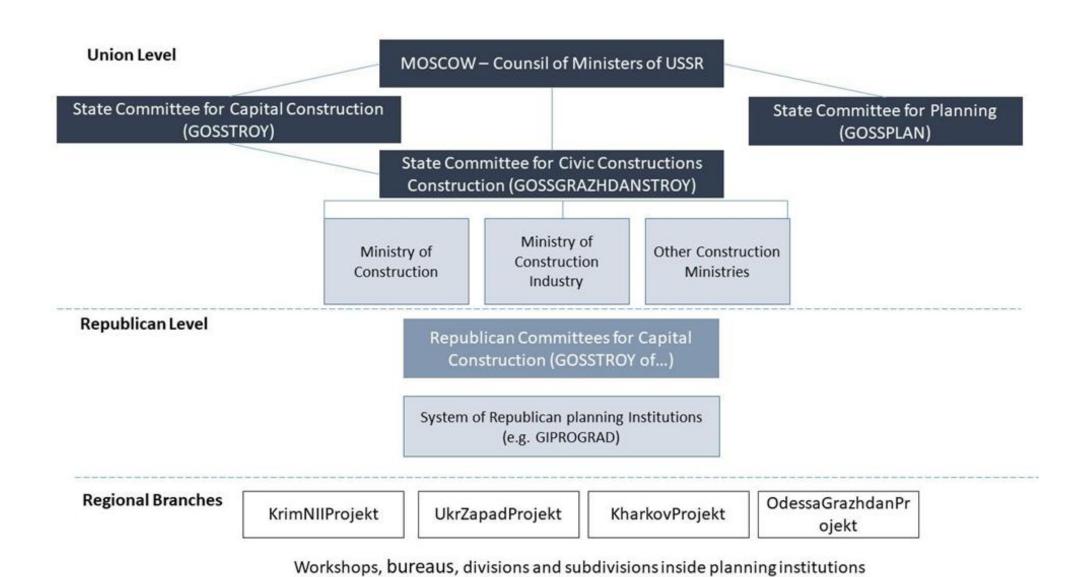


Figure 2.2 Hierarchy of Planning Institutions of the Soviet Union.

The main task of the committee was reviewing projects and estimates for the construction of enterprises, buildings, and structures submitted by ministries and departments for approval by the USSR Council of Ministers, and providing conclusions on them, as well as monitoring the implementation of government decisions by ministries and departments on design and construction – as stated in the Decree of the Supreme Soviet of the USSR dated May 9, 1950 (Supreme Soviet of the USSR 1950). Later, its powers were widened. The Gosstroy of the USSR developed with the participation of ministries and departments of the USSR, the Councils of Ministers of the Union republics, and approved annual and long-term plans for typical design, experimental design, and new construction (Council of Ministers of USSR 1968). Simultaneously, Gosgrazhdanstroy or State Committee for Civil Construction and Architecture3 dealt with the housing in the urban and rural areas, was in charge of master plans and global decisions for the cities conducted in the capital. Based on its decisions, planning on the local level was the task of the city's planning institutions. Gosgrazhdanstroy existed both in direct dependence on the Council of Ministers and was a structural unit of Gosstroy (Underhill 1976).

Union Republic Committee for Construction (Gosstroi in Ukrainian SSR) was transmitting the orders for construction from the Board of Ministers of the USSR to each Union Republic. They controlled urban development, architecture, and construction institutions, conducted contests for developing master plans and design buildings, as well as controlled finance (Council of Ministers of the Ukrainian SSR 1987) Committees in Kyiv were responsible for the reform of the construction industry at the republican level in Ukraine. Kyiv design institutes acted as the leading developers of large urban development projects to construct new residential areas of Ukrainian cities (Boichenko et al. 1961).

Giprograd (established in 1930) was a leading institution of Ukrainian Gosstroy on the republican level, consisting of the system of planning institutes with branches in the large cities (Glavkharkovstroy — General Agency for Urban Planning and Construction in Kharkiv, KrimNIIProekt, Odessagrazhdanproekt, Ukrzapadgrazhdanproekt, and many others). It had been assigned the tasks of urban planning, design residential and community buildings, and scientific work in urban planning (Giprograd 1990). Kyiv branch of planning institute Giprograd was in charge of large town-planning projects to construct new residential areas of Ukrainian cities, layouts of district planning, and mapping the perspective construction for the next 5-year period.

In the late 1950s, the correction of master plans had started. Meanwhile, local planning institutes, branches of Giprograd, their workshops and divisions, developed more precise plans by districts and housing estates (as depicted in Figure 2.2). At the turn of the 1960s, using district planning as a basis, the Institute created the schemes of perspective development for each national economy area (ibid.). Kyiv design institutes led large-scale urban development projects for new residential areas in Ukrainian cities. Plans had minor corrections on the place. For example, in Odesa, the implementation of the Khrushchev housing reform began with the design work of Kyiv city planners. The new plans, including zoning and the city's future development, were approved by the Council of Ministers of the Ukrainian SSR and had an implementation time of 25 years. These integrated plans were based on future demographic and economic development, including large-scale zoning for housing, industry, open spaces, and infrastructures. These documents were sup-

_

³ Gosgrazhdanstroy, in Russian: Госгражданстрой.

posed to secure the planned nature of urban development. However, very soon, great dissatisfaction was expressed on their effectiveness. Genplans become outdated within 10-12 years, and only 20-22% were realized. As Shaw mentions, already in the late 1970s, it was already urgently necessary to revise those for Kharkiv, Zhdanov, Dnepropetrovsk, Odesa, Voroshilovgrad, Cherkasy, Chernihiv, and several others (Shaw 1983).

2.3 Micro-district and the Socialist city

In the Post-War period and during the following Five-Year Plans, the paradigm of Socialist neighborhood develops in the direction of standardization and height increasing. Cultural and social infrastructure finally being separated from housing and located inside the district, and then moved inside the neighborhood (Bylinkin and Ryabushin 1985). Finally, the «superblock» system (communal house units, expanded outside), proposed in the 1920s by Strumilin, was transformed in the 1960s into the concept of the «mycrorayons,» the micro-regions (or micro-districts). This principle shifted everyday cultural and household services of the population into the district territory, increasing the role of public space around the buildings. At the beginning of the 1960s, took place a return to the leading politics line of the 1920s in an attempt to provide the maximum number of citizens with the necessary minimum of housing. However, there was a significant difference: the aspect of «collectivity» in the housing structure was almost completely removed (Bronovitskaya 2013).

However, that theoretical development on the creation of the micro-district as a city planning unit was carried out in the Soviet Union and was most likely borrowed from Western developments. The micro-district idea (as a neighborhood unit) was already applied in the United States by Clarence Perry in plans for New York and New Jersey in his monograph «Regional Plan of New York and Its Environs" (1929). The Neighborhood Unit by Perry was organized around several physically oriented ideals: its size between 5,000 to 9,000 residents, approximately 65 ha at a density of ten units per 0.4 ha, providing enough population for one central school and a church that should be easily accessible from each end of the unit. Arterial streets were located along the perimeter to define and distinguish the neighborhood and, by design, eliminate unwanted traffic from the neighborhood and enhance the safety of pedestrians. At least 10% of the area had to be green space, such as playgrounds and community interaction areas (Lawhon 2009). The Soviet urban planners adopted this idea except for one significant change: a micro-district is essentially a labor sitting location, a place for rest between work shifts, and therefore the connection between the production center and housing was given priority.

The basic planning unit, a «superblock» in the Soviet Union, accommodated 1000-1500 citizens. All daily facilities – schools, kindergarten, and shops are located within walking distance. Groups of living complexes comprised the next highest organizational unit – «mykrorayon" (micro-district) with a population between 8000 to 12000 inhabitants on the floor area of 10 ha, providing a higher level of services (Bater 1980). In reality, micro-districts were much denser than the theoretical population size and built up with higher tower blocks on the same surface. On a higher level, the micro-district was combined into districts with a population of 30000-50000 (French 1995).

Even without an explicit aspect of communization, the micro-district maintained its previously accepted ideological orientation. It was aimed to create a particular type of collective living, where the entire community would be busy with cultural, educational, and ideological activities, such as cleaning the common areas, helping each other, and joint leisure (Urban 2012). As aforementioned, the primary function of the micro-district was housing. The rest of the functions are inserted based on three service levels categorized by the frequency of their use.

The approximate model of this system is shown in Figure 2.3. The first level included daily need services - child care facilities, food stores, canteens, cafes, pharmacies; these objects should be located within a 300-500 m radius in the micro-district for 6-12 thousand inhabitants.

The second stage featured periodical use buildings — polyclinics, hospitals, post offices, shopping centers, cinemas. The service radius for these buildings could be 800 to 1,200 meters, recommended locating inside the territory inhabited by 12 - 20 thousand dwellers. It was advisable to combine these facilities with transport centers, tram, metro stations.

The third level is represented by buildings, episodically used — administrative and economic institutions, sports centers, theaters, clubs, large shopping and treatment centers, and meant to be used by the whole city's population. Access to them was provided through public transport (Fedorov 2014).

Last but not least, the fourth stage objects are located in the suburban area – having no defined scale and radius.

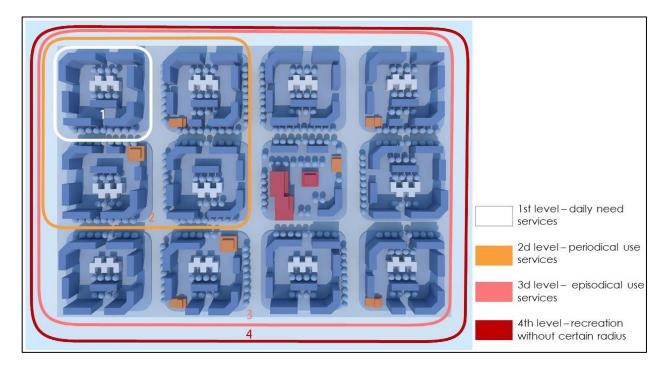


Figure 2.3 Hierarchy of service levels in micro-district development, their location in different urban scale (Vavirovskiy 1964).

The main mistake of this categorization is an underestimation of the daily and periodical use of institutions. Buildings of cinemas, theaters, clubs, sports, and shopping centers are much more attractive for the user than it was expected, and being constructed later than the housing, they were often overloaded.

A critical stage in development was creating the series of house «types» and combining them into quarters, ensembles, complexes along avenues. The industrial method, known as a line assembly system, was praised as allowing to build up the entire districts and avoid «expensive» individual projects. Construction of the typical housing and administrative buildings became the leading line of the Party. The country's prominent city planning institutes – Giprogor, Gorstroy-project, Kievproekt, Lenproekt, Giprostroy, and others were working on the projects (Kravchuk 1954). To better understand the development, it is necessary to separate three key decades of industrialized mass housing: the 1960s, 1970s, and 1980s. Each of these periods has a distinguishing construction technology, characteristic spatial development, and scale.

2.3.1 The late 1950s- early 1960s: refining of the standardization

The early sixties were a time of experiments with the materials and scale of industrial housing. The approximate size of the block (micro-district) was defined theoretically. In 1955-1960, during the first stage of mass standard construction, the basic techniques were worked out, and albums of typical series were created for further application. The majority of the buildings were relatively low, not more than five stories. The structures above were considered challenging to typify. It should be noted that the buildings were first designed without reference to the site, regardless of a specific address, city, and national specific and artistic image (Salzman 1954).

The critical ideas of town planners on creating a new type of settlement were collected in the contest album for competition on the experimental residential district in southwest Moscow by Shkvarikov (1963). According to the leading idea, the new district - or, better to say, the whole new worker's town - should include a three-stage system of cultural and household services. At the same time, the social services system was deliberately not planned to be ramified so that the number of workers in the social services segment did not equal the number of industrial workers (Shkvarikov 1963). An important aspect was the reduction of service radius (the distance from dwelling to the nearest service, e.g., 500 m from house to school, 350 m to kindergarten, according to Soviet Building regulations (СНИП II-60-75)- and others), and the maximum approximation of service to the dwelling along with combining them into large complexes. The primary factor defining the location of the housing units was distance. As Bater described it, the commute to work should take up to 40 minutes, so the units had to be planned close to the industrial facility and have a developed transport network (Bater 1980).

Figure 2.4 shows the typical layout of the 1960s micro-district and its regular development. Buildings were constructed in rows, parallel to the roads, with perpendicular inserts or enclosed in groups. Transportation streams were supposed to run around the periphery of the area, removing homes from noisy highways. The flowing yard space of these micro-districts arranges small gaps between the five-story buildings. Depending on the position of the entrances, this space is used as a playground or as a green garden, spontaneously divided by tenants into small plots for outside cellars, kitchen gardens, or flowerbeds, providing noise protection on the «quiet» side of houses. Vehicles were not foreseen to be placed in the yards; only single dead-end driveways were

planned. Residents also engaged in landscaping the area on "voluntary Saturday workdays". While setting up a home, residents of one or a few nearby houses formed some sort of community (Figure 2.5).

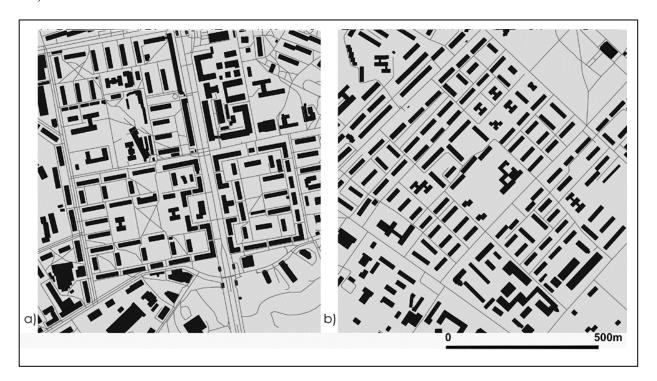


Figure 2.4 Layout of typical 1960s development a — Kharkiv, Pavlovo Pole (fragment) b — Odesa, Cheryomushki (fragments) still reminds quarter development, buildings organized in small yards which are easy to define on the plan. Source: own representation based on Open Street Map, 2019.

The construction was based on an equal amount of space per district inhabitant regarding housing space, which increased from ca. 7 m² in 1952 to 8,7 m² in 1958 (Grigorieva 2010). Many districts consisted of completely identical houses (the difference is only in the material — bricks, blocks, or panels); these typical Khrushchev era buildings appear regardless of the location, both on the outskirts and city centers (Shevchenko 2019). With the development of standardized dwelling, the discussion about the desire for life in an individual apartment became more active. With the development of the micro-district, the transition to constructing individual apartments as the primary form of resettlement of families was finished. However, one of the essential features of Soviet urban planning, its complexity, remained. That was provided by constructing residential complexes in which an individual apartment was still closely connected with public services. The tiny flats could not afford enough space for daily services, so they were proposed to be moved outside. The concept of a new dwelling included a single apartment and the complex of services in the micro-district. Thus, an area of 75 hectares (=0,75 km²) should accommodate around 15 thousand inhabitants. The complex construction method had to be applied, residential houses and service facilities had to be constructed simultaneously: schools, kindergartens, cafes, dining rooms, shops. In the center of the micro-district was planned to locate a cultural and residential complex with a club, movie theater, pharmacy, bank, and shopping center (Shkvarikov 1963).





Figure 2.5 Small block development with little distance between the buildings created private yards. Pavlovo Pole, Kharkiv, the 1960s (Source: State archive of Kharkiv oblast).

Important detail should be noted: the smallest unit of residential development was considered not a single separate building but a group of houses repeatedly placed in the scheme. Demography dynamics was the key feature not only of flat standardization but also city planning. Based on these data, the district space was designed as well. Socio-cultural and residential infrastructure in the district was first implemented in Khrushchev's time. If the Stalin era trade and other infrastructure were presented exclusively on the first floors of residential buildings (including cinemas), in the 1960s, there were separate centers of domestic services with ateliers and dry-cleaners. During this decade, the practice of placing shopping centers on the ground floor was criticized for destroying the courtyards of houses by the technical parts of the shops (Shevchenko 2019). Figure 2.6 demonstrates an example of various shops located on the ground floor of a building along a busy street from the beginning of the 1960s. Later, the practice of an active ground floor was abandoned, returning closer to the end of the 1970s and in the 1980s, in a more modernized form where shops and courtyards had separated entrances.



Figure 2.6 Five-story building along Lenin avenue (now: Nauki avenue) with a ground-floor store "Druzhba" in Kharkiv, 1978. (Source: Postcard set «Kharkiv», Mystetstvo publisher house, 1978 private collection).

Larger indicators of plots area of the cultural, household, and municipal services in the microdistrict (according to SNIP II- K.2-62, show approximate square norms per person in the infrastructure of the newly planned district (Table 2.1). The primary attention was paid to the social facilities and public space for leisure and rest.

Table 2.1 Larger indicators of plots area of the cultural, household, and municipal services in the microdistrict (according to SNIP II- K.2-62, (GOSSTROY USSR 1966).

Plots/Usage	Recommended area (m²)/person
Schools	2,7
Kindergarten	2,8
Cultural and educational institutions	1
Garages of individual cars	0,3
Gardens of residential districts	3
Sports facilities	1,2
Total m² per person	11

With industrialization and typification, the character of residential architecture has changed to more closely resemble the international standards. Characteristic elements demonstrating the national character in Stalinist architecture (flower wreaths and sheaves of hay, traditional ceramics, and figures of people) were not allowed in the architecture of Khrushchev. In their place came discreet geometric compositions, glorifying science and progress.

The observance of the general design rules in the Soviet Union and Eastern Block often depended on the location and the inner situation in one particular Soviet Republic or country. Despite the border, cultural exchange between East and West Germany remained, and GDR influenced Western modernism. Estonian architects were allowed to conduct trips to Finland to collect «western» experiences. Estonian, Latvian, and Lithuanian housing projects received many all-Union awards and pushed the borders of Soviet design (Metspalu and Hess 2017). The architecture of Tajikistan and Kazakhstan Soviet Republics is also defined by a unique combination of traditional patterns and modernist forms.

Unlike the countries of Eastern Block or the Baltic coast of the Soviet Union, which could allow themselves some distance from the international style, Ukrainian mass housing did not have this degree of freedom. It is hard to define a distinctive «national component" both in individual projects and in the mass housing in the Ukrainian Republic by that time. Post-war architecture is very different inside the country. As Yekaterina Gubkina, researcher of modernist architecture reported, there were features of architecture related to the functions of regions in the structure of the economy of all Ukraine. These were the industrial regions of the east, the central Ukrainian region connected with the Dnieper, the sea line of the Black and Azov Seas, and Western Ukraine, which stood out with its so-called «Hutsul» 4 style" (according to (Gladchenko 2019).





Figure 2.7 On the left: Humble traditional mosaic elements on the balcony panels in Cheremushki, Odessa.

The pattern differs for every house. On the right: Drawing of an atom on the wall of the building, Cheremushki, Odesa.

Subsequently, in the 80s, the Slavic theme began to be actively used in architecture, which was particularly relevant to Kyiv. Public buildings and structures of significant ideological meaning received some national and historical motifs — subway stations in Kyiv (Zoloti Vorota, 1989) featured stylized «medieval» ornaments inspired by Kyivan Rus era architecture. "The so-called synthesis of arts was used — but national features were very hard to find" (Gladchenko 2019).

⁴ Hutsul, hutsuls - (Ukrainian: гуцули) is an ethnic group inhabiting the West of Ukraine, remarkable for their unique style in clothing, sculpture, architecture, crafts.

The first buildings in the Cheryomushki mass housing area in Odesa had mosaic balcony panels decorated with elements of traditional Ukrainian garment — «vyshyvanka». This practice was later criticized and abandoned in favor of simple white elements, as seen in Figure 2.7 (Urenyov 2017). Rare facades were decorated with scientific and sea motifs. In most cases, local toponyms were also not preserved, remaining mainly in the «folk names» of the district's parts.

In conclusion, in the 1955 - the early 1960s, the main features of the micro-district unit were elaborated as follows:

- The location of the district was tied to the commuting distance to the industry.
- The number of non-industrial (service) facilities was limited.
- Functional zoning was based on the minimal planned number of users.
- Decorative elements went out of favor.

2.3.2 The 1970s: enlargement of the layout

Between the 1960-1970s in the new mass housing areas of the Ukrainian Republic, the scale of mass housing districts began to increase, including the height of buildings. This tendency can be explained both with the technical progress, efforts to save land constructing denser and higher, and a tendency to add diversity in the development. Since 1970, the construction conducted with the new block-section methods. Long row houses were combined with single focal points – higher-level resident towers (Sedak et al. 1987).

Planning institutes in regional centers tried to develop their unique types of housing. A large number of so-called experimental projects were created at this time, mostly in big cities. Kharkiv districts of Pavlovo Pole and Saltivka, planned by Kharkovproekt (architect Leonid Tyulpa), became the experimental field, where new methods were developed. These projects laid the foundations for developing many other housing estates (Bouryak et al. 2017) (Figure 2.8). The range of projects also diversified for different social strata. In the late 1960s - the beginning of the 1970s, higher comfort housing was built in more prestigious districts of Kyiv and Moscow. These were middle-and high-story buildings with unusual architectural solutions (Shevchenko 2019). In this context, the importance of the environment has increased because it has remained open and intended equally for all, no matter which house they lived in. This status will remain until the end of the era of panel neighborhoods.

Ground-level shops and service facilities came back and became the usual element along busy streets. These buildings were used to somehow diversify monotonous urban fabric and save funds and space for construction.



Figure 2.8 Addition of high-rise buildings and lower-level public facilities created rhythm in monotonous development. Pavlovo Pole, Kharkiv, 1978 (Source: Postcard set «Kharkiv», Mystetstvo publisher house, 1978 private collection).

Planning codes also received important updates in terms of comfort. Average housing space per person in new housing stock gradually increased to 10,3 m2 per person (in the cities) (Leningrad City Council of People's Deputies 1979). If in planning documentation from 1960 the sizes of the functional areas in the micro-district distributed by functions are given in the abbreviated form, in general terms, then by the mid-1970s the zones included in the yard space were already accurately calculated. For example, Table 2.2 shows sizes for daily household and leisure activities grounds calculated according to the estimated number of inhabitants in nearby houses. Like a mathematical formula, the desired site size, its distance from buildings could be calculated from the table and inserted into the plan.

Table 2.2 Sizes of the grounds in the settlement according to the Soviet Building Regulations (SNIP II-60-75)

	Grounds	Recommended area per person	Recommended distance to the buildings
	garbage collector	30 m ²	12 m
Household	cleaning of furniture, carpets	100 m²	20 m
	clothes drying	150 m ²	40 m
	dog walking	0,3 m ² /pers	-
Playgrounds	preschool children		
Leisure	Schoolchildren, teenagers	0.7 m ² /pers.	10 m
	adults	0.1 m ² /pers	

Sports	basketball/ football grounds	2 m²/pers.	20 – 40 m
Green spaces	Front gardens	8 m²/pers	-
Garages Parking	As an exception for people with disabilities, 2 guest	0,8% m²/pers	10 m

Technological improvements accelerated the speed of construction. By 1972, panel housing accounted for nearly half of the construction in the country (French 1979). In some cities in the mid-1970s, this number reached as high as 76%. Mass prefabricated construction was proclaimed the country's future, as the decline of traditional construction is inevitable (Rosanov 1977). In the construction of residential complexes, the scale of development was enlarged and the leading role in creating a unique appearance was played not by individual buildings, but by the differences in form or spatial composition in combination with natural conditions (Kibirev and Olhova 1970).

Except for experimental projects, micro-district development remained monotonous. Sections of different sizes and heights were combined to bring formal diversity into an ensemble of the district and fit into landscape features such as height, waterfront, park. Buildings were collected in several groups on the territory. Dead-end driveways inside the district were supposed to lead into groups of buildings. The same standardized series were built simultaneously in different cities, and it became clear that it is impossible to develop a unique design for each of them; in general, technical methods dominated over artistic approach. The well-established technology allowed architects to experiment with floor plans and create improved units.

Technical possibilities of section and apartment combination were discussed among architects and engineers much more than the harmonious fit of the building into the environment and the creation of a comfortable environment in the inter-house space. Architects did not possess many tools to enrich the visual performance of their projects. Due to typification, standardization, and urban development limitations, they had to look for other visual statement methods. To create an expressive and memorable image of a new complex, architects used curvilinear and zig-zag compositions of the typical sections (Sedak et al. 1987). Another widespread method to create an architectural composition was «supergraphics» — the application of differently colored sections that would dynamically change the form perception and building's appearance and reorganize the surrounding space. This meant the creation of new composite integrity based on actual geometry (Shirochin et al. 2018). Examples of these methods could be found in Kyiv, Kharkiv, and a few other big cities. Unfortunately, due to the cost shortage and panel production, the paint used instead of tiles was aging too fast.

Despite the critics of the 1970s micro-districts, they were considered to be the best built in the era of industrial housing construction. There was a better-established infrastructure than in the Khrushchev housing estates: a large density of coverage with public and shopping centers, counting 4-6 in the micro-district, a lower density of population than in the micro-districts of the 1980s (Shevchenko 2019).

The size of the housing estate was continuously growing; one may find recommendations to build up micro-districts by the maximum recommended density, which was taken to be 400-450 person/ha and kept increasing the height of buildings to save more residential lands (Belousov and Smolyar 1972). The scale grew respectively – 5 story buildings disappeared from the plans. Instead, yards were formed by 9-12 story high buildings, closing the perimeter and at the same time setting accents in the development. Often the higher rows were used to cover and "protect" lower development from the road (Figure 2.9). To provide enough insolation, the distance between buildings gradually increased. Districts grew in size; however, the service distances remained limited according to norms. This tendency continued up to the Perestroika era (1985-1991) and the following dissolution of the USSR.



Figure 2.9 Development along Byron Street: five-story buildings inside of the district appeared at the beginning of the 1960s, nine-story buildings with public ground floors built late 1960-1970s, closing the yards from the road. Novy Domy, Kharkiv, 1978 (Source: Postcard set «Kharkiv» Mystetstvo publisher house).

The largest mass housing developments in Ukraine were built in the 1970s and consisted of 9 to 12 story buildings, with dominant towers of 16 – sometimes 24 stories. Among them, the largest built during the early 1970-1980s: Saltovka housing area (Kharkiv, final stages of construction 1993) with a population of 409.300, Troyeshina (Kyiv), population 267.300, Obolon (Kyiv), population 239.500, Cheryomushki (Odesa), population 143.500, Sychiv (Lviv), population 230.000 (according to the central election commission, data is not renewed since 2013).

Features of the housing appeared in the period from the late 1960s until the end of the 1970s:

- enlargement of buildings and yard space due to technical progress
- combination of different types of buildings in one block
- different comfort levels of the buildings and environment
- improved infrastructure.

2.3.3 The 1980s: enlargement of the micro-district layout

Further experiments with constructive systems have contributed to the formation of appearance and spatial relationships in mass housing areas. With the growth of the building's height, the connection between the human scale, yard, and the housing complex was lost. Prestigious housing kept being built through the 1970-1980s, although those "better housing" was also built in strict accordance with accepted types and standards (Shevchenko 2019).

In her interview with Kazakova, Nina Krainyuya, architect, planner of the South-western district in Moscow, explained the turning point of the scale changed for industrial housing in 1985, by the invention of the corner section. It made it possible to connect buildings at different angles because planners wanted to realize yards and streets. That became a turn in the city's space, in its formation, in time for the environmental approach, for postmodernism and traditional construction. The new buildings provided semi-enclosed courtyard spaces, but at the same time, the number of floors increased. To insolate the territory of the yard and all these houses, planners had to move them on a great distance from each other (2014).

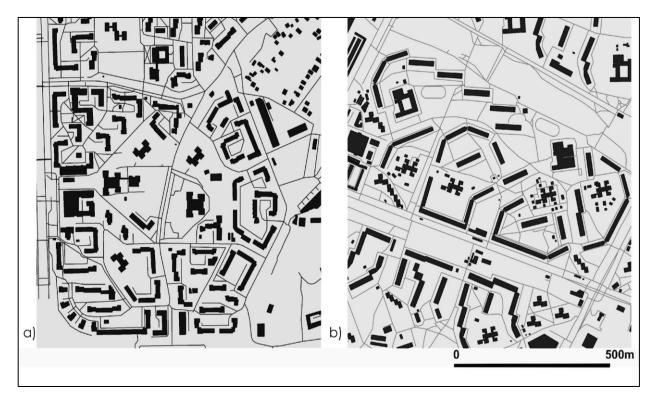


Figure 2.10 Development of 1980-1990s in Lviv-Sykhiv (a) and Kharkiv-Saltivka (b). Buildings losing their connections, infrastructure objects float in space. Source: own representation based on Open Street Map.

Enlargement of the buildings led to the change of the spatial concept. Ribbon development (along the main transport axis) was combined with the group into a mix of building types (Fedorov 2014) (Figure 2.10).

Combined, different sections types were more advantageous, making the layout more flexible following the existing landscape, water sources, and green spaces (Matusevich and Tovbin 1970). The planning structure of the settlement represented a free layout, locating houses according to the

cardinal points to improve insolation. Since the distance between infrastructure facilities was defined by a certain radius and technical requirements (SNiP – «Construction norms and requirements»), they were moved inside the yard spaces. It was decided to install central heating stations and childcare facilities inside these courtyards, which divided internal space into linear zones along with the buildings. Borders and buildings did not define the courtyard territory as it was typical between the five-story buildings. High-rise buildings no longer represented the second wave of modernism but postmodernism. There was the problem of scale between people, buildings, an adjacent space.

"Until the 1980s, there was classic Soviet modernism; after the 1980s, a different period began. In this case, modernism means not the architecture of buildings, but rather the town-planning techniques and solutions,"- reported Nina Krainyuya (Kazakova 2014).

This construction method also provided considerable reserves of the territory (insolation and technical gaps between buildings, unused sports fields, reserved plots for infrastructure). In the Figure 2.11 one can see the example of infrastructure, placed inside these spaces. At the same time, large districts were built farther from the city center and were considered less favorable due to unfinished state and an uncanny inhumane scale. In the 1980-1990s, the attractiveness of city centers with completed infrastructure and leisure facilities grew, while new panel construction districts had little to offer except sleeping.





Figure 2.11 Enlargement of height and the layout: service facilities are enclosed inside of the building groups. Saltivka, Kharkiv (Source: Domik 12/24/2014).

The concentration on residential function also caused drawbacks in social infrastructure. Special purpose buildings were often left out from the planning. In the ensuing struggle for scarce resources, the urban residential, commercial and social infrastructures had no real chance of asserting themselves, igniting a chain of trends that had a deleterious impact on the socialist-built environment (Gentile 2015).

The main difficulty faced by the urban planners was a poor set of standardized buildings. The task of locating various social and utility infrastructure facilities was further complicated by the absence of standardized designs for such facilities with a capacity of 25-30 thousand people. For example, during the construction of the Saltivka area in Kharkiv, Leonid Tyulpa, the chief architect of Kharkovproekt, managed to create only one original building per micro-district (Bouryak et al. 2017).

The projects were exclusively utilitarian and were deprived of the appearance that could revitalize the perception of the entire area. Only nominative yards were existing, divided approximately between communal services, schoolyards placed in the middle of the complexes, sometimes blocking the flow of space, leaving narrow strips of land to walk between the buildings. Shortages and backlegs in infrastructure also affected the attractiveness of the "last generation's" districts. The period between 1980 - 1990s was the most active phase for the construction branch in Ukraine. From 1981 to 1990, around 200 million m² of housing were built in the Republic (Anatasov 2010). During the turning year of 1990 were built around 17.45 million m² and 17.8 m² of living space accounted per inhabitant (Samchenko 1991). The urban sprawl led to the new housing areas being built too far from the center and had poor transport connections (Shirochin 2017). The disadvantages of the planning were revealed when the construction industry in the Soviet Union began experiencing an economic crisis. The last half of this period was marked by financial problems in the country, and the severe slowdown of the construction branch. Many districts did not receive vital infrastructure facilities and were built up in the 1990s with commercial housing. Unfinished districts of Kharkiv, North Saltivka, still possess enormous resources of urban void reserved for such facilities as kindergarten and schools (Figure 2.12).

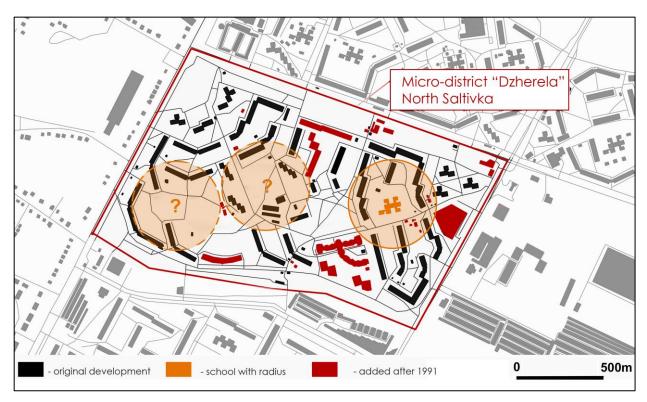


Figure 2.12 Fragment of North Saltivka planning. Part of the infrastructure has never been finished. The New post-1980s development gradually fills empty spots. Source: own representation based on Open Street Map.

The final stage of mass housing development (1980s-beginning of the 1990s) was marked with:

- increment of sizes and distances between buildings, square per person
- loss of clearly defined yard space
- an increased backlog of infrastructure development
- planning based strictly on technical requirements.

2.3.4 Development after 1991

The re-establishment of capitalism in Ukraine is marked with chaotic development above the master plans. At the same time, it meant reunion with the global urbanization process. New actors – private developers and business people began to change the built environment according to their ideas

The collapse of the Soviet Union and uncertain reforms played a negative role on the state's economy and halted the Ukrainian construction market. As Meuser et al. stated, the post-Soviet cities' economy and governance have had no resources to adapt and improve the outdated urban situation. Moreover, all those construction industries, which managed to survive in the new economy of a free market, are doing well by continuing to produce the new settlements using old typologies of second and third generations of mass housing (2015). Giprograd (preserved under the name Dipromisto) remained the only planning organization, which continued functioning as a scientific and planning facility with priority on reorganizing the state settlement system and developing and realizing the General scheme of planning of the territory of Ukraine. General scheme of planning of territory of Ukraine defined priorities and conceptual planning solutions for using the country's territory, improving the system of settlement and provision of sustainable development of settlements, development of industrial, social and engineering-transport infrastructure (Verkhovna Rada 2002). The general scheme set a priority of development for large cities such as Kyiv, Kharkiv, Odesa, Donetsk, Lviv. The general scheme prioritizes development for large cities such as Kyiv, Kharkiv, Odesa, Donetsk, Lviv. Dipromisto participates in legislative framework development but has lost its leading role in developing detailed master plans. As Renaud reported, the disruption of state controls, very high inflation, and falling wages led to the initial years of the transition, demonstrating a massive collapse of housing production (Renaud 1996). With the development of a free market, the city planning institutions were divided into smaller private bureaus; either large corporations or public companies, which began to propose commercial projects.

Growth of construction resumed only at the beginning of 2006 it was built 8.6 million m², and in 2007 – 10,244 million m² (the growth of + 18.7%). The volume of completed construction in 2007 National Bureau of Statistics estimated at 95 thousand built apartments (+ 15.9%). The financial and credit crisis of 2008 has forced many Ukrainian developers to stop construction plans. During this period, the construction volume fell to a record amount of 0.4-14.5% (Sinitsyna 2008). The result of the 2008 crisis was the appearance of very small (around 20 m²), so-called "smart-flats" collected in residential towers. These smart flats were located in dense areas without infrastructure, parking facilities, and sometimes built without permission documents. People tended to purchase this kind of property as an investment.

Modern urban development in Ukraine is trapped in two paradigms — one continues the construction of quarters-towers without any infrastructure, while the other makes efforts to promote "better" block development of the XIX century in modern environment and materials for the upper market segment. Social rotations in the cities were caused by sharply emerged social inequality. At the same time, mass housing areas earned a reputation for being unsafe, where crime runs rampant. This process also reflected on the perception of mass housing areas, while the city center housing received a second wind in the 1990s. The rich tend seek to move to prestigious housing and live in the center, which recovered the high status. Simultaneously, citizens seeking improvement in their financial situation tend to sell housing in the center and move to more modest homes and areas (Shirochin 2017).

The shortage of residential space in Ukraine remains colossal — on average, Ukrainians account for only 22 m² of housing per person (Anatasov 2010). After a slowdown in 2008, already in four years in 2012, pre-crisis indicators were achieved and improved (Levin 2016). According to the State Statistics Service, for 2017, the construction volumes increased by 22.5% compared to the same period of 2016. In terms of regions, the most significant increase was demonstrated by Zhytomyr (145.2%), Kirovograd (141.3%), Odesa (140.3%), and Kyiv (131.3%) (Ukrainian Ministry of Finance 2017).

The luxury part of the market was shortened after 2014 due to the economic crisis. Other segments of housing, including mass housing areas, remained popular. This type of property is considered reliable enough, and the demand remains stable. Due to the city's expansion, many mass housing districts appeared closer to the center with a higher value of land, which led to a discrepancy between the urban value of these areas and the quality of housing itself (Mezentsev and Stebletska 2017). After the devaluation of the national currency and the economic crisis in 2014, household deposits were directed to construction. Trends in the development of the construction market of Ukraine are positive: construction volumes and prices are increasing every year. However, the situation in the real estate market of Ukraine is unstable (Horbal N. I. et al. 2019). On the one hand, housing seems to have become more physically accessible: headlines about unsold apartments constantly appear in the media. On the other hand, the cost of these apartments is too high considering income (Fedoriv and Lomonosova 2019).

As stated in the Ukraine Urbanisation Review, the multi-family housing stock in Ukraine, which is mostly represented by mass housing, has the lowest quality among European countries, and is steadily declining due to deferred maintenance and the cost-of-service provision (Restrepo Cadavid and Quintero E. 2015). For both Soviet planners and modern developers, the main task is to meet the plan to build/sell a certain amount of housing. In this situation, the neighborhoods suffer the most, as they remain an additive to housing. As for the functional development and management of these territories, the state still does not provide a detailed vision for their further development. That is why the destiny and the future development of these buildings and territories became a subject of discussion. Problems and potentials of mass housing areas will be described in the next chapter.

3 The current situation in prefabricated settlements in Ukraine

3.1 Conditions of mass housing development

After the collapse of the Soviet Union, Ukraine joined the Central- and East-European trends for housing market liberalization, private sector introduction, and privatization with some delay (Renaud 1996). The destruction of the previous management model and the transition to a market economy in Ukraine resulted from changes in global politics. This process in post-Socialist countries was not uniform, objectively leading to the "promised world of capitalism" (Yuzvyak 2019: cited Burawoy and Verdery 1999: 4).

The early 1990s was the time of flourishing transformation ideas and plans. New strategies for developing post-Soviet cities and enhancing community activism were proclaimed in the wake of a general transformation (Ilchenko 2013; Tyminsky 2013a). Nevertheless, the transformation process was limited to the city centers or did not occur at all. There were still no visible changes within the areas of mass housing development, which were not considered old enough for reconstruction. The absence of development concepts, the mass privatization, and the economic crisis slowed down transformation processes in Ukraine. The re-establishment of capitalism in Ukraine was marked with chaotic development above the master plans. At the same time, it meant reunion with the global urbanization process. The new actors – private developers and business people – began to alter the built environment according to their ideas.

Both World Bank and local experts agreed that recent fluctuating economic indicators negatively impacted the social structure and architecture of mass housing areas, following the reduction in the demand for housing and contributing to the outflow of the population from certain areas (Shirochin 2017; Restrepo Cadavid and Quintero E. 2015; Shirochin 2017; Restrepo Cadavid and Quintero E. 2015).

At the latest stage of the district development in post-socialist countries, Gentile highlights such factors as suburbanization, gentrification, urban regeneration, and the proliferation of gated communities as its main characteristics (Gentile 2015). However, as concluded in «Ukraine Urbanization Review». low mobility of the population (unpreparedness for a job search with a change of residence, a high segment of private homeowners) is an obstacle to the development of the urban areas. However, it prevents negative trends in the neighborhoods, such as ghettoization and abandonment, which have become common in the mass housing areas in Europe (Restrepo Cadavid and Quintero E. 2015). The transformation of economic and legislative systems cannot be considered a universal phenomenon because, in every country, this process proceeded differently. This subchapter enlarges upon current conditions of the housing economy and legislation that influence development trends in mass housing areas.

3.1.1 The privatization process and district development

After the socialist housing provision in Eastern Europe demonstrated its inefficiency, policymakers in multiple countries developed the belief that market mechanisms are a more efficient housing provision to remove and that the private market will motivate owners to maintain their property. Additionally, there was an expectation that the privatization of housing would reduce budget expenditures and yield financial benefits (Pichler-Milanović 1999).

The first effort to reform the housing sector was a decision to implement privatization to ease state's housing burden, which began in the late 1980s. In 1988, a decree of the Board of Ministers of the USSR «On the sale of apartments to the ownership of citizens in the buildings of the state and public housing stock» was adopted. This document was called to resolve the privatization issue, but it did not work as expected. As Vlasenko explains it, despite the relatively low prices announced, privatization did not become popular at the time due due to the lack of market incentive mechanisms and the housing market itself. (Vlasenko 2016).

The purpose of the state housing stock privatization was to create conditions for the realization of citizens' right to free choice of housing, involving citizens to participate in the maintenance and preservation of existing housing and the formation of market relations, as The State Law for Privatization of Housing Stock (1992) stated (Verkhovna Rada 1992) but also lessening the pressure on municipal companies. The view of privatization focused on overcoming the obstacles and short-comings of centralized planning and sharing responsibility for the housing stock with the population through the establishment of market-based prices (Vlasenko 2016).

During the first years, aggressive privatization policies transferred almost 72 percent of the public stock, primarily free of charge, to sitting tenants (Tsenkova and Turner 2004). According to the data cited by Berezhna, since 1993, more than 5.4 million dwellings have been privatized, corresponding to 85.4% of the total volume of state housing stock at the time of privatization. The privatization peak took place in 1993-94 and ended in 2000 (2009). The process significantly limited government's share of the rental market and served as a binding factor for residents to their place of residence. However, this measure was not entirely realized due to several legal complications. Privatization was limited by several factors, such as poor land registration and cadaster, absence of delineation, or registration of land boundaries (Renaud 1996). In this sense, Ukraine followed the general East-European pattern with post-Soviet cities demonstrating the highest level of homeownership in Europe. As Lyasheva states, in Kyiv, this figure had reached 91.1%. In comparison: in Germany, even after all the reforms, including the privatization of housing, the level of homeownership in 2016 was only 51.7% (Lyasheva 2018). This high percentage can also be explained by the fact that nearly all new housing since 1990 was sold to individual owners.

Nevertheless, the privatization procedure did not give a clear answer to which part or percentage of the house should belong to the single apartment owner. Previously, in the USSR, all units were state property; now, each case is individual: the inner parts of the building (flats and other rooms) belong to individuals, while the infrastructure, roof, basement, facade, and surrounding territory remain on municipal balance. In rare cases, the building may be in the common property of a cooperative or association; however, flats remain in private property (Figure 3.1). This situation created a false sense of irresponsibility for the space surrounding the house, even though owners continue to pay for the building's capital repairs. Many people still expect the municipality to take

care of the entire building. Municipal services, in turn, often neglect the right of apartment owners to choose how the building should be maintained. The position of local government bodies, which mostly continue to traditionally consider multi-apartment buildings as municipal property, contributes to this inconsistency, ignoring the presence of privately-owned flats and non-residential premises within multi-apartment buildings (Babak et al. 2008).



Figure 3.1 Peculiarities of ownership: (Left): state property in USSR (until the 1990s). (Center): From the 1990s till present – the case when the apartment belongs to the private property (Right): From the 1990s till present – condominium/cooperation case the building represents «patchwork" with three different types of owners: apartment owners — private; roof, basement, utilities, premises – communal owners.

It is a common problem in Ukraine and the whole of East Europe that a high level of homeowner-ship prevents the area's development. As Bernd stated, mass privatization has created a paradoxical gap in the relationship between household incomes and housing ownership. He calls this situation a "crushed structure of ownership": within the same house, there can be owners of apartments and tenants who rent housing on their own, who may or may not live in the house. This situation significantly impacts the possibility of gentrification, since it is challenging to implement any investment project in the existing urban environment (2016). Dealing with many small households is hard for a developer due to the different living conditions and preferences.

Later editions of the Law (from 04.09.2008, N 3716-VI) assigned the rest of the building should be in the joint tenancy of the owners to stimulate the activity of tenant associations and condominiums. Even after this transformation, the yard space of the mass housing areas was not legally assigned to private owners. As Renaud accurately stated, public facilities and space became unreliable without any owner and turned into randomly occupied spots for everyone and for no one at the same time (1996). This contradiction led to property violations, such as unauthorized parking and commercial activities in public spaces of the neighborhoods without the consent of authorities, cooperatives, communal services, and inhabitants of the building. Some residents used the local area to establish garden plots and kitchen gardens, digging underground cellars to store vegetables and other items.

3.1.2 Legislative transformations

The privatization issue is not the only obstacle to successful revitalization. The outdated legislative system also needed transformation. Decentralization reforms in Ukraine began the process of transferring power from central to local government bodies to follow regional development requests. Changes to urban development legislation, introduced in recent years, aimed at solving specific problems of the construction and related industries, did not have a comprehensive nature or strategic implementation plan. Ignoring public needs to create a comfortable living environment has led to considerable social tensions, heightening the authorities' confidence crisis (Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine 2019). Three core documents have regulated the development of housing policies in Ukraine since 1991:

- **1.** Resolution of the Verkhovna Rada of Ukraine of June 30, 1995, No. 254/95-VR «On the Concept of State Housing Policy» directed to «Formation of the new housing policy, matching market relations» (Verkhovna Rada 1995).
- 2. The Law of Ukraine «On Comprehensive Reconstruction of Blocks of Buildings (Microdistricts) of the Outdated Residential Housing Stock» dated December 22, 2006, No. 525-16 aimed at the complex restoration and thermal rehabilitation of existing buildings, defining the legal, economic, social and organizational principles for a comprehensive reconstruction of micro-districts. The Law stipulates that the reconstruction of a residential building is involves changes in geometric dimensions, functional purpose, replacement of individual structures and elements, and fundamental technical and economic indicators without interaction with the land plot and related regulations.

Investors and developers find it financially unprofitable to implement investment projects of complex reconstruction and development, preferring new construction, which guarantees a bigger profit. The bodies of self-government, which finance the capital repair of the housing stock, only fund 8-10% of the needed cost amount, unable to concentrate appropriate expenditures on housing reconstruction in local budgets. This has resulted in a deficient number of restored housing units; in 2008, it only reached 0.3% (Oliynyk 2009). The budget shortage is the main reason why this approach has not been practically implemented.

3. «National Program for Reform and Development of Housing and Communal Services» for 2009-2014 was dedicated to the introduction of market economy methods for the establishment of optimal relations for the society and state of economic, by stimulating energy efficiency, investment, scientific and technical advancements, foreign economic and environmental policy, and institutional and structural changes in the housing service sector, as well as publicity, public control, transparency, and citizen participation in decision-making (Verkhovna Rada 2009).

The purpose of the program was to implement measures to increase the efficiency and reliability of housing and communal services. However, Kipenko argues that the program's results remain questionable since no proper evaluation of its efficiency, socio-economic consequences, or degree of achievement was performed (2014). Foreign experts from the German organization Kompetenzzentrum Großsiedlungen e.V gave unflattering evaluations of the program results; the reform process had little effect in the past despite the six-year implementation of the National Program (Protz 2014).

Another transformation step is the Government's Action Plan on Decentralization (December 2014) and the Law on Regulation of City Construction Activities and State Construction and Architecture Control (2015). The reform permits private development actors to have full access to planning, zoning, and building information to facilitate a well-functioning land market. These recent developments aim to bring current urban planning practices in line with contemporary international standards that allow increased flexibility of local-level planners in managing development (Restrepo Cadavid and Quintero E. 2015).

Some core transformations took place at the district level. Before, the communal services organizations with offices in every micro-district were the only management bodies. Their names vary from city to city: there are reformed Soviet ZhEKs, (Housing maintenance offices), ZhENs (Housing operation association), ZhREOs (Housing repair-operational association), — communal managing enterprises, also remaining from the Soviet times housing construction cooperatives. The private maintenance companies and Association of Co-owners of Multi-apartment Houses, which appeared after the 1990s, are still a minority (Shevchenko 2019). The term «Association of Co-Owners of Multi-Apartment Building» appeared in 2001 with the first edition of the Law «On the Association of Co-Owners of a Multi-Apartment Building» (Verkhovna Rada 2017). Their purpose is to substitute state communal offices in the management process. Vlasenko stated that, unlike a cooperative form, where a resident purchases stock in the housing corporation that owns the apartment building, an association is a less corporatized ownership form and is primarily associated with ownership of an individual parcel of real property (2017). The second stage of reforming marked by «The Law of Ukraine on features of ownership rights in an Apartment Building» dated May 14, 2015, No. 417-VIII came into effect. The Law regulates relationships in the housing cooperative (known in Ukraine as the Association of Co-Owners of Multi apartment Building) between the owners and authorities and organizes their financial and legal shares. It led to the loss of state communal service's monopoly on providing (Verkhovna Rada 2015). The private services companies received rights to provide various services for condominiums and associations if they wished to change their managing office. The law propagated as a simple solution for housing services improvement but turned out as a long process. According to the law, apartment owners are required to organize independent initiative groups and conduct voting, designate authorized persons, collect necessary documents, and perform other actions. Figure 3.2 below explains a scheme of management hierarchy from state to district level (with changes that came to effect after 2001).

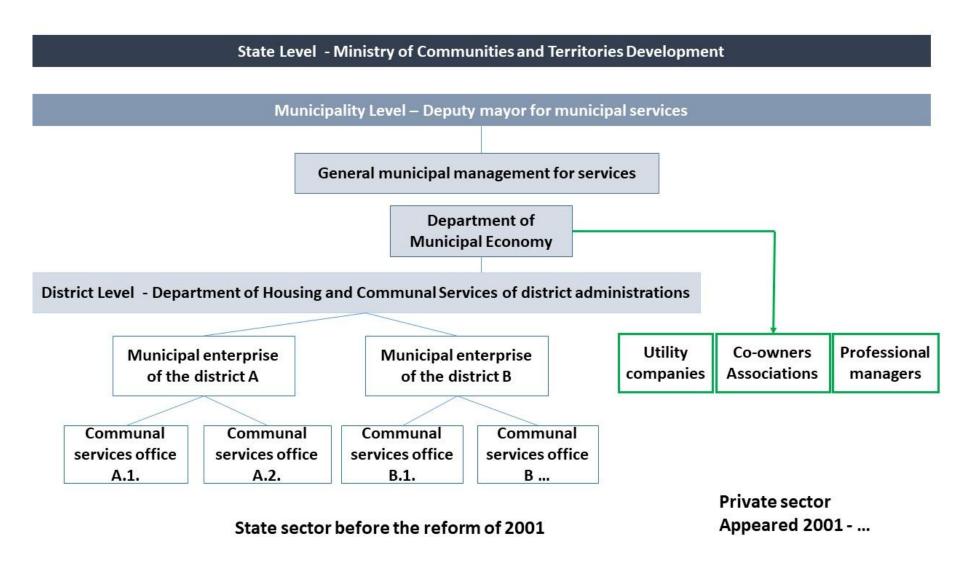


Figure 3.2 Management bodies in the land managing and district service system in Ukraine, due to the regulation from 2001. The newly appeared private sector actors are shown in green.

Regarding the public activity and participation in the planning and management process, the Decree of the Cabinet of Ministers on Ensuring Public Participation in Formulation and Implementation of State Policy No. 996, from 2010, established mechanisms for public participation in developing, implementing, and monitoring state policies. This document defined important aspects of public communication, such as public councils, their responsibilities and rights, the mechanisms of public consultations, public opinion polls, proposals, recommendations, complaints, and mechanisms for organizing public hearings.

The new urban development stage was initiated in 2018 by the Ministry of Regional Development and the institute Dipromisto to elaborate new building codes to limit chaotic development. The newest regulation on the reconstruction of micro-districts (Law of Ukraine «On the Complex Reconstruction of Quarters (Micro-districts) of an Outdated Housing Fund») is yet to be developed and applied. According to the draft, investors can carry out a comprehensive reconstruction of micro-districts. The norms stimulate mutual reconciliation between state, public and private interests in the planning and implementation of integrated projects, reconstruction of micro districts, consolidation of the state budget funds, investors, builders, and local budgets for engineering training, construction of social facilities, engineering and transport infrastructure (Ministry of Regional Development, Construction and Communal Sevices of Ukraine 2020). The main disadvantage of the law is the absence of a clear position for the local community and co-owner associations. Although their property rights are guaranteed and protected, they do not have the opportunity to give their opinion and make proposals for the reconstruction project.

3.1.3 Urban planning institutions and policymakers

The system of institutions responsible for urban development in Ukraine partly preserved the features inherited from the USSR. First, it is a strictly vertical system; second, different units often duplicate powers and influence each other's decisions. It is divided into three main branches: legislative (represented by the Parliament committees), executive (represented by various ministries), and research-scientific (multiple institutes and their branches). This multilevel structure represented in Figure 3.3.

At the legislative level, there are two committees responsible for drafting laws. At the legislative level, there are two committees responsible for drafting laws. Besides, planning decisions in relevant areas of responsibility are approved by the Ministries of Economic Development and Trade, Culture, and Regional Development. The latter is responsible for the development and implementation of state policy in the field of urban planning, architecture, and housing, as well as for the development of regional development policy. Additionally, the Ministry of Regional Development monitors the implementation of legislation and initiatives in this field (Restrepo Cadavid and Quintero E. 2015).

The new norms and codes have to be approved by the Ministry of Regional Development and the Parliament, although the latter often accepts conflicting laws. Local governments create plans without coordinating them with the Master plans. The centralized planning system requires the development of master plans for each city but does not allow local actors to determine the content of these documents or provide the necessary information. For example, the country is still using a model of statistical data collection close to the Soviet one, not displaying the data for smaller units,

which is hard to access. Local administrations are responsible for the implementation of the laws and the formation of strategic plans. The executive bodies of city councils are responsible for:

- implementation of state policy in the field of urban planning in the relevant territory
- planning of territories at the relevant levels
- preparation of proposals for programs of socio-economic development of the territory
- formation of specially authorized bodies on urban planning and architecture, and management of their activities
- informing the population about the plans for the location of the most significant urban, industrial, energy, and transport complexes
- ensuring the protection of cultural heritage
- monitoring construction and other uses of territories (Verkhovna Rada 2020).

However, there are also other bodies partly responsible for these procedures. It is the competence of the state research and scientific institutions to provide planning documentation, construction, and planning norms. These organizations may operate from other cities and be unaware of the local context. For example, such as the Scientific Research Institute Dipromisto, mentioned above shares responsibilities for issuing master plans and other planning and design documentation with other organizations: Scientific Research Institute of Town Planning and State Enterprise «Ukrainian State Research and Design Institute of Civil Engineering».

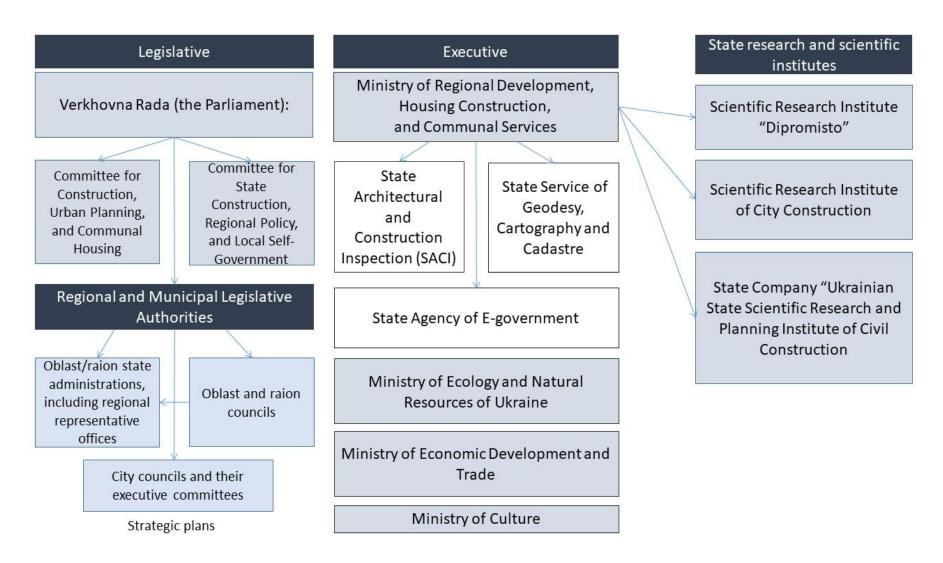


Figure 3.3 Urban planning Institutions in Ukraine. Author's presentation based on World Bank Report «Ukraine Urbanization Review 2013-2018».

Scientific Research Institute of Town Planning produces the planning schemes for the territories of oblast and administrative districts, parts of districts (united territorial communities), and general plans of cities, towns, and villages, detailed plans of territories. Additionally, historical and architectural reference plans, protection zones of cultural monuments, natural territories and objects of a nature reserve fund, technical documentation on normative monetary valuation of lands and land inventory, demarcation of lands, and other related tasks (Scientific Research Institute of Town Planning).

The State Enterprise «Ukrainian State Research and Design Institute of Civil Engineering,» according to its description, develops town-planning documentation of all levels, schemes for planning of territories of areas, districts, and general plans of settlements. It also creates zoning plans, detailed plans of territories, and sections on the need to make changes to urban planning documentation, land management, and land valuation works (land management projects, regulatory monetary and expert assessment of land), and urban planning calculations (SE "UKRNDPICIVILBUD" 2012). Additionally, organizations at the local level, such as city or regional Centers for Public Initiatives, working as charitable foundations or NGOs (non-governmental organizations), strengthening civil society at the local level. These various organizations are administrating grant programs, representing and protecting the interests of civil society, conducting charity events, training the activists, helping to plan and implement various campaigns and projects, to attract resources for local development (Eastern Ukrainian Centre of Community Initiatives 2017). Their goals are to provide tools for local communities to independently improve their lives. Furthermore, there are city and regional network agencies, such as the Association of Ukrainian Cities (AUC), which represent and defend the interests of cities in the Verkhovna Rada, the Cabinet of Ministers and other central authorities, and conduct other work directed on city development (Association of Ukrainian Cities 2002). These organizations do not have sufficient power in the development process, which is still greatly influenced by larger players at the legislative and executive levels.

This is not an exhaustive list of institutions and organizations involved in developing urban legislation and direct planning documentation, which may also be divided into branches and departments at other levels.

3.1.4 Planning instruments

Since 1991, the vertical hierarchy of the Ukrainian planning regulatory documents has remained mostly unchanged. Different levels of the scheme have different stages of relevance. The national level in spatial planning is represented by the General Scheme of Territorial Planning, prepared by the state project institute Dipromisto. This scheme was approved in 2002 and is still valid, although its calculation period has ended. The regional (oblast level) of 24 regions is represented by the Area Territorial Planning Scheme which is currently the most up-to-date, having been approved in 2010. The situation is much worse at sub-regional, district level. The data is absent for more than a quarter of the districts, and a larger district planning schemes were developed and approved by 1992. The local level, represented by Master Plans for settlements (cities, towns, and villages) is incomplete. Around 40% of settlements are entirely missing, while 47% of settlements have valid general planning plans until 1992. After the Decentralization Reform, single territorial communities at the local level started to develop their spatial planning schemes as separate documents, some with some integrating them into the district planning scheme (Ridosh 2020).

Master plans remain the main source of information about future development at the city level, but they contain only general information such as permitted district usage and the boundaries of public areas. Additionally, most city master plans are based on population growth projections that may not correspond to the actual situation (Fedoriv 2018). However, horizontal regulatory mechanisms are also emerging (Figure 3.4). In addition to the Master plans and following the international experience, strategic plans are created for most Ukrainian cities. These additional documents were designed to declare a vision on future socio-economic development (Restrepo Cadavid and Quintero E. 2015). Many of these plans were developed with the help of international state and non-state funds. However, many cities declare unrealistic goals or goals inconsistent with subsequent development. Additionally, as Ilchenko mentions, evaluating the success of implementing urban strategies remains crucial (2013).

According to the Law of Urban Planning Reform (2011), cities with populations exceeding 50,000 inhabitants are required to develop a «Detailed Plan of Territory» for individual micro-districts and estates where new construction activities are planned. A detailed plan is developed to determine the planning organization and functional purpose, spatial composition, and parameters of the building and landscape organization of the district, micro-district, and other parts of the settlement intended for integrated development or reconstruction (Verkhovna Rada 2012).

In most cities, comprehensive urban planning documentation is still incomplete, and planners rely on the master plans or zoning plans, which contain only general information about function zones and do not have the necessary detailing. This deficiency is due to the backlog of planning documentation development and results in uncertainty and violation of land use relations. According to the Law, an integral part of the zoning plan is the land management project. During the development of a zoning plan, conditions and restrictions for each zone are set in detail. The practice of developing urban development rules and land use regulations became widespread in Ukraine only in the mid-90s, influenced by the adaptation of foreign practices (Vadimov 2003). Dipromisto develops Country-wide Master plans of the cities, often fails to keep pace with commercial developers' requests and does not adequately consider citizens' proposals due to non-transparent acceptance mechanisms. To mitigate these conflicts, local authorities need more power to approve town planning documentation.

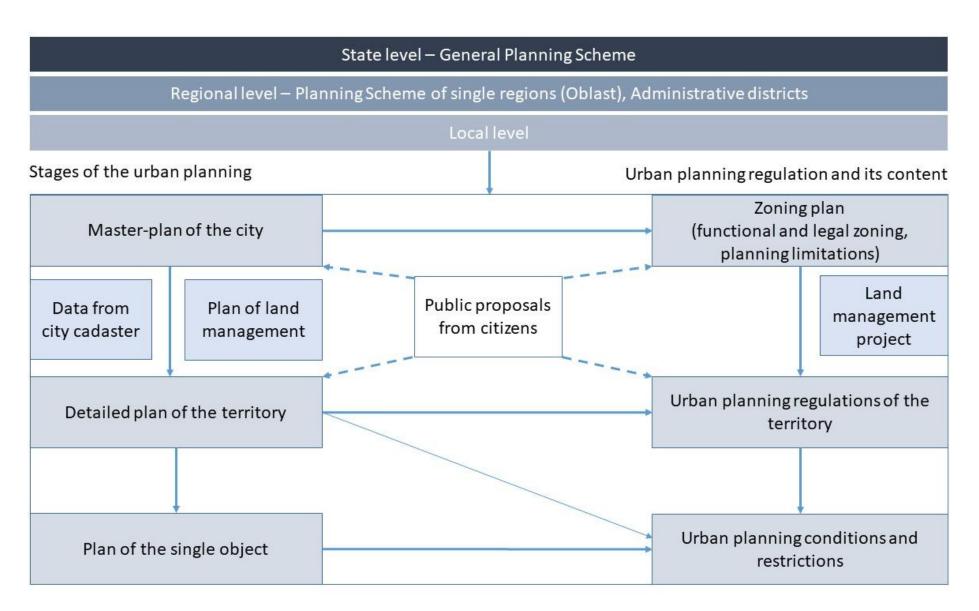


Figure 3.4 Interconnection of planning documentation in settlements of Ukraine.

According to Dudkina, several factors contribute to the problems with planning documentation:

- insufficient attention from the authorities to the management of urban planning as a prerequisite and consequence of investment activity in the territorial community
- •loss of coordination in the architectural and town-planning process at both the state and regional levels (with minimal town-planning documentation developed in recent years)
- the improper zoning of settlements has led to significant social, economic, and environmental issues
- the influence of the political factor and the pressure of big business on on urban planning management have resulted in lobbying for specific projects, thisoften leads to ignoring the community interests, loss of historical and architectural heritage, and degradation of the living environment (2014).

Most of the planning and statistical data is available online and sorted in statistical yearbooks, but it remains inadequate for detailed research. Indicators such as the population's economic activity are collected only at the regional level, without specifying the city or district. This inaccuracy makes it impossible to conduct thorough urban environment analyses. Statistics yearbook «Housing Fund of Ukraine» contains only general data, is also sorted by regions, and contains information only about general volumes of housing. To understand the social and economic development of cities, community-based statistical data is required. As Fedoriv mentions, the analysis, which is based only on the totality of statistical indicators, can be descriptive and does not explain the reasons for the current state of affairs (2018). Efforts have begun to develop documentation to resolve issues of ownership and management of territories. A possible way to deal with the territory of mass housing areas is often referred to as "no-one's territory", described in the document issued by Dipromisto and the Kharkivproekt planning bureau. «Adjustment for Distribution of the Micro-districts (Quarters) Territories for Determining Adjacent Territories of Multistory Buildings» (2013), came into farce in 2014, is based on the current Land Code and Law of Ukraine «On Regulation of Urban Planning Activity» (Ministry of Regional Development, Construction and Communal Sevices of Ukraine 2013). This document aims to clarify borders of land ownership and management within districts. Clarifying these borders is vitally important for the success of future district transformations, as illustrated in Figure 3.5. According to it, borders of land property and maintenance could be defined for any existing or planned district. The size and configuration of the apartment building's territory are determined in a Project of the Territory Allocation, following the building code, and considering the planning of the residential district (quarter). This ensures the proper functioning and maintenance of the multi-story house and the possibility

of its maintenance. The created Project of the residential district (quarter) division displays:

- apartment buildings with adjoining territories, public buildings and structures, and other objects of urban development
- approved plots of land with existing and available legal documents
- areas of shared use by the population of the district (quarter)
- land plots requiring the creation of legal documents
- unbuilt territories (reserve), areas where an appropriate detailed plan of the territory (construction project) provides for the location of construction objects or areas that are currently free from construction.



Figure 3.5 Proposal for territory according to the «Adjustment for Distribution of the Micro-districts (quarters) Territories for Determining Adjacent Territories of Multistory Buildings» by Kharkivproekt, 2013, Kharkiv.

The same document defines guidelines for the land plot, which belongs to the multi-apartment house, which consists of:

- areas intended for the residents of the building, specifically designed for games of preschool and primary school children, recreation for the population, sports activities, green areas, and pedestrian paths connecting these sites
- designated areas for outbuildings and structures

- spaces for the permanent storage of cars belonging to the house's occupants and for temporary storage (guest parking)
- entrances and exits to underground garages and parking lots, if they exist.

The remaining territory of the quarter may either belong to institutional property (schools, kindergartens, companies, service points) or be designated as reserve territory. A separate category, the area of shared use, includes land facilities designed to serve the population of the group of apartment buildings or the whole residential district (quarter). According to the regulation «On the Order of the Territory Division in Residential Neighborhood (Quarter)» of 1999 (updated in 2001), the shared land plot includes functional and planning elements of a residential area that do not directly adjoin a dwelling house (planned separately from other structures, reserve areas or public areas), and can be used to service the specified building and other quarters. These include namely:

- sports facilities, training grounds, these are planned separately from the yard spaces of residential buildings and public property plots
- grounds intended for household use
- areas allocated for pet-related activities
- greenery and other leisure territories (State Committee of Construction, Architecture and Housing Policy of Ukraine 1999).

The importance of the shared-use area is emphasized because several associations can use it as "communication space". This territory cannot be divided between other buildings' territories and also does not serve as a reserve for future construction. The practical significance of this regulation is that it provides a legal base for tenants' associations to define their territories to maintain them, and organize the space according to their needs. It also addresses the issue of "no-one's" land inside of the quarter territories that can be shared between tenant organizations and groups of locals. At the same time, the regulation forbids the installation of physical borders within the quarter, which ensures free access of pedestrians and communal services to the territories. However, the regulation has its disadvantages, such as its expensive cost in terms of document preparation, and there is an absence of cadastral information, according to Valeriy Ponomaryov, a workshop supervisor at Kharkovproekt Institute (2019).

3.2 Case studies – Ukrainian districts

The study of the current state and the complex problems of mass housing areas in Ukraine is based on materials from Ukrainian urbanists and case studies. Two Ukrainian districts: Saltivka (Kharkiv) and Cheryomushki (Odesa), were chosen for this study.

Odesa was selected because it has the highest share of Khrushchev-era housing among the major cities of Ukraine: more than a thousand of these buildings, which represent 18% of the housing stock and houses around 20% of the urban population. A greater part of them is constructed in one homogenous district. Most of the buildings were built between 1958 and 1973, and they remain popular, even though their operation period expires (Meisersky 2016). Figure 3.6 demonstrates the location of the district within the city.



Figure 3.6 Left: Location of Cheryomushki on the scheme of Odesa (by the author) Right: typical view of the district (photo by Svetlov Artem).

Cheryomushki, by design and spatial features, can be attributed to the first wave of mass development, whereas Saltivka belongs to the second and third waves. The location and access to urban infrastructure have also influenced the further development of these districts. The following subchapter will discuss in detail how these areas have developed and what factors influence them. Table 3.1 below concludes the short comparison of their data.

Saltivka was chosen as the largest housing estate in the Ukraine, covering a significant territory of Kharkiv (Figure 3.7). Initially it was planned as an independent satellite with its own center and all the elements typical of a city (Bouryak et al. 2017). Its construction aimed to provide necessary housing for workers of East Ukraine's constantly growing industrial center. Currently, twenty-two large micro-districts of block-free type are located on Saltivka, numbered from the north to the south and from the east to the west (524 ... 656), occupying a territory of more than a thousand hectares and locating approximately 1,500 thousand m² of multi-story housing (Virchenko and Mazurova 2014). Together with Kharkiv itself, the district lost its industrial importance and requires functional redefining.

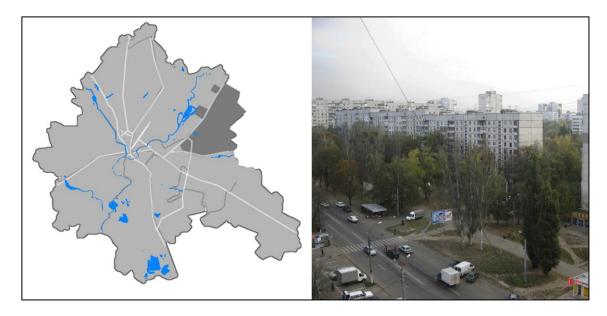


Figure 3.7 Left: Location of Saltivka on the scheme of Kharkiv (by the author) Right: typical view of the district (source: Google maps, photo by the author)

Both cities (and districts) are the largest in their region having been significantly impacted by the urbanization process of the second half of the XX century. They faced the industrial decline of the 1990s and currently demonstrate population decay (Restrepo Cadavid and Quintero E. 2015). Despite the similarity of some technical parameters (Table 3.1), the two studied areas are very different in character.

Table 3.1 Comparison of main data about two cities. *Data sources: (Restrepo Cadavid and Quintero E. 2015 pp.154-160), 2012 polling station lists.

	CHERYOMUSHKI - ODESA	SALTIVKA - KHARKIV
YEARS OF CONSTRUCTION	1961-1981	1963-1993
POPULATION*	City: 1,014,852 District: 143,500	City: 1,451,028District: 409.300
AREA SIZE	City: 23690 ha District: 540 ha	City: 35000 ha District: ca. 1200 ha
POPULATION DENSITY	City: 430.0000 ha District: 270 /ha	City: 411.1000 ha District: 320/ha

Qualitative data collection on satisfaction and neighborhood community involvement was conducted during the site visits between September 2017-October 2018 as well as through a directly distributed online questionnaire in the same year.

Respondents were given a short questionnaire and were free to provide additional information during a brief interview (sample in Appendix I). The interviews were conducted with 16 individuals (8 in Odesa and 8 in Kharkiv) from different age groups (18-25, 26-35, 36-55, 55-70, 75+). Responses from different groups give insights into how they use and interact with the district space and their current needs. A particular interest group in the study was composed of persons who represented the first generation of (long-term) tenants in the area and witnessed its development through the ages. These are people 40+ years old. The second (and sometimes third) generation is represented by people of 18-30 years old. The interviews focused on exploring topics of safety, accessibility, and living comfort in the district by understanding the repeated activities inside the districts. The results of the empirical study contribute to the research on the living conditions satisfaction and community involvement from two prefabricated districts in Ukraine. Cheryomushki and Saltivka were compared in terms of comfort, convenience and movement, accessibility of daily services and attractiveness for potential buyers of apartments and tenants, and possible future development.

Considering the peculiarities of the two districts created during different periods of mass housing construction will help to understand the problems in these areas and predict the priority vectors for development.

3.2.1 The development history in the 1960-1990s

3.2.1.1 Odesa - Cheryomushki

Cheryomushki was the first micro-district of a new type, constructed in Odesa. However, efforts to build worker's settlements date back to the mid-1940s. The settlement of ship-wrights was built in several stages from 1946 to 1958 along Admiral Avenue. The establishment of the new district linked it with the city and formed in the mid-1950's cottage town for the military on the Sibirskaya and Marschrutnaya Streets (Figure 3.8). Since 1958, the construction of new Khrushchev housing estates has provided thousands of Odesa families with separate housing and giving a powerful impetus to the city's development. In 1961, the first new settlers received apartments in houses on the Southwest Massiv. In a short time, the city built up an area of 514 hectares and allocated housing for 35,000 families (Odesskiy Sait).

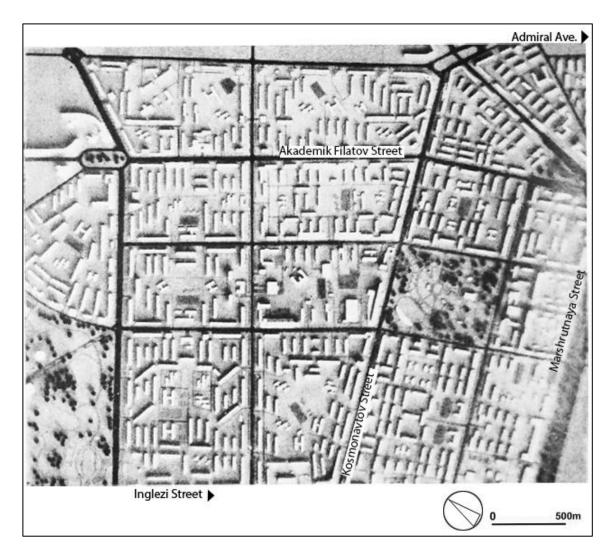


Figure 3.8 Variant of Cheryomushki development (model). arch. M.Sereda, I. Gribchenkova. The order of the buildings is more conceptual and will be changed in the final version, but the location of the park and the street network are already approved. Source: «Stroitelstvo I Architektura» Kyiv, 1964.

The construction of Cheryomushki marked the implementation of new approaches in various aspects of construction and planning. In the late 50s, the large block construction prevailed; the first houses were built from sawn blocks of shell rock, mined in the catacombs. By the mid-1960s the even side of Valentina Tereshkova Street was built up and then Varnenskaya, Academic Filatov, General Petrov, and Cosmonavtov streets. Then the builders transitioned to using concrete blocks and bricks, and from 1965 on the prefabricated panels. The panel housing construction became predominant in the late 1960s. The original housing type for Odesa was the series 1-464, a five-story building with a flat roof, used until 1965 when they introduced a slightly improved series 1-464a (Figure 3.9). Part of the district was planned to be located in 250 hectares (Figure 3.10). Its total living area was 230,000 square meters, and the population equaled to 26,000 people. This housing

estate was divided into five micro-districts, each ranging from 14 to 34 hectares. All residential buildings were 4- to 5-story structures. Assembling the house took an average of 3-4 months. At first, all the new houses were built along the tramline; later, the locals called it the "old massiv" unlike the "new massiv" stretching from Novoselov Street (now Academica Filatova) to the 25th Chapaevskaya Divisiya Street (Drozdovsky and Krasnova 2015). By 1969, State architecture control had criticized the quality of the buildings, which after less than ten years already looked unsatisfactory (Shevchenko 2017).

Since 1968, high-rise housing construction began, until that Cheryomushki was built entirely up with five-story houses. Starting in the late 1960s, architects have been creating accents in the urban fabric that would break the monotony of the "flat" Cheryomushki. This effort led to the construction of nine-story towers on the Filatova and Cosmonavtov Streets. In the early 1970s, the South-West was further revitalized by the high-rise buildings of research institutes «Ukrkolkhozproekt» and «Ukrjuzhbiosintez». Moreover, in 1981 Cheryomushki experienced another significant development — 16-story towers appeared on Varnenska Street (ibid.). In the fall of 1972, the first 12-story building in Odesa was completed — a house with a built-in store on Krasnova street. In 1976 the construction of three 14-story houses along Filatova street was completed (Odesskiy Sait).

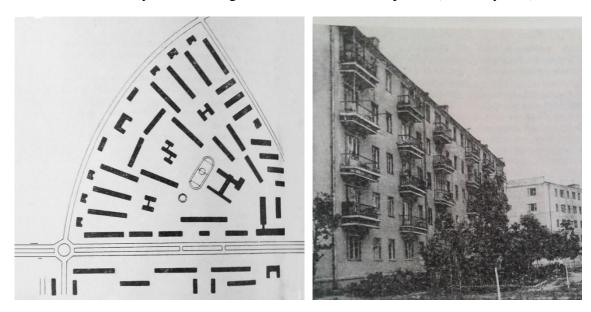


Figure 3.9 Fragment of the plan on General Petrov Street (left) and a photo of new development (right) in Odesa, Cheryomushki. Source: «Stroitelstvo I Architectura» 1967(5)

The modernization of the district has long been the topic of discussion between the city municipality and the local architects' community. Local professionals recognize the district holds a distinctive meaning for the city; it could become home to multifunction hubs and "gate to Odesa" thanks to its location near the airport. The proposal for the develop-

ment of Cheryomushki -2020 included the reconstruction of five-story apartment buildings, the construction of an educational center, and a gas station with automobile services (Yuzhnyi Kurjer 2017). However, like many other suggestions, this idea remained unrealized. Further proposals have included demolition of the old buildings and substitution with high-rise developments, a densification without proper infrastructure analysis.

3.2.1.2 Kharkiv - Saltivka

Saltivka belongs to the "younger generation" of prefabricated estates (Sobytia 2007). Before the 1960s, few smaller scattered areas were built up with three-story buildings (Tyurynka, Old Saltivka, Shevchenko town) around the district. The original layout and general plan of the Saltivka housing area were completed in 1963 by the Kharkiv branch of Giprograd. The Master plan for the district development, developed by the Kharkiv project team, was approved in 1967. The planners of the Kharkivproekt Institute, under the leadership of architects E. Schur, V. Lavrentyev, L. Tyulpa, and E. Hirsch, worked on the plan during 1975-1982 (Skubytska 2012).

Since that time, the district has become the main construction site of the city (Dyachenko 1977). The development was represented mainly by panel buildings of 9, 12, and 16-story sections and towers; 5-story sectional houses were rare. Separate high-rise buildings were constructed in 1967, mass construction of high-rises was performed in the 1970s. The Heroiv Pratsi Street saw the first sixteen-story apartment building in 1974. The following year, nine houses were built in Saltivka and in 1976 — already more than twenty. In 1975, in the 602nd micro-district, the construction of an experimental 24-story residential building for 180 apartments began, becoming a dominant feature of the whole area. In 1976, began the construction of a 522nd micro-district in the alluvial soils. The chosen location was favorable: near the forest park and the future channel on the river Kharkiv. However, the construction was challenging due to the soil conditions. The 522nd micro-district was one of the largest in the mass housing area, with square of around 70 hectares. It included 344 thousand square meters of housing, home to 38 thousand inhabitants. In constructing a new micro-district, serious attention was paid to improve the territory, housing comfort, and development complexity.

In the 1970s, the residential area rapidly expanded and planned to become the largest residential area in the Soviet Union (the projected population was 400 thousand people, mainly consisting of rural residents, recruited to the ranks of workers in large industrial enterprises). Several buildings have been added since then, but the state did not organize further development. The total population of "prefabricated" Saltivka, excluding private buildings and apartment buildings built before the mass building of the 1960s — 250 thousand people in 1977 (Dyachenko 1977) In 2010, the population reached 385 thousand people.

Construction continued until 1993, when the last micro-districts on the Rodnikovaya Street (north of the districts, divided by the natural springs) were accomplished (Figure 3.10). However, the area remained disconnected from essential infrastructure for a long time - the subway line was not accomplished, and the only connection was a bus, kindergartens, which were planned inside the big yards, were never built, and even play and sports grounds were not finished. The space between the buildings remained covered with soil and sand, removed during the construction process, which grew over with grass and volunteer planting. The The mid-1990s marked the most challenging period for this mass housing area since it faced the decline of an old communal services system, the wave of crime, and vandalism. Several high-rise buildings appeared in the micro-districts 522, 605, North Saltivka-1, and North Saltivka-2 during the late 1990s and the early 2000s. However, by the end of the 2000s, due to the relatively low cost of housing compared to the city center, Saltivka became unattractive for investors.

The fact that Saltivka was planned to be a satellite city positively influenced its infrastructure development. More sports, leisure, and shopping facilities were established. This planning also helped the district integrate into the existing city and became important when this plan was not accomplished. The good transport infrastructure and subway lines connecting the district to the city center and industrial areas further influenced its development. By the 2010s, active construction was renewed. Nowadays, high-rise towers keep appearing on empty plots. However, the security and legality of these buildings' construction are controversial, primarily due to complex sandy soils and the proximity of neighboring high-rise buildings.

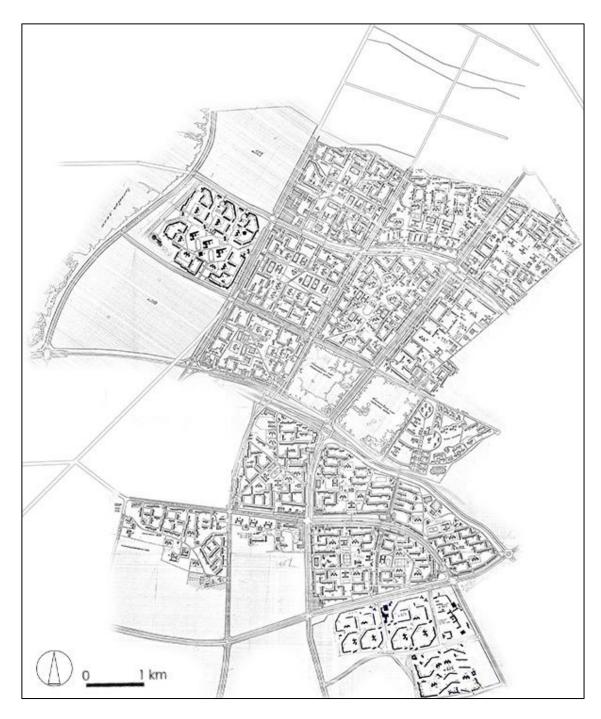


Figure 3.10 Detailed plan of developing district Saltivka. The micro-district scheme is formed by blocks and wide avenues. Districts of North Saltivka (top right) are not detailed yet, as well as the center of the district, with a planned socio-cultural center Western micro-districts 517 and 521 were not realized. Source: Kharkivproject archive, 1984.

3.2.2 Spatial Structure and Urban Layout

3.2.2.1 Odesa - Cheryomushki

Cheryomushki belongs to the first wave of mass housing, explaining its relatively simple and monotonous spatial structure. Unlike other residential areas in Odesa, Cheryomushki was built according to a once-approved plan, developed by the architects of the Odesa branch of Giprograd, including O. Dragomiretskaya, E. Vainshtein, G. Topuz, N. Shapovalenko, M. Savulkin, N. Milgram, L. Chazov, A. Krainev, and others (Sharapenko 1964). The territory was systematically developed along the diagonal, going from the first station of the Lustdorfskaya road, where the first pits were dug during spring of 1961, to the present-day street of the 25th Chapaevskaya division, where the "Khrushchevka housing" reached 7-8 years later. The area was constructed with a pattern that takes into account the direction of seasonal winds and the existing road network but does not consider the local topography. In the area of the intersection of the Cosmonavtov and Academika Filatova streets, a lake was drained during the construction of the micro-district (Odesskiy Sait).

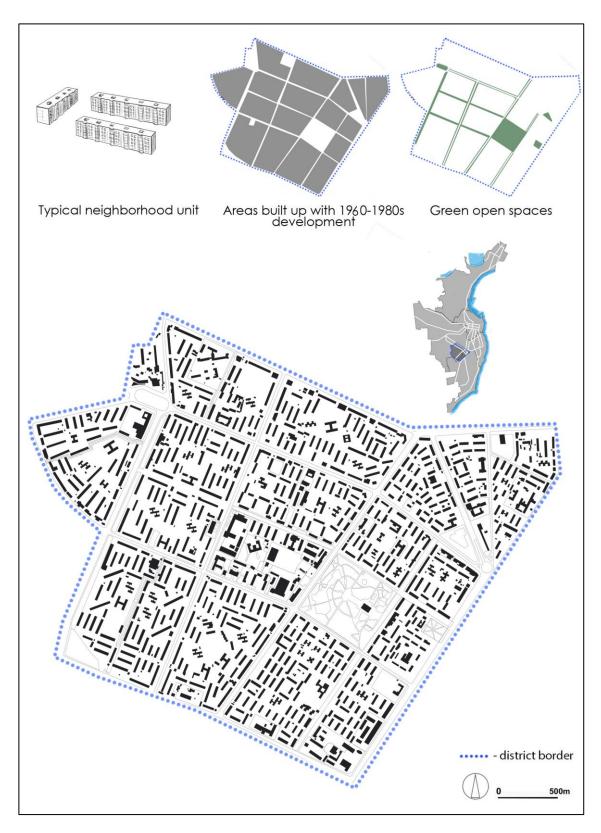


Figure 3.11 Plan of the Cheryomushki district, built according to the plan in the 1960-1980s, featuring broad green avenues separating homogenous development. Based on the Open source map, 2019.

Micro-districts were connected to the center of a residential area with a boulevard. The approach to house location was also innovative for Odesa — moving away from the old city quarter, with buildings around the perimeter and closed courtyards to the free placement of buildings on an angle to the road. The courtyards became opened to the city, creating an environment of a new kind, saturated with sunlight and fresh air (Shevchenko 2017). Compared to the old city center development, the new scheme represented an enlarged group of downtown blocks with services placed inside, away from automobile routes. Groups of 5-story houses formed square semi-private yards, collected into enlarged quarters. This scheme formed an urban texture partly similar to the a historic city texture, as seen in Figure 3.12. This typology helped to avoid a lack of insolation and provided fluent movement through the district.

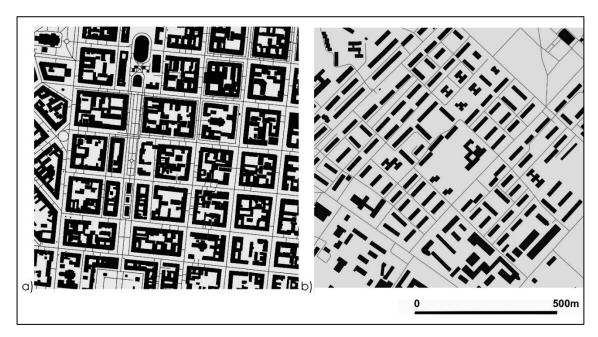


Figure 3.12 The urban fabric of Cheryomushki (b) can be related to the traditional structure of Odesa (a) forming safe inner yard territories for inhabitants. Based on the Open source map, 2019.

Wide highways divided buildings into blocks, isolating them from each other and the rest of the city, representing enclosed spaces. Often these connections are not enough equipped with safety means. The speed on these straight highways sometimes exceeds the permitted city limits, causing additional danger. Consequently, pedestrian movement is encouraged only inside the neighborhoods.

Another indicator of space division was the green zones marking the borders of areas available for pedestrian activities and games. Compared to the city center, the district was proudly called "green." Visual analysis estimates the public green spaces as sufficient; however, these zones are currently neglected and a source of frequent discontent. While

green zones were once considered an advantage of modernist spaces, nowadays they are left to grow freely without landscapers' supervision obscuring the light and reducing visibility and safety (Figure 3.13).



Figure 3.13 Uncontrolled greenery left to grow above the entrance and on the walls. Cheryomushki, Odesa – green space of the districts making it look better on summer days, but it covers the sight and at nights and in winter makes a walk through the yard dangerous, 2017.

The disadvantage of the Cheryomushki spatial scheme is the partly closed yards, which are dissolved by row development. Although intended to be penetrating and well-lit, the approach leaves all space to be public, erasing borders between street and yard. Many of these schemes were later altered by constructing illegal building extensions, shops, and numerous garages, which led to the closure of accessible open space in favor of private property that balanced the environment. While new commercial construction has not influence the structure of the district, it has primarily "filled the blanks" or transformed outdated infrastructure. It barely had any influence on the structure of the yards (Figure 3.14).



Figure 3.14 Transformation of the district structure. Since the completion of the district, many small structures were added. Since the number of kiosks and garages is too big, they are left out of the scheme. Source: Open Street Map, A. Schuplyakov 2020.

The residential yards were originally intended to become places of active social interaction, however, today their space is perceived more as areas for children and the elderly and partially occupied by garages and kiosks. One reason for this shift is the inflexible design, which gives the inhabitants minimal possibilities to shape their environment according to changing needs. When given the opportunity, people and businesses began actively working on the improvement of their buildings and environment. This has blurred the boundary between private and public spaces: ground floor apartments often expande outwards, forming private gardens. Additionally, patchwork interventions and vandalism have contributed to the negative image of the districts. The addition of structures, balconies, and extra rooms lowers the sight and security (Figure 3.15).

On the other hand, these interventions demonstrate the possibilities for transformation and the great potential of the territory. The spatial practices of the tenants significantly influence the perception and morphology of the yards and the district itself. The chaotic structures and shabby gardens often close and mark the territory where the residents feel a sense of belonging.





Figure 3.15 Examples of public space occupation resulting from dissatisfaction with the quality of dwelling and environment. Cheryomushki, Odesa, 2017

3.2.2.2 Kharkiv - Saltivka

The large district's area is limited by the flood plain north of Kharkiv river and the East regional road to former sovkhoz (State farm) "Ukrainka" and Kulinychi village, from the south by Nemyshlya river, from the West — Marshala Bazhanova and Yakira Streets. The district received its name because of the road that leads from the city center to the Old Saltiv settlement – the Saltiv highway, limiting the city (Figure 3.16). The north-eastern route extending to the Ring Road is prioritized for development (Virchenko and Mazurova 2014).

According to the Genplan¹, the city's main industrial and residential areas were formed in seven radial directions. The district is located along the prominent north-eastern radial axis, which defines the industrial and residential development of this part of the city (Nemets et al. 2017). Notably, the development was conducted from the outskirts to the center, in a "reverse order" (Khoroshkovatyi 2017). The planners attempted to consider the landscape as much as possible (Figure 3.16). The district's eastern edge is its highest point, and the rest of the district is gradually lowering in the direction of the river Kharkiv.

1

¹ Soviet name for Master plan

The green areas of the district follow the natural landscape, descending towards the riverside. The streets also function as drainage, leading the water towards the river. The landscaping and green development involved sufficient modification to the existing natural environment. A large water reservoir — the "Saltivka Sea", stretches from the 524th micro-district to the water park "Zhuravlevsky" or "Zhuravlevka" (located in the northwest of the district, marked with C). This water park, completed in the late 1970s. The park that spans 200 hectares was created on the river banks, and remains a popular leisure spot for residents. The eastern boundary of the district is delineated by the Nemyshlya River bed (lower edge of the district plan). Accordingly, the territory is formed both by natural and planning borders.

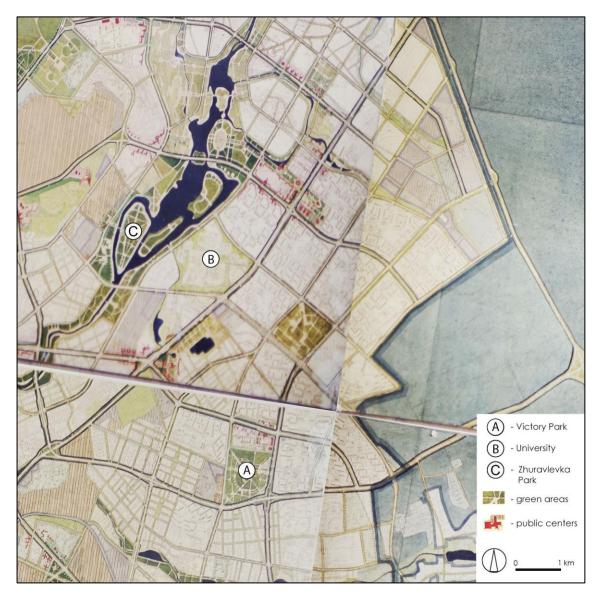


Figure 3.16 A fragment of Kharkiv Genplan from 1985. Vast park areas and public centers are marked with green and red. Great attention is paid to the landscape arrangement and connection of the district to the river plain. Source: Kharkivproekt Archives.

The composition center of East Saltivka (marked with an A in Figure 3.16) is organized around Victory Park. The surrounding micro-districts feature an enlarged semi-closed yard scheme, forming courtyards with extensive green spaces. The district is characterized by its division into large "square" micro-districts, which are divided by wide avenues, but the traditional streets inside the micro-district merge into the courtyards and disappear, as featured in Figure 3.17.



Figure 3.17 The urban fabric of Saltivka (b) has little in common with the traditional city center structure (a), letting the streets dissolve within the yard space. Based on the Open source map, 2019.

Due to the extended time and significant construction volume, architects architects had the opportunity to test different planning schemes and approaches for each micro-district; however, the schemes differ very little. The rows of micro-districts on the edges are built according to the free layout scheme such as in North Saltivka. The sections are placed freely in space, rotated at different angles (Figure 3.18). The disadvantage of this scheme is evident in the loss of yard space and the abundance of territories without solid borders. This open scheme results in one integral space, inside which there are no private or semi-private spaces left. Most of the territory is treated as a public space; the buildings have small front gardens flanked by driveways, with rare improvised privately created gardens. Additionally, there is a significant green area resource, which remains chaotic, as the construction around was problematic due to the area's complicated topography. The buildings often seem randomly located within the park, or rather a wasteland, as parts of the neighborhood were not finished.

Even though the district had been constructed for an extended period, combining spatial features of the second and third waves of standardized housing, it has poor space typology. Architectural language followed available structure types and industrial capacity, a significant role in the image is played not by a single building but by an ensemble. In many parts of the district, the same scheme was repeated multiple times. Most of the buildings belong to the same type (nine-story II-49, twelve-story II-57) with rare exceptions for 16-story buildings with "improved flats" (larger living spaces and loggias) and some later building series as dominant structures. This scheme created vertical plasticity of the facades, which was designed to contrast with the horizontal landscape, creating an effect seen only afar. On the ground level, the minimalist nature of the space does not allow for the creation of mental maps concerning any place or characteristic landmark.

The district's center also has reserved spaces for developing the trade and market complex, which was not fully realized. Significant areas remained reserved for unique, not typical development projects. At the same time, the number of commercial buildings, including housing and various types of services, has significantly increased in the district. Typically, these structures fill places deemed unsuitable for planning neighborhoods and are concentrated in popular areas with locals. The tendency towards densification is still present, as it meets the demand for increased services and convenience, mainly influencing the planned development, as seen from Figure 3.19. Although new buildings add variety to the existing structure, they wear out communications as the project was not foreseen (Makoveichuk 2019).

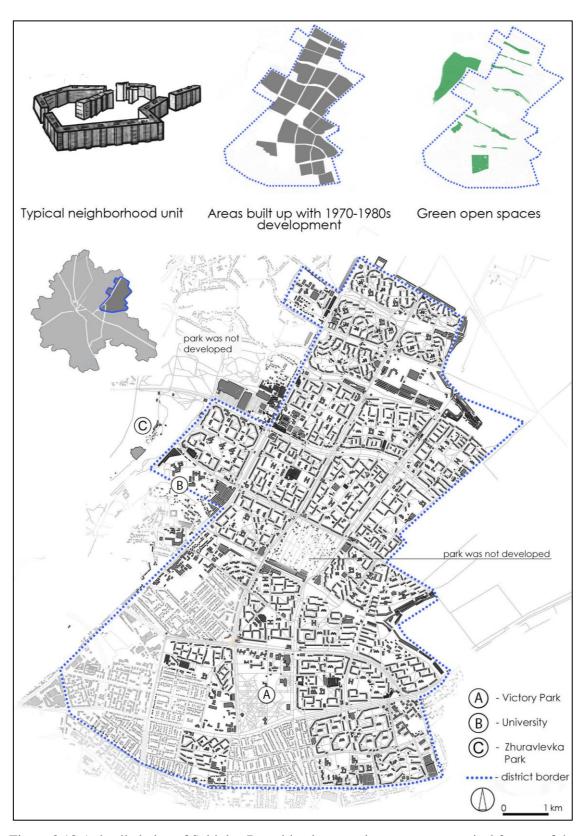


Figure 3.18 A detailed plan of Saltivka. Repetitive large-scale estates are a typical feature of the late 1970-1980s development. Kharkiv. 2019. Source: Open street map.



Figure 3.19 Transformation of the district structure after 1991. Over the years, construction has been significantly consolidated due to legal and semi-legal buildings that have closed construction or are concentrated near transit flows. Source: Open Street map, 2021.

Twenty-two large micro-districts were meant to serve as spatial units and core for the local community. However, due to the large population and size, similar properties of

space could not be mentally perceived as a whole. The lack of clear boundaries influences the feeling of territorial control and a sense of security. Due to the limited typology of space and the monotony of the buildings (repetitive courtyard spaces), the spatial boundaries turn into semantic ones. The population has adapted to perceive their courtyards and neighborhoods as familiar spaces, focusing on some small landmarks and small architectural forms that separate these spaces. For example, fences, garages, and cellars mark the borders of the space at the pedestrian level. In this case, a large architectural shape no longer plays a decisive role in space recognition. Even the courtyard space is not perceived as semi-private, and the boundaries of the yards are blurred (Figure 3.20). The users instead identify particular areas separated by smaller structures through which the territorial community can define itself.





Figure 3.20 The photo of Saltivka taken from the apartment. The typical yard space has no borders except for kindergartens/schools. There are no zoning, playgrounds, and leisure areas placed randomly. The small plots of soil near the buildings almost always serve for occasional gardening. Saltivka, Kharkiv, 2017. Source: photo by the author.

3.2.3 Programming and Function

The location of the building (central or peripheral) and distance to the functionally diverse areas define its priority status, sometimes more than the physical characteristics of the building itself, as Soviet planners already laid it down. The inhabitants of mass housing areas greeted the appearance of new services in the proximity to housing. The activity of commerce in the districts dramatically influences the quality of the living environment. However, commercial enterprises have nothing to do with the service level system used in micro-district planning, as they occupy the most suitable land plots and exploit them.

Shopping malls are an example of how differently private capital utilizes space, making a profit from functionally unused areas within districts. As a phenomenon of specific strategy in this aspect, malls are worthy of consideration because they usually appear in low-cost peripheral areas. As Skubytska puts it, the logic of capital differs from the Soviet planners and makes adjustments to the functioning of the urban space. The commerce development leads to both positive and negative outcome (2012). Malls substituted Soviet consumer services centers and universal stores, creating a protected space shielded from life's dangers, weather, dirt, and social disruptions. From the urban development perspective, the mall, now synonymous with community centers, occupies more and more squares in the city plan (Kravets and Sovsun 2012). In the time of degradation of openair public space they have become the only entertainment and leisure opportunity for the inhabitants, protected from elements of nature. Nevertheless, the lack of development in free and social diminishes the functional composition of the territory.

Organized commercial activity may have a positive effect on the neighborhood. Trade, catering, and service provision, generally improve the perception of the area by revitalizing streets that previously lacked activity or by renewing and expanding the functions of existing enterprises. These include daily services such as small shoe repair shops, dental offices, hairdressing salons, and pharmacies located on the first floors along pedestrian routes. However, business owners often introduce chaotic reorganizations, blocking street views and disrupting existing architectural ensembles, blocking the ways, and cluttering spaces designed for other functions. Commercial enterprises not only reduce areas for household needs, walking spaces, and children's playgrounds but are also responsible for reducing their appeal.

3.2.3.1 Odessa - Cheryomushki

As part of the strict system of urban services established in Soviet urban planning, neighborhoods were designed with specific functions based on their size and population. Each block of the Cheryomushki district followed this concept, with buildings and grounds designated for service facilities at three "levels" to meet residents' basic needs. The first level included schools, kindergartens, and stores; the second level offered episodic demand services such as hairdressers, laundries, post offices, and savings banks; and the third level provided target-oriented public services (Meerovich and Antonenko 2018). The functional system of Cheryomushki, like many other estates, faced criticism at the local level as early as the 1960s. Despite the declared multi-level service structure, most second and third-level services were not implemented on time or in sufficient volume. Residents also complained about the lack of leisure options in the district. "There are 50,000 people in our district. This is more than in Izmail, Belgorod-Dnestrovsky, and Kotovsky. But we don't have a stadium, a palace of culture, a cinema, or libraries. Yet all of these exist even in villages" — reported magazine readers (Meyzersky 2014). Unfortunately, the district did not receive the planned system of open-air pools and playground

networks due to planning and architectural simplifications. The only recreation area in the middle of the district, Gorky Park, gathered significant greenery and offered space for leisure and culture, including a cinema, café, playgrounds, and other facilities.

After 1991, the majority of the network of services and retailers was developed. Many apartments on the first floors, overlooking the boulevards, were converted into services and shops. Later, the intersections and red lines along pedestrian paths were partially built up. De-industrialization affected the district and local enterprises, which partially closed or changed their function, renting out space for other activities. Mass commercialization played a negative role in the external appearance of Cheryomushki; kiosks blocked the view at key road intersections, cluttered the transitways, and increased debris and noise levels. Most of the additions to buildings were illegal; however, they provided previously underdeveloped functions. Increased traffic flow created chaos on the roads and affected the inner spaces of the district: recreational and household functions, which had lately prevailed in the small inner yards, were replaced by unregulated parking.

Although the district possesses some infrastructure facilities, it does not compete with enterprises in the city center, as they mainly provide services to its residents. However, the district also received some unique functions—a cluster of individual project buildings located at the Kosmonavtov and General Petrov Street intersection. These include the Odesa branch of the Institute «Ukrkolhozproekt» (Drozdovsky and Krasnova 2015). The district's only industrial facilities include the "Radiozavod" plant, the ZhBI concrete products plant, both located on Varnenska Street. These buildings have lost their functions; for example, the large shopping complex built in 1983 on General Petrov Street has changed its function to a leisure area (Figure 3.21, B). On the other hand, daily services such as groceries and retail have moved to more preferable locations and expanded (Figure 3.21, A) (Meyzersky 2014).

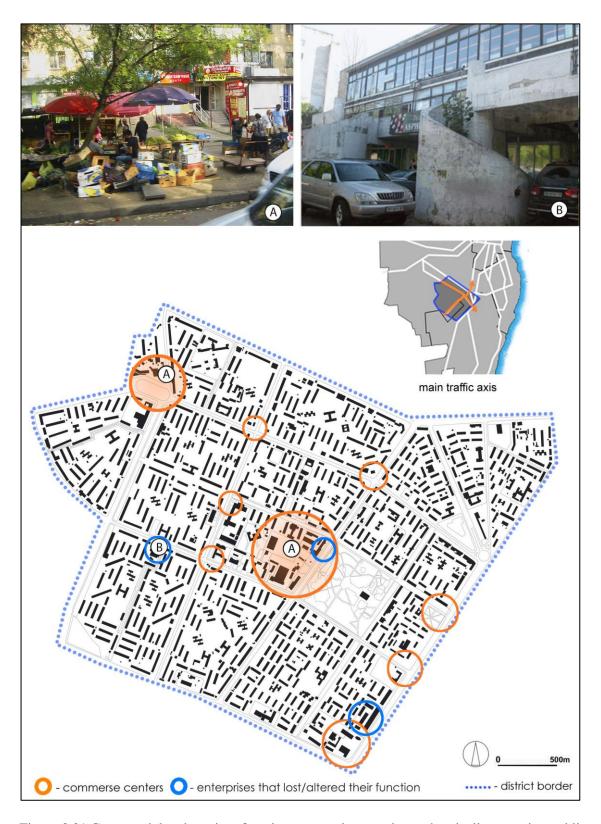


Figure 3.21 Commercial and services functions appear in new places chaotically capturing public space, instead, old enterprises (B) that had the buildings lost their function in Cheryomushki, Odesa, 2017.

New commercial centers have grown chaotically at the intersections of highways and transport lines or have captured existing buildings. New functions arise primarily along the most significant pedestrian currents within the neighborhoods — between several blocks or at intersections. These new functions often become a source of conflict, as stated by interviewees:

[quotation respondent C2] "...here we have a problem of illegal construction. New shops, cafes constantly appear everywhere near the roads, or the transport stops. They steal the space, which people can use for themselves; instead, they play loud music; put their fences, banners, and shiny advertisements. I am happy to see some of them being demolished, but most of them will stay here for years."

New functions made the pedestrian flows more active and dangerous: the street sight is covered by buildings and supply lines. Analyzing the activities of people in the dis-trict, one can state that almost all activities represent only basic needs (transit, waiting for transport, walks to reach service facility) according to classification by Jan Gehl (2018). Spaces that may attract people and allow them to stay longer are limited and hidden by other users (inner yards, gardens).

As the spaces remained the same type as planned, the social function pattern is mainly represented by the functions established earlier. Schools, kindergartens, and courtyards have barely changed, despite informal organizations and interest clubs that emerged in the early 1990s, offering a few street sports activities, graffiti, and occasionally, neighbors' groups.

Looking at the public grounds within the network of small yards, one can state that only some elements of the space are used as intended. The quality of playgrounds, sports facilities, and other grounds is very poor. Most objects and small architectural forms are made of concrete and metal, as these are the most durable materials.. Nevertheless, even these details with the time have deteriorated, frayed, rusted, or some of them had been stolen. Additionally, most of these designs do not meet any quality and safety standards. The maintenance is expected to be performed by local communal services, but too little is done in practice. In some cases, equipment for games is replaced or supplemented by modern ones, but these objects are also standardized, without considering the territory plan. The grounds do not have proper flooring for sports and games (most often using masonry sand and asphalt); there are no fences, and no division into zones. The users established new connections and elements and actively re-using old ones, focusing on the functional properties of the space and social networking rather than valuing the actual physical structure (as seen in Figure 3.22).





Figure 3.22 Left: Playground with two generations of equipment, re-invented as a leisure place for adults. Right: Basketball ring and a pull-up bar, sports ground with asphalt covering surrounded by garages in Cheryomushki, Odesa, 2017.

The uncertainty of boundaries and functional areas is inconvenient both on a large and small scale and creating a fertile ground for user conflicts:

[quotation respondent C1] "Here is a small yard. However, we have everything. Here are the garages, here is a playground, and here is another one [...]. Mothers complain that everybody is sitting here, near the playground, someone drinks and someone smokes. But where we [adult people] are supposed to go? I believe, the playgrounds have to receive a fence around. Who should do it? Parents should do it. This space is for their children, and they should take care of them, not us [...]."

3.2.3.2 Kharkiv - Saltivka

The functional structure of Saltivka has undergone many changes over the past three decades. Planned as a worker dormitory city, the area nevertheless received a significant amount of infrastructure facilities. A "focusing method" employed for the infrastructure of residential blocks during the planning allowed for the grouping of social and utility facilities in close proximity to transport stops. This method was used in the Ukrainian Soviet Republic for the first time and made it possible to enlarge the grid of major thoroughfares, reduce the number of intersections, increase the distance between transport stops to 800-900 meters, reduce the number of stops, and increase the overall speed of traffic by 20% (Bouryak et al. 2017). This method aligned with the idea of micro-districts. Applying it, planners did not limit the micro-district utilizing the street but formed it around the accessibility radius. For example, the intercrossing of the highway represented one large focus, while adjacent stops formed a minor radius focus. It was believed that

this approach would improve the plan and provide better infrastructure to the inhabitants throughout the district.

Another peculiarity is that no industrial enterprises were planned in the area, resulting in active daily labor migration. However, there were foreseen many retail shops and markets. In 1971 - 1975, numerous shops and establishments for domestic use were planned and built in the district, including a polyclinic, youth clubs, training centers, libraries, «pioneer rooms», and two cinemas. Social infrastructure included play- and sports grounds in almost every yard. In the eastern part, a large medical center for the Kharkiv region was built with 5,000 beds and a hostel for medical staff, becoming the biggest medical facility in the area. A pioneer palace with a swimming pool was built in the Victory park (micro-district #623), which received landscaping and entertainment facilities, including an amusement park with leisure zones for children and adults (Makoveichuk 2019). Additionally, several scientific research centers, planning, and training institutions were built in the district (Institutes for Pharmacology and Pedagogy), providing locals with additional work and study opportunities. Despite the impressive functional system (by Soviet standards) and further development, the area remains a dormitory to this day, leading to significant work migration to the city center.

Due to the demographic decline in the 1990s, many kindergartens were closed and converted into sports schools, clubs, offices, or other state institutions. In the mid-2000s, an increase in the birth rate caused the opposite imbalance: a lack of places in kindergartens and long waiting lists. The micro-districts built after the 1980s often suffer from low functional diversity. The micro-districts of North Saltivka did not receive many essential elements, including social infrastructure facilities, which is evident today. Kindergartens, schools, post offices, service shops appeared with significant delays after the completion of construction.

As shown in Figure 3.23 (A, B), there is an imbalance in the use of space around transport hubs and the periphery areas. The free layout allowed the placement of services between the buildings and the spacious yards, which were used for objects of social infrastructures, such as schools, kindergartens, and sports facilities. The growth of commerce, based on both old and new centers, continues, and market laws govern this process. However, commercial services continue to be concentrated around traffic arteries and 'focal points,' in proportion to the flow rate (A). This trend was already apparent during the development process but intensified with the rise of commercial development. In contrast to focal points and transit areas, the micro-districts on the periphery remain monotonous and neglected (B).

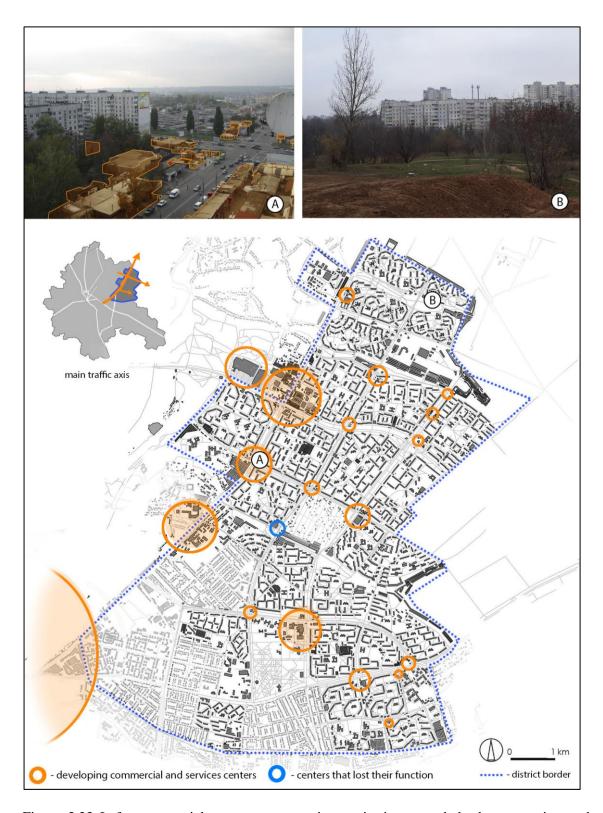


Figure 3.23 Left: commercial structures occupying territories around the busy crossing and transport stops (A) on the scheme. Saltivka, 2019, Kharkiv, Right: wasteland on the outskirts (B) North Saltivka, Kharkiv, 2019. Below: scheme of the biggest commercial centers (all of them located on the crossings with the strongest traffic flow) Source: photos and scheme by the author.

The functional development at the district level remains chaotic and primarily driven by the interests of investors and specific pinpoint projects. An example of this can be seen in the active development of the market and high-rise buildings near the Heroiv Pratsi subway station in the residential area of Saltivka in Kharkiv, seen in Figure 3.24. Despite the sanitized market, the environmental quality is expected to decline due to the many new residential buildings, which place additional pressure on infrastructure and limit space for quiet leisure, except for shopping centers and cafes.

In some instances, the commercialization of space for leisure and consumption functions as a gentrification mechanism, typical for post-Soviet cities. With the growing number of commercial objects, a division has formed among groups of inhabitants in the district, as people with lower incomes cannot afford to use these spaces, even though they are located nearby, and must seek alternatives. Commercializing public spaces is often perceived as a non-alternative development strategy as areas not occupied by stores, coffee shops, or kiosks are often abandoned (Lyasheva and Openko 2019).

The Saltovsky market suffers from overload: new residential complexes are pushing into the market area, making the limited public space even more crowded without introducing new functions. As seen in Figure 3.24, the construction of trade and leisure continues in the district, even though the engineering and transport infrastructure are at their limit. The social infrastructure, including the school network, is also overloaded (Makoveichuk 2019). The opposite situation is observed in the eastern part of the same residential area; at the intersection of two tram lines, a new social services center was built in 2017-2018, and the territory was cleared. The building diversified the monotonous architecture, became a center of attraction, and created jobs and potential for further infrastructure development, which will be discussed in the next subchapter (Figure 3.24, right).

New commercial structures partly cover the social infrastructure drawbacks, but some institutions remain irreplaceable. Functionally, the districts continue to be cut off from the city center, and this development gap remains significant. Currently, there is no development strategy in the district that could connect it with the rest of the city and make it attractive for investments.





Figure 3.24 Two examples of development in Saltivka mass housing area: commercial (on the left) and social (on the right). Kharkiv, 2017-2018. Photos by the author.

Inside the micro-districts, the range of services has become broader, including specialized shops, medical and pet stores, and branches of banks. In general, new enterprises improve the perception of the place by renewing and expanding the functions of already existing enterprises. However, business owners often introduce chaotic reorganization, closing the street view, disrupting existing ensembles, blocking pathways, and cluttering up spaces designed for other functions, as seen in Figure 3.25.

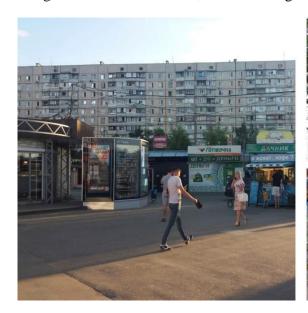




Figure 3.25 Commerce capturing the space in micro districts. A large market is blocking access to the subway station once was a small table market, the same as seen now in the inner space of the micro-district in Saltivka, Kharkiv, 2018. Sources: on the left: Bezrodnova A., on the right: by the author.

The inner spaces of every estate in Saltivka are removed from the centers of services, which gives rise to illegal construction and parking that reduce the free open space for citizens. To the great inconvenience of users, many small entrepreneurs independently addressed the arrangement of entrances and the area around their buildings. As a result, their structures do not follow safety standards, are uncomfortable, and have an unkempt appearance. Kiosks and shops, service workshops not only reduce areas designated for household needs, walking spaces, and children's playgrounds, but also generate extra garbage:

[quotation respondent S2] "...many services appeared closer to home. The disadvantage is that they use our territory as their own. Big cars coming to deliver goods, destroying our road in front of the house, small decoration. Then trash everywhere. They do not dispose of it right. There are plastic, cardboard boxes loaded in our [garbage]containers."

Other enterprises are directly lowering influence the safety and well-being of citizens:

[quotation respondent S3] "There are a lot of these so-called bars appeared around. Near tram stop, they opened one in a kiosk, also few near the market. These are not real cafes, no; just "drink-and-go" places. I constantly see alcoholics sleeping there..."

However, the violation of function is not exclusively caused by commerce—inhabitants themselves change the functional use of their yards. Due to the large number of private vehicles, they often transform leisure areas into parking lots. Garages, outbuildings, and, with rare exceptions, homemade sports equipment are examples of how citizens adapt the existing functional structure to their needs regardless of the authorities' or their neighbors' opinions.

Visual analysis of the territory shows that residents tend to seek out tools and available spaces to assert their presence within large yards (Figure 3.26). Particular attention is paid to marking semi-private and private spaces around buildings, shaded areas, and unused plots. There are two main purposes for territory appropriation: leisure and economic activities, aimed at reclaiming the territory for its users. It is noteworthy that self-occupied spaces are often selected because they hold little value to other users. These are usually shaded areas, walkways between houses, narrow plots under balconies, which are inconvenient for larger groups of users. In this way, illegal structures such as garages, underground cellars, or guerilla gardens are not questioned by other users but mark a border of semi-private and public spaces. Also, the visibility radius plays an important role. The territories visible from the windows of the first floors and often visited are perceived by residents as their own and better maintained. At the same time, remote areas that are less attractive for economic activities (e.g., transit areas or those with too much sunlight) remain neglected. Comparing the size of these spaces with larger public areas planned by the architects, one can conclude on which scale the community prefers to operate.



Figure 3.26 Examples of activities in public space, directed on territory appropriation: the place of rest, hobby, gardening, and food storage. Photos and sketches by the author.

3.2.4 Property and Management Structure

The previous subchapter has already illustrated the system of urban planning institutions and policymakers on the state and city level; however, the district level has its own peculiarities in each area. Since a large portion of the area remains under state ownership, multiple authorities manage this resource. Municipal companies struggle to maintain large territories effectively, limiting their activities to cleaning house territories and conducting occasional repairs. Housing cooperatives, entities that have persisted since the USSR, remain the most active in this process, but their budget and territory limit their actions. There are also occasional commercial managers. This multitude of management bodies creates a patchwork management structure, which often results in the low quality of the environment. The limited participation of tenants can be partly attributed to the complexity of this structure and the large scale of the buildings that makes possible only occasional contact with neighbors.

3.2.4.1 Odesa - Cheryomushki

Like most mass housing districts, Cheryomushki retained the former municipal communal services (ZhEK) structure. The district is divided into six areas of responsibility, not corresponding with the micro-district structure. Here, as in Saltivka, the communal offices continue to manage the organizational support, the maintenance, repair, and improvement of housing stock, non-residential constructions, adjoining territories, the performance of various services connected with daily needs. Communal offices take a minimal part in the maintenance of the territory. The budgets of these organizations are planned for years in advance, and they are unprepared to respond to current problems. Building component replacement and repair are often carried out only after critical damage has occurred. It shows that this type of territory management is ineffective and outdated. In recent years, political advertisement campaigns in the form of campaign gifts from local deputies have replaced many necessary activities. However, such initiatives cannot be considered reliable for improving the building's condition and environment. There is no mechanism to influence the quality and nature of these 'gifts,' while the issue of joint management of the territory remains acute.

In addition to the state form of ownership and privatized territories, the district also includes housing construction cooperatives and houses built by trade unions at their own expense (for teachers, doctors, port workers, and technicians). The main feature of cooperative houses was the so-called "cooperative sector" — a body that addressed problems and responded to residents' requests. Residents did not need to contact the city executive committee for resolution; they could handle issues locally. The cooperative sector existed until the 1990s when most of the flats were privatized. Currently, a movement to create co-owner associations (ACMB) is actively developing in the area (Figure 3.27). With the establishment of condominiums, more areas of the micro-district are being transferred out of state ownership, which, on one hand, improves control over the territory, but on the

other hand, can lead to organizational and management conflicts due to unclear regulations.

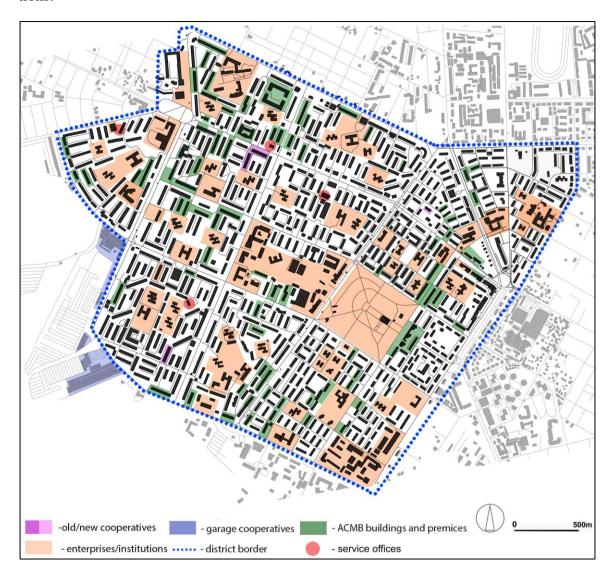


Figure 3.27 Management structure of Cheryomushki. Currently, the movement for the creation of ACMB is active in the district. Source: Open street map, 2021, List of ACMB organizations of Odessa.

The establishment of local NGOs marked a crucial step in the transformation of the management system. The first such organization, the Association of Condominiums "Development of Self-Government," was formed in 2017. The Association was created to to unite condominiums and cooperatives, protect their rights, foster an active and responsible civil society with a clear, unified stance, and support the development of residents' associations through rule-making practices. The Association does not have management responsibilities, receive funds from its members, replace house-level associations, or provide management personnel. The Association is a non-profit, non-political organization.

The key aspect of its agenda is to work with the public to involve homeowners in proposing and promoting reforms. Additionally, the goals of the organization are:

- Strengthen the role of the public in addressing housing and communal service issues by educating the society to become competent and responsible citizens, homeowners.
- Recognize citizens as property owners and active participants in these relationships, and stop the imposition of illegal actions and decisions against the will of owners and condominiums.
- Achieve a target of more than 50% of the housing stock managed by condominiums and owners' associations, fostering a stable consolidated position regarding the solution of major urban problems, thus creating a powerful regional coalition of condominiums, which the authorities cannot ignore (Association of condominiums "Development of Self-Government" 2017).

The organization cooperates with authorities on issues related to the regulatory and legal framework governing the operation of condominiums, housing cooperatives, and other forms of ownership associated with apartment buildings. It serves as a representative body advocating for the interests of the members of the Association in communication with local governments, working groups, and monopolists. It supports its members through the use of deputy appeals from local deputies and members of the Verkhovna Rada.

The partner organization at the city level is the Association for Innovative Development of Households. It is a protective-type association, meaning that does not take over buildings, replace chairpersons, or profit from its members. It is a human rights organization and its primary task is to safeguard the interests of all member condominiums. After establishing the ACBM, the next step is to unite condominiums to protect their rights at a higher level and develop a single consolidated position on controversial issues. Additionally, the organization conducts joint searches, prepares proposals, and develops new forms of associations, aiming to establish transparent and collaborative relationships with local self-government bodies, utilities, other organizations, and institutions of the state (Drahanov 2015). From this, it can be concluded that the associations of Cheryomushki are beginning to play a significant role in the area management. However, as noted by the organizations, the main obstacles to this process are the complexity of function delegation, lack of transparency, and bureaucratic difficulties (Odesa City Council 2017, Association of condominiums "Development of Self-Government" 2017).

3.2.4.2 Kharkiy - Saltiyka

Saltivka also has a hybrid management structure, combining plots and buildings under state ownership (maintained by state utility companies), service cooperative unions (currently, there are 26 in the district, each covering multiple buildings), and, rarely, Associations of Co-owners of Multistory Buildings. A peculiarity of the district (and the city) is the significant number of preserved cooperatives.

The housing cooperative is an organization that operates based on self-government, meaning its members have the right to independently decide on the cooperative's activities within the Ukrainian regulatory system and its own statute (Verkhovna Rada 2003). Housing cooperatives, established during the USSR, have preserved their territory and premises and continue to operate, selecting service providers and maintaining their territory. The management structure of a cooperative is similar to that of an Association of Co-owners of Multistory Buildings, consisting of a cooperative head, accountant, and hired service providers, with annual or unscheduled meetings.

A service cooperative is formed by uniting individuals or legal entities to provide services mainly to members of the cooperative and, in some cases, to others for carrying out activities. Service cooperative unions are based on construction cooperatives, created during the district's construction in the USSR era to accelerate housing provision with state credit for various trade unions. The cooperative members paid their share of the construction and then committed to paying service fees. According to the Law of Ukraine "On Cooperation," service cooperatives provide services to other members in amounts not exceeding 20 percent of the total turnover of the cooperative, as they are registered as non-profit organizations. A new level of organization is required for effective work with the numerous management entities, which could be established as the "Association for Support of Housing Cooperatives and ACMB" to cooperate with the Department of Housing in the city council. It is a non-profit economic association formed by voluntarily uniting economic entities to coordinate the activities of its members without allowing the Association to interfere in their economic activities or make management decisions regarding any member. Established with the support of the Kharkiv City Council and the Department of Housing, the Association protects its members' rights (Association for Support of Housing Cooperatives and ACMB). The Association assists its members in resolving disputes over cleaning area definitions with the Inspectorate for the Improvement of Kharkiv. It also identifies unscrupulous contractors who have provided substandard services in residential complexes, housing cooperatives, and condominiums, preventing these companies from participating in future tenders. The Association is also engaged in providing legal support to cooperations and ACMBs.

As the district's territory covers a large area, numerous branches of state utility companies provide various services. State-owned service companies remain active because most

buildings have not formed associations, and no collective decisions have been made. Service contracts for maintaining buildings, structures, and adjacent territories in apartment buildings are concluded between apartment owners or tenants and the balance holders or an authorized representative (such as associations or cooperatives)(Moroz 2019). However, many buildings remained with the old service providers (now re-named as state service companies) unable or reluctant to organize an ACMB. As a result, state companies continue to remain the most numerous service providers in the local market.

According to findings from the Nakipelo media group, Kharkiv significantly lags behind other large cities in Ukraine in establishing tenant associations. Currently, 6,814 multistory buildings in Kharkiv are owned by the state company Zhilkomservis. There are 555 multi-story buildings in the city united in registered condominiums, but only a few in the Saltivka district, as shown in Figure 3.28. Tenant organizations manage less than 10% of the territory. According to the media group, city services are not supporting the formation of independent associations (Polonchuk et al. 2019).

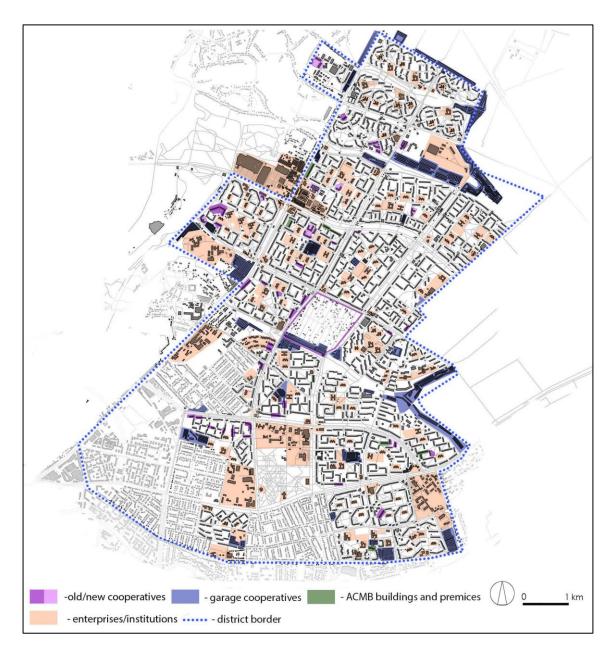


Figure 3.28 District plan with marking of territories managed by cooperatives and condominiums. Based on Open Street Map, 2021.

The Department of Housing and Communal Services at City Council coordinates the work of offices and state companies related to the housing and communal services for district residents, ensuring the implementation of state policy in the field of housing and communal services in the district, primarily on the organization and implementation of measures to reform it. In Kharkiv, there is a city program of support for housing cooperatives and ACMBs, for which funds are allocated annually. The program covers various areas, including major and routine building repairs, as well as area improvements. The program operates on a shared basis — residents must pay at least 25% of the cost of work,

with the remaining funds provided by the city budget (Kharkiv City Council 2011). However, the mechanisms for allocating funds are non-transparent and often subject to speculation by the city council. A visual analysis of municipal and cooperative yards reveals differences in the quality of playgrounds and equipment. Interviews with respondents support this observation.

[quotation respondent S1] "We live in the cooperative house. We do not have any play-ground near the house. There are four houses in our yard, three of them are cooperative, and one is municipal. That house has a playground. When my children go to play there, it happens for me to hear a lot from those people [from the municipal house]. Especially older women, who sit on the benches nearby. The most common complaint, kids are too loud, kids do not let them sleep [...] Every time we go for a walk, it ends up as a scandal. How could the child understand that this playground belongs to someone? There is no fence, there everyone is allowed playing."

[quotation respondent S2] "Our house stays in the line for two years to receive money for the asphalt. The road in [in front of the house] is covered with bumps and holes. We have to pay 25% of the price, but the Head [of cooperation] told me the people from the Council demand another 25% to speed up the allocation process."

Generally, those complaints related to the low quality of the common spaces and the absence of the costs for reparations. findings provide further empirical evidence that municipal and cooperative housing receive different levels of funding, leading to different sets of problems. The municipal houses often receive support from the city and sponsors (primarily politicians) to upgrade amenity spaces. Unfortunately, these upgrade are sponadic and cannot substitute planned improvements. However, the territory of a municipal house often has new play and sports facilities, while cooperative housing often has less developed amenity spaces. In contrast, the condition of cooperative buildings tends to be better, as their funds are focused on building maintenance, including sanitation, rather than on the surrounding territory. Additionally, multiple buildings with different management organizations often share the same inner yard without clearly defined borders, which leads to conflicts.

3.2.5 Social activity and Transformation approaches

The low level of resident responsibility for the public space within their estates results from ambiguities and conflicts in the management system. It is observed in Ukraine as well as in many countries of Eastern Europe. Mass housing neighborhoods are generally known for little to no social activity and cooperation between the residents. Low resident participation in the planning process can be attributed to a lack of interest from local authorities and social housing companies (Richard Sendi et al. 2009). However, it is only one part of the explanation.

The social impact of mass housing was not a topic of discussion before the dissolution of the USSR Although the discussion about safety and social problems of socialist (and modernist) housing became popular in the West as early as the 1970s, it did not affect the housing programs. As a result, panel districts continued to be developed both in the USSR and the Eastern Bloc (Urban 2012). State programs in USSR followed the ideological line of "unification of society", disregarding the various socio-cultural ties. This approach brought the opposite result as soon as the state disappeared from the real estate market. Wildly contrasting was the prevailing reality in the 1990s, so far from socialist ideals. The Soviet housing policies left an indifference toward common property as a legacy. For instance, "Subotnik" — the working Saturday, symbolizing the joint effort of the population to beautify the neighborhood — had faded with the age of the socialist era. As Novaković notes, it seemed that the practical application of the neighborhood unit did not always succeed in fostering a sense of community; rather, it often contributed to social fragmentation at the city level (2017).

Gnatiuk and Oreshchenko identified integrated socio-spatial processes within the mass housing neighborhoods as polarization, commercialization, de-industrialization, revitalization, and certain manifestations of segregation and gentrification. Their study supports the thesis of the critical role of commercialization in transforming the neighborhood's space, including the conversion of amenity spaces, buildings, and industrial facilities in the district (2017). The emergence of commerce, de-industrialization, and their complex impact on the quality of neighborhoods has already been discussed. However, it's important not to overlook social and other contributing factors.

The poor infrastructure and transport networks of mass housing districts across Eastrn Europe led to social isolation and negatively affected the image of these districts, which soon began to be labeled as "ghettos" in comparison to their Western counterparts. Although the term "mass housing" is often associated with ethnic ghettos in America and Western Europe, the situation differs from these scenarios. Temelova repeatedly concluded that the increasing crime fears rate is not linked to the changing population or location of the district (2016). Neglected territories, poor visibility due to extraneous structures, unkempt greenery, and the lack of public oversight can be considered real problems. These factors reinforce the crime situation and contribute to the area's overall negative perception (Temelova and Slezáková 2014). Post-socialist "ghettoization" is connected to rapid economic changes, the wage-rent correlation, and migration. These processes were also tied to design and planning issues. It remains unclear brought into action whether the scale of mass housing impacts relationships among residents. However, it does not foster any community spirit and is not associated with cultural traditions; it does not help create unions and associations. Despite efforts to educate people through new architecture, Socialist planners were unsuccessful. According to a 1984 survey, 60% of Moscow housing compound residents had no contact with their neighbors. Another survey from 1974 showed that around 40% were unsatisfied with the monotony and the "addresslessness" of their homes (Urban 2012). Instead of becoming a space for cultivating a new society, mass housing areas instead became a random social mix, where people from different social and professional backgrounds were set together. From this, it can be concluded that the lack of territorial markers causes the low activity of residents. Planning and maintenance of the micro-districts certainly influenced the social dynamics. As Sendi et al. state, the design of public space determines its character and, consequently, its appeal for various uses, whether positive or negative. Poor design often leads to these places being seen as "anonymous" (2009). This observation is fully confirmed by the state of mass housing areas studied; however, they do not entirely conform to global pattern.

Although this concept is subjective, many areas of mass development often fall into negative ratings in media; a series of interviews gave a mixed assessment of security in Cheryomushki and Saltivka (Appendix). There was also no clear evidence of active community self-organization within these micro-district territories.

The term 'ghetto' is incorrectly applied to describe mass housing districts, as Ukrainian cities were originally developed as multi-ethnic (Rudnytskyi and Duda 2010). (Shirochin 2017). Simultaneously suburbanization process reactivated on the outskirts of the cities, 10-30 km away from the center, transforming satellite villages into elite residential towns, which are a more desirable form of living (Rudnytskyi and Duda 2010). The primary factor influencing the ability of an ordinary citizen is a financial resource independent from a work position or party. Ukrainian post-Soviet areas went through a crisis of the 1990s and the following social stratification. Sharply emerging social inequality led to spatial rotations: the wealthy sought prestigious housing in central, high-status parts of the city. At the same time, those who wanted to improve their financial situation sold the property and moved to more modest homes and areas s was uneven and not controlled by the state, and almost no support (subsidies) was provided to the poor in housing purchases. Under these conditions, neither a solid social housing system nor a broad rental market emerged where apartments were owned by companies or concentrated within specific neighborhoods (Lyasheva 2018). However, contrary to prognoses, mass housing areas did not turn into ghettos, remaining stable within their segment (Neugebauer and Kovacs 2015). There is no discrimination of residents based on national, racial, or religious grounds, and the population remains economically heterogeneous.

Discussing the opposite phenomenon, the gentrification in post-Soviet cities, Oleg Golubchikov, who studies uneven spatial transformations in post-Soviet societies, highlights the period 2007 - 2008, which coincided with the economic crisis, as a time of accelerated gentrification of the centers of large cities and crowding out the population to the outskirts. This displacement was carried out through market mechanisms, and sometimes involved criminal measures. Subsequently, elite real estate appeared on the market, signifying Ukraine's involvement in a global process shared by all post-socialist countries (Oleg Golubchikov 2019).

At the same time, gated communities emerged as a new feature in large cities when free amenity spaces of mass housing areas began to be redeveloped in the mid-1990s. The gentrification appeared after the addition of new housing in the old districts. Citizens who can afford apartments in these new housing complexes generally have a higher socioeconomic status than the "indigenous" tenants of the districts in which new buildings appear. This shift leads to spatial polarization, often marked by fences around housing complexes that enclose squares, kindergartens, parking lots, restaurants, and beauty salons designed exclusively for their residents (Lyasheva 2018). However, the older, less-lucky inhabitants are not entirely displaced from these districts by new development since their right to reside in the same area is protected by property ownership. While rising property values may act as a filter for the next generation of owners, this process is gradual. Residents often describe gated communities as closed perimeters, with minimal risk of encountering strangers (Mezentsev et al. 2018). However, fences do not effectively address crime and safety issues as intended. "Those who intend to commit unlawful actions can still find a way into the territory" - confess territory manager, reported by Lutska (2019). It was noted that social conflicts increase due to the spatial appropriation by gated communities (Richard Sendi et al. 2009). This observation was confirmed by interviews conducted by researchers in and around a new development in Kyiv. The interviews revealed that the relationship between new residents and residents of the old Soviet micro-district was strained. Both groups kept their distance, showing unease both when entering the other group's territory and meetings on neutral territory such as schools, supermarket, web forums (Mezentsev et al. 2018).

The housing market structure remains unclear due to privatization and the "hidden" housing market, and a limited percentage of new housing developments within socialist-era neighborhoods. In a single area, socio-spatial transformation occurs unevenly and in a mixed manner, so it is impossible to classify as either ghettoization or gentrification. However, this phenomenon may develop. As confirmed by an expert from the private service company 'Avantazh,' cooperatives and associations imply territorial control. If cooperation or co-owner association received the territory into the ownership, they would have a right to close it entirely, even the driveway inside the yard (Spasova 2017). Potentially, any of the created ACMB and new development can become a gated community, especially, if it gains control over the adjacent territory and contributes to social segregation. Therefore, it is essential to carefully consider the processes and manifestations of social activity in micro-districts. This was done by examining experiences of social engagement and transformation in both areas.

3.2.5.1 Odesa - Cheryomushki

The relatively small scale of Cheryomushki compared to the later developments suggests that social cohesion should be stronger. Nevertheless, the visual analysis of the courtyards

indicates a trend toward individual maintenance rather than collective control over shared areas. This observation is reinforced by the presence of individual spatial interventions in the courtyards, and interviewees could not recall any significant transformation done with the neighbors. One of the most important questions asked during these short interviews was participation in improvements on the local level. As mentioned, the primary role in the management and transformation of the micro-district territory remains to be played by communal enterprises. Nearly all respondents acknowledged that the efforts of communal services to maintain the area are insufficient. None of the interviewees could clearly identify which specific actions are the duty of communal services or articulate their expectations of them. However, the tenants' activity is also sporadic and minimal.

[quotation respondent C1] "Tenants are only those who maintain the territory. Painting benches and cobblestones, whiten trees, and plant flowers. I sometimes water flowers".

[quotation respondent C6] "Tenants cooperate and maintain the territory, solve all problems, do repairments, add improvements, landscaping works, communal services do nothing."

Nevertheless, there are isolated cases of transformation in the area, supported by activists and political forces. A non-governmental public organization, «Nashi Cheryomushki» (eng. «Our Cheryomushki»), has been active in the district since 2010.

The organization operates with the goal of promoting an active development of the district's infrastructure, fostering active forms of public participation in landscape gardening and beautification of the area, improving recreational conditions, helping in the organization of additional recreation zones for all generations of residents. The purpose of the organization is to gradually enhance the condition of Cheryomushki's courtyards by involving tenants in this process and radically change the residents' attitudes toward their environment, ecological culture, encouragement to a sense of responsibility. «Nashi Cheryomushki» has implemented various projects, including a sports and creative club for youth and children, an annual mini-football tournament (League of Cheryomushki), local fairs and holidays (Nashi Cheryomushki 2015). Among others, the organization advises residents on legal issues and publishes an online newspaper that provides informational and advocacy content.

The organization also facilitates physical improvements to courtyard spaces with resident participation through contests «The best courtyard of Cheryomushki» or «The Best Mural of Cheryomushki». As part of the contest, (2019) local communities competed for a grant of UAH 100,000 and a professional landscape or design coach (depending on the content of the project) to assist with the idea implementation. A prerequisite for participation in the competition was the inclusion of applications featuring existing transformations and an already formed group of yard activists. Other participants in the project also received support to complete their projects.

The organization exsibits signs of a political agenda, though its methods extend beyond merely gaining electoral support with beautification. The activities of «Nashi Cheryomushki» are aimed at educating and strengthening the spirit of the community. While some projects have served as political platforms for local deputies, their true value lies in organizing leisure activities and educating tenants about their rights and potential opportunities for neighborhood improvements.

Courtyard transformation on Varnenska Street

An example of successful work performed in collaboration between professional associations and co-owners' associations also involved the use of foreign financial aid. The project «Let's design a yard in Cheryomushki» has become part of the «CHANGING PLACES / ЗМІНЮЮЧИ МІСЦЯ» program implemented under the «Leipzig Prize for Integrated Development in Ukraine».

A non-governmental, public educational platform, Impact Hub Odesa initiated the semi-private yard improvement in Cheryomushki district (Figure 3.29). In February 2017, in partnership with the City Club «Odesa: Strategy-2050» and the Association of AIDO «Development of Self-Government» Impact Hub organized a workshop within the framework of the project «Changing Places», which received the prestigious Leipzig Prize for Integrated Urban Development (financed by the German government) for about UAH 400 000: it was decided to spend this amount on the project realization (Fedoseeva 2018). The public two-day built upon work initiated during the Trilateral Project «Unloved Heritage: Socialist city» organized by KIT and OSCEA, which took place in September 2017. The participants of the new project studied the results of this workshop.



Figure 3.29 Example of the problem analysis and mapping on the area plan. Cheryomushki, Odesa. Source: workshop publication (Smirnova et al. 2018).

The event brought together the local community with professionals from the Odesa State Academy of Civil Engineering and Architecture (OSACEA). Activists, architects, and local inhabitants united to reorganize the yard space. The approved project was based on strict zoning to separate public areas from parking zones with the help of various elements, such as parklets, green dividers (also used to hide an unattractive pipeline). The task also included finding a suitable yard and a community, willing to contribute to and maintain the improvements. Noteworthy is the fact that initially, several tenants' associations initially competed to use the grant money, but in the end, only the one that agreed to take the resulting improvements to the balance remained. Once all the aspects were finalized, the yard space was transformed, except for the parking, which was impossible to remove at that moment. The whole transformation, including the planning phase, took around six months. Further work on improvement and maintenance of the yard space has to be conducted by the local co-owner association. The chosen Association already performed several renovations in the apartment building but did not have funds to continue work on the territory (Grad 2018).

The mission of this pilot project was to create a precedent of redesigning the yard spaces, go through all stages of this process, describe it, and develop methodological instructions those wishing to replicate a similar experience in their own yards (Figure 3.30). The booklet, published by the project organization team, describes all project stages in a tutorial format (Smirnova M., et al. 2018).

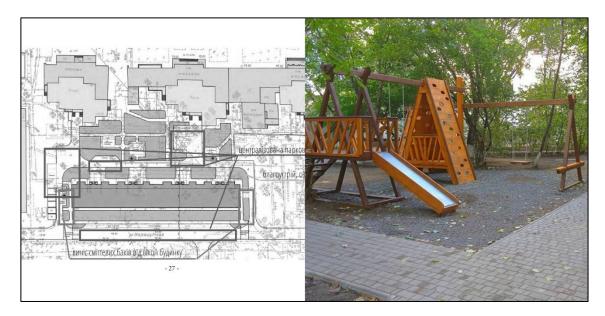


Figure 3.30 Plan of the yard foreseen after transformation (on the left), a fragment of realization (on the right) Cheryomushki, Odesa. Source: Maria Smirnova.

In 2019 the heads of co-owners associations continued working on the improvement, working on pavement and greenery. The anticipated success depends on the ability of the

remaining houses to form tenant associations and, collectively, establish a single housing association to distribute the financial burden effectively. Local construction and architecture experts, however, remained skeptical about that (Panfilov 2019).

3.2.5.2 Kharkiv - Saltivka

In large panel districts such as Saltivka, it is difficult to assess the degree of social interaction. However, as it was evident from the interviews, some residents tend to perform minor improvements independently. Evidence of this is seen in the adjacent territories: planting trees and flowers, painting and repairing work on the sports or playgrounds, and fencing. Changing people's perceptions and making them feel responsible for the accomplished projects requires a long training and cumulative learning process, pilot projects, workshops, and other events to develop civil identity and community responsibility. Reviewed transformation scenarios show that the active participation of all stakeholders is required for comprehensive realization strategy. Single actions initiated by inhabitants may be effective on a small scale, but for further development, they need financial resources, as well as professional and, in most cases, legal support.

[quotation respondent S1] "Last spring, our family decided to intervene in the [common] yard with few improvements. My elder son (13) bought some paint from his birthday money and went [with his parents] to paint those rusty cloth standers. Then there was an improvised chain to forbid parking in the yard. He painted it too. How much he had to listen! Everyone, who was in the yard, older women, pedestrians, were criticizing him. No one cared about his initiative to make something beautiful, and everyone argued if he was allowed to do so or how to do it right. Afterward, some older women asked him to come to their benches [benches near their house entrance hall] and paint them too. I asked, don't they have any children to take care of the space around their house? Why my son has to work for them"?

The majority of residents often reject attempts to unite, and the population remains skeptical and cautious of the authorities' initiatives. There were several cases of protests against development along the green zone in the Saltivka neighborhoods, which eventually ended with the protesters' victory. However, such cases are rare.

Localization of investment in public space, micro-district 522

Transformation of the district public space with negligible municipal costs and minimal interference with the built environment took place in Saltivka in micro-district 522 in the early 2010s. It can be said that the environment created in the neighborhood by the Soviet planners had set priorities for change. The location of the micro-district—side by side with the recreation area (Zhuravlevsky Hydropark)—is a desirable place to live. The long green alley, stretching from inside the district, serves as a central public axis of movement, unlike the intricate routes through the yards, providing a connection between opposite sides of the micro-district. On both sides of the central axis are three schools, six

kindergartens, a children's and youth art school, and other facilities. Courtyards with more private interior space are also linked to this axis. With the green "pockets" of the yards, the line creates a pleasant, continuous pedestrian space (Figure 3.31).



Figure 3.31 Micro-district 522: green pockets as common leisure space along the green alley, Kharkiv, Saltivka 2018.

For a long time, this area acked lighting during the night hours, was intensively used through the daytime due to schools and pedestrian transit, but at night, the security situation remained unsatisfactory. the absence of stops along the way did not encourage people to spend time there. In the early 2000s, authorities significantly increased the number of opportunities for secure public life within the micro-district through low-cost measures. Transformations greatly improved the population's satisfaction with leisure and public life (Skubytska 2012). The increase in safety levels was achieved by introducing new, powerful light posts for night hours, turning the alley into a safe promenade across the district. Secondly, the new asphalt and benches were added. Because of its length, the alley soon became the favorite place for families and youth. Free access to the school grounds and playground facilities also helped make the neighborhood center a place for lively social life in the evenings and on the weekends. The reconstruction of playgrounds also contributed to the improved safety level. They began to function as safe "pockets" along the alley (Figure 3.32). In summer, until the late hours, adults are controlling the area while watching their children. In summer, until the late hours, adults control the area while watching their children. They now define the nature of the alley's space. The transit path serving the central axis was transformed into a stretched recreational space, full of activities until the late hours.

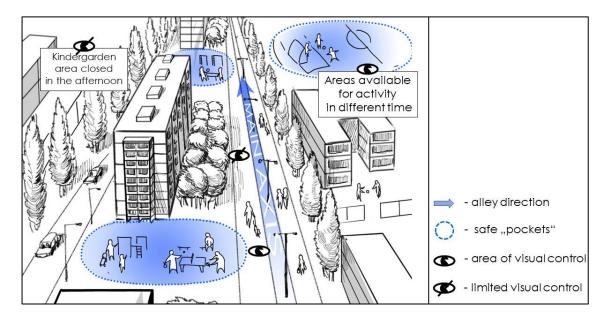


Figure 3.32 Spatial organization along the central axis inside of the micro-district N522 in Saltivka, Kharkiv. The pockets and open territories along the alley provide public access at any time of the day and contribute to safety. Sketch by the author.

Well-equipped sports grounds are rare in the mass housing area. This scarcity often led to youth occupying playgrounds, creating tension. The most straightforward transformation involved installing basketball hoops and table tennis tables, which attracted youth in the evening hours. That initiantive helped to increase control of spaces, traditionally known as «urban wasteland».

The perception of the schools grounds has changed from being cut off from the rest of the neighborhood to being always open, allowing the general public to use the facilities. Sports fields and gardens around schools now perform different functions depending on the time of day. In the mornings, schoolchildren have sports lessons, and in the evenings, adults come to play football, volleyball, and work out. These playgrounds serve as spaces for health, leisure, and socialization activities. Small local changes have improved the safety situation and perception of the district by locals. The functional use of previously unoccupied territories and the absence of barriers to development in the neighborhood contribute to the socialization of its inhabitants. (Skubytska 2012).

The drawbacks of this intervention were an unresolved issues with overgrown and cluttered areas in the immediate vicinity of buildings and their safety, Chaotic kiosks were not removed, and parking remained unorganized. The improvement focused solely on a specific site and did not extend to neighboring areas. It is important to note that these transformations occurred without the active participation of the locals, although their involvement is a significant factor in enhancing the security of the area.

Urban Park in the micro-district 607

Another revitalization project in the same district was initiated by the NGO «Street Culture» together with the NGO «Urban reforms». The park was the result of two years of ongoing work with representatives of the municipality. The discussion of the final project took place in late 2020 as an online presentation due to lockdown limitations; however, the interested public was encouraged to participate. The idea behind it was to give a voice (and space) to representatives of street culture, sportspeople, artists, and youth clubs (based in local schools) and involve them in the creation process. The concept of space was developed jointly with representatives of local street subcultures (Kulichenko 2021).

The concept of the park was relatively new for a city dominated by festive and parade park spaces. Along with a more democratic space, the creators tried to restore the green network of the micro-district and offer new scenarios for interaction. A vacant plot with a ruined playground near the new social services center, favorably located at the intersection of public transportation on Traktorastroitelei Street was chosen as the future park. The concept included grounds for various activities: skateboarding, parkour, workout, streetball, soccer, roller-skating, and a two-story building for an urban hub with administration, sanitary facilities, equipment rental, service workshops, and a cafe. Part of the funds earned in the hub was expected to spend on maintaining the grounds. The park was designed to become a new point of attraction for neighborhood residents and a focal point for new (planned) bike paths (Street Culture 2020).

After the presentation, the Kharkiv City Council announced the playground reconstruction at the beginning of 2021. The respective departments announced the tender and completed it in spring, followed by the immediate start of construction (Shupenko 2021). According to the City Council, this project became a part of the pilot municipal program for supporting sport and leisure (Kulichenko 2021).

However, the finished project differs significantly from the presented version (Figure 3.33). Not only does it have a smaller, simplified layout, but it also includes only outdoor facilities. Regardless of the initial public discussion, the involvement of residents in the planning and construction process did not occur. Moreover, the information campaign was limited to a single poster, which triggered an adverse public reaction, with fears that illegal housing construction might take place.

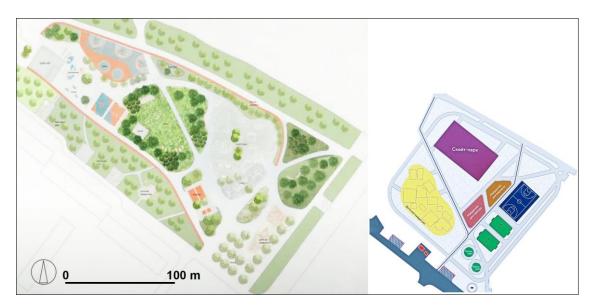


Figure 3.33 Comparison of two projects. On the left: Presented layout of the urban park (source: still from the presentation video «Presentation of the Urban Park/Center Concept at Saltivka» by NGO Street Culture). On the right: the plan of the realized project (from a poster put on the fence during the construction), Saltivka, Kharkiv 2021.

Funding also was a subject to municipality decisions. The spent amount equals 1.3 million euros, and the financing model remained non-transparent. As the Kharkiv Anti-Corruption Center points out, neither prices for sports infrastructure facilities nor quotations were published (Voinitsky and Ilchenko 2021). The newly constructed urban park included grounds and equipment for skateboarding, parkour, workout, streetball, indoor soccer, freestyle on scooters, and roller-skating (Figure 3.34). The pompous opening was celebrated with a Street Culture festival; the 4th round of the Street Culture Games - 2021 competition was held at the location opening.





Figure 3.34 The view of the finalized Urban Park: budget optimization resulted in shortages on lawns, trees, and wasteland around Saltivka, Kharkiv, 2021.

The resulting location will undoubtedly have a positive impact on the quality of the neighborhood environment, as it is unparalleled. However, the collaboration between the municipality and the population cannot be acknowledged, as the latter was excluded from the process. Even the aforementioned non-governmental organizations had minimal influence on the final outcome. Notably, the opening of the new park prompted residents to demand a second one in the neighboring micro-district. Their request was expressed through a petition published on the City's website (Gorun 2021).

Public initiative in the micro-district 524

An example of public involvement in the district space is the small-scale transformation carried out in micro-district #524, which took place during the fall 2015. Its goal was to transform the common area as a pilot project that could inspire further guerilla interventions. The selected site did not have a clear status as it was located in the courtyard between high-rise buildings and was used as a site by their residents, while at the same time remaining open and walkable. Financial support was provided by the NGOs Critical Thinking and the Heinrich-Böll-Foundation in Ukraine.

The selected site did not have a clear status, as it was located in the courtyard between high-rise buildings and was used as a site by their residents, but at the same time remained open and walkable. It included a small square surrounded by public green space but did not have a recreational function. The project included renovating an old stage area, transforming the space into the "parley stage," a meeting point. In the future, the development of the entire area was planned with the involvement of local communities. One of the plans was to apply similar approaches at various public places of the district selected during the event. However, this plan was not fulfilled.

Simultaneously, work was carried out with different age groups. The project was viewed as a catalyst for uniting communities and fostering their future development (Sergatskova 2015). The idea behind the project was to stimulate communication and activism within the community of one micro-district. To achieve this, activists organized two weekendlong "Neighbors' festivals" to promote their ideas and encourage inhabitants to participate in the transformation. During this time, people were invited to attend various workshops and lectures on community development. This project included renovating an old stage area, adding new benches, a screen, and stairs, and transforming it into a meeting place (Figure 3.35).

Although the transformation was successful in the short term, it did not contribute to the formation of a local community or further initiatives in the district. The further use of the structures was not planned. At present, the initiative has not continued.



Figure 3.35 On the left: the concept of the transformation, on the right: photo of the transformed space, Sources: Vasilisa Schogoleva, Joe Plommer.

In mass housing neighborhoods, people tend to organize into small tenant groups of one entrance hall (20–40 flats) or cooperation of several entrance halls or the complete building. The size of newly organized condominiums can also vary. From the interviews coducted, one can conclude that the residents lack a comprehensive understanding and a willingness to oversee the long transformation process.

Despite the growing number of residents' associations, they cannot offer an alternative to managing the territory in opposition to commercial and municipal owners. Their creation remains very problematic due to imperfect legislation, but this is not the only drawback. It is also important to note the many organizational problems, as well as financial issues involved in condominium creation. Indicated by the expert Ekaterina Spasova:

ES: "If we are talking about the old house, a house from the 60s-80s, it needs many repairs. If the residents of this house want to organize an ACMB, first they need to contact the local service company, provide a list with problems, and only after the corresponding actions accept a transfer of ownership. They should also realize which territory they could use for their needs and control".

In that case, the existence of condominiums becomes questionable. Although this decision is more favorable for the city, it is no longer responsible for maintaining the house and its territory. The question remains whether condominiums can be effective for maintaining micro-district territory.

ES: "Condominiums, as they exist, are able to function under three circumstances:

- The building is new.
- The income of all residents is (nearly) equal.
- There are no problems with the documents.

I wouldn't recommend the organization of condominiums in the old houses with many problems and residents of varying incomes and statuses. Currently, the quality of local service companies (ZhEK, ZhSK) is deficient. Private companies should provide services for the buildings, gradually substituting the municipal services. But not under the condominium model. It is unsuitable in the current economic situation. The only advantage of a condominium is its transparency" (Spasova 2017).

3.3 Existing revitalization policies and transformation practices

Efforts to create city development strategies for post-industrial cities and districts have been made in Ukraine since the early 1990s. The decentralization reform was intended to give more powers to local communities and was actively propagated. Strengthening communities became the new goal declared in the Decentralization Law of 2015. This step was a prerequisite for development and partnership with the European Union, as declared in the country's development direction in 2015. "Ukrainian society does not receive direct investment from European (or other international) funds unlike Romania, Hungary, Poland, or other European Union member states. However, over the past five years, Ukraine has received hundreds of millions of euros from various humanitarian funds and EU development funds (mainly for the Donbas) as well as similar amounts from U.S. funds" (Yuzvyak 2019). Aid packages were episodic and varied in length and degree of foreign participation. In 2018, the discussion about complex reconstruction arose again. The Ministry of Regional Development insisted on comprehensive territory restoration, including infrastructure. There is an expansion of cooperation between public authorities and the community actors, which has created a variety of representatives, including both individuals and representatives of public organizations. Institutions taking part in the development process can be divided into two large groups:

- political institutions, including regional authorities and local municipalities, as well as temporary and permanent commissions and committees that have acquired or delegated certain powers
- <u>civil society institutions</u>, including public organizations, trade unions, charities, religious organizations, non-governmental media, and other non-profit societies and institutions. (Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine 2019).

According to the proposed scheme, three groups of actors have the right to initiate the reconstruction: 1) local governments, which would rely on a technical survey of the housing stock, and independently seek investors through transparent auctions; 2) residents who apply to the municipalities with a request to resettle them from emergency buildings; and also 3) investors who could benefit from the quarter reconstruction (Bobrova et al. 2018). Due to the lack of costs in communities and municipalities, there is a danger, that investors may become the key figure in the revitalization process and densifying territories to maximize profit without providing an infrastructure. In this case, balancing the actors and providing mutual control is very important, including increasing the share of local community influence and enabling democratic planning.

The next subchapter will consider cases of joint design and transformation, as well as urban movements with the participation of citizens.

This work accepts three basic kinds of urban space transformation regarding the main actors:

- changes initiated and led by the municipality or state "top-down"
- changes supported by civil society institutions (private investors or foundations) third parties
- changes driven by public actors, local tenants, the "grassroots initiative."

It is challenging to distinguish an isolated type because each case involves the interaction of various subjects; therefore, conditionally, transformations should be conditionally categorized based on the funding source and original initiative. The most notable examples of the transformation will be examined in detail in the following sub-sections to highlight the role and cooperation between these actors.

3.3.1 Changes initiated by municipalities

This category includes changes carried out according to the "top-down" model, regarding the primary role of the state or municipality in the transformation process, as the source of funding and a contractor or sometimes executor. "Top-down" programs and transformations in Ukraine have not achieved significant success. For example, development strategies of most cities are declared on paper to receive better funding from the state, remain disconnected from reality and fail to address the challenges faced by post-Soviet cities.

As an example, in the city of Kirovograd (now Kropyvnytskyi), the municipal strategy «Yelisavetgrad — a Creative City» (2011-2012) was introduced as part of the city's

branding effort and an attempt to break away from its Soviet past. The program's activities included several actions, which only vaguely resembled the urban development strategy.

The adopted «Strategy of economic and social development» featured in the section titled«Strategic directions and tasks of city economic and social development», which included the subdivision «Contemporary Creative City». However, the exact meaning behind the terms "creative" and "social" remain unclear. The strategy reflected the municipality's vision of city development. "It turns out that the strategic direction of the city's creative development aimed to "refresh the appearance of the city, turning it into a holistic architectural ensemble that harmoniously combines historic areas and modern buildings, park areas, housing, social and business infrastructure..." (quotation: Strategy of economic and social development of the city of Kirovograd p.19). The strategy also included renewal and reconstruction of the city center and riverfront, enhancements to the master plan, and the installation of numerous art objects in public spaces. However, it remains unclear, how these individual actions were aligned with the strategy's aims, or how would they help to realize declared goals. The strategy also failed to provide opportunities or mechanisms for public oversight and input. Perhaps, the only practical alternative to the ideas of the municipality was the monthly contest for grants dedicated to citizens. The selection of funded projects was based on proposals submitted by individuals unaffiliated with political parties or other public organizations. Projects were related to the environmental education (such as bicycle parking, a fir tree created by students from waste paper, and teaching schoolchildren about the effect of radon gas); social (information and entertainment club for youth and adults, «Library of the Sky», «Higher Folk School» for pensioners), development «Creative industry» (recording studio) and improvements in urban space («City-Garden») (Ilchenko 2013). However, it was noted that a very few people used this grant to improve their living environment or change the social situation in the city.

Another example, Svitlovodsk, a typical industrial city neighboring Kropyvnytskyi. The strategic development plan intended for implementation by 2010, developed within the framework of the Ukrainian-American peer-learning program. The main prerequisite for participation in this program, titled «Partnership of Communities,» was announced by the local government and representatives of the American side. As Tyminsky reported, "the development of the Svitlovodsk Strategic Plan by 2010, which aimed to consolidate all local actors and attract the attention of both Ukrainian and potential foreign investors to the city" (2013a). The plan focused on current economic development but overlooked the local character. It also failed to establish a communication platform for different actors. As a result, the development perspective for Svitlovodsk was just another plan that remained on paper.

None of these projects significantly improved the conditions of post-Soviet cities. The fiasco of the municipal strategies was rooted in two main points. The first was failed communication, which resulted in citizen inactivity, alienated from municipal decision-making. Actions taken on the initiative of the city authorities failed to get a response from citizens and creative communities; they were carried out without addressing real needs and lacked organizational and financial support. Meanwhile, sporadic resident-led initiatives connected to the project lacked professional support. One of the biggest obstacles for transformation progress from their side was mistrust of top-down initiatives and an inability to act collectively. Second, the city authorities did not tend did not pair symbolic activities (renaming, branding) with meaningful steps in other areas of urban life. As Ilchenko mentions, ultimately lacked genuine collaboration among the program's initiators, urban planning specialists, cultural institution employees, and residents (Ilchenko 2013).

3.3.2 Expert and third-party initiatives

When municipalities and residents fail to communicate and work together effectively, it is essential to involve a third party to mediate. Additionally, they can supply the project with social and technical data and oversee its progress to completion. The decentralization of local budgets is still not fully clarified; though initiative groups across the country have already tested various approaches. Some non-governmental organizations and companies independently involve people in the planning processes. These actions and professional intervention fall within the framework of participatory planning developed by Robert Chambers (PRA — Participatory Reflection And Action). This involves teaching the basics and encouraging participants to undertake parts (if not all) of the initiative themselves, and carry responsibility for the outcome without relying on help from authorities promoting the sharing of experiences and knowledge through various media (Fisher 2001). The "third parties" model is perceived by communities as a mere luck, but it should be viewed as a beginning of a long, resource-taking project. In these cases, small-scale transformations are deliberate, targeting neighborhood communities, which are expected to maintain the condition of buildings and territories independently in the future. There is already some experience of third parties involved in the transformation processes in Ukraine that could be valuable for the research, as they can help to understand the limitations and drawbacks of these projects. Several foundations and international programs have been active in Ukraine to promote sustainable development, sanitation, and the renewal of mass housing districts.

One of these organizations is «Kompetenzzentrum Großsiedlungen e.V.» (Eng. «Competence Center Large Housing»), Berlin. The Center is a civil society platform for exchanging experiences on the sustainable design of large housing estates built throughout Europe between the 1920s and 1980s (Kompetenzzentrum Großsiedlungen e.V. 2018). The Center has already conducted numerous evaluation and peer-sharing projects in Ukraine, in

the cities of Zhovkva and Dnipropetrovsk (2011–2012), supporting sustainable and energy-saving initiatives for buildings and neighborhoods. Focus points in Ukraine included the evaluation of energy efficiency and the development of new energy-saving strategies, including consulting and teaching for authorities and citizens. German experts acted as coordinators and provided technical support. As part of the program, the team selected five residential buildings and analyzed the possibility of their comprehensive thermal modernization. Unfortunately, the project's potential was limited due to the gaps in Ukrainian legislation on energy-saving and modernization. Another problem the absence of clear ownership of the buildings, land plots, and adjacent territories, as the project participants admitted (Dyenkov 2018).

In addition to imperfect legislation, another obstacle was the inactivity of citizens and distrust of government and experts. This gradually changed with the introduction of substantial financial support from the state in later stages. The project's core was focused on constant engagement with people, encouraging the creation of condominiums, and introducing energy-efficient technologies in their homes.

Even with substantial limitations, the first pilot project was beneficial, demonstrating the possibilities of these transformations and establishing a relationship between the municipality and the local community, which let to a further series of projects funded by the state and sponsors. In addition to its direct outcomes, the project identified priority areas for community and city development. As one of the first such projects in the country it served as a marker of readiness and signaled future changes. Among the recommendations made by the project's authors, the following are particularly noteworthy:

- improvement of the legal framework and implementation of existing regulations
- institutionalization of professional public relations
- introduction of transparent tendering and awarding processes for modernization projects
- establishment of a public bank for the transparent allocation of promotional funds and promotional loans
- encouragement of condominium creation
- issuance of feasible building standards (Protz 2013).

One of the key conclusions of the project report is that private initiatives require political support both in Germany and in Ukraine to ensure that the necessary skills and the responsible reform actors to connect effectively (Protz 2013). This approach was implemented in Zhovkva. The municipal actors were actively working with the community. Their goal was to foster a culture of resource-saving and were even willing to reimburse

up to 70% of the cost of energy efficiency measures, provided that residents create condominiums and initiate the process. The town has attracted more than one million euros of financial support from the EU for energy efficiency projects, which was twice its annual budget (Dyenkov 2018).

IWO — «Initiative Wohnungswirtschaft Osteuropa e.V.» (eng. «Initiative Housing Eastern Europe») united private and public partners from Germany and other countries. Their common goal was to support the market-based, sustainable, ecological, and socially responsible development of housing and construction in Eastern Europe (beyond the EU), the Caucasus, and Central Asia (IWO 2009). The Initiative supported the sustainable development of Ukrainian households by organizing various seminars and training sessions for local specialists and activists (in the cities of Lviv and Kherson, 2012–2013). The project's goal was to create a professional network in the country, providing materials and facilitating experience exchange (IWO 2015).

IWO and Kompetenzzentrum Großsiedlungen e.V with support from the German Federal Ministry for Economic Affairs and Energy (BMWi) and German Energy Agency (dena), united for the program «Model project German-Ukrainian Efficiency Houses» (2016–2018) (IWO 2018). The program offered renovation concepts and supported on the stages of an organization to technical support. On the Ukrainian side, 20 multi-family buildings with different types of ownership (co-owner associations, communal, state) were selected. The homeowners covered costs for the renovation. A significant part of the preparation time was dedicated to coordinating details with the apartment owners.

"These experiences showed that in many places, there was a lack of trust in state institutions, bank loans, or specialist consultants," said project manager Bastian Stenzel. "Communicating with homeowners plays a central role in this context" (dena 2016).

In 2019, the organizations initiated the pilot project «First Shots,» which aimed to demonstrate the possibilities of condominium renovation. During this phase, pilot projects were evaluated in terms of energy efficiency and social structure The results of the pilot project served as an argument for Ukrainian citizens to assume more responsibility for energy conservation in their homes and thereby reduce their utility bills. (dena 2019). The gathered experiences were intended to serve as a reference for the Energy Efficiency Fund and as an example for other towns. The project helped to highlight the potential financial and environmental benefits of various renovation measures, showcasing the impact achieved when municipal incentives complemented financial support from the Fund. In the long term, the labor market could also benefit from the increased demand for renovation experts in the building sector (Geiger 2019). Nevertheless, despite the project's achievements, the experts highlighted the following problems that slowed down the renovation and development of old housing stock: poorly developed financing instruments,

partly unclear ownership structures, and inadequate normative bases. Therefore, a conceptual framework at the national level and the rapid implementation of exemplary comprehensive renovations in practice were required (Stenzel 2018).

The undeniable advantage of the project was the constant education of the tenants about the basics of building maintenance and transformation. Co-owner associations received information about conceivable financing models and possibilities to contribute to the renovation costs, as well as constant expert support. This gave reason to believe that the existing tenants' associations would be able to monitor the house's condition independently and maintain the territory after the assistance period was completed. It was impossible to rely on third parties, coordinators, or sponsors, as it did not guarantee the successful accomplishment of the project and its long-lasting effect. The most critical time for the preservation of transformations began when the aid period was over. Considering the described situations, one could conclude that there was a need to develop advanced legislation and the emergence of a participatory culture. This was possible only in the case of the interaction of all participants and a balance of powers.

3.3.3 Public initiatives

The participatory planning movement remains largely unknown in Ukraine, where development is traditionally "beamed down," even without notifying what exactly is going to appear behind the construction site fence. It is traditionally not promoted or taught, and the population is not interested in urban transformation, preferring the role of onlooker rather than taking part. The World Bank report states that involving citizen participation and consultations in planning is often not followed. As a result, the process is subject to the will of political officials; consequently, proper public outreach is not ensured, and citizens' suggestions during public meetings are sometimes subject to approval by national or local authorities(Restrepo Cadavid and Quintero E. 2015). However, in rare cases, protest movements or activities of outside actors can stimulate people's participation.

One of the most successful grassroots initiatives started as a protest against the developers of public space, which began in the Lviv mass housing area Sychiv in 2014. The uniqueness of this project is that a group of people decided to transform not only the territory directly adjacent to their housing, as it was in the case of Odessa, but also contributed to the emergence of a sense of responsibility for the entire area. At the transformation starting point, a group of residents opposed to four-story construction on the square 0,36 ha in front, which was already shared by local school and residential houses. The place, although outdated, served as a transit and recreation area. The initial conflict manifested people's doubts about the legality of the construction and their intentions to obstruct it by brute force, which received prolongation as a legal argument, the arrangement of the existing square, and discussions about how this space should look in the future (Mysak

2019). The inhabitants created the NGO "Better Sykhiv" and began to cooperate with the authorities on the issues of arranging the square.

After the project for the supermarket and the documents for construction were recognized as illegal, the square was returned to community property and rearranged into a leisure area for all generations with benches, new trees, barrier-free pavement, and a sculpture of the Virgin Mary (Svush 2018). The Square of Dignity — the new name of the space — became a crowd-funded project and continues to receive new elements and greenery. Participants of the Urban Initiative "Group 109" developed a project to reconstruct the square. The recreational function was reinforced; simultaneously, the area remained free for a slow, relaxed walk-through. The geometry of the elements invites people to communicate in small groups — thanks to the round benches made for the project. An essential piece of public space is its inclusion — removed curbs and added tactile tiles marking main directions. Financial issues were covered by the donations of local inhabitants, sponsors, and the municipality: the city financed the pavement, trees, and furniture sponsored by residents and sponsors (Figure 3.36) (Better Sychiv 2017).



Figure 3.36 Realized Dignity Square (on the left) and Dovzhenko square project by «Group 109» (on the right) Source: Better Sykhiv.

While the transformation was ongoing, the NGO, from a small group of active citizens, grew into an organization with a wide network of connections, including the municipality, public organizations, and schools.

Following success in the legal argument, the position of the community was reinforced. The organization started other projects, including festivals, ecology education, and the next big transformation — revitalizing the central district square in front of the O. Dovzhenko cinema. This project received support from the city.

In 2016, Lviv's «Institute for Spatial Development» and NGO «Better Sykhiv» organized an extensive survey of residents of the district to determine public opinion about the revitalization of the central square and the cinema building. The survey results were incorporated into the conditions of the national contest for the project to update the square. An eco-holiday and youth workshop in the summer of 2017 were organized to draw attention to the location, and in 2018, the Urban Initiative «Group 109» won the new contest. A petition about the square redesign collected enough signatures, and the municipality approved its funding. The project aims to create a more democratic space, as all inhabitants should be able to use the main district square daily. The design of the square includes several scenarios for its use, increasing the inclusivity of the space and buildings (such as replacing stairs with one-level ramps) and preserving the openness of the space as the main feature of the district. Lowering the square level allows for the creation of an amphitheater and a fountain that can be used as a skating rink. The construction also includes developing bicycle infrastructure in cooperation with the local bicycle movement (Better Sychiv 2017).

The NGO "Better Sykhiv" gained significant meaning for the development of mass housing areas in Ukraine through the publication of the development strategy for Sychiv: "Sychiv 2027: District for Everybody." This strategy serves as both a roadmap for further development transformations and a manifesto for the movement. Developed by the City Institute — a local communal organization and analytical center — it includes three main priorities aimed at making the district "Interesting, barrier-free, and green." This document serves as an excellent example of how a residential area can develop into effective and well-organized cooperation between the city, investors, micro-communities, and non-governmental organizations. To date, the project continues to develop successfully. This success has been made possible due to the well-coordinated interaction with project partners and the promotion of their ideas on the agenda of city authorities.

The hypothesis is that small local projects could become centers of communication, socialization, and association for people living in the same territory. Such initiatives should be started by conscious enthusiasts who want to change their home territory, are ready to manage the space themselves, and encourage their neighbors to participate. Unfortunately, this is not always the case. Any completed project (a stage, a shed, a communication unit) is ultimately a tool that requires care, and there is a need for organizers who take responsibility for it and oversee its maintenance. When a project concludes and volunteers stop managing it, regular service becomes necessary, which requires funds to sustain its functioning. That is why there is a need for a responsible body (private or communal) to take care of it. However, there is a limitation on the size and costs that private entities can manage. To bring small transformations to a systemic level and foster a culture of self-responsible territory management, help from the city is necessary. Therefore, either from the beginning or after completing the project's first stage, it is essential to initiate negotiations with city authorities to conduct the next phase in partnership.

3.4 Problems and Challenges

3.4.1 Legislation issues

Ukraine remains in a transitional state in terms of urban territory development. The shifts from the centralized planning system to a decentralized one occurred unevenly, through a slow back-and-forth process that is yet to be completed. The complexity and abstraction of planning laws, the absence of political will, and a high level of bureaucracy and corruption continue to slow down the process of reform. There is no national framework for integrated urban development to guide the government and other urban actors (Zuiev 2020).

The problems with legislation related to planning and land use are multi-layered. The Ministry of Regional Development, Construction, and Housing and Communal Services of Ukraine, in the 2019 "Concept of Public Management in the Field of Urban Development," described the main issues as follows:

- non-codification of town planning legislation, the inconsistency of its norms with each other and with other sectoral legislation
- •uncertainty and contradiction of the conceptual apparatus
- excessive discretionary powers of the authorities and officials specified by law
- uncertainty of responsibility or insufficient responsibility for non-compliance with laws in the field of urban development
- the inefficiency of state and public control over the exercise of authority and local self-government bodies
- inconsistency of town planning and land legislation regarding the establishment and change of purpose of land plots, the complicated procedure for transferring ownership (use) of land plots under real estate objects
- non-transparency land and state and communal property formation processes and their disposal, no public control
- low interest of local authorities in the development of spatial planning documentation
- lack of legislatively defined concepts, procedures, and mechanisms for implementing public control in the field of urban development

• ineffectiveness of public councils and other advisory bodies activities, the lack of transparency of their formation (Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine 2019).

From this list, the study suggests that the most critical issues are the inconsistency of planning legislation, the non-transparent mechanisms of ownership procedures, and the absence of mechanisms for public control.

3.4.1.1 Inconsistency of planning legislation

The legislation and detailed planning documentation rarely include mass housing areas because of their "peripheral space" status. This status is explained by the common fact that, unlike central public spaces with citywide significance (such as city squares and parks), these spaces are not prioritized by local authorities. They are often overlooked regarding political legitimacy, economic competitiveness, social cohesion, city image, and marketability (Madanipour 2004). It also explains the absence of a city target program for the improvement of courtyards and adjoining territories. The lack of financial mechanisms to support these spaces not only fails to address the problem but also aggravates it each year. As a result, the inner spaces of districts lose their appearance, becoming places for car parking, kiosks, other structures, and garbage. The modern legal framework hardly regulates the transformation process, considering residential zones only from the perspective of the master plan, without addressing the details.

3.4.1.2 Non-transparent mechanism of ownership procedures

As Richard Sendi et al. stated, management and maintenance problems were closely related to the unresolved ownership rights of the land within housing estates. (Richard Sendi et al. 2009). The privatization of the former public housing stock resulted in the distribution of dwellings to their tenants while leaving the land in the ownership of the municipality or third parties, creating significant confusion that remains unresolved. Currently, ACMBs are being encouraged to privatize land plots of amenity land. These obligations are too burdensome for the small budgets of tenant associations, which is why the issue of territory maintenance has not yet been resolved. At the same time, commercial actors are capturing plots through non-transparent rent and purchase mechanisms. This contradiction directly influences the further development of the district space, and it is a crucial land management problem in mass housing districts. Multiple owners and managers of the territory create organizational chaos and conflicts, as the spaces are actively exploited by commercial interests and occupied by new developments. As foreign experts have already observed, poorly developed legislation on land and building ownership makes revitalization progress extremely difficult (Stenzel 2018; Protz 2013). Without proper legislation, successful examples of revitalization will continue to remain exceptions.

3.4.1.3 Public control

The controller of the bureaucratic apparatus is civil society, which typically functions in developed democratic states. In Soviet Ukraine, a civil society based on the European model never existed and was not formed during the years of independence. (Rachinsky and Panteleichuk 2010). In such circumstances, the national management bureaucracy remains largely uncontrolled. Land allocation for development is expensive, complex, and often corrupt, as the country's land market is still in the process of formation. This process remains predominantly non-transparent, leaving significant room for abuse. Municipalities depend on rental income, while municipal officials rely on bribes from developers (Lyasheva 2019). This is well illustrated by the example of Kharkiv, where residents demonstrate a lack of awareness regarding their rights and opportunities, while the municipality pursues its own interests (Polonchuk et al. 2019). The global issue with district revitalization which causes delays is that despite the transformations in the legislative sphere, and the beginnings of horizontal-level organization, the system remains strictly vertically structured, preventing a democratic change emerging at the grassroots level. When the state initiates any changes, communication among other actors often devolves into simply following top-down orders. These ideas are frequently perceived as alien and fail to gain support. In many cases, the imbalance of power and differing visions of the process make cooperation impossible. Despite the active reform processes in Ukraine in recent years, there are currently no effective legislative initiatives or development strategies addressing the broad range of issues in revitalization.

3.4.2 Problems of planning practices and institutions

According to contemporary views on the development of Ukrainian cities, they inherited a vertically-led Soviet system of settlements and failed to fully adapt to a market economy on the one hand. On the other hand, they have also fallen into a global crisis of modernism and industrial production. (Tyminsky 2013b) The same applies to planning practices and instruments, which partly remain dependent on the old model, while new actors struggle to develop contemporary ones. As Mezentsev et al. state, the inhomogeneity of space-economy in Ukraine is caused by the influence inherited from Soviet-era factors (level of economic development, production, and employment structure) and the emergence of new factors primarily linked to economic development under market conditions: private property, infrastructure, and politics. (2015). This nonconformity still exists.

However, the main obstacle to the revitalization process is a cumbersome bureaucratic apparatus built in the form of a vertical hierarchy. The rapid shift to decentralization created an institutional vacuum, where one institution was expected to pass powers and responsibilities to others—institutions not yet fully formed. The reformation process within the legislative framework remains slow. Different aspects of urban planning policy are

regulated by various committees and branches, whose powers are imbalanced, partly duplicating each other's functions and creating legal conflicts. The divisions into urban and regional branches further complicate solving these problems.

The need for change confronts a local planning culture that remains deeply centralized. As proven by the examples of the described projects, plans will only be accepted and receive positive feedback from other participants if they have access to information and opportunities to participate. As evidenced by these situations, the system of institutions responsible for urban planning limits public actors' access to information and their influence on the progress of strategy development and project implementation. The powers of state bodies remain too broad due to the authoritarian nature of their creation. They need to be revised and reorganized into more horizontal management. The system must adjust to ensure that information flows are no longer directed solely from the top down, as in the command economy model, but are also coordinated among all actors. Decisions made solely by municipalities often remain misunderstood and unaccepted by citizens; ineffectively distributed funds have hindered the implementation of comprehensive revitalization. New approaches to transforming district spaces are slowly emerging with the involvement of multidisciplinary teams. Necessary communication and information exchange should be available on demand. As Friedmann recommends, planning needs to be conducted at different scales—ranging from neighborhood and district to regional levels—to be effective.

However, these planning levels can only be loosely coordinated, as different problems are addressed at each level. Coordination often occurs informally, through what some have termed mutual adjustment (Friedmann 2005). So far, new planning instruments are introduced slowly and often only consider city centers and other priority areas, similar to the vertical hierarchy principle. More attention should be paid to transformations in areas located on the periphery.

3.4.3 Management problems

Management of the neighborhood environment and elimination of its problems are enormously complicated by bureaucratic features and deficiencies in the legislative framework. As mentioned above, the balance of power is not yet achieved. Ukrainian cities have not yet succeeded in coordinating measures in urban areas of action, reaching agreements between stakeholders through participation formats, or increasing the effectiveness of public funds by bundling resources (Zuiev 2020). At the moment, the state of the management system is poor and requires further transformation. The state sector narrows its powers but does not provide sufficient support or tools for public players.

In general, the transformation process in the management system is characterized by a departure from centralized supervision of large panel micro-districts and the intensification of efforts by businesses, owners' associations, and active-minded residents to modernize them. This model aligns with the new economic reality, but in practice, many issues remain unresolved. The management of most public and private spaces in areas of mass housing development remains under the control of the city. Instead of creating a single body to monitor the condition of residential complexes, the state seeks possibilities to unite small owners. The politicization of management reflects a desire by officials to monopolize power and their ability to independently generate political decisions based on the interests of bureaucratic organizations, given the immaturity of political institutions and civil society at the local level (Rachinsky and Panteleichuk 2010).

Poor control in neighborhoods has led to social trends that have emerged in recent decades but have not yet become equally widespread. First, these include weakly expressed local communities, which were not formed earlier and have become even more fragmented due to the lack of clear interaction patterns. The absence of local regulators results in a lack of initiatives and reluctance among citizens to manage processes independently. Secondly, under conditions of ownership uncertainties and poor construction regulation, conflicts in the urban environment become more pronounced. New buildings and their resident communities often compete for space and infrastructure resources with the older population, capturing parts of common areas and limiting access to other groups. While this process cannot be considered full-fledged gentrification, the emergence of gated communities signals increasing social polarization within districts. In the shadow market, it is difficult to trace how the poor population is being displaced from areas where new buildings are emerging.

Another consequence of poor management is the increased influence of commerce. Institutional weakness has resulted in the prolonged absence of effective regulation for managing the territory of micro-districts, which has provoked increased activity among private actors. As a result, commerce has become a decisive force in managing and transforming these areas, filling the gaps while exploiting public space solely for personal profit became a new phenomenon. These new commercial actors are reshaping the factors that determine the attractiveness of the environment. Commercial managers can alter the role of the environment within a short period. With their influence, the traditional value of the environment becomes irrelevant, as control and transformation take precedence. The presence of open and green areas does not guarantee a good-quality environment; on the contrary, poorly managed spaces have become part of the problem (Richard Sendi et al. 2009).

As evidenced by the case studies, commercial actors are unreliable participants in the development of micro-districts. They focus selectively on areas with already developed infrastructure while neglecting less attractive zones, thereby exacerbating contrasts in the

quality of different spaces. Serious concerns arise that continued development along the lines of commercialization, combined with a lack of social organization, will lead to the degradation of the environment and social interactions within mass housing developments.

Currently, state und and public managing systems exist simultaneously in parallel to each other. While the municipality is lessening its role, the public actors such as condominiums and tenants' organizations are slowly claiming more rights and powers. Organizations similar to ACMB and cooperatives associations are in the beginning phase and lack authority. This process is non-gradual and needs support from the state. These new organizations also require professional help, funding, and education. Instead of that, the power uses opportunities to impose its agenda in the management and renovation of mass housing areas.

4 Redevelopment of mass housing estates in East Germany

4.1 Mass housing in GDR

Mass housing in the German Democratic Republic developed in a manner comparable to that of the USSR. Planning policies were also based on the needs of industry. Workers from the growing chemical, paper, plastic, and electronics industries were the primary users of the newly constructed housing.

In the 1960s, after Khrushchyov's housing reform reached the GDR, large construction companies and plants emerged, along with Soviet-style planning bureaus and integrated home-building factories. These facilitated the production of standardized elements for constructing entirely new housing areas. Since the GDR adhered to the Soviet model of governance, only the development of the concept should be applied (Hannemann 2000). The overall number of industrial housing units built during this period equals 2.2 million units, 1.5 million of which are panel buildings, most of which are constructed in large-size settlements (Haller 2002). Panel districts proposed "privileged" housing for the working class, offering significantly better accommodation quality compared to traditional old buildings in the city center or suburbs (Bittner and Weinand 1998).

Remarkably, even the ideological foundation of this construction reflected the influence of the USSR. Many tenants had neighborly connections resembling a fellowship and were part of the professional community linked to the local industry center. Most were young workers' families with children. Socialist management promoted the concept of the small family as the "cell of the community," and the panel districts exemplified this demographic trend. Families were expected to have one or two children, as evident from the standard flat sizes and norm calculations (Keller 2005). This housing policy successfully fostered a homogeneous society of people with equal incomes. The secure placement of kindergartens and schools within the district, away from avenues and broad streets, created a family-friendly environment. Planners anticipated daily migration from the district to industrial areas and encouraged shared leisure activities within the neighborhood. Keidel observes that the lower number of private vehicles compared to West Germany promoted the development of public transport lines, although sufficient parking facilities were not provided (1997).

Examples of these developments can be found in many cities of East Germany: East Berlin settlements such as Fennpfuhl and Marzahn-Hellersdorf, Gorbitz and Prohlis in Dresden, Halle-Neustadt, Silberhöhe, Grünau in Leipzig, and new towns like Hoyerswerda

and Eisenhüttenstadt. Planning groups for the industrial building settlements also adhered to the approved "standardized patterns." A typical housing complex consisted of several house groups—blocks—connected to the green center by green alleys, along with schools, kindergartens, shops, workshops, and cafes. The regular landscape design featured a complex geometric configuration of blocks, forming large inner courtyards and surrounding the central core with green walking promenades. Some examples of project models for East German neighborhoods are depicted below (Figure 4.1).

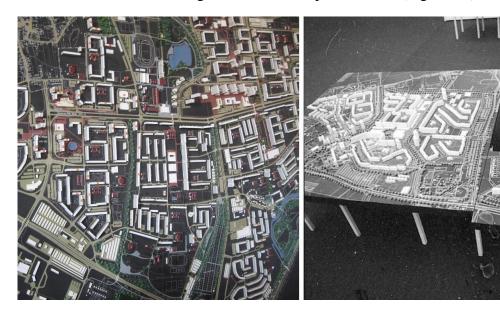


Figure 4.1 On the left: Model of Neustadt (Halle), photo by the author, Halle, 2016. On the right: Model of the district Prohlis, Dresden 1976-1988, (Source: Fotothek Dresden, http://www.deutschefotothek.de/obj80812771.html).

With the change in the political paradigm following the fall of the Berlin Wall in 1989, the era of housing standardization came to an end (Keller 2005). Alongside a retrenchment in economic activity, the construction of new panel districts was halted. The orientation of mass housing neighborhoods and entire towns toward monotowns resulted in widespread unemployment. The loss of social connections, professional devaluation, and insecurity—after decades of stable job and housing provision—defined the spectrum of challenges for the subsequent decades (Tanninen et al. 1994). As many industrial enterprises were closed or modernized, the number of available jobs decreased significantly, leading to intensive migration of the workforce to the West.

The local government implemented privatization to reduce the debts of housing companies and cooperatives and to introduce self-management and self-help activities to the tenants. Houses were privatized according to three models: selling flats to sitting tenants, companies and investors, or organizations in public-private partnerships. (Wulf and Baum 2002). This action created a variety of small and big owners. Housing companies were

also selling stock to sitting tenants. In 1991-92, the sales represented only 0.8% of the housing companies' stock due to the high sale prices. However, this never had a mass character. The (West) German government funds enabled the renovation of existing rented stock before sales (Potter 1994).

The discussion about the future of panel districts after the Wende and new housing policy concepts was raised at state and local levels. As Tanninen et al. state, the situation was called problematic due to the poor economy, the unclear question of property ownership, and the underdeveloped legal system4 (1994) These factors led to the following problems:

- depopulation and migration of specific social categories: spatial and social polarization between old and new tenants, and migration issues
- ownership conflicts: unresolved privatization issues
- district's spatial structure and building's outward appearance: shaped by industrial production, resulting in a low variety of spaces.
- lack of functions: dormitory districts with poorly developed and degrading social infrastructure; poorly developed public spaces, absence of playgrounds for kids and teenagers, and a lack of sports and leisure facilities.
- insufficient transport connections and a lack of parking lots.

Regarding the issues listed above, mass housing districts were labeled as unattractive. The demolition and incomplete sanitation measures initially implemented in parts of these districts did not resolve the image problem. These measures did not help counter the negative perceptions of these areas and, in some cases, even accelerated the negative social trends (Keller 2005). The social polarization in East Germany was primarily linked to limited work and leisure opportunities in the neighborhoods, long commuting distances to workplaces and the city center, as well as the economic crisis, which triggered population changes and a flow of people to other, more favorable districts (Bittner and Weinand 1998). Haller provides the data that between 1992-1998, around 160.000 people were moving from East to West per year (Haller 2002). Various disadvantages drove tenants away, such as the lack of a planned center with shopping and service facilities in the Prohlis district of Dresden. Poor transport connections to the city center also played a role, along with the availability of affordable housing in the restored center and attractive one-family houses on the outskirts. As a result, the district lost around 40% of its population (Stadtplanungsamt Dresden 2014). n Berlin, the districts of Fennpfuhl and Marzahn-Hellersdorf, despite their location in the capital, saw around 12% vacancy in their apartments between 1991 and 2000 (Bezirksamt Lichtenberg von Berlin 2017; Tibbe et al. 2007). Smaller industrial cities and cities with little functional diversity exhibited between 25-35% vacancy rate (Lindner et al. 2004). Consequently, the number of abandoned buildings grew, and by the 2000s, the housing market situation had become acute.

4.2 History of transformation (chosen programs and tools)

Nevertheless, despite its shortcomings, the vital role of the prefabricated building stock in providing housing, especially for low-income groups in big cities, was recognized (Bundesministerium für Verkehr, Bau und Stadtentwicklung 2009). Comprehensive research and revitalization programs were launched to restore the attractiveness of depressed areas in response to the situation. Soon after the political changes in 1990, expert groups from East and West Germany conducted a collaborative study on revitalization possibilities in large housing areas (Rietdorf 1997b). The acceptable condition of prefabricated buildings and their potential for further use after technical improvements positively influenced the future of panel housing complexes. An assessment conducted by the Institut für Städtebau und Architektur identified key aspects of social infrastructure development aimed at revitalizing panel districts. These included:

- creation of services and cultural entreprises
- development of social institutions
- •increase in the number of educational establishments
- expansion of retail and gastronomy networks
- development of community facilities.

To enhance district identity and increase the attractiveness of settlements, a functional mix of living, working, and leisure needed to be achieved, however, not solely by constructing malls and shopping promenades. In addition, the development of hotel, healthcare, and entertainment facilities was recommended. To make panel neighborhoods livable for all social groups, special facilities had to be planned, including senior complexes, apartments for people with disabilities, social complexes, and clubs for youth, single parents, and the elderly.

In addition to a functional mix and social infrastructure, landscape re-planning and improvements in environmental indicators were necessary. These included greenery for sun and sight protection, soil modeling, the development of garbage sorting systems, and the revitalization of leisure and hiking areas (Rietdorf 1991). The vitalization and renovation of the housing estates were considered economically justifiable actions, as stated in the Federal Ministry's general strategy from 1992 (Rietdorf 1997). Before launching an extensive state program, it was essential to draw on existing urban development experience.

4.2.1 Development of legal base and revitalization programs

Not only the spatial and functional structure of the East German panel district required updates. Outdated scenarios and urban planning documentation no longer represented the current requirements. Political will was necessary to address these new challenges.

In 1990, the Building Planning and Permission Ordinance was passed for the new states joining the Federation, introducing West German urban planning law in East Germany (Pahl-Weber and Henckel 2008). Between 1990 and 1998, the planning and administrative systems of West and East Germany were unified through numerous acts and ordinances. New provisions on urban redevelopment were integrated into the Building Code via the European Law Adaptation Act for the Construction Sector (ibid.). The Federal government also developed and launched «Stadtumbau Ost» and «Soziale Stadt» programs to restructure panel districts.

It should be noted that Germany already had experience in housing revitalization in the Western states starting in 1971, and this experience was incorporated into the East within the framework of «Stadtebauförderung» (eng. «Urban development support program»). However, the different social, structural, and economic conditions in West and East Germany made it difficult to apply previous program measures directly. As a result, a new research initiative, «Städtebauliche Weiterentwicklung grosser Neubaugebiete in den Neuen Bundesländern und Berlin-Ost» (eng. «Urban development of large new development areas in the new federal states and Berlin East») for East Germany's biggest settlements, was launched in 1994, including Berlin (Marzahn, Hellersdorf), Halle (Neustadt), Dresden (Gorbitz), Leipzig, Rostock, Ludwigsfelde, Stendal and others (Rietdorf 1997b). The study aimed to gather primary data on these districts and propose measures and instruments for their further development. Based on the collected data, two programs were launched almost in parallel. These will be described below.

The «Stadtumbau» (eng. «City Redevelopment») program was launched in the New Federal Lands in 2000 when the number of vacant apartments had reached one million, making it difficult to imagine them being either demolished or rented out on the market (Pfeiffer et al. 2000). Responding to the crisis, Federal Minister for Transport, Construction, and Housing, Reinhard Klimmt, initiated the creation of a special commission to improve the situation: Expertenkommission «Wohnungswirtschaftlicher Strukturwandel in den Neuen Ländern» (eng. «Structural Economic and Housing Change in the New States»). The commission studied the current state of shrinking panel districts and formulated recommendations for addressing identified problems, including the legal and economic foundations for demolition, new planning strategies, and the stabilization of the real estate market. Unlike the Stadtumbau, which focused primarily on demolishing vacant blocks the «Stadtumbau Ost» considered other measures, performing the redevelop-

ment more comprehensive. The main components of the program were revaluation, demolition, restoration of city infrastructure, sanitation, and building preservation (Deutscher Bundestag 2017).

Integrated Urban Development Concept

Perhaps the most valuable experience taken from the program, was a new phase that introduced strategies for internal district evolution and served as a guiding framework for urban development. Addressing complex problems required creative solutions. In October 2001, the Federal Ministry of Transport, Building, and Housing launched the competition «Stadtumbau Ost – für lebenswerte Städte und attraktives Wohnen» (eng. «City Redevelopment East for livable cities and attractive housing»), in which over 260 municipalities participated. The competition aimed to accelerate the development of «Integriertes Stadtentwicklungs Konzept» (eng. «Integrated Urban Development Concept» shortly – ISEK), a comprehensive plan for district development and integration—and to bring urban transformation into discussions at all levels.

The development of the framework plan involved gathering available information, identifying problems, and determining priority areas for further analysis. Following, it included proposals for measures, objectives, and guidelines for their implementation. The framework planning explored alternative approaches rather than proving one official authority's decision. The outcome consisted of planning proposals and recommendations, which could take various forms, including future land-use distribution plans, priority measures, or designs for specific areas (Pahl-Weber and Henckel 2008).

These were the prerequisites for obtaining subsidizing from the «Stadtumbau Ost» program in 2001. Based on the competition results, 34 municipalities with the best concepts were awarded for exemplary urban redevelopment projects. Among the awarded development concepts were: 1 Prize Marzahn-Hellersdorf (Berlin) 3 Prize Halle/Saale (Sachsen-Anhalt) (Röding and Veith 2003).

The Act Facilitating Planning Projects for Inner Urban Development (Gesetz Zur Erleichterung von Planungsvorhaben für die Innenentwicklung der Städte) came into force on January 1, 2007, to enable projects in the fields of employment, housing, and infrastructure by simplifying building and planning law. to support projects in employment, housing, and infrastructure by simplifying building and planning laws. This act introduced an accelerated procedure for binding land-use plans related to inner-urban development into the Building Code (Pahl-Weber and Henckel 2008).

Experts confirmed that each city had its own requirements and needs, so the program did not impose standardized solutions. Instead, its approaches and principles provided municipalities with a solid foundation for identifying their problems and finding solutions (Röding and Modes 2012). In this regard, the importance of the ISEK as a tool was difficult to overestimate. The concept had to be adapted to local, individual scenarios rather than being a universally applied framework while still considering the broader regional context. It enabled city authorities to take an active role in the development process and defined opportunities for the involvement of both private and public actors. ISEK was designed for long-term urban development planning, with the proposed measures intended for implementation over the next 15 to 20 years.

ISEK is an informal and flexible document primarily used in core areas or for urban district development. It is based on an informal framework plan and formulates specific development objectives for subsequent local development plans (Pahl-Weber and Henckel 2008). It differs from formal, mandatory plans and focuses on spatially and substantively limited urban development tasks. Its primary aim is to refine the details of the preparatory land-use plan at the neighborhood level, thereby providing a foundation for the binding land-use plan. The framework plan is used mainly for urban extensions, but also for developing existing urban areas that suffer from deficiencies and shortcomings (Danielzyk and Sondermann 2018).

Although this document has no binding legal effect, it can serve as an effective tool for urban district transformation when used with other instruments. This plan is intended to be discussed and revised with the public to ensure that it meets the community's needs. ISEK proposes various measures for the development of the area (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit 2016). It is necessary to elaborate on the essence of this tool (Figure 4.2). First, the concept includes a detailed report on the problem area, including the following chapters:

- thematic data collection and analysis
- formation of an integrated strength-weakness profile
- creation of a hierarchy of missions, goals, actions guidelines
- definition of fields and spaces of action, specific, comprehensible, and realistic objectives
- proposal for individual projects and measures
- implementation strategy and control methods
- providing a cost and financing overview.

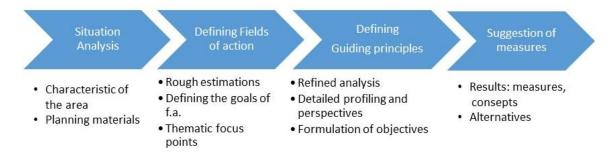


Figure 4.2 Development of goals and strategies in ISEK Prohlis, based on «Integriertes Handlungskonzept Fortschreibung 2014 Dresden Prohlis/ Wohngebiet Am Koitschgraben» (Stadtplanungsamt Dresden 2014).

ISEK moderates all stages of the redevelopment process. It also includes predictions of potential conflicts in the area and provides a clear list of focus areas. ISEK addresses decisions regarding housing, the living environment, transportation, and social infrastructure; as well as the local economy, unemployment levels, sustainability, community relations, finance, and options for project financing (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit 2016). Integrated development and action concepts help coordinate, promote, and stimulate the dialogue between private and public actors in the neighborhood. The concept is based on the study of challenges and potentials of every single district and developed, taking into account the wishes of local actors, inhabitants, and businesses. It covers all fields of action by proposing solutions (planned measures) to current problems while considering the district's integration into an overall urban strategy, as shown in Figure 4.3. Ideally, it also contains information on construction and financing bodies, the bundling and interlinking of measures and projects, and a cost and financing overview.

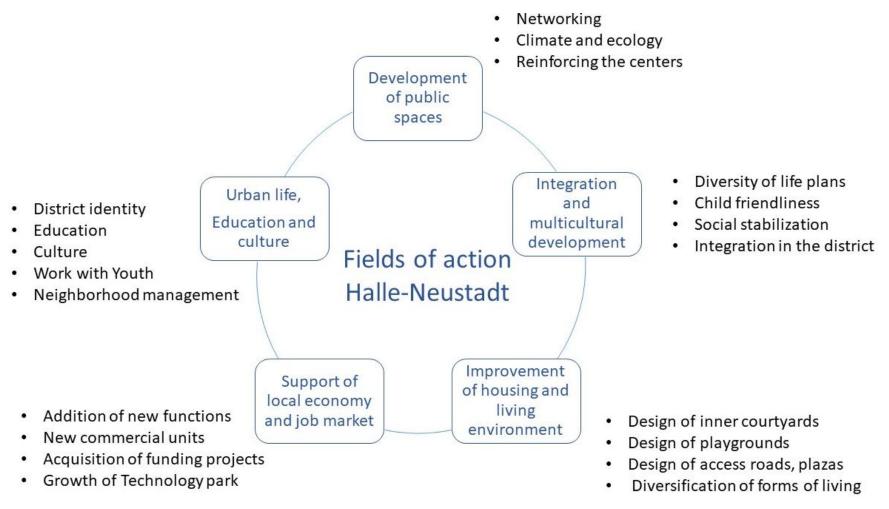


Figure 4.3 Action fields defined for the second update of action program in Halle-Neustadt. Based on Integrated action plan «Social City Neustadt 2025» (Elstermann et al. 2015).

Soziale Stadt – urban transformation with a social aspect

The program «Soziale Stadt – Stadtteile mit besonders Entwicklungsbedarf» (eng. «Social City – Urban areas with special development needs») program was launched in 1999 in addition to the programs «Renovation and Development» and «Urban Conservation» (dated back to 1991). The interdepartmental Soziale Stadt strategy, «Strengthening Neighborhoods, Togetherness in the Neighborhood, » which was adopted by the Federal Government in 2016, enhanced cooperation at the federal level (Bundesministerium des Innern, für Bau und Heimat 2018). Its goal was to halt the degradation of the social and spatial structure in the New Federal Lands. The program targeted settlements and cities defined as "areas with a special need for development". While the Stadtumbau Ost addressed buildings and spatial issues, the Soziale Stadt focused on a broader spectrum of measures. This program aimed to stabilize and enhance urban areas that were economically and socially disadvantaged and spatially weak. It promoted urban investments in the residential environment, infrastructure, and housing quality—thereby ensuring greater intergenerational equality and creating family-friendly neighborhoods that increased opportunities for residents' participation. The objective was to strengthen social cohesion among different groups within the district's population, prevent conflicts, and help integrate and combat rapid social degradation, poverty, and unemployment. The federal states were responsible for implementing the federal-state program by issuing funding guidelines that specified the type and amount of funding. According to those, the municipalities submitted their funding applications to the responsible state ministry (ibid).

The program fostered active participation among residents, youth, local clubs, and neighborhood centers in planning and development activities.

Instrumental-strategic fields of action:

- integrierte Entwicklungs- bzw. Handlungskonzept (Integrated development and action concept)
- district reference
- resource concentration
- Quartiersmanagement (neighborhood management)
- population activation and participation
- evaluation
- monitoring (Bundesministerium des Innern, für Bau und Heimat 2013).

The integrated development and action concept should be reviewed in detail. It is based on a study of the challenges and potentials of each district and is developed with input from local actors, residents, and businesses. This tool helps to coordinate, promote, and stimulate dialogue between private and public actors in the neighborhood. It covers all fields of action by proposing solutions (planned measures) to current problems while taking into account the district's integration into an overall urban strategy. Ideally, it also includes information on construction and financing bodies, the bundling and interlinking of measures and projects, as well as an overview of costs and financing (Bundesministerium des Innern, für Bau und Heimat 2013).

Reviewing recent years of urban redevelopment and the prospects for cities and regions, it became clear that urban redevelopment programs do not have a clearly defined endpoint. Instead, they represent an ongoing process with a long-term perspective that also produces short-term consequences and must contend with unplanned developments (Sievers 2019). It was concluded that progress can be achieved when all actors work together, although this cooperation was not always voluntary. In this process, the municipality should take the lead in controlling redevelopment at every stage. The results of this collaborative approach are evident throughout the program areas (Röding and Modes 2012).

The program also had disadvantages. Unpopular decisions—such as demolitions carried out during the early stages of implementation—were based on the assumption that the high number of flats in East Germany was unattractive to the market and needed to be removed. The extensive demolition during Stadtumbau Ost was later questioned, and the program was widely criticized for its limited public involvement in decision-making (Sievers 2015). Very often, the city failed to listen to citizens' wishes, even though citizens expressed realistic perspectives on the situation that followed the requests of other stakeholders (Liebmann 2007).

High demolition costs and the subsequent renaturation of the grounds posed a significant problem. This challenge shifted the program's emphasis toward re-use and functional redistribution, as well as enhancing the attractiveness of the remaining housing stock. The issue was partly addressed in the next stage — Soziale Stadt program which focused on developing social infrastructure and improving environmental comfort.

However, Soziale Stadt also faced significant criticism. Critics pointed out that the program was based on a one-dimensional approach, focusing primarily on enhancing the investment attractiveness of settlements rather than the social issues. Becker and Löhn stated that the sectoral actions were insufficient to solve complex problems and sometimes even led to unintended negative consequences in other policies or areas of the policy domain (2002). The program was designed to pool resources from local self-organization efforts as well as from cross-sectoral cooperation. The program's weak point was dependence on the development of municipal organizational structures and in neighborhood initiatives that relied on the mandatory participation of residents, industry, and other local actors. The partial disappointment with the program can be explained by the fact that

management was confronted with high expectations in many neighborhoods that it could scarcely meet (ibid.). The absence of dialogue between various bodies led to conflicts between inhabitants' ideas and actual project time, output, and funding limits.

Experts on city redevelopment, while evaluating ten years of the Stadtumbau Ost program (Röding and Modes 2012), identified complementary and supporting instruments essential for long-term urban redevelopment. These include:

- sufficient funding, ideally with a planned multi-year budget
- flexible handling options
- the addition of control instruments
- professional support for the program
- opportunities for experience exchange between municipalities.

Despite criticisms regarding the appropriateness of large financial contributions and government support, the experience gained from instruments such as the integrated development concept can serve as a knowledge base for future transformations. Moreover, some measures required relatively little funding while being planned to yield long-term results. A comparison of examples of such attitudes toward the environment in areas of mass housing development may offer insights into the future direction of development.

Now, when the main instruments of revitalization in Germany have been described, it is necessary to discuss in more detail the measures and actions taken to address specific problems.

4.2.2 Functional transformations

Like their Ukrainian counterparts, mass housing districts in Germany were functionally outdated and required a functional redesign. This redesign involved reinforcing existing functions and introducing new ones so that the settlement could operate as an independent urban area rather than as a dormitory satellite. Redevelopment often included reconfiguring land plots, redefining the balance between public and private spaces within the district, and altering functions to promote multiple uses. This process also required active administrative involvement in planning and allocating sites, as well as the centralized acquisition of land plots and apartments for transformation. Additionally, it required active cooperation with apartments and landowners and local businesses. Mass housing districts frequently needed the development of peripheral centers where citizens could access services, goods, and employment opportunities.

An essential step in functional diversification was preserving the district's character while adapting it to modern needs, such as ensuring attractiveness for all age groups, enhancing accessibility, and maintaining a high level of safety. Addressing monotony with costeffective methods required a careful balance between modernization and the preservation of historical context (Bürger 2016). For example, in Dresden-Gorbitz, important infrastructure buildings with unique characteristics, such as schools, shops, and public plazas, were preserved and renovated (Figure 4.4). When implementing functional transformations in the landscape, the goal was to create enough unique areas that would attract people and create the identity of the place. Careful renaturation was carried out at Weidigtbach Creek, restoring its natural flow and designing open spaces for leisure and play. New and renovated routes along the central axis were developed as promenades or sports trails, offering various scenarios for interaction. Open-air fitness equipment is made available for sports enthusiasts. Terrain modeling provided a variety of landscapes. Additionally, new public spaces with scenic views were created in Weidigtbach Park, between Omsewitzer Ring and Coventry Street, replacing demolished buildings (2016a);(Polenz 2015)

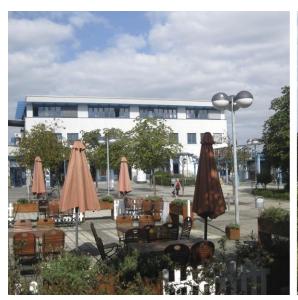




Figure 4.4 Minor interventions in the spatial-functional context in Gorbitz. Photos by the author, Dresden, 2016.

A more extensive example of functional transformation can be found in Fennpfuhl, Lichtenberg (Berlin). The district was planned in 1957, and by that time, it was an example project that should set standards for housing, the "Socialist district of the future", as it was named in press (Spiegel 1957). During the 1970s and 1980s, approximately 15,000 apartments were constructed in large open blocks and extended multi-story rows. Many of today's residents are original inhabitants who continue to value the vicinity of Fennpfuhl Park. (Senatsverwaltung für Stadtentwicklung, Bezirksamt Lichtenberg 2002a). The

district experienced population decline, which, by the 1990s, led to the demolition of several schools and kindergartens, while others were repurposed for different functions. Due to a large number of abandoned buildings, many functions were disrupted. The district was included in the program Stadtumbau Ost in 2002-2010 with the mission statement «Living in the countryside — in the middle of the city»" (Senatsverwaltung für Stadtentwicklung, Bezirksamt Lichtenberg 2002b). To prevent environmental degradation, authorities focused on the sanitation and functional re-organization of the area, working mainly on improving public spaces. The renewal and adaptation of the social infrastructure were of great importance.

The results of previous measures were re-evaluated in 2007, leading to a decision to intensify efforts in selected areas during the next phase of the project (Balzer 2007a). The primary objectives included upgrading public space design, functional redevelopment to create a mix-use space in the center, and reinforcing trade and service functions to stabilize the local economy. The entire district underwent functional changes. Until 2010, the primary focus was on transforming public spaces. However, from 2011 onward, work was dedicated to adapting the social infrastructure. Several relevant locations were chosen as primary points of transformation. These included the redesign and enhancement of the Anton-Saefkow Square and Roeder Square district centers, the development of the Altenhofer Dreieck wasteland into a play and sports area, the conversion or demolition of vacant daycare centers and schools, and the creation of crossings over Landsberger Allee. The majority of these objectives were successfully achieved (Bezirksamt Lichtenberg von Berlin 2017).

4.2.2.1 Anton-Saefkow and Roeder Squares

The work on the projects included multiple stakeholders, including state authorities, planning offices, private non-profit organizations, as well as the local community of Fennpfuhl. At the initiative of the local building committee, a decision was made to strengthen retail activities at the Anton-Saefkow Square, preserving its center function, turning it into an attractive and modern meeting place for locals, — Anton-Saefkow-Promenade — featuring a mix of uses, including services, gastronomy, retail, and social services, as illustrated in Figure 4.5.

The project included the renovation of spacious stairs, coverings, lighting, and an adjacent playground. The buildings, which surround the entire space area, have been renovated and redesigned until 2007. By 2007, the surrounding buildings had been renovated and redesigned. Planners collaborated closely with the citizens of Fennpfuhl and local traders to develop the concept (Stahl 2010). To enhance accessibility and functionality, shopping malls and service centers were added near major roads and streets intersection, while the district's core remained home to services and retail facilities. The old department store on Anton-Saefkow Square was converted into an apartment building, meeting the demand

for diverse floor plans. New community services and shopping centers were added to the apartment block with improved floor plans.

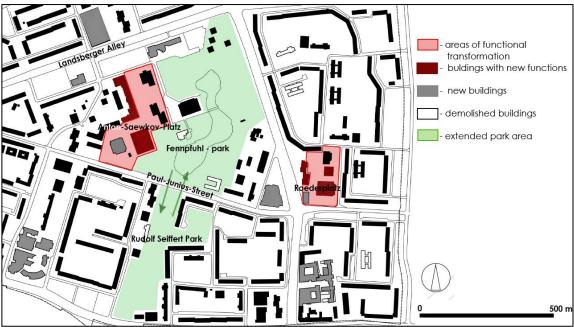


Figure 4.5 New functional areas in the district Fennpfuhl (fragment) Scheme by the author, based on the reports of Bezirksamt Lichtenberg, Berlin 2019.

Roeder Square had lost its role as a neighborhood meeting point due to the loss of shopping and gastronomy facilities. The city's planning department worked with residents to develop a modernization concept to restore its status as a community hub and a center of attention. The creation of the youth center supported the cultural initiative. The new supermarket in place of the old store represented the retail function. The north-south promenade was designed to look more welcoming and better illuminated in the night hours. Changes in the arrangement of the square made it more attractive, transparent, and safe for all categories of citizens (Stahl 2013). Both areas represent a mix of shopping, recreational, and housing, supporting the sustainable development of the neighborhood.

4.2.2.2 Fennpfuhl-Park

One of the main tasks of the transformation was the preserving of the recreational function by expanding the big park in the center of the district (Rühle 2016). As a part of «Integriertes Stadtteilentwicklungskonzept 2007 Fennpfuhl: program Stadtumbau Ost in Berlin-Lichtenberg» underwent significant transformations. A significant part of the project was connected with expanding the green open space of Fennpfuhl and Rudolf Seiffert park areas and creating the "green link." Changes were made to the land-use plan, officially designating Rudolf-Seiffert Park expansion as a green area, ensuring an undivided, larger green space (Balzer 2007b). The key challenge was the transport line of Paul-Junius

Street, dividing two park areas from each other. With the implementation of the measures to increase the usable open space, administrative buildings of the household cooperative Lichtenberg (WGLi) the school at Rudolf-Seiffert Street, and several buildings were demolished and their plots integrated into the park (Balzer 2007b).

The vacant restaurant/public building Seeterrassen was demolished due to its low profitability; the space was integrated into the park, as seen in Figure 4.6. Another building, Villa am Fennpfuhl (a protected structure), had long remained unused, however, after evaluation, its function was changed into an office building. The recreational function remained a key focus of the district's development. The goal was to continue expanding green spaces and connect them with "greenways" designed for slow pedestrian traffic. In general, following the transformation, the total green recreational area increased by approximately 0.5 hectares (Rühle 2016).



Figure 4.6 Enhancement of existing functions in district Fennpfuhl: cleared park and greenery instead of a restaurant (on the left) and shopping promenade (on the right) Anton-Saewkov Square. Berlin, 2016, photos by the author.

4.2.2.3 Halle.neu.stadt 2050

Functional transformations within districts should be rationally assessed from the city's perspective and its role in the broader development concept. In 2015, the district Halle-Neustadt once again gained attention in Saxony-Anhalt—this time as the focal point for implementing the new vision "halle.neu.stadt 2050." According to the city authorities' plans, this former socialist utopia is set to become a hub of innovation under the motto "vernetzt – integriert – transformiert" (eng. «linked-integrated-transformed»). The goal was to transform the declining district into a sustainable urban area by introducing new functions such as education and research, the creative industry, and modern housing. The

city of Halle (Saale) submitted this concept for Halle-Neustadt in the nationwide competition "Zukunftsstadt 2050" (City of the Future 2050) by the Federal Ministry of Education and Research (Stadt Halle (Saale) Fachbereich Wirtschaft, Wissenschaft und Digitalisierung 2018). The first project phase (2015–2016) focused on conceptualizing the neighborhood transformation into an innovative district campus and a meeting place for people, research, and funding. The plan included establishing a start-up school, a senior academy, and engaging (international) researchers in teaching. A key idea was to create a new type of neighborhood campus that would complement the existing school at Kastanienallee. There, different educational levels were to be combined into an innovative, integrative place of learning (Stadt Halle 2018). At the same time, schools were expected to become more open to the neighborhood by offering adult education programs and promoting social engagement. The overarching goal was to develop transferable knowledge about the possibilities and limitations of innovatively designed campus concepts with a strong neighborhood charisma in socially structurally disadvantaged urban areas. It was also suggested to relocate the Campus of the local Institute into the district, merging it with a technology park (Löbner 2016).

The project development involved two workshops, a survey, and more than ten thematic workshops with citizens, local actors, and external experts. Various ideas were generated in specialized "laboratories" focusing on communication, start-ups, technology, and social innovation (Stadt Halle (Saale) Fachbereich Wirtschaft, Wissenschaft und Digitalisierung 2018). The second phase focused on the further development of the district campus, incorporating a creative approach. The project was made possible through financial support from key institutions, including the Federal Program Soziale Stadt, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, and the "Zukunftsstadt 2050" competition (Federal Ministry of Education and Research). Additional support came from partnerships with ISW Institut, Zentrum für Sozialforschung Halle e. V., Univations Gründerservice, science2public, Freiraumgalerie e. V., and Fraunhofer Institut (IMWS). Although the city did not reach the final round of the competition, the first two phases continued to receive funding and were carried forward (Stadt Halle (Saale) Fachbereich Wirtschaft, Wissenschaft und Digitalisierung 2018).

Extensive measures for functional restructuring of buildings and areas were enabled by vacant buildings and facilities. Those that were not demolished were redeveloped for new functions. However, this opportunity diminished quickly as neighborhoods became saturated with new functions and commercial enterprises, alongside population growth. Despite this, the demand for social interaction and leisure activities remained high. As a result, construction of public buildings resumed in neighborhoods, and those activities that improve the social climate —without requiring a fixed location in a single building—were actively developed.

4.2.3 New horizontal management units

Another essential tool developed and applied during the program was the «Quartiersmanagement Büro» (eng. «Neighborhood management office») which was introduced as a moderator between authorities and local groups. It became evident early on that revitalization priorities extended beyond physical transformations to include cultural and public sphere changes. Effective interaction with residents and public actors required a new management system, integrating social work, economic development, urban planning, education, and cultural initiatives. Therefore, these units became a part of the new horizontal management system, facilitating the organization of the local economy, integration, and problem-solving. In practice, their role involved coordinating cross-sector cooperation at the administrative level—such as within working groups—and regularly pooling expertise and financial resources on a quarterly basis (Bundesministerium des Innern, für Bau und Heimat 2013). The management offices served as a link between local initiatives, organizations, and businesses, as illustrated in Figure 4.7. These offices functioned as information hubs, advisory centers, and meeting points, providing daily support to citizens, associations, initiatives, and housing companies/owners (STESAD 2009). The work of management offices was financed by the program Soziale Stadt and they functioned full-time during the program in action, organizing events and activities, dealing with everyday conflicts in practice (Hoffmann 2016). Quartiersmanagement offices, as the new responsible bodies of the district, were supported by the state and remained functioning even after the action program. These offices facilitated the use of temporary and spatially targeted intervention tools, which contributed to the stabilization and enhancement of urban, economically, and socially disadvantaged, and structurally weak districts.

The role of QM on different stages of its work was as follows:

- start phase (QM as observer and researcher)
- implementation phase (QM as initiator, strategist, carer)
- stabilization phase (QM as a stabilizer and supporter) (Walz and Kunze 2015).

The neighborhood managers played a crucial role in addressing residents' concerns and needs while maintaining close cooperation with the district administration and local actors. Their tasks were extensive: activating residents, bringing together different interest groups and establishing cooperation between institutions, initiatives, companies, housing associations, and initiating and supporting projects — structurally, spatially, socially, culturally, and economically (Bezirksamt Neukoelln 2019). With the support of the Soziale Stadt program, local offices were established in each participating district as contact points for all actors in the project area. This allowed neighborhood managers to address the concerns and needs of residents while working closely with the district administration and local stakeholders.

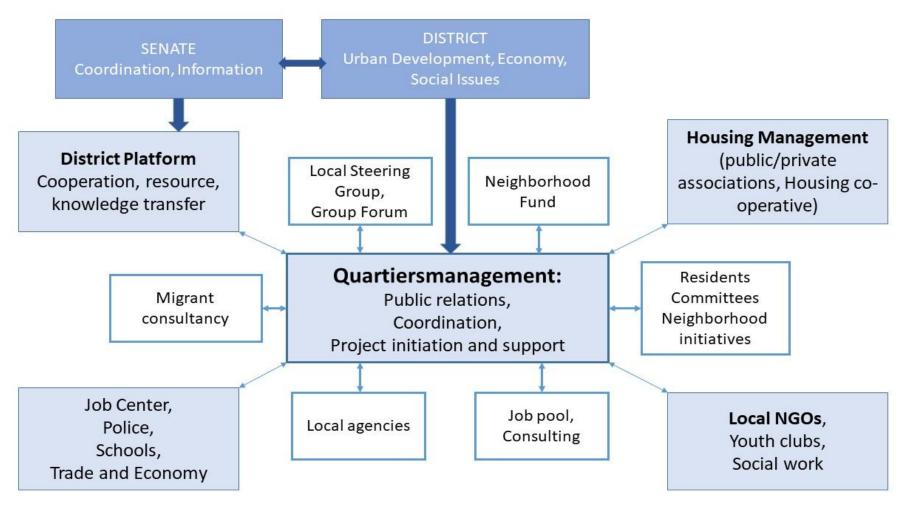


Figure 4.7 Place of Quartiersmanagement in the system of relations between district actors. After the "Network relation of the Quartiersmanagement Marzahn NW" (Knorr-Siedow and Droste 2005).

At the same time, the offices served as meeting points for residents, educational facilities for youth and migrants, and creative hubs in cases where such spaces were absent or lacked dedicated buildings. They actively involved actors in the transformation process by linking professional proposals with the population's needs, forming strong bonds within the district's community, engaging property owners and long-term residents in volunteer projects, and improving communication between groups, as seen in Figure 4.8. In turn, neighbors were encouraged to participate in minor projects or social events, fostering connections and exploring their potential.

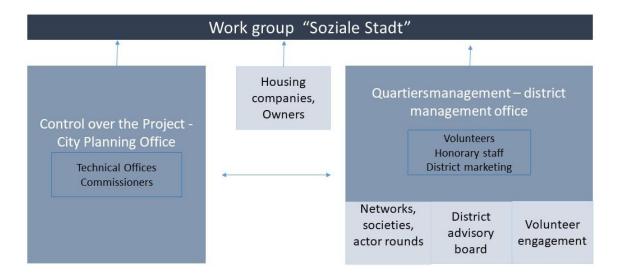


Figure 4.8 Interaction of actors and organization of management inside the district according to (STESAD 2009), own representation.

The benefit of Quartiersmanagement was its ability to establish direct communication with the population, making them aware of the changes and helping them accept them. Through intensive neighborhood management procedures, the population's perception of urban development programs in Berlin shifted (Röding and Modes 2012).

Although their role in the urban redevelopment process is not always clearly defined, neighborhood management offices can increase transparency and strengthen tenant participation. They serve as important contact points for residents but are often cut off from the flow of information between the municipality and housing companies. If information on urban redevelopment is handled openly by all actors, these on-site offices can effectively fulfill their role as an interface between municipal authorities and citizens, ensuring the necessary transparency of procedures (Bundesministerium für Verkehr, Bau und Stadtentwicklung 2009). As stated in the report on public participation from the Federal Ministry of Traffic, Construction, and City Development, neighborhood offices play a crucial role in providing information and advice to residents while also facilitating the implementation of collaborative projects as moderators. For this purpose, funds that can

be used flexibly would also need to be made available within the framework of urban redevelopment (Bundesministerium für Verkehr, Bau und Stadtentwicklung 2009).

4.2.3.1 Prohlis, Am Koitschgraben

The district Prohlis (Dresden) lost a significant portion of its housing stock due to demolition. After a major demolition of vacant buildings in the 1990s, the demand for housing increased again, and the subsequent development strategy did not include these measures. Open spaces created by the demolitions were transformed into green spaces and play areas. Sports facilities for youth and playgrounds were placed away from the buildings to avoid noise. The areas were turned into park-like public spaces for all groups of users. The public and publicly accessible living environment was transformed into an attractive lounge area (Müller 2016). Further, it was decided to concentrate on social projects to increase the attractivity of the district for all categories of tenants.

Since 2000, the residential area Am Koitschgraben (covering an entire territory of 154.5 ha, located in the southwest) has been included in the program «Soziale Stadt». Fields of action for the area's development included points such as active citizen involvement, the local economy, employment, training, community centers, demand-oriented infrastructure, and the living environment (Stadtplanungsamt, Stadt Dresden 2016; SAS Regional-Verkehrs- und Umweltforschung GbR Dresden 2012). With the support of the «Soziale Stadt», a neighborhood office «Am Koitschgraben» was established. Under its supervision, several pilot projects were implemented between 2007 and 2014. These projects included initiatives aimed at strengthening community ties and bringing different actors together. The district forum "IDEE 01239 e.V." united creative initiatives in the district and promoted public space art. Furthermore, the office mediated the re-planning of inner yard spaces, incorporating suggestions from residents, which helped reduce user conflicts (Figure 4.9).

Emphasis was placed on local initiatives with the direct involvement of residents in planning and alterations. Program funds supported private creative efforts. With the assistance of the neighborhood office, those interested could submit their projects for consideration and initiate small-scale improvement projects. This allowed residents to influence their environment while balancing decisions made by planning bureaus and preventing chaotic private transformations.

Constant monitoring conducted during the program's implementation—including data from the Municipal Statistics Office, the eMo (annual surveys by the federal government for evaluating urban development funding), the Municipal Citizens' Survey, the Housing Market Report, and the Social Structure Analysis Prohlis—confirmed the efficiency of neighborhood management and recommended its continued operation (STESAD 2016).

Thanks to these measures, Prohlis was rediscovered by families with small children. After the improvement of open spaces and the creation of multifunctional community centers offering various activities, the vacancy rate dropped from nearly 30% to 6%. Nonetheless, minor social tensions between different resident groups continued to be observed (Stadt Dresden 2012).





Figure 4.9 Playground and landscaping elements finished with participation and consulting with the public. Prohlis, Dresden, 2016.

4.2.3.2 Project on Tulpenbrunnen – "Meeting place for generations"

In Halle-Neustadt (included in the second stage of the «Soziale Stadt» program since 2008, based on ISEK 2007), different approaches were tested to revitalize the district. The district's large size and uneven built environment, along with its diverse social structures, made it difficult to implement a large number of projects simultaneously. Halle-Neustadt consists of clusters of smaller districts with sub-centers (residential complexes) that are connected to the central district in various ways. This is reflected not only in its spatial structure but also in its social and economic conditions. Today, the area still functions as a "dormitory town" and requires the development of additional functions. To counteract negative trends and urban decline in the early 2000s, a decision was made to redefine the neighborhood's functional profile, with a focus on open public spaces (Geschäftsbereich Planen, Bauen und Straßenverkehr Halle 2007).

An example of democratic planning in action in Halle-Neustadt can be found east of the district center, in the residential complex WKIII. The local integration process, which began in 2005, continued at a workshop in the summer of 2008 as part of a broader transformation (Busmann 2010). As a result of joint efforts by residents and the local Qurtiersmanagement, the square at Tulpenbrunnen was redesigned. Tenants were invited to participate in project discussions and contributed to its construction. Under the expert

guidance of the «Association of Communal Culture Halle», residents and local school-children created ceramic tiles that were integrated into the fountain insert (Busmann and Dobberstein 2009).

It was an effort to strengthen social ties within the micro-community and improve the area's image. The revitalization project incorporated proposals from community members and was carried out under their supervision. The custom-designed playground next to the square was created through collective brainstorming, including input from youth and children. The square at the center of the housing complex was transformed into a small shopping and recreation facility (Figure 4.10). Residents of the complex were also invited to share their opinions on the design and artwork proposed for the housing complex and actively discussed the district's current events and challenges. The authorities' attention to the population's wishes strengthened interactions between various actors. The transformation process was closely linked to civic engagement. People had the opportunity to propose changes themselves or take responsibility for minor transformations. The project was funded by the Stadtumbau Ost program (Löbner 2016).





Figure 4.10 Newly renovated square «Tulpenbrunnen» (on the left) and playground, funded by the Stadtumbau Ost program (on the right). Halle, 2016.

The most important outcome of working with the population was the development of valuable experience in self-government and civic engagement. These efforts made a significant contribution to the safety and comfort of the living environment. Unlike typical gentrification, these activities represented an organic transformation of the area rather than a replacement of the population.

Gradually, the projects aimed at increasing the settlement's attractiveness seem to have achieved the desired results. The population began to rise again between 2005 and 2012.

Now Halle-Neustadt has excellent potential to become a new city center. Now, Halle-Neustadt has significant potential to become a new city center. Alongside numerous housing blocks, there is ample space to introduce diverse functions and further develop the area. The long-term development strategy also focused on strengthening neighborhood relations by creating meeting points, leisure spaces, and educational facilities to foster civic engagement and enhance opportunities for disadvantaged population groups to participate in district life (Stäglin 2017). The involvement of residents is an important conceptual component in project implementation. Public-oriented measures require greater transparency and planning security. At times, residents propose alternative approaches or priorities different from those outlined by the municipality. In some cases, citizens' initiatives have led to a reassessment of projects or have contributed to the expansion of public information and advisory tools. However, responses from political authorities, administrative bodies, and housing companies do not always prioritize public initiatives(Bundesministerium für Verkehr, Bau und Stadtentwicklung 2009).

4.2.4 Tackling social polarization

The experience of urban transformations in Germany serves as an example of inclusive engagement with various population groups. In 2010, during the second program phase of Stadtumbau Ost program, the Federal and State governments expanded funding and reinforced instruments and incentives aimed at more actively involving private owners of small-scale structures in urban redevelopment. (Röding and Modes 2012). Conducting revitalization measures required joint efforts from professionals and local activists. Tenant representatives were involved in nearly every field of action developed within the framework of ISEK. Citizens' suggestions were incorporated into the development of action goals, fields of action, and measure groups. Experts emphasize the crucial role of small local management units in overseeing the territory, engaging tenants, and addressing social conflicts (Walz and Kunze 2015; SAS Regional- Verkehrs- und Umweltforschung GbR Dresden 2012). These measures included interventions in infrastructure and the social fabric, as well as social and cultural activities aimed at addressing the district's challenges and adapting the neighborhood to the needs of a dynamic community. The revitalization process combined short-term community involvement projects that addressed minor crises with long-term, comprehensive strategies to improve the district's environment. To unite the residents of the area into the community, it was essential to emphasize that changes were not simply being made for their benefit but were being carried out in coordination with them and with their direct participation. Thhis approach created an atmosphere of trust and community spirit between the neighbors, which was reflected in the district's external image.

The distinctive feature of the German approach to solving social problems is based on three key strategies:

- enhancing public engagement (revitalization with participatory planning)
- returning the places to the community
- making the public space more "democratic."

The addition of new functions and improvement of public spaces were key instruments to foster a social mix in the district and decrease social polarization. Providing facilities for different age groups, for example, converting former apartment blocks into retirement homes, reserving ground floors for the elderly, creating private gardens, opening clubs and sports grounds for all ages were widely implemented in Germany. Those changes introduced different scenarios of interaction within the community.

4.2.4.1 Strategical measures for the social situation in Dresden and Halle

In the districts of Prohlis (Dresden) and Neustadt (Halle), the social situation deteriorated following population migration and a shrinking job market in the 1990s. The unemployment rate in the Prohlis was nearly three times higher than in the entire Dresden. In 2014, the district, with a population of 15,240, had 4,063 social benefits recipients aged 0 to 64. A total of 2,001 people with a migration background lived in the area, including more than 20 percent of all children in the area. The panel district also experienced population loss, while young people made up only one-quarter of the total population (Quartiersmanagement Prohlis 2014). The revitalization measures took place in the early 2000s within the framework of «Soziale Stadt» program, focusing on strengthening community relations. In order to make the area more attractive, vacant buildings were demolished, and a new tram connection to the city center was introduced. However, these efforts were deemed insufficient, as the district still needed to attract new residents, particularly young families. It was needed to create a generations-friendly environment.

The social situation in Halle-Neustadt followed similar trends, characterized by negative population growth and a declining number of young residents (Amt für Burgerservice Halle 2010). Several negative socio-structural patterns were evident, including high unemployment (26%), minimal migrant integration, and a population loss of nearly 44% (Geschäftsbereich Planen, Bauen und Straßenverkehr Halle 2007). The living environment, public utilities, and supply infrastructure were planned during the district's initial development but were not fully completed. The furnishing of the courtyards and central squares was largely monotonous and inadequate. These had been partly improved with urban development funds between 2000 and 2008. However, priority areas across the entire district still lacked sufficient dining, cultural, and, in some cases, sports facilities, as well as social infrastructure for all age groups.

Social and planning problems were decisive for including these areas in the federal-state program «Soziale Stadt Investments in the District (SSP)» and remain central to the integrated action plan. As Liebmann wrote, a direct correlation was found between social

conditions in the districts and the extent of planning participation. People in stable circumstances and with higher levels of education were more likely to engage in planning and decision-making than those who consider their perspective in life to be uncertain. Participation was particularly low in districts with negative economic situations and weak social data (2007).

Several program areas in Dresden and Halle were selected to counteract alarming trends in population development, address deficiencies, remedy abuses, and exploit the concerning, and improve the living environment. Activation required additional procedures to engage people of different generations. The primary goal was to integrate all resident categories, with a particular focus on inclusion strategies for individuals in difficult life situations, people with disabilities, senior citizens, and those with a migration background. The following measures were selected to improve the situation:

- improvement of the social structure by attracting different tenants groups, depending on the demographic changes
- expansion and improvement of a social infrastructure to better serve youth
- creation of demand-oriented meeting and participation opportunities for children, young people and senior citizens
- educational support in cooperation with schools and daycare centers in the area
- support for people in stressed life situations, expansion of the advisory services
- promotion of neighborhood networks, support and encourage volunteer work
- establishment of a meeting and communication places for active civil society with local associations, actors, initiatives to reduce the scarcity of institutions for community work
- promotion of the culture of participation among the population through applying the proven and testing new methods (Stadtplanungsamt Dresden 2014; Elstermann et al. 2015).

In Prohlis, more extensive and complex measures were combined with short-term activities and creative pop-up projects. Public facilities were refurbished or rebuilt, including the «Mareicke» children's and youth center, the residential area, and its street space (Gamig Street, Georg-Palitzsch Street.). Local management office «Am Koichgraben» also concentrated on creative activities for families. Special emphasis was placed on children and young people, recognizing them as socially vulnerable groups. This was made to to foster a sense of responsibility and belonging among the residents, fight with the social exclusion that tends to increase in the districts. «In Arbeit für Prohlis und Reick»

project focused on youth's professional and personal development, offering various activities. «Kleinbiotope» project engaged children from local schools and kindergartens, along with their parents and teachers, in revitalizing the local creek by cleaning and planting different types of wild grasses and shrubs (Stadtteilbüro "Am Koitschgraben" 2019; Stadtplanungsamt, Stadt Dresden 2016).

The phenomenon of public art was actively practiced while improving the environment. Following the open-air art initiatives led by IDEE 01239 e.V. in Prohlis, the city expanded its focus to foster collaboration between culture, urban development, the social sector, and civil society In 2017, the theatrical project, «Zuhause in Prohlis» («At home in Prohlis»), was launched, along with the annual festival «Theatersommer Prohlis». This partnership between the theater and district leadership facilitated dialogue within the urban community: the project became an innovative mediator between the city center and its periphery, as well as between the administration and socially disadvantaged population (At home in Prohlis 2017).

The «ha:neo» initiative (developed in fthe framework of «halle.neu.stadt 2050») in Halle-Neustadt aims to turn the district into the "public art gallery". Starting in 2020, with funding from the Saxony-Anhalt Art Foundation, monumental murals have been created to strengthen identification with the district and its urban community. Unlike mural festivals and arbitrary wall painting, «ha:neo» focused on relevant works of art, intensive involvement of the artists, and creative formats for participation (Freiraumgalerie - Kollektiv für Raumentwicklung 2019). Initial efforts to involve the public in discussions about the future mural began in 2015 (Löbner 2016). Since then, the concept has evolved into a largescale project aimed at engaging multiple actors. Jointly developed creative and artistic projects for wall and facade designs, co-designed courtyards, partially public sports and leisure areas, neighborhood paths, and passageways have become catalysts and platforms for collaboration between residents, artists, designers, housing companies, urban developers, and other social actors. The campaign also appealed to single parents, migrants, or children underprivileged or low-education households, affected by poverty. They were seen as an essential target and participation group for the social cohesion of the city of the future (Stadt Halle (Saale) Fachbereich Wirtschaft, Wissenschaft und Digitalisierung 2018). A distinctive aspect was establishing the advisory board and its long-term involvement in the project. Highly qualified representatives from city administration, academia, the arts, and the neighborhood management office were invited to oversee art selection, participation formats, and engagement with feedback and criticism (Freiraumgalerie -Kollektiv für Raumentwicklung 2019).

Another approach involved engaging residents in co-designing their public space through art-related events (Figure 4.11). One of the projects was «Hotel Neustadt», an empty high-rise building in Halle-Neustadt; in collaboration with a children's and youth theater fes-

tival, the initiative brought people together on-site, sparking a diverse range of community activities within the district. (Liebmann 2007). «Hotel Neustadt» was a community experiment that brought together around 100 young people (volunteers working in construction, design, and project management) and 120 artists from the Netherlands, France, Argentina, Austria, Switzerland, Spain, the Czech Republic, the USA, and Japan, as well as visitors, residents, and the urban space. The location offered a range of cultural strategies to reinterpret the negative image of the area. International artist groups used the hotel structure for four weeks, engaging with the location and organizing a two-week festival. «Hotel Neustadt» was accessible to the public in different ways. Festival guests attended the «Hotel Neustadt-Show», a theatrical staging dispersed throughout the house and district. Hotel guests had the opportunity to spend the night in one of the rooms, meeting with artists, young people, and former residents who once lived there as students (Förster-Baldenius and Rick 2003).



Figure 4.11 On the left: One of the first murals in the district, created with the involvement of public discussion. Halle-Neustadt, 2016, on the right: former «Hotel Neustadt» main location of the theatre festival, Halle-Neustadt, 2016.

Attracting the public to participate in cultural events is practiced in many areas. While it is difficult to establish a direct connection between the event and the development of community dynamics, the creators of these events believe that their presence contributes to improvements and fosters connections. To address unfavorable social conditions, create a sense of responsibility within the environment, and build a feeling of belonging, involving citizens directly in the revitalization process is also a common practice.

Youth- and sports-oriented transformations are often implemented with the belief that they stabilize social dynamics and attract younger generations to aging districts. In

Prohlis, a skate park and BMX-bike complex were constructed in 2010, covering approximately 1,600 square meters. The park, featuring 25 different elements, playgrounds, and meeting areas, cost nearly 500,000 euros and was financed through federal funds and programs (Müller 2016). The skate park is considered the first facility of its kind in the entire city, and it serves as a magnet for youth from other districts (as part of the opening festival «Come to Prohlis»). However, the primary goal was to bring together new generations of residents in one place. The project involved local participants, incorporating suggestions and ideas from youth and athletes. These small additions were made to vacant lots or areas previously occupied by the remains of demolished buildings or nonfunctional infrastructure.

In the Halle-Neustadt district, professionals and authorities implemented long-term measures aimed at improving the social situation, focusing on both residents and local businesses. Part of the community management strategy was the creation of multifunctional indoor facilities that could work as meeting places for different groups of tenants (Figure 4.12).





Figure 4.12 New spaces created for different generations. On the left: BMX complex in Prohlis (Dresden), on the right: landscaping with playground elements in Neustadt (Halle) 2016.

4.2.4.2 Project skate park – public open space for young

In 2008-2009, a skate park (at the Central Polyclinic) was constructed next to the former polyclinic of Neustadt in Halle. The project was a part of the update to the integrated action plan «Soziale Stadt» – Neustadt between 2009 and 2013 (Elstermann et al. 2015). The park was showcased on the International Construction Exhibition (IBA-2010) (Projektbetreuung Stadt Halle 2010). This event gave an impetus for the further development

and perception of the area. As part of IBA 2010, three major projects were carried out in collaboration with residents of all ages, including the redesign of the residential area center, revitalization of the Tulpenbrunnen area, and the construction of the skate park (Grunze 2017). The goal of this project was to create a vibrant focal point in the center of Neustadt (rather than outside of it) that would attract youth from the whole city. The area was expected to be in high demand among users of different roller sports and would help create a contemporary and urban gathering space for spectators and passers-by of all ages. It was essential to actively involve future users in the planning process (Busmann 2010). The most critical step was ensuring that responsibility was transferred to the users even after completion (Busmann and Dobberstein; Restrepo Cadavid and Quintero E. 2015). During several workshops in March 2008, the project was supported by members of the skate scene from the planning start through execution, who came together to form an association. This association is organized to support future voluntary social projects for young people in Neustadt. The results were communicated publicly. lose cooperation among all project participants made it possible to address key challenges related to noise protection, order, and security. The 1,200 m² sunken concrete floor sculpture was erected within a newly designed green area at the InterCity Hotel. It created a new entrance on the previously inconspicuous east side of the center and served as a distinctive counterpart to Neustadt Center's existing focal point on the west side. In addition to skating, the site can accommodate other roller sports such as BMX and inline skating. As part of the project, an agreement was made between the city and the skater club, granting the club shared responsibility for the proper use of the facility and marketing rights for future use. In 2009, the skater club «Congrav e.V.» began to operate the site. Shortly after its opening, the skate park attracted significant attention from young people and new community members. Participation and cooperation continued to be key priorities of this project (Projektbetreuung Stadt Halle 2010).

4.2.4.3 Multigenerational House «Pusteblume»

A neighborhood center, «Pusteblume», was established in a former kindergarten in Halle-Neustadt (Housing complex WKIII), aiming for social stabilization and better connection between residents and the municipality. In 1994, the «Vereinigung Kommunale Kultur Halle e.V.» was founded. Over the following years, the «Pusteblume» evolved into a socio-cultural center under the sponsorship of this association. Initially, the space served as an art hub for interested individuals. Activities primarily included teaching graphic techniques, hosting artist talks, organizing literature evenings, ceramics circles, school projects, and a history workshop — along with many other cultural initiatives that became integral to «Pusteblume». In 2008, the «Vereinigung Kommunale Kultur Halle e.V.» transferred the operation of the socio-cultural center to SPI — Soziale Stadt und Land Entwicklungsgesellschaft mbH. Due to the city's strained budget situation, a conceptual rethinking was necessary. A concept of a neighborhood center was developed (Paulsen and Böger 2013).

The center served as a communication and meeting place, a provider of culture and education, a hub for civic engagement, and a support facility for the Neighborhood Management Office. Its work was based on four action pillars: aging and care, integration and education, household services, and volunteering. The attention of the office to the wishes of the population increased the interaction among them. Additionally, the center functioned as a meeting place for various clubs and groups (Hoffmann 2016).

With the support of the management, people received an opportunity to suggest changes themselves or take responsibility for small-scale transformations. The success of the multi-generational house relied primarily on civic engagement and the active participation of numerous social clubs. The project «Pusteblume» received an Honorary Mention in the «Soziale Stadt 2010» competition (Elstermann et al. 2015). «Pusteblume» became a hub for various associations, initiatives, and institutions collected under one roof, all brought together under one roof as part of a governmental initiative (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth program (BMFSFJ)).

Public involvement should not necessarily require complicated and expensive measures. In situations with little funding, it is more effective to strengthen communication and social networks through positive experiences with low-budget participation opportunities. It is also preferable to base it on existing communication and participation patterns, such as local groups, schools, and clubs.

The most important outcome of the work carried out by neighborhood management offices and district centers with the population is developing the citizens' valuable experience of self-government and civic engagement. These efforts significantly contribute to the safety and the comfort of the living environment. The value of the center for the district is hard to overestimate. «Pusteblume» is an example of effective re-use of the resources available at the place. It also includes smaller projects requiring little to no investment, such as community gardening. Concepts for so-called "intercultural gardens" became increasingly widespread, especially in metropolitan areas with heterogeneous ethnic populations, starting with upgrading the residents' immediate living environment with their active participation. Similar projects have been implemented in Berlin-Marzahn, Halle-Neustadt, Leipzig-Lindenau, and Chemnitz (Bundesministerium für Verkehr, Bau und Stadtentwicklung 2009). This practice was primarily applied to demolition areas, where vacant plots emerged to prevent them from turning into wastelands. In the areas where design opportunities are noticeably limited, collaborative gardening is often the only way to engage citizens in public space management and transform them into active participants in the process.

Social activities in Neustadt were not necessarily centered around institutions. In the «Garden of Cultures», students of local schools and adults worked together to to build connections and practice urban gardening. A research initiative from the local university received an unexpectedly strong response from the community. People not only expressed

interest in being informed about the project but also participated directly. Approximately 1,800 m² near Heinrich Heine School was designated as a community garden for several school classes and local tenants. Further efforts focused on incorporating residents' suggestions (Zöller 2018).

It should be noted that the social problems in many large housing estates are increasing noticeably, making it more challenging to encourage community engagement. Reactivating and involving citizens in planning is a complex and time-consuming process. Without constant interaction, the interest for changes and participation declines rapidly. This view was shared by Quartiersmanagement in Halle and the report from SAS Dresden in 2009. In Prohlis, two-thirds of the population reportedly had neither the time nor the interest in transformation. However, it is believed that the emergence of new projects may reignite this interest (SAS Regional- Verkehrs- und Umweltforschung GbR Dresden 2012).

There was also a noticeable gap in information exchange between authorities and the public. Municipalities were criticized for providing sporadic information for the citizens through daily newspapers, their own urban redevelopment publications, or leaflets, while making insufficient use of the Internet. were deemed inadequate for ensuring transparency in the urban redevelopment process. In general, citizen participation was of secondary importance. This was partly because public demands could not always be directly implemented in the actual redevelopment plans, but sometimes the public suggestions were asked after the ready concept is discussed on the administrative level. Necessary prerequisites for the success of such initiatives include adequate creative freedom, as well as meaningful support and approval from the administration (Bundesministerium für Verkehr, Bau und Stadtentwicklung 2009).

5 Discussion of the strategies

5.1 Conditions of experience transfer

The challenges of mass housing areas in Ukraine and Germany often manifest in similar ways: neglected public spaces, functionally overloaded or underdeveloped areas, social polarization, and a lack of essential infrastructure elements. Although political and economic conditions, as well as mass housing management, have been similar in both countries in the past, the main difference between Eastern Germany and Ukraine lies in the development of their legal frameworks with numerous reforms in legislation, planning culture, and available tools. These conditions have influenced the approaches to addressing the problem of outdated housing stock and areas.

The difference between revitalization approaches in Ukraine and Germany largely influenced by the economical and social contexts in which they were applied. For example, the measures for reducing height and reshaping the buildings were not equally effective across different cities or districts. In contrast, engaging with the population and the environment to support stable housing demand proved highly effective. Balance of power and readiness of politicians for the dialog and transformation defined the success of the reforms. The initial situations of both countries seem to differed even more significantly in various aspects, including ownership, as well as economic and political conditions.

Political conditions

At the core of these inconsistencies were the differing policies and approaches to the environment pursued from the early stages of change (1991-1994). Originally, there were different political approaches regarding ownership structures. A key distinction between the Ukrainian and German situations was the absence of mass privatization in the latter. While Ukrainian flats were distributed among thousands of small owners, Germany adopted a different model—either transferring the majority of flats to housing service companies or housing cooperatives—thus keeping privatization numbers low. This contributed to greater population mobility, allowing authorities to decdetermine the extent of interventions. Since problems of the housing stock responsibility for housing stock problems rested with municipalities across Germany, they were compelled to seek large-scale solutions and involve various actors. In contrast, in Ukraine, opposition from numerous small owners and heavy bureaucracy slowed efforts to address housing stock and the built environment.

However, both countries initially faced similar challenges, such as the absence of a legal framework and a lack of funding. Despite lengthy discussions, no simple solution to Germany's housing problems was found; the first decade of transformation was marked by trial and error. The core of revitalization lay in the approval of new administrative and financial models. A significant portion of the program consisted of small-scale solutions and private initiatives. The revitalization of districts, renewal of thousing stock, infrastructure improvements, is a long-term process requiring 15–20 years for implementation, evaluation, and adjustment; in some areas, it is still ongoing. Other factors influencing revitalization in both countries will be discussed next.

As seen from the experience of Stadtumbau Ost and Soziale Stadt implementation, the German government provided the initial impetus for these programs. While citizen participation is recognized as an essential element of the planning process in Germany, achieving set goals would have been impossible without top-level regulations. At the same time, the roles of various actors were balanced, and democratic planning elements such as public hearings, participation workshops, and competitions were incorporated. Developed tools, such as Integrated Development Concept and Neighborhood management, ensured the actors' role in this process. The sequence of programs, the participation of different stakeholders, stakeholder participation, and resource allocation were monitored at every stage. The significance of these programs' success in Germany is further emphasized by the fact that their results are presented and discussed at the highest level, in the Bundestag (Deutscher Bundestag 2017).

On the contrary, in Ukraine, public participation in the development process is often limited and not effectively enforced. Although public hearings are required according to Article 13 of Ukraine's Self-governance Law, the procedure has yet to be fully implemented, and local government agencies need to amend their city charters accordingly (Restrepo Cadavid and Quintero E. 2015). Legislative uncertainty persists in addressing the interests of local communities, often disregarding public needs and the rights of community members in territorial planning and development. As previously described, the authorities often fail to understand the actual needs of the population and instead prioritize projects that enhance their portfolios. As a result, residents have become accustomed to initiating transformations on their own, rarely receiving financial support. In such cases, public participation may be purely symbolic and vulnerable to speculation and corruption.

Planning instruments

The transformation process requires the creation and adaptation of planning instruments, which cannot simply be updated through experience transfer. The East German experience demonstrated the importance of comprehensive spatial planning updates. Confronted with the functional and social obsolescence of urban spaces, Germany enacted laws to accelerate the alignment of West and East planning systems, promote administra-

tive decentralization, and ensure compliance with European Union regulations. In addition to traditional project documentation, informal tools such as framework plans were developed to outline potential changes for the public. These documents are essential for presenting transformation projects to stakeholders and legitimizing them.

A notable achievement of German planning institutions was the development of precise demarcation plans that delineate management areas among different actors (although privatization mistakes also occurred). Below is the example of the ownership structure of Gorbitz (Germany) and an example of a land distribution plan as proposed by «Guidelines for territories of micro-districts (quarters) distribution to determine the adjacent building territory» in Ukraine (Figure 5.1). The German district plan is exceptionally detailed, leaving no undefined plots or areas of responsibility. This level of precision resulted from the collaborative efforts of multiple institutions under state supervision.

A realistic and precise territory distribution plan is an essential tool for district development. Ukraine has yet to develop equivalent documentation. To prevent future ownership conflicts and ensure a balance between private and public actors, a detailed zoning plan for each district must be included to guarantee that commercial structures and businesses do not violate property rights. This plan could complement the Detailed Territory Plan discussed earlier and aid local budget planning by coordinating the efforts of city planning institutions, district communal services, independent bureaus, and public oversight bodies. At this stage, it would be helpful to use the schemes developed by Kharkovproject, described in Chapter 3. According to this proposal, a shared land resource would be established, consisting of plots that do not belong to housing associations or district institutions. In the future, this land could be managed jointly by multiple tenant organizations and serve as a communication platform. Land plots without clear attribution—whether due to lost or undeveloped documentation—may be incorporated into a fund for future development. This document is necessary to ensure transparency in land allocation and disposal processes, simplify public access to urban planning data, and streamline ownership attribution. Additionally, it would enhance residents' understanding of their rights and reduce state monopoly.

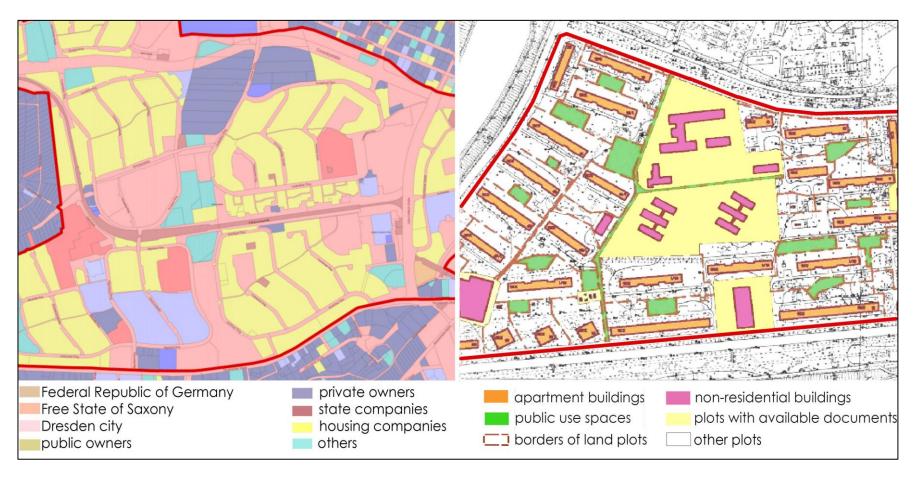


Figure 5.1 On the left: ownership structure in Gorbitz, Dresden (Source: (Stadtplanungsamt Dresden 2016b), On the right: proposed example of district territory distribution (industrial construction) in Ukraine, Source: (Ministry of Regional Development, Construction and Communal Sevices of Ukraine 2013) p. 21).

Economic conditions

Extensive revitalization measures require sufficient and consistent funding. According to official figures, between 1999 and 2018, the Federal, State, and local governments provided approximately 5.3 billion euros for investments in 533 program municipalities, enabling integrated developments across 934 program areas. In the 2019 program year, the federal government provided 190 million euros. Federal grants made available to the federal states under Article 104b of the Basic Law corresponded to a third of the eligible costs. Together, the federal states and municipalities added the remaining two-thirds of the federal funds (Bundesministerium des Innern, für Bau und Heimat 2019). The development of urban development concepts has been promoted with the «Stadtumbau Ost» competition. Depending on city size, participating cities received subsidies from the Federal budget (Bundesministerium für Verkehr, Bau und Wohnungswesen 2003). For example, the amount ranged from 50,000 euros for cities with up to 30,000 inhabitants to 125,000 euros for cities with over 100,000 inhabitants (Deutscher Bundestag 2017; Bundesministerium für Raumordnung, Bauwesen und Städtebau -BMBau- 1994; Röding and Veith 2003).

The application of new instruments wouldn't be possible without active financial support from the state and land budgets. This support came in the form of reduced-interest loans from state-owned banks, grants for the projects that lie in the interests of the general public, and, finally, offering investors below-market prices in exchange for maintaining low rents (Hunger 2019). Residential areas included in the programs required substantial financial resources, primarily directed at improving the living environment, enhancing social and cultural infrastructure, and establishing a new democratic management system.

The maintenance of the large settlements demanded great financial resources; therefore, demographic changes and the shrinking of East German cities posed a serious challenge. Drawing from the experience of East German mass housing districts, funding mechanisms operated by securing investors and distributing expenses among all stakeholders (for example, one-third from the state, one-third from the municipality, and one-third from private actors or flat owners). While state revitalization programs (Stadtebau Ost, Sociale Stadt) provided strong incentives for communities, they did not cover all costs. As part of the program «Städtebauliche Weiterentwicklung großer Neubaugebiete in den Neuen Bundesländern und Berlin Ost» (Urban development of large new housing estates in the new federal states and Berlin East) in 1993-1994, a total of 600 million DM was allocated across 141 districts in East Germany, with one-third of the funding provided by the Federal Republic (Rietdorf 1997a). The financing of the restructuring process involved investments from multiple sources in each case. For example, in Halle, the municipality combined its own resources with funds from various programs, including the federal urban development initiatives «Städtebauliche Weiterentwicklung großer Wohngebiete» («Enhancement of large residential areas by urban development measures»), «Soziale Stadt» and «Stadtumbau Ost» as well as compensation funds under the Nature Conservation Law (Neubert 2010, 2010).

Even with these high investments, the results of district development faced significant criticism, particularly regarding the amount of funds allocated for their implementation (Brattfisch 2007). Some measures were not filly accomplished or or carried out to the expected extent due to budget shortages. Therefore, experts advocate for a more flexible budget and the ability to plan expenditures over extended periods. Thoughtful planning and directed funds to where they are most needed would help ensure their effectiveness for the next 20, 25, 30 years (Röding and Modes 2012).

The allocation of equal budget funds for revitalization in Ukraine is hardly feasible. However, with private investment and public contributions, securing funding for local projects appears more realistic. On the other hand, making any financial forecast is challenging without considering local market characteristics, as well as evolving norms and standards.

Similar financing mechanisms were proposed in programs supported by German partners within the framework of the «Model project German-Ukrainian Efficiency Houses» German-Ukrainian program. According to the declared goals, around 60% of all costs will be covered by the foundation, while the remaining costs will be borne by residents or financed through credit (dena 2019). Taking out loans for building or territory reconstruction is a common practice in Eastern European countries. Not only Germany but also Poland, the Czech Republic, and Hungary have successfully developed specialized financial services for housing renovation; however, this sector is almost non-existent in Ukraine (Vlasenko 2017). As a result, major hopes are placed on international sponsors.

In Ukraine, even when funds are allocated correctly, they are often insufficient. Mass housing districts usually have weak social data and cannot afford co-funding; forcing their communities to seek alternative funding sources. Public instruments, including financial ones, are not enough to meet all the challenges of a society that changes at a much faster pace than the country's administrative and political systems. Even the legislative provision granting united territorial communities the right to receive state subventions for infrastructure development does not fully resolve these issues (Kozak 2018). According to a survey conducted by civil network OPORA, more than 60% of Ukrainian private apartment owners are willing to invest their funds into renovating their homes (Vlasenko 2017). However, due to an unstable job market, currency fluctuations, and inflation, many hesitate to invest large sums or take on credit obligations. In this context, fundraising may serve as an alternative. Today, the concept of fundraising is undergoing a radical shift: it is no longer seen as a desire for financial resources for survival but as invitation to investors, private sponsors, sponsors for joint participation in socially significant local projects (Kozak 2018). Municipal fundraising, which involves accumulating funds through donations from community members and third-party donors, could be a viable solution in this case.

5.2 Comparison of approaches to district revitalization

Depending on political and economic conditions, the approach to transformation develops differently. As seen in Chapter 3, various attempts to transform mass housing developments have been undertaken in Ukraine, but they differ in key ways from the actions taken in Germany, as illustrated in Figure 5.2. Below each point will be explained in more detail.

Ukraine

- exclusive approach
- single, short-term actions
- one-actor, poor communication
- · absence of control

Germany

- · comprehensive approach
- long-running projects
- multiple actors' interactions
- control and transparency

Figure 5.2 Difference in revitalization approach in Ukraine (left) and Germany (right) as the result of a set of different conditions.

Analysis of German and Ukrainian experience allowed to identify the following principles of district revitalization:

5.2.1 Exclusive/comprehensive approach

The strategy must be research-based to cover all aspects of the project area. Identifying and evaluating internal and external factors form the foundation for possible development options, leading to a precise formulation of strategic goals that should be translated into action plans and specific projects. A comprehensive strategy should combine legislative, economic, spatial, social, and other objectives. The range of issues covered should remain consistent, ensuring alignment between the strategy's scope and the competence of spatial development authorities. Many transformation attempts in Ukraine focus on only one dimension, disregarding other factors, and therefore fail to achieve the desired results.

German development concepts, as seen in the examples of Dresden and Halle, are designed with urban development trends in mind, considering how a single project can influence the future growth of neighboring areas and what solutions can be proposed. All strategic and action plans should align with the local planning hierarchy. Their development should be integrated and carried out with consideration of both the city's development priorities and the broader regional context. A well-thought-out and coordinated

transformation should assess problem areas while anticipating both universal and individualized approaches. The parallel implementation of multiple social and infrastructure projects allows for the coordination of smaller actions to achieve larger goals.

5.2.2 Single, short-term actions/long-running projects

The value of the minor local events should not be underestimated in the flow of the transformation process. Small projects have a broader impact, fostering trust and strengthening connections between locals and professionals. They help residents perceive the territory as a shared space that belongs to the community and encourage a sense of responsibility. These events also help identify the most active neighborhood members who may form a local activist group, assess the scope of problems, and audit available resources. Additionally, they strengthen neighborhood ties and—perhaps—serve as a catalyst for larger initiatives. These events are also helping the social scientists to collect valuable data about the neighborhood and define directions for future projects.

Even though festivals in Kharkiv-Saltivka and Halle-Neustadt, as well as art actions, did not directly lead to more extensive initiatives, they served as initial kick-off meetings for tenants and professionals. The example of Lviv-Sykhiv demonstrated that some activities could evolve into participatory movements, but such cases remained rare.

Small projects are easier to implement, and their impact may be more noticeable, although they do not always produce long-lasting effects. Long-term projects must include proposed adjustments at crucial points. However, these alternative scenarios should not compromise the main strategic goals. Combining short-term actions with similar objectives into a single program line helps maintain a steady course of transformation and keeps participants engaged. Short-term actions attract citizens in both Germany and Ukraine. However, the primary reason for the failure of most Ukrainian transformations is the lack of a long-term vision and the inability of planners to connect multiple projects into a cohesive long-term strategy, as seen in German case studies. Broader goals are often declared vaguely, without being broken down into manageable segments. To enhance public oversight and improve outcomes, long-term strategic plans should be divided into clear phases and financed proportionally.

German practice has shown that a significant part of a transformation's success depends on acceptance by the local population. For this reason, a considerable amount of effort was focused on tenant activation and education, involving them in the planning and conceptualization process through a series of small actions. District upgrading with public participation does not necessarily have to be a cost-intensive project. The experience of public gardening and land reuse became very popular in mass housing districts in Germany. Similar activities could be introduced in Ukrainian districts with minor adjustments.

5.2.3 One actor/multiple actors' interactions

Strategic planning requires strong leadership and motivation to initiate activities and develop skills in organizing teamwork, communication, and conflict management. Collaboration between actors is a necessary prerequisite for transformation. All stakeholders should be invited to participate in the planning process and decision-making, including government representatives (municipality), the business community, public organizations, and active members of tenant associations. All actors should be equally involved in discussions and implementation, seeing their direct impact on the project. It contributes to building partnerships and mutual understanding within the community, ensuring full support and engagement in programs and projects

According to Liebmann, certain conditions have to be maintained to ensure quality exchange between the actors:

- ensuring transparency in planning decisions and providing access to information about each important step in the process; citizens must have access to the goals and framework plan or participate in their development
- involving citizens in the conceptualization process where they can have a real influence, meaning their engagement should begin before the planning phase
- making proceedings and decisions regarding the scope of transformation publicly available (2007)

German experts have highlighted the issue that these conditions are not fully met during the implementation of projects in mass housing areas. However, these actions are still significantly more effective than similar projects in Ukraine. Due to misleading planning documentation and a lack of public awareness, residents often stay aside from the transformation process. In Germany, an integrated approach that engages both public and private actors helps secure a project's future, even though it increases the preparation time. As seen in Chapter 3, revitalization efforts in Ukraine are typically initiated by a single party—either municipal or private actors—with varying degrees of third-party involvement and poor communication between participants. Because of this one-sided approach, public interests are often overlooked. As a result, projects may fail to gain public support, fall short of their expected impact, or be entirely replaced by the authorities with something else. In Ukraine, decisions and budgets for state-initiated transformations are often kept undisclosed, creating opportunities for corruption and manipulation. Public-initiated actions, on the other hand, are largely unregulated and rarely receive official support, which can lead to conflicts with neighbors and businesses. Ensuring transparency in the planning process is complex, even though the necessary tools are already embedded in legislation. Strengthening the role of public actors primarily depends on the information

policies of the state and local authorities, as well as the efforts of non-governmental organizations that educate citizens about their rights and opportunities. While some progress has been made in Ukraine, it remains insufficient compared to Germany.

5.2.4 Absence of control/control and transparency

Approved projects and their components should be continuously monitored and adjusted, regardless of their size or the number of participants. The experience of transformations in East German districts demonstrates a broad set of tools for project control and monitoring. These include informal framework plans, public hearings, and communication through Quartiersmanagement which safeguard the right of all actors to contribute and discuss the future of their district. Public accessibility is a crucial component of oversight, and ensuring it through media coverage, public hearings, discussions in newsletters, or personal communication can encourage stakeholder participation and help align outcomes with declared goals. As mentioned above, the involvement of actors is a key aspect of information policy and a fundamental guarantee of control. In German cases, each transformation phase is subject to discussion and detailed reporting, ensuring project transparency for all stakeholders.

A possible solution for monitoring, evaluation, and social work during and after project implementation may be found in practical experiences. One approach could be establishing a new body to manage small territories, with responsibilities similar to those assigned to neighborhood management offices in Germany. These offices have proven highly effective in working with residents and providing mechanisms to oversee city decisions within specific areas. Depending on the district's size and the level of community engagement, there may be one or multiple units (interaction hubs). This new body should not be confused with the old communal service bureaus, which were present in Soviet-era districts and later transformed into commercial service providers. Historically, these communal offices acted as contractors and facilitators of technical maintenance and repair services. However, with the emergence of tenant associations as independent entities managing building and neighborhood upkeep, these organizations have lost their monopoly on service provision. They can be reoriented into community centers or act as district management bureaus. The new neighborhood management office would serve as an independent link between municipalities and public stakeholders, facilitating transformations in spatial planning, governance, and other areas. Unlike utility providers, which focus on technical maintenance, this body would take on a broader range of strategic tasks. Importantly, complex funding mechanisms, such as municipal and state development programs, would not be necessary for its operation. The existence of these offices can be supported both by contributions from homeowners, independent property owners, and by the state funding, but it is vital to maintain their independence.

5.3 Requirements for the revitalization strategies

The study of mass housing area development in Ukraine revealed that the planning principles of multi-apartment housing districts differ very little from those in other post-Socialist countries. Their decline was attributed to rapid economic changes, flaws in the legal framework, low public awareness, and the reluctance of political actors to implement reforms. Nevertheless, as interviews indicated, both tenants and professionals evaluated mass housing districts positively. Examples of individual transformations at various scales demonstrated that the success of each project depends on multiple factors.

A comparison of the German and Ukrainian experiences highlighted the importance of constant oversight, active administrative participation, and resident engagement in the revitalization process. The analysis of various projects also underscored the need for a systematic approach to revitalizing mass housing areas.

According to the Ukrainian Concept of Public Management in the Field of Urban Development, management relations and the interaction of authorities with civil society at the state level during extensive planning must be based on the principles of publicity, legality, planning, scientific approach, subsidiarity, and decentralization (Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine 2019).

The strategy for revitalizing mass housing areas is based on the following principles:

- Politically legal Law must take precedence over power; all actors must operate
 within a legal framework, ensuring that their rights are equally protected from any
 arbitrariness.
- Transparent The public must be involved in decision-making, with public oversight ensuring government actions align with societal interests and citizens' rights and freedoms. Transparency, accessibility, and open communication between public administration and citizens must be maintained at all levels.
- Scientifically approved Decisions must be based on comprehensive analysis and research. The management system should be formed according to science-based requirements.
- Effective Goals should be achieved at a reasonable cost by selecting the most
 effective management decisions, based on thorough analysis and consideration of
 multiple solutions. Project evaluation should go beyond financial and time constraints, also accounting for unforeseen circumstances such as political changes,
 resource availability, and professional expertise.

- Comprehensive planned Detailed planning should be carried out at multiple levels (city district neighborhood), covering organizational and economic management, socio-economic development, planning, and design..
- Flexible Depending on project priorities, plans should be continuously updated. Individual projects must align with different aspects of the overall strategy while minimizing uncertainties and risks. The strategy's progress should be guided by the actual advancement of ongoing projects rather than a rigid, theory-based plan.

The revitalization strategy should reflect various aspects of district transformation, including spatial development, clarification of ambiguous areas in legislation, land use management, balance of power, infrastructure development at both the district and city levels, and participatory planning. Additionally, the strategy should address transformation on multiple scales, from the city and district levels to smaller units such as microdistricts, neighborhoods, and courtyards, adapting to each case as needed. Guided by the Concept of Public Management (2019), priority directions for the revitalization strategies for mass housing areas in Ukraine are classified into five main categories with their subdevision described below.

<u>Implementing changes in spatial legislation:</u>

- shift towards horizontal management at all administrative levels, granting local managers the authority to propose and implement transformations
- prevent duplication of legislation and institutional functions
- develop guidelines for spatial planning and establish a clear hierarchy of spatial plans at all levels, from city and regional planning to individual neighborhoods, integrating detailed territorial plans and local regulations into a single framework
- create legislation on land use under public legal rights to balance the interests of the state, local government, and local population
- establish financial support instruments at the state and municipal levels to fund the development of spatial planning documentation at the local level
- improve legislation on the ownership changes for land plots for public needs, while detailing the requirements for such ownership transitions
- develop an action plan to reform contractual relations in the field of spatial development and district revitalization.

Strengthening cooperation of stakeholders within cities and districts:

- promote democratic planning at all levels
- improve communication and public participation in the planning process by ensuring transparency in land management documentation and architectural and urban planning councils
- create conditions for local community engagement by cultivating a sense of ownership and responsibility among residents, strengthening their cooperation
- provide effective mechanisms for public control and decision-making.

Taking actions to minimize and prevent land-usage conflicts:

- keep the population informed about the ongoing and planned projects
- establish a mediator body at the local (municipal) level
- link spatial planning projects with local territory organization and compensation measures
- restrict business influence over district land use, buildings, and new construction
- incorporate art events, pilot projects, and guerrilla interventions into revitalization and spatial planning to explore alternative solutions
- integrate action concepts for problem areas into local plans.

Strengthening functional diversity and local labor market:

- revise the principles of function distribution on a city-wide scale to enable the development of local centers
- •reinforce the role of secondary and minor sub-centers as service providers to ensure accessibility to essential facilities and services for different population groups
- introduce a strategic planning system to support the development of centers in planning documents, including zoning reservations and monitoring their implementation.

Additional high-priority measures to be included in the city-wide development strategy:

- create a large-scale open space network on the city scale to ensure high-quality open spaces within districts
- ensure connections between the districts, link important infrastructure points

- restrict excessive spatial expansion to reduce urban sprawl, promote the reuse of abandoned areas, and maximize existing space potential within districts
- ensure infrastructure development is proportionate to other types of construction
- establish continuous greenway links between center and suburbs
- integrate district infrastructure development into the city-wide transport strategy, concerning the growing amount of traffic, focusing on the development of city mobility and logistic systems
- optimize traffic flow based on the capacity potential of different transportation modes and street networks
- improve the efficiency and attractiveness of public transport
- expand and enhance pedestrian and bicycle paths for short-range commuting.

5.4 Suggestions for the scenario of revitalization

5.4.1 Focus on peculiarities within the area of mass housing development

Revitalization, as a set of actions carried out by institutions, organizations, and individuals, depends on the balance of power in each specific case. It requires a tailored and targeted approach based on the spatial and management profile of each district.

The algorithms for revitalization should be designed with consideration for the spatial structure and property profile of specific housing areas. The following sections will analyze two of the most representative types of housing areas in Ukraine, constructed during the 1960s and 1980s...

As discussed in Chapter 2, micro-districts from the 1960s are smaller in scale, offering significant potential for courtyard dwellers to manage private and semi-private spaces. The analysis in Chapter 3, along with the case study of the Odessa courtyard on Varnenska Street, demonstrated that residents are more inclined to initiate changes on-site and form small groups to jointly manage and control their territory.

In later districts, from the late 1970s to the 1980s, semi-public and public spaces dominate. This is due to the larger scale of the buildings and the less-defined courtyard boundaries. In the example of Saltivka in Kharkiv, such undefined spaces are less likely to be managed and maintained. The case of resident organization for territorial management in the Lviv micro-district Sykhiv is an exception, as its development strategy and vision

extend beyond a single plot to the entire district, making it difficult to organize solely through local activism. Thus, the development scenario allows for different organizational approaches depending on the context..

5.4.2 Proposed scenario for district development

As experience shows, revitalization can be initiated in several ways. The first approach follows an authoritarian model, rooted in centralized planning traditions. The municipality determines the most suitable approach for the district's space and budget, selects investors, and implements changes. This approach is common in Ukrainian cities. As seen in the case study of Saltivka, changes are imposed from above. While these changes achieve some success, they offer little room for further transformation.

The second approach relies on independent expert support and guidance. The strategy and action plan are developed by experts based on in-depth. During the process, stakeholders can contribute their opinions and visions through questionnaires, polls, round tables, and public hearings, helping refine the expert team's findings. With the participation of foreign and local experts, this approach has been applied in multiple projects across Ukraine. Its disadvantage is that there is little to no further expert support and supervision long-term project. Budget constraints and tight timeframes limit the extent to which expected results can be achieved. Public interest decreases proportionally to the amount of investment and professional control.

Another option for the municipality is to actively promote local activism. This method was intended to provide sustainable development partly or completely maintained by the public. In the case of the festival of neighbors on Saltivka, the municipality showed support to a newly appeared initiative. This design-thinking approach facilitates more effective implementation of changes, as they are both proposed and embraced by the public. However, the population may quickly lose interest in the transformation process without the constant reinforcement from local activists. The same applies to citizen advisory involvement through round tables, public hearings, and art events, as observed in Germany. Examples from Halle and Prohlis demonstrate that municipal oversight and public engagement must be maintained throughout all stages of the program.

The most advanced practice applied in Ukraine was represented by the approach led by NGO Better Sykhiv in Lviv. This became possible when an active core of the local community independently initiated the transformation, subsequently involving other stakeholders. The approach was based on collective participation and the establishment of an NGO composed of community leaders, professionals, and independent experts.

Solutions were developed by self-organized, multidisciplinary teams of experts and users, which later gained municipal support. However, as previously mentioned, successful development through self-organization was an exception. Ultimately, the transformation process and strategy formulation were supported and secured through collaboration with local authorities.

Both Ukrainian and German experiences confirm the statement that that development progress depends on continuous administrative support. In this process, local political authorities play a leading role. Based on the studied experience, the proposed approach to district revitalization is outlined in Figure 5.3.

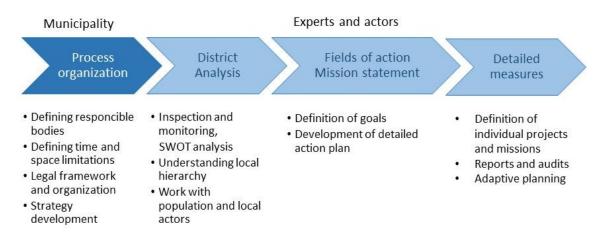


Figure 5.3 Stages of district revitalization scenario.

A scenario of district development, regardless of the spatial structure, should include the following steps:

1. Preparatory phase is the task of local power institutions. The relevant municipal committees must reach a political agreement on the scope of the transformation. The intervention area's size and the responsible groups should be determined, ensuring compliance with current legislation. At this stage, a rough budget estimate and strategic direction are also agreed upon.

The responsibilities of the multidisciplinary bodies during all phases of transformation nelude regular reporting on project progress and all aspects of their work (such as recruiting new project members) across various platforms, including public meetings and local media. Additional responsibilities may include:

- developing and approving revitalization projects for residential areas
- securing funding through budget allocations or crowdfunding initiatives

- facilitating conflict resolution and mediation
- educating residents about management opportunities
- monitoring implementation and overseeing long-term usage.
- 2. Once the legal and organizational work is completed, the work continues on the subsequent blocks with broader professional involvement. Inspection and monitoring of the intervention area area are conducted in collaboration with relevant specialists. A comprehensive understanding of the site can be achieved through a SWOT analysis of the territory. The transformation scenario is defined based on the studied planning structure, functional hierarchy, and social data.

Preparation and review of the planning tools. After determining the hierarchy responsibility areas, the plots held in reserve must be coordinated with other associations. The creation of the detailed profile of the territory should be carried out in a general-to-specific approach, which should consist of the following points:

- clearly defined borders and territory zoning
- identification of functional and spatial structure
- property attribution for the territory
- a plan for "urban voids" transformation and areas reserved for construction.

The analysis includes assessing the local hierarchy and management structure, identifying responsible bodies and actors at the local level, as well as organizations and public activists/volunteers, considering the studied ownership structure. The division of territory and stakeholders will determine the scope of potential individual interventions and future control, including management organizations and structures such as single ACMBs, ACMB cooperations, and private management offices.

Another crucial aspect is engaging the local population to enhance the contribution of tenant group participation in the process (definition of responsible persons inside of tenant organizations, local small businesses, parent groups, schools).

Working with the population depends on the defined social structure and existing non-governmental institutions. Communities in smaller courtyards of 1960s districts have an advantage in terms of organization time compared to residents of multi-story buildings in free-layout areas. Unification can follow the standard procedure of ACMB establishment or an agreement of tenants in a single small yard. Compact and often enclosed yards can also be successfully improved through local efforts. However, for large projects, individual communities will still need to unite at a higher level.

It is a more difficult task for residents of high-rise buildings in the 1970-1980s districts due to many small actors. In this case, coordination among other responsible parties plays a decisive role. As shown in Chapter 3, the example of budget localization in Saltivka demonstrates that municipal communication is often ineffective—either absent or replaced by ready-made solutions. In such cases, control over the territory can be exercised not by the closest neighbors in the yard, but by authorized representatives or volunteer associations of active citizens.

3. Mission statement and goal-setting stage begins after the clarification of project limitations, potentials, and local specifics. This stage involves the creation and introduction of the framework project, which outlines the main areas of interest and corresponding goals. By this point, most documentation has to be prepared, and all unresolved issues regarding property must be settled. Extensive interaction and consultation with all stakeholders—through workshops, public hearings, and other forms of communication—are essential to anticipate the potentials and challenges of the planned actions.

Action plan development should begin once the scope of problems, organizational structure, and main action fields have been defined. The approach to action plan development reflects the relationship between authorities and local democracy organizations. Groups of actions should be formulated regarding the problem areas and the types of their possible application. Each action should specify responsible actors, financial and time frames, stakeholders, a description of the expected effects, and potential challenges, as depicted in Figure 5.4. A degree of flexibility should be maintained to allow for future adjustments.



Figure 5.4 A schematic representation of the components of the action plan

4. Definition of individual detailed projects, their realization, and further monitoring is the final stage. Once strategic goals are agreed upon and the action plan is established, concrete missions and projects are proposed and implemented. Projects involving multiple participants are particularly prone to changes and revisions. To prevent internal conflicts and ensure successful completion, re-planning and the creation of alternative solutions should be considered from the beginning. Adaptation of the transformation path should be based not solely on the theoretically elaborated plan but also ongoing progress.

Understanding the specific characteristics of the community structure will determine the methods of interaction with both the territory and the public. For example, the districts from the 1960s, where semi-public spaces prevail, require active public organization through ACMBs and co-owner cooperatives. These associations, typically smaller in scale, may choose to operate independently or unite into a medium-level body, such as a local ACMB association, to engage directly with other stakeholders (Figure 5.5). In such cases, with minimum intervention and support from third parties, they have enough resources to monitor and manage their territories.

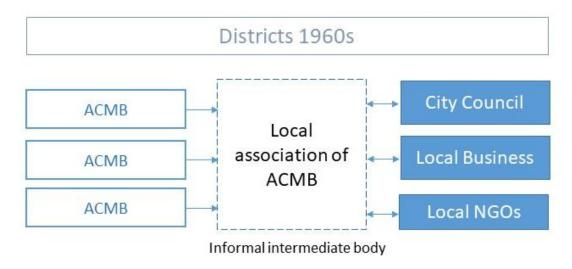


Figure 5.5 Proposed scheme of relations between different bodies in the district.

The districts with a prevailing amount of public space (formed as a free layout from the late 1970- the 1980s) require careful delineation to ensure that local tenant associations have sufficient land for their needs and development. As previously mentioned, organizations in the districts with a large number of people would require assistance in managing the territories, as they often consist of multiple tenant groups and various local organizations. The proposed management unit (neighborhood office) would serve as a crucial link between authorities and residents. This office would help monitor problem areas and identify opportunities for development. The neighborhood office could be structured as an organized working group, comprising representatives from:

- power Municipality (City Council and its divisions, responsible for projects implementation)
- community local non-governmental organizations, co-owner associations, activist groups, and clubs
- professionals architects, city planners, and communication specialists
- third parties (if needed) including local businesses, sponsors, or investors.

For the well-being of all district residents, a strict balance of power has to be observed preventing shifts toward political or business interest. For this reason, the working group should rotate periodically, with City Council representatives and investors refraining from taking leading roles. The primary responsibilities of the working group include receiving and refining suggestions, formulating proposals, and overseeing the implementation of projects. The group should operate in communication with City Council and other stakeholders, holding regular meetings for the period needed to monitor the projects and manage their agenda. This neighborhood-based monitoring and support body may function temporarily during the transformation phase or remain a permanent fixture, depending on the project's objectives and the level of municipal support (Figure 5.6).

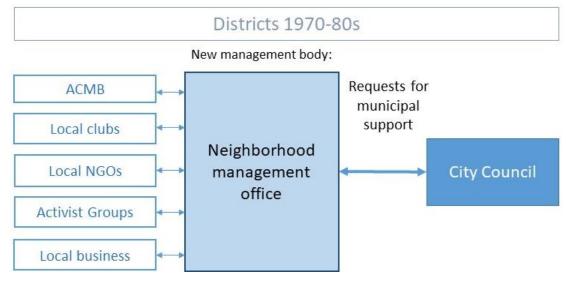


Figure 5.6 Larger districts require the creation of a special monitoring body that consists of representatives from different stakeholder groups.

5.5 Conclusion and future research

Conclusion

In this thesis, the issue of post-socialist legacy in Ukrainian cities was addressed. The mass housing areas in Ukraine will continue to evolve and change. The quality of this process will primarily depend on systematic transformations from both the top down and the bottom up. Crucial for the development of neighborhoods is the understanding that these changes should begin as soon as possible. This research proposed examining the differences between German and Ukrainian cities and districts, defining them through a set of internal and external factors such as historical, political, and social conditions, public networking, business climate, the inherited administrative system in the neighborhoods, and local budgets.

The research process identified issues beyond the original study area that are still relevant to the topic. A historical overview of mass housing construction in Ukraine showed that many problems stemmed from miscalculations by planners, but most were rooted in the peculiarities of social policy at the time. Changes in politics and the economy only made these issues more apparent. The distinctiveness of mass housing in Ukraine was defined, on one hand, by large-scale homogeneous spaces that are constantly being altered by private capital and spontaneous public interventions. An overview of mass housing types built between the 1960s and 1980s revealed a diversity of existing planning and administrative situations, further complicated by uncontrolled modifications.

The main focus of the research was to identify the problems and conditions of mass housing development and compare them to an ideal scenario. The studied districts served as material to justify compiling the discovered measures into a set of recommendations.

The analysis of the current state of mass housing and revitalization progress in Ukraine has revealed poor management, unclear ownership, rights violations, and other issues. The most critical problems are the unsatisfactory state of legislation and the management system, which make the implementation of systematic changes impossible. The country needs to develop efficient legislation at all planning levels, renew or update existing planning instruments, and eliminate inconsistencies and redundancies in documents and institutional functions. Legislative reforms should continue at all levels, with a primary focus on local implementation. The management system is already undergoing changes through the Decentralization Reform, which helps structure budgets and introduces recent regulations on communal services and district renovation. However, these processes are uneven and disrupted, requiring the completetion to enable further development.

Democratic planning was highlighted as a promising direction but has not been widely implemented due to imperfect legislation. Poor regulation was also identified as the main cause of negative trends in Ukrainian mass housing districts. However, these trends are

not seen as particularly dramatic. The survey revealed that residents' attitudes toward mass housing areas are significantly more optimistic than researchers and outsiders might expect. Nevertheless, with increasing housing demand and the emergence of new housing types on the market, mass housing will face greater competition in the coming decades. These issues must be addressed within the next decade, as revitalization is a long-term process..

The study examined how Germany and Ukraine responded to emerging challenges by analyzing changes introduced by authorities and the subsequent reactions of local communities. German districts, adapting to residents' needs and market demands, have undergone a complex and controversial transformation process, which remains incomplete. Many radical methods failed to gain support, proved ineffective in the long run, or were unsuitable for the Ukrainian context due to economic, demographic, and other factors. For the same reasons, most measures cannot be directly transferred. This was already evident in Germany when Western revitalization strategies were applied to districts in the East. Studying the operational mechanisms of revitalization programs and the interaction between municipal authorities and residents helps assess the feasibility of adapting and modifying this experience. The German revitalization experience has demonstrated that every district requires an individualized approach rather than relying solely on universal tools. The transformation process involves measures that must be continuously adjusted and evaluated, meaning that rapid results should not be expected. As observed in case studies, small-scale local initiatives that enhance the functionality of public spaces have gained popularity in recent years.

The analysis of case studies revealed that many measures used in Germany and Ukraine share similar external characteristics. These include efforts to improve functional diversity, engage the population in the planning and transformation process, and implement spatial, environmental, and social initiatives. Despite the significant state support for district revitalization in Germany, the Ukrainian experience demonstrates that small, crowdfunded interventions can have a strong positive impact on neighborhoods. These measures can not only complement centralized initiatives but also achieve meaningful results on their own. However, transformations in German cases indicate that such interventions are most effective when integrated into a broader revitalization framework. Systematic funding, consistency, legal support, and the exchange of experiences are key factors that increase the chances of success.

Future research

In conclusion, despite the studied differences, the most effective measures and tools can be identified and should be considered when developing revitalization strategies:

• Expanding the range of planning tools: Integrated development concept and framework plan should be established as a customized set of actions for each area, taking

into account both positive and negative factors. Planning should shift from declarative strategic master plans to integrated urban development, with a stronger focus on action planning that addresses key strategic development issues for cities and their districts.

- Changing the planning culture should also involve public actors, who currently lack sufficient power to contribute to the planning process. The new planning model should be based on direct interaction between state representatives, planners, and stakeholders. Non-governmental organizations, tenant groups, and other independent bodies must be actively included in the planning process and given enough authority to influence decision-making. A key tool for this is the Quartiersmanagement, an accessible and independent mechanism for monitoring and managing areas, educating and connecting local communities on planning and management issues, and establishing a communication platform between different stakeholders.
- Introducing democratic planning practices (participatory planning) and educational measures to foster a horizontal planning culture. Participation should be recognized as an ongoing learning and improvement process that benefits all those involved in urban redevelopment. This requires increasing both opportunities for participation and motivation to engage, for example, by providing ways for residents to take personal responsibility in the planning and transformation proces.

This thesis mainly focused on theoretical scenario suggestions, which will inevitably vary when applied to real-life transformation planning. The feasibility and scope of the proposed tools should be further examined on a case-by-case basis, considering the specific local context.

Given the nature of the research questions, the suggested approaches are most applicable to Ukrainian mass housing built between the 1960s and 1980s. While many urban planning situations share similarities with the studied cases, areas with mixed development may require additional research. Key challenges in implementation included low public engagement, a shortage of specialists for tenant interaction, and insufficient funding reserves. Additionally, some aspects of the study could not be further explored due to the poor quality of available statistical data.

For this reason, the collection and analysis of this information remain an important and relevant research topic. Further studies are needed to explore management approaches and spatial system transformations separately. Another valuable area of research is the study of community relations and bureaucratic processes. This data would help develop a deeper understanding of the local context and refine the proposed scenarios for real-life application.

Other aspects also warrant future investigation, including the development of sustainability and user-oriented innovations, which will undoubtedly require extensive experimental work and pilot projects.

An unresolved issue remains regarding the role of owner associations and cooperatives, as their powers need to be clarified and expanded in the future. However, given the complexity of the revitalization process and the influence of legal, economic, and planning conditions, a systematic strategic approach at the state level is required, rather than relying solely on isolated local initiatives.

Revitalization in mass housing neighborhoods requires a reevaluation of both existing and new boundaries, as well as functional structures, alongside the establishment of new rules and tools for balancing public and private interests. The functional and managerial systems of these neighborhoods will continue to evolve. However, achieving qualitative development depends on improving communication between communities and the government, as well as advancing decentralization reforms at the local level. The ongoing transition from administrative control to initiatives led by non-governmental organizations must eventually extend to grassroots movements.

List of Figures

Figure 2.1 Socialist city «New Kharkiv.» Left: a modern plan of development. Source: Open Street Map. Right: Axonometry of the housing complex, 1929-1930
Figure 2.2 Hierarchy of Planning Institutions of the Soviet Union
Figure 2.3 Hierarchy of service levels in micro-district development, their location in different urban scale (Vavirovskiy 1964)
Figure 2.4 Layout of typical 1960s development a - Kharkiv, Pavlovo Pole (fragment) b - Odesa, Cheryomushki (fragments) still reminds quarter development, buildings organized in small yards which are easy to define on the plan. Source: own representation based on Open Street Map, 2019
Figure 2.5 Small blocks development with little distance between the buildings created intimate yards. Pavlovo Pole, Kharkiv, the 1960s (Source: State archive of Kharkiv oblast)
Figure 2.6 Five-story building along Lenin avenue (now: Nauki avenue) in Kharkiv, app.1967-1972. Source: private collection
Figure 2.7 On the left: Humble traditional mosaic elements on the balcony panels in Cheremushki, Odessa. The pattern differs for every house. On the right: Drawing of an atom on the wall of the building, Cheremushki, Odesa
Figure 2.8 Addition of high-rise buildings and lower-level public facilities created rhythm in monotonous development. Pavlovo Pole, Kharkiv, 1978 (Source: Postcard set «Kharkiv,» Mystetstvo publisher house)
Figure 2.9 Development along Byron Street: five-story buildings inside of the district appeared at the beginning of the 1960s, nine-story buildings with public ground floors built late 1960-1970s, closing the yards from the road. Novy Domy, Kharkiv, 1978 (Source: Postcard set «Kharkiv,» Mystetstvo publisher house)
Figure 2.10 Development of 1980-1990s in Lviv-Sykhiv (a) and Kharkiv-Saltivka (b). Buildings losing their connections, infrastructure objects float in space. Source: own representation based on Open Street Map
Figure 2.11 Enlargement of height and the layout: service facilities are being enclosed inside of the building groups. Saltivka, Kharkiv (Source: Domik 12/24/2014)39
Figure 2.12 Fragment of North Saltivka planning. Part of the infrastructure has never been finished. The New post-1980s development gradually fills empty spots. Source: own representation based on Open Street Map
Figure 3.1 Peculiarities of ownership: (Left): state property in USSR (until the 1990s). (Center): From the 1990s till present – the case when the apartment belongs to the private property (Right): From the 1990s till present – condominium/cooperation case the building represents «patchwork" with three different types of owners: apartment owners - private; roof, basement, utilities, premises – communal owners
Figure 3.2 Management bodies in the land managing and district service system in Ukraine, due to the regulation from 2001. The newly appeared private sector actors are shown in green48
Figure 3.3 Urban planning Institutions in Ukraine. Author's presentation based on World Bank Report «Ukraine Urbanization Review 2013-2018"
Figure 3.4 Interconnection of planning documentation in settlements of Ukraine54

Figure 3.5 Propo	sal for territory according to the Adjustment for Distribution of the Micro-districts (quarters) Territories for Determining Adjacent Territories of Multistory Buildings", by Kharkivproekt, 2013, Kharkiv
Figure 3.6 Left: 1	Location of Cheryomushki on the scheme of Odesa (by the author) Right: typical view of the district (photo by Svetlov Artem)
Figure 3.7 Left: 1	Location of Saltivka on the scheme of Kharkiv (by the author) Right: typical view of the district (source: Google maps, photo by the author)
Figure 3.8 Varia	nt of Cheryomushki development (model). arch. M.Sereda, I. Gribchenkova. The order of the buildings is more conceptual and will be changed in the final version, but the location of the park and the street network are already approved. Source: «Stroitelstvo I Architektura» Kyiv, 1964
Figure 3.9 Fragm	nent of the plan on General Petrov Street (left) and a photo of new development (right) in Odesa, Cheryomushki. Source: «Stroitelstvo I Architectura" 1967(5) pp.14-16
Figure 3.10 Deta	iled plan of developing district Saltivka. The micro-district scheme is formed by blocks and wide avenues. Districts of North Saltivka (top right) are not detailed yet, as well as the center of the district, with a planned socio-cultural «epicenter.» Western micro-districts 517 and 521 were not realized. Source: Kharkivproject archive, 1984
Figure 3.11 Plan	of the Cheryomushki district, built according to the plan in the 1960-1980s, featuring broad green avenues separating homogenous development. Based on the Open source map, 2019
Figure 3.12 The	urban fabric of Cheryomushki (b) can be related to the traditional structure of Odesa (a) forming safe inner yard territories for inhabitants. Based on the Open source map, 2019.
Figure 3.13 Unco	ontrolled greenery left to grow above the entrance and on the walls. Cheryomushki, Odesa – green space of the districts making it look better on summer days, but it covers the sight and at nights and in winter makes a walk through the yard dangerous, 2017.
Figure 3.14 Tran	sformation of the district structure. Since the completion of the district, many small structures were added. Since the number of kiosks and garages is too big, they are left out of the scheme. Source: Open Street Map, A. Schuplyakov 2020
Figure 3.15 Exam	nples of public space occupation resulting from dissatisfaction with the quality of dwelling and environment. Cheryomushki, Odesa, 201771
Figure 3.16 A fra	agment of Kharkiv Genplan from 1985. Vast park areas and public centers are marked with green and red. Great attention is paid to the landscape arrangement and connection of the district to the river plain. Source: Kharkivproekt Archives
Figure 3.17 The	urban fabric of Saltivka (b) has little in common with the traditional city center structure (a), letting the streets dissolve within the yard space. Based on the Open source map, 2019
Figure 3.18 A de	tailed plan of Saltivka. Repetitive large-scale estates are a typical feature of the late 1970-1980s development. Kharkiv. 2019. Source: Open street map
Figure 3.19 Tran	sformation of the district structure after 1991. Over the years, construction has been significantly consolidated due to legal and semi-legal buildings that have closed construction or are concentrated near transit flows. Source: Open Street map, 2021 76
Figure 3.20 The	photo of Saltivka taken from the apartment. The typical yard space has no borders except for kindergartens/schools. There are no zoning, playgrounds, and leisure areas placed randomly. The small plots of soil near the buildings almost always serve for occasional gardening. Saltivka, Kharkiv, 2017. Source: photo by the author

Figure 3.21 Com	mercial and services functions appear in new places chaotically capturing public space, instead, old enterprises (B) that had the buildings lost their function in Cheryomushki, Odesa, 2017
Figure 3.22 Left:	Playground with two generations of equipment, re-invented as a leisure place for adults. Right: Basketball ring and a pull-up bar, sports ground with asphalt covering surrounded by garages in Cheryomushki, Odesa, 201782
Figure 3.23 Left:	commercial structures occupying territories around the busy crossing and transport stops (A) on the scheme. Saltivka, 2019, Kharkiv, Right: wasteland on the outskirts (B) North Saltivka, Kharkiv, 2019. Below: scheme of the biggest commercial centers (all of them located on the crossings with the strongest traffic flow) Source: photos and scheme by the author.
Figure 3.24 Two	examples of development in Saltivka mass housing area: commercial (on the left) and social (on the right). Kharkiv, 2017-2018. Photos by the author86
Figure 3.25 Left:	Commerce capturing the space in micro districts. A large market is blocking access to the subway station once was a small table market, the same as seen now in the inner space of the micro-district in Saltivka, Kharkiv, 2018. Sources: left photo: Bezrodnova A., right photo: by the author
Figure 3.26 Exam	nples of activities in public space, directed on territory appropriation: the place of rest, hobby, gardening, and food storage. Photos and sketches by the author88
Figure 3.27 Man	agement structure of Cheryomushki. Currently, the movement for the creation of ACMB is active in the district. Source: Open street map, 2021, List of ACMB organizations of Odessa
Figure 3.28 Distr	ict plan with marking of territories managed by cooperatives and condominiums. Based on Open Street Map, 202194
Figure 3.29 Exam	nple of the problem analysis and mapping on the area plan. Cheryomushki, Odesa. Source: workshop publication (Smirnova M., Gagina E, Zapotochny E. 2018)100
Figure 3.30 Plan	of the yard foreseen after transformation (left), a fragment of realization (right) Cheryomushki, Odesa. Source: Maria Smirnova101
Figure 3.31 Micr	o-district 522: green pockets as common leisure space along the green alley, Kharkiv, Saltivka 2018103
	al organization along the central axis inside of the micro-district N522 in Saltivka, Kharkiv. The pockets and open territories along the alley provide public access at any time of the day and contribute to safety. Sketch by the author
Figure 3.33 Com	parison of two projects. Left: Presented layout of the urban park (source: still from the presentation video «Presentation of the Urban Park/Center Concept at Saltivka" by NGO Street Culture). Right: the plan of the realized project (from a poster put on the fence during the construction), Saltivka, Kharkiv 2021
Figure 3.34 The	view of the finalized Urban Park: budget optimization resulted in shortages on lawns, trees, and wasteland around Saltivka, Kharkiv, 2021106
Figure 3.35 On the	ne left: the concept of the transformation, on the right: photo of the transformed space, Sources: Vasilisa Schogoleva, Joe Plommer
Figure 3.36 Real	ized Dignity Square (left) and Dovzhenko square project by «Group 109» (right) Source: Better Sykhiv116
Figure 4.1 Left: 1	Model of Neustadt (Halle), photo by the author, Halle, 2016. Right: Model of the district Prohlis, Dresden 1976-1988, (Source: Fotothek Dresden, http://www.deutschefotothek.de/obi80812771.html)

Figure 4.2 Devel	opment of goals and strategies in ISEK Prohlis, based on "Integriertes Handlungsk Fortschreibung 2014 Dresden Prohlis/ Wohngebiet Am Koitschgraben»	onzept
	(Stadtplanungsamt Dresden 2014).	132
Figure 4.3 Action	n fields defined for the second update of action program in Halle-Neustadt. Based of «Integrated action plan «Social City" Neustadt 2025" (Elstermann et al. 2015)(Elstermann et al. 2015)	
Figure 4.4 Minor	r interventions in the spatial-functional context in Gorbitz. Photos by the author, Dr 2016	
Figure 4.5 New f	functional areas in the district Fennpfuhl (fragment) Scheme by the author, based or reports of Bezirksamt Lichtenberg, Berlin 2019	
Figure 4.6 Enhan	restaurant (left) and shopping promenade Anton-Saewkov Square. Berlin, 2016, p by the author.	hotos
Figure 4.7 Place	of Quartiersmanagement in the system of relations between district actors p. 69 (K. Siedow, T., Droste, C. 2005)	
Figure 4.8 Interac	ction of actors and organization of management inside the district according to (ST 2009), own representation	
Figure 4.9 Playgr	round and landscaping elements finished with participation and consulting with the public. Prohlis, Dresden, 2016	
Figure 4.10 New	ly renovated square «Tulpenbrunnen" and playground, funded by the Stadtumbau oprogram. Halle, 2016	
Figure 4.11 On the	he left: One of the first murals in the district, created with the involvement of public discussion. Halle-Neustadt, 2016, on the right: former «Hotel Neustadt" main loca of the theatre festival, Halle-Neustadt, 2016,	ation
Figure 4.12 New	spaces created for different generations. Left: BMX complex in Prohlis (Dresden), landscaping with playground elements in Neustadt (Halle) 2016	-
Figure 5.1 On the	e left: territory distribution in Gorbitz, Dresden (Source: (Stadtplanungsamt Dresde 2016b), On the right: Proposed example of district territory distribution (industrial construction) in Ukraine, Source: (Ministry of Regional Development, Construction Communal Sevices of Ukraine 2013) p. 21)	l on and
Figure 5.2 Differ	rence in revitalization approach in Ukraine (left) and Germany (right) as the result of different conditions	
Figure 5.3 Stages	s of district revitalization scenario	172
Figure 5.4 Depic	tion of the action description	174
Figure 5.5 Propo	sed scheme of relations between different bodies in the district	175
Figure 5.6 Larger	r districts require the creation of a special monitoring body that consists of representatives from different stakeholder groups	176

List of Tables

Table 2.1 Larger	r indicators of plots area of cultural, household and municipal services in the micro-	
	district (according to SNIP II- K.2-62, 1966).	32
Table 2.2 Sizes of	of the grounds in the settlement according to the Soviet Building Regulations (SNIP II	.=
	60-75)	35
Table 3.1 Compa	arison of main data about two cities. *Data sources: (Restrepo Cadavid and Quintero F	Ξ.
	2015 pp.154-160), 2012 polling station lists	59

Glossary

This writing uses the following definitions of the terms:

ACMB – **Association of Co-owners of Multistory Buildings** (Ukrainian: ОСББ – Об'єднання співвласників багатоквартирного будинку) - legal entity created by the owners of apartments and/or non-residential premises of an apartment building to facilitate the use of their common property and the management, maintenance and use of joint property. The Law of Ukraine "On the Association of Co-Owners of an Apartment Building" regulates the procedure for the creation, registration, reorganization, activity, and liquidation of ACMB (Document number 2866-III, Edited 19.05.2017).

Action plan is a methodical, clearly structured, detailed description of the strategic goals, operational targets, and actions (projects, programs, or tasks) that need to be made to achieve results. The action plan takes into account the time of implementation of the planned activities, responsible persons, and a description of the expected results.

City – according to the Soviet definition (Great Soviet Encyclopedia, GSE), is a large settlement, whose inhabitants are mainly engaged in industry and trade, as well as in the areas of service, management, science, culture. The city is usually the administrative and cultural center of the surrounding area. The main criteria for classifying a settlement as a city are the number of its inhabitants and its functions: industrial production, organizational, economic, cultural and political. The economic aspect is put first by Soviet urban theorists: after A.Gutnov, the city is the industrial center of a vast area, a hub of an extensive network of railways and highways. According to V. Glazychev, the city is a developed economic complex, where dozens and hundreds of various enterprises and industries are linked together (Gutnov, A., Glazychev, V. 1990).

Cooperation – (Ukrainian: кооператив) is a legal entity formed by citizens and/or legal entities that voluntarily united based on combining their shareholding contributions to participate in the construction, reconstruction, or maintenance of a building(s) and their subsequent operation. Cooperative ownership was an alternative to public housing in the USSR. In modern Ukraine cooperation buildings remain preserved, however, new cooperation movements do not appear.

DBN – (Ukrainian: ДБН, Державні Будівельні Норми) State Building Regulations applied in Ukraine since 1992. Those norms substituted the Soviet SNIP Code (State Building Norms and Regulations).

District (**Russian: rayon**) is an administrative unit used in post-Soviet countries. As a term for urban development, districts are common for cities with a population of over

100,000. The issue of the organization of district management in the city is referred to the competence of the city council. However, it is important to define a district as an administrative unit and a district as a city territory built up at the same time. In this writing, the district is used in the second meaning.

Giprograd (now **Dipromisto**) was founded in 1930, a research institute in the field of planning of territories and settlements in Ukraine. Is a state enterprise belonging to the Ministry of Regional Development, Construction and Housing, and Communal Services of Ukraine.

Gosgrazhdanstroy (State Committee for Civil Construction and Architecture, Russian: Госгражданстрой) – is the structural part of Gosstroy, responsible for civil construction, in the same time subordinated to the Council of Ministers of USSR. Gosgrazhdanstroy designs direct and oversees the construction of residential and public buildings (Underhill 1976).

Gosstroy (State Committee for Construction Affairs, Russian: Γος Τροὔ) – the top construction institution of USSR, carried the main organizational responsibility for some aspects of construction and planning in USSR, subordinated to the Council of Ministers of USSR. Provided standards and technical guidance and developed policies for all major construction projects. Had several ministries executing their policies.

Mass housing development – is a type of structured development of high-rise residential buildings, which is characterized by large scale and low density. The term "mass housing development" refers to the type of public housing, which was common in the USSR. The main features of the mass housing development are prefabricated building elements, a small variety of structural layouts, and models.

Mass housing development area – an area of the city, built up as the answer to extreme housing demand, in most cases with high-rise prefabricated buildings. Mass housing areas are often built as a state housing program. The main features of the mass housing areas are poorly developed social infrastructure, homogeneous and mono-functional structures. Mass housing development areas often could be imagined as a "dormitory district" ("bedroom community") – part of a big city, where residents live, eat and spend their leisure time, although they leave it to work.

Micro-community defined by the Law of Ukraine "At general meetings (conferences) of members of a territorial community according to the place of residence" 24.03.2015 No. 2467 as a group of members in a territorial community, united by a compact residence legally on a part of the territory of the city, village, settlement (micro-district, street, quarter, house (several houses), or other smaller territories) or village territory (several villages, settlements, districts in the city, if they are not administrative centers of local

councils), and a relative community of social, cultural, domestic and other needs and interests.

members of the micro-community – members of the territorial community, who legally live on the territory of the micro-community.

Micro-district or micro rayon (in literature: mycrorayon – Bater, the micoregion – A. French), according to the Soviet housing programs, the primary unit of a residential development of the city. Typical unit for former Communist states. The size may vary from 10 up to 80 hectares. Microdistrict includes mostly dwelling, dwelling houses, and nearby institutions of everyday cultural and household services of the population (kindergartens and nurseries, schools, dining rooms, food, and necessities stores), sports grounds, and gardens. Normally built on the outskirts of the city on the free plots of land. Nowadays construction of micro-districts is considered an outdated urbanist method.

Post-Socialist – (**post-Soviet**) means a combination of social phenomena, development, territory, and physical objects existing and being modified after the Dissolution of the Soviet Union in 1991.

Strategy (**strategic plan**) is a guideline for management that covers a set of goals from general to specific (vision, priorities, goals, tasks). The strategy describes the measures to be done, temporal and spatial limits, methods and tools, and executors. The strategy provides clarity of thought and helps the various actors in the local development planning process to reach an agreement. The strategic plan is a combination of long-term strategic goals, medium-term operational goals, measures, programs, and projects united by a specific vision, that need to be implemented to achieve the goals of the strategy.

Quartiérsmanagement (in German, English: "neighborhood management") – central control office provided by a district manager appointed and funded by the municipality, limited by the borders of the district; District fund for short-term and small-scale measures in the district (embellishment, courtyards, playground construction). The distribution of funds is decided by a citizens' council together with experts from the district management office. The district provides the administrative infrastructure for the neighborhood management; the Office of neighborhood management is a starting point and meeting place for civil organizations and locals.

Appendix I Public interviewing: sample

General Questions

- 1. Do you like living in this district (Cheryomushki/Saltivka?)
- 2. How long have you lived here? (1-2 years 3-5 years 6-10 years 11-15 years 15-20 years> 21 years)
- 3. Would you like to move out of the district?
- 4. In your opinion, are there enough jobs, recreation, cultural facilities in the district?
- 5. In your opinion, are there enough such facilities as:

Playgrounds for young / teenagers Yes/No

Sports grounds Yes/No

Adult recreational facilities Yes/No

Dog walking grounds Yes/No

Are garbage collection / sorting sites? Yes/No

6. Are you renting the flat? Yes/No

- 7. Are you satisfied with the services provided by the municipal services?
- 8. Were there any attempts to unite in the ASMB in your house or one you know?
- 9. Do you have many friends/acquaintances in the district? Is it easy to find new contacts?

Detailed Questions

- 1. What motivated you to settle here? (Next to work, close to the family, the apartment is affordable?)
- 2. Which institutions do you visit, what services do you use inside of the district?
- 3. How do you estimate the changes in the area during the past 5-10-20-30 years? What got worse? What got better?

- 4. What disadvantages do you see in the area? What do you like in the area? What in particular?
- 5. If you had a chance to move out, then where (the district in the city? The place in the district?)
- 6. Could you name three places, buildings that need to be repaired/altered/demolished in the area? What would you change first?
- 7. How do you evaluate the condition of the adjacent territory (front garden), yard, grounds near your house?
- 8. Who takes care of the territory around your building? Do tenants take part in this process?
- 9. Are you satisfied with the neighbors? Are there more elderly people or young families in the district/your house?
- 10. Do you consider this area to be safe? Can you mark your most and less favorite places?
- 11. How do you believe the district will develop in the future?

Dear residents of the Cheryomushki district!

A survey is being conducted among residents of your area.

The goal is to assess the general condition of the district, housing stock, infrastructure, sites, etc.

We will be very grateful if you spend 5-10 minutes filling out this form. If you wish, you can specify gender and age, but no personal data is collected.

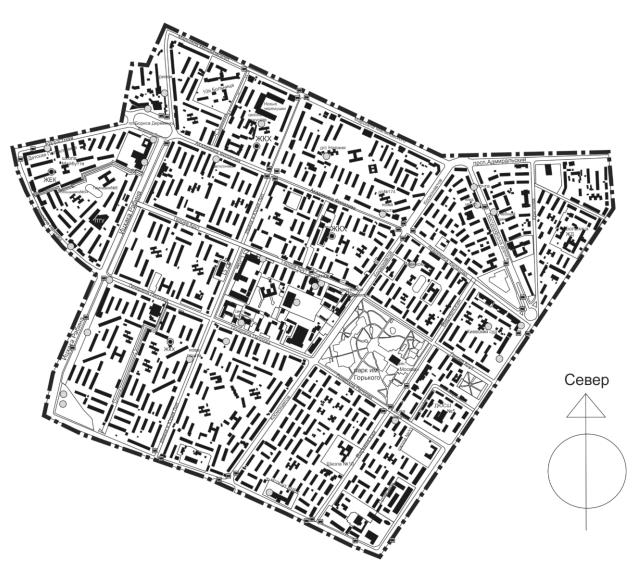
So, the first part - select the answer option (mark Yes or No)

The second - questions with a detailed answer (enter the answer in person)

Please answer both pages and please write briefly describe which part of the district you like the most and which - the least, or consider it unsafe.

The plan of the district is given for better orientation.

Thank you for your participation!



Appendix II Public interviewing: Interviewing evaluation

Interviews cited in the text – Cheryomushki, Odessa

C1: F, 78, retired, moved in current location 5 years ago, no higher ed, interviewed in Odesa, Cheryomushki, 2017.

C2: M, 30, higher ed, married, no children, interviewed in Odesa, Cheryomushki, 2017.

C3: M, 55, no higher ed, married, interviewed in Odesa, Cheryomushki, 2017.

C4: F, 55, higher ed, lives in the district from an early age, interviewed in Odesa, Cheryomushki, 2017.

C5: M, 47, higher ed, moved in as a child back in the 1980s, interviewed in Odesa, Cheryomushki, 2017.

C6: M, 35, higher ed, married, two children, interviewed in Odesa, Cheryomushki, 2017.

C7: M, 65, no higher ed, retired, lives alone, interviewed in Odesa, Cheryomushki, 2017.

C8: F, 56, higher ed, married, grown-up children, interviewed in Odesa, Cheryomushki, 2017.

Saltivka, Kharkiv

S1: F, 42, higher ed, married, big family (5 children), recently purchased a flat, but lived 4 years in the district, interviewed in Kharkiv, Saltivka-602, 2018.

S2: F, 56, higher ed, married, one grow-up child. Has lived in the current dwelling since the 1970s, interviewed in Kharkiv, Saltivka-522, 2018.

S3: F,60, higher ed, grown-up children, lives alone, moved in the current dwelling in the 1970s interviewed in Kharkiv, Saltivka-531, 2018.

S4: M, 60, no higher ed, moved in the current dwelling in 1990, interviewed in Kharkiv, Saltivka-522, 2018.

S5: F,45, higher ed, unmarried, one child, moved in the current dwelling recently, interviewed in Kharkiv, North Saltivka-2, 2018.

S6: F, 28, higher ed, married, two small children, lived in 522, recently moved to 605 micro-districts, interviewed in Kharkiv, Saltivka-605, 2018.

S7, F, 35, higher ed, married, one child, moved from 531 to 522 micro-district, interviewed in Kharkiv, Saltivka-522, 2018.

S8, F, 25, higher ed, lives with parents, interviewed in Kharkiv, Saltivka-531, 2018.

Interviews with population – insight into the problems

Qualitative data collection on the level of satisfaction and neighborhood community involvement was conducted in different ways: during the site visits in September 2017 and by direct-distributed online questionnaire the same year.

Respondents were given a short questionnaire and were free to provide additional information during the short interview. The sample questionnaire was designed to provoke people to a discussion about the state of the micro-district and its role in its development.

The interviews were conducted with overall 16 individuals (8 in Odesa and 8 in Kharkiv) from different age groups (18-25, 26-35, 36-55, 55-70, 75+) between September 2017-October 2018. Responses from different groups giving insight into how each of them uses and interact with the district space and their current needs. A special interest group of the study was opinion collection from persons who represent the first generation of (long-term) tenants in the area and witnessed the development of it through the ages. These are people 40+ years old. The second (and sometimes third) generation is represented by people of 18-30 years old. The interviews were focused on exploring topics of safety, accessibility, and living comfort in the district through understanding the repeated movements in the districts and usage of services.

The choice of respondents was performed randomly. Despite the small number of respondents, the age and sex structure in both districts are close, many answers tend to repeat. Relying on the fact that satisfaction with the living space of the micro-district does not depend on the gender of the respondent, and any of the genders does not require special conditions, these data are not included in the result of the study. The difference between the statements of interviewees, in this case, is not sufficient and was leveled during the preliminary analysis.

All the collected data was sorted and categorized according to topics and compared to explain key issues of the study. Contradictions found in the testimonies of some of the respondents do not skew the results.

The main criteria for the evaluation were:

• Satisfaction with the number of daily services

- Quality of space and conflicts
- Level of safety (subjective evaluation)
- The willingness of an individual to participate in community life.

Evaluation of the interviewing

The results of the empirical study represent the part of research on the living conditions satisfaction and community involvement from two prefabricated districts in Ukraine. Districts Cheryomushki and Saltivka were compared in terms of comfort, convenience and safety of movement, accessibility of daily services and attractiveness for potential buyers of apartments and tenants, and possible future development. Ukrainian micro-districts possess lesser population exchange and temporary tenants flow than Germany. It is a historical trend, which is possible due to the fact, that most of the flats are privatized and belong to small owners. People tend to look for a temporary dwelling closer to their families and keep adjusting the surroundings to their needs, instead of moving. However, the opposite trends also exist. The answers received from the flat owners and the tenants slightly vary.

Many interviewees used to complain about the condition of the buildings, which directly is not included in the topic of the research. The reason for those complaints is the generally low quality of the communal services and the absence of the costs for reparations. This may be evidence of existing management's low efficiency.

The findings thus offer further empirical evidence that municipal and cooperation houses possess a different amount of financing and, accordingly, a different set of problems. The municipal houses often receive help from the city and sponsors (here – politicians) to upgrade the amenity space. Unfortunately, this kind of upgrade is rather episodical and cannot substitute for the planned improvements. However, the territory of a municipal house often has new play and sports facilities, while cooperation houses have less developed amenity space, but the condition of the buildings is better: concentrating their funds on the building, not the territory, performs sanitation. Several houses with different organizations have to share the same inner yard, which often leads to conflicts.

[quotation respondent C1] "Here is a small yard. However, we have everything. Here are the garages, here is a playground and here is another one. These two were recent gifts from the municipal candidate [name] and that one is from [another candidate]. But he lost the election anyway. Mothers complain that everyone is sitting here, near the playground, someone drinks, and someone smokes. But where we [adult people] are supposed to go? I believe, the playgrounds have to get a fence around. Who should do it? Parents should do. This space is for their children, they should take care of them. Not us... The house is

in bad condition. There is a leakage in the basement, the roof is also leaking somewhere. There was [local election candidate name], he gave us new windows in the hallway."

[quotation respondent S1] "We live in the cooperative house. We do not have any play-ground around. There are four houses in our yard, three of them are cooperative, and one is municipal. That house has a playground. When my children go to play there, it happens for me to hear a lot from those people [from the municipal house]. Especially older women, who sit on the benches nearby. The most common complaint, kids are too loud, kids do not let them sleep [at day], kids use trees and shrubs around as a toilet...they should better look for their cats and dogs. Every time we go for a walk, it ends as a scandal. Could the child understand that this playground belongs to someone? There is no fence, there everyone is allowed playing."

[quotation respondent S2] "Our house stays in the line for two years to receive money for the asphalt. The road in [in front of the house] is covered with bumps and holes. We have to pay 25% of the price, but the Head [of cooperation] told me the people from the council demand another 25% to speed up the allocation process."

Daily services

Most of the respondents evaluate the development of daily services and commercialization positively. They admit a wide spectrum of retail and service shops as sufficient for choice. Every interviewee could clearly state at least 3-4 different daily services, which they use in the district (supermarkets, repair shops, spot clubs, post, or bank). Most of these services appeared in the 1990s and constantly changing their location due to the complicated economic situation. Services, located in bigger buildings, existing from the very beginning, often changed their owners, but are still actively used by the local population. The location of new entrepreneurship sometimes takes place of existing functions, occupying yards, and gaps between buildings, erasing usual routes, and creating new ones.

[quotation respondent S2] "...many services appeared closer to home. The bad point is that they use our territory as their own. Big tracks coming to deliver goods, destroying our road in front of the house, small decoration. Then trash everywhere. They do not dispose of it right. There are plastic, cardboard boxes, just loaded in our containers. Before this summer, sellers from the shop did not even have any toilets. Now they brought a plastic cabin for that purpose..."

The often-named disadvantages of commercialization are noise and pollution also visual. Some respondents complain about small shops and kiosks, throwing their garbage in the house's garbage collectors or leaving it in the streets, café, and shops playing loud music and collecting loud groups on weekends or night time.

[quotation respondent C2] "...here we have a problem of illegal construction. New shops, cafes constantly appear everywhere near the roads or the transport stops. They stealing the space, which people can use for themselves, instead, they play loud music; put their fences, banners, shiny advertisement. I am happy to see some of them being demolished, but most of them will stay here for years."

[quotation respondent S3] "There are a lot of these so-called bars around. Near tram stop, they opened one in a kiosk, also few near the market. These are not real cafes, no; those are just "drink-and-go" places. I constantly see alcoholics sleeping there. Especially in the dark mornings, when I go to work, I see a lot of them."

Level of safety

Public opinion about the safety level in the micro-districts varies. Respondents admit, that the district has problems, but cannot state if safety in the neighborhood differs from the safety in the city. The most positive answers given by the respondents include characteristics of the green spaces, however, they also include fear of the green debris, which may hide a possible criminal. Light and visibility distances are also often characterized as not efficient for many times of the year. Common recommendations from the local population include avoid walking in the dark (streetlamps are not working or not enough), avoid going through narrow paths between garages and buildings' sides without windows. Several interviewees could name cases of robberies or assaults, which they witnessed, or were victims.

[quotation respondent C3] "No, I do not think it is a safe place. I was a victim of violence, and the police came to the place only in 25 minutes, did not attempt to organize a search for robbers. Just called an ambulance and that was it."

[quotation respondent S4] "Well, the district is relatively safe. In our district space between the school and high-rise building hooligans are walking. There are not enough patrols these days"

[quotation respondent S2] "Micro-district 522 is a special neighborhood, very comfortable. Between two kindergartens on the street Heroiv Pratsi, the place looks just like a garbage dump. It is not always safe, especially in the evenings, behind the garages it is scary to walk (Valentinovskaya Street). My nephew's car was robbed twice during the past two years, once near his house, once near the supermarket while he was going shopping»

[quotation respondent S5] "It is dangerous to live here, at the exit from the Heroiv Pratsi subway station to the direction of 522 micro-district, is a dirty pit. Place of gathering for alcohol, drug addicts, and thieves. Thirty years ago, this was not like this."

[quotation respondent C4] "I think it's the same safe as the rest of the city. it's better not to walk in the courtyards at night, of course. The neighbor's car was robbed."

There were several warnings about alcoholics, 24-hour open illegal bars, hooligans among the responses, but those responses took place in different periods, so to receive a better image of safety in these districts, one has to look at official police statistics. It is hard to speak about the crime wave.

Participation in community life and general satisfaction

The comparative study showed that the satisfaction level in Saltivka and Cheryomushki differ: younger neighborhoods received more positive answers. Most of the respondents expressed satisfaction with their living environment. However, many of them also expressed complaints about several aspects: financial inequality between neighborhoods and cooperations, lack of management, and transparency, impossibility to influence any process.

Families of respondents tend to perform little improvements independently. Evidence of that is seen in both observed districts: planting trees and flowers, painting and repairing work on the sports or playgrounds, fencing.

[quotation respondent S1] "Last spring our family decided to intervene in the yard with few improvements. My elder son (13) bought some paint from his birthday money and went [with his parents] to paint those rusty cloth standers. Then there was an improvised chain to forbid parking in the yard. He painted it too. How much he had to listen! Everyone, who was in the yard, older women, pedestrians, were criticizing him. No one cared about his initiative to make something beautiful, everyone argued if he was allowed to do so or how to do it right. Afterward, some older women asked him to come to their benches [benches near their house entrance hall] and paint them too. I asked, don't they have any children to take care of the space around their house? Why my son has to work for them?"

It is hard to investigate the community relations in these neighborhoods: mostly people tend to organize small groups of tenants from one entrance hall (20-40 flats) or cooperation, including several entrances hall or one building completely. The size of newly organized condominiums can also vary. From the received interviews, one can conclude that people tend to organize for spontaneous short-term projects, after performing them, do not show any interest in the further organization.

Most of the complaints were dealing with the condition of inner-quarter roads and driveways inside of the micro districts, which are, as was observed, in a precarious state. Sometimes people tend to influence traffic flow inside of the district, like putting stones or concrete blocks on the roads, if they feel like too many cars are passing in the yard or parking in the wrong place. It was often observed in Odesa, Cheryomushki, and neighboring districts. [quotation respondent C5] "If I could order what should be done, I would widen the streets, to avoid traffic jams. Remove this chaotic parking from the yard, here is no organized parking".

[quotation respondent C5] "I like our green district. But there are too many cars everywhere. We need more playgrounds for our kids, more flowerbeds, more grass. Parking in the yards has to be prohibited".

[quotation respondent, S6] "It bothers me, that there is no clear distinction in the yard, where you can play with small children, and where the elders play. There are no places for adults to relax. Again, everywhere in the stops, these are those liquor shops..."

[quotation respondent S7] "Too many cars, which, due to lack of sufficient parking space, stand along all roads and often even under the entrances, making it difficult for pedestrians and transporters to move. Very poor asphalt condition (although recently they began some restoration, for the first time in 40 years!). I like the good transport infrastructure, the proximity to the subway. A positive aspect is a river nearby, and lots of trees, where you can go."

In their wishes to leave the neighborhood or the district, some of the respondents pointed out the location (far from their current work), design problems (dissatisfaction with the building or surrounding appearance), or their negative attitude against panel housing. But those opinions were quite rare.

Positive evaluation received public spaces (the reason is the amount of greenery and small design elements, absence of industry). The "green neighborhood" is the most common positive characteristic used for the description of the areas.

One of the most important questions, which were asked during these short interviews, was about participation in improvements on the local level. Almost all respondents admitted, that communal services' efforts to maintain the territory are unsatisfactory. None of the interviewees could clearly say, which spectrum of actions is the duty of communal services and explain what is expected from them.

[quotation respondent C1] "Tenants are only those who maintain the territory. Painting benches and cobblestones, whiten trees, and plant flowers. I sometimes water flowers".

[quotation respondent C6] "Tenants cooperate and maintain the territory, solve all problems, do repairments, add improvements, landscaping works, communal services do nothing."

Expectations on development

Cheryomushki and Saltivka's populations have quite different future prognoses on the district's development. The older district Cheryomushki, built up with an earlier generation of Khrushchyovka housing, expects, as seen from the answers of local tenants, the similar destiny of Moskov Khrushchyovka districts.

[quotation respondent C7] "Everything is going to be demolished sooner or later, built-up with high-rises. The district will be 'killed' by developers. It will be turned into ghetto-like «Raduzhnyi» (new housing complex in Odesa, built-up with high-rises and having a reputation of very uncomfortable) ..."

[quotation respondent C8] "Most likely, the district will be developing more, getting more comfortable. Even now, many young families and kids are coming here"

[quotation respondent S2] "The district surely will keep developing, roads and pedestrian pathways will be slowly repaired. It is hard for me to imagine more high-rise buildings. More comfortable public spaces for us and kids – this is what we need."

[quotation respondent S7] "I think the district will develop according to the needs of the residents themselves and according to the laws of the market. Will be build-up, as it is going on now, with new tower-like buildings. Small shops, hairdressers, branches of banks, will appear and disappear. Wherever there will be a growing number of residents - supermarkets and mini-markets will keep appearing. Inside of a living area - apartments will be bought and sold, both in new buildings and in old houses. Gradually all the facades will be insulated by clapboards. Old elevators and roofs hopefully will be exchanged for the tenants. It is unlikely that the district will become very attractive from the outside, but it will continue to function for a long time."

The poor condition of the buildings is always in the first place in the rating of most common complaints. Some residents provide a complete list of the tasks, but, unfortunately, those expectations are far from economic reality.

[quotation respondent S8] "Residential buildings (built about 40 years ago) are in poor condition, pipes are in poor condition, centralized heating is terrible. it would be nice to build new houses with normal insulation (do not hear my neighbors so clear, as they are standing in my apartment, the wind blowing from every hole and corner, normal insulation to preserve warm air from leaking outside) and regulated heating. New homes should look like part of a single whole, (cannot remember word "ensemble" - editor) not like "I'll attach here a balcony," etc

Publication Bibliography

Alyoshin, V. E. 2000. Design and construction of Sozgorod "Novyi Kharkiv": Development of the idea of a socialist settlement in the town planning of Ukraine in the 1920s - early 1930s. http://alyoshin.ru/Files/publika/alyoshin/alyoshin_diss_htz.html. Accessed 6 November 2017.

Amt für Burgerservice Halle. 2010. Halle (Saale) in Zahlen: (Halle (Saale) in numbers (in German)). http://www.halle.de/VeroeffentlichungenBinaries/519/506/halle_in_zahlen_2010.pdf. Accessed 6 July 2016.

Anatasov, Vitaliy. 2010. Політика житлового будівництва в пострадянській Україні. *Spilne* Transformations of living environment (2): 68–72.

Association of condominiums "Development of Self-Government". 2017. The purpose of the Association. https://www.association-ihd.org/o-kompanii. Accessed 15 January 2021.

Association of Ukrainian Cities. 2002. History and activities. http://2.auc.org.ua/en. Accessed 8 January 2021.

At home in Prohlis. 2017. Über das Projekt (About the Project(in German).

https://zuhause-in-prohlis.de/ueber-das-projekt/. Accessed 10 August 2021.

Babak, A., D. Levytskyi, and N. Parchomenko. 2008. Модель залучення кредитних ресурсів на оновлення будинку. (Model of attraction of credit resources for the renovation of the building (in Ukrainian). http://teplydim.com.ua/static/stor-

age/filesfiles/Model_zaluchennia_kreditnix_resursiv_na_onovlen-

nia_budinku_2008_Ukr.pdf. Accessed 20 January 2019.

Balzer, Georg. 2007a. Integriertes Stadtteilentwicklungskonzept 2007 Fennpfuhl,

Kurzfassung (Integrated district development concept 2007 Fennpfuhl, abridged version (in German). STADTLANDPROJEKTE.

https://www.stadtentwicklung.berlin.de/staedtebau/foerderprogramme/stadtumbau/filea dmin/_migrated/content_uploads/INSEK_Fennpfuhl_2007.pdf. Accessed 2 February 2017.

Balzer, Georg. 2007b. Integriertes Stadtteilentwicklungskonzept 2007 Fennpfuhl:

Stadtumbau Ost - Berlin-Lichtenberg (Integrated urban district development concept 2007 Fennpfuhl: Urban redevelopment east - Berlin-Lichtenberg (in German).

https://digital.zlb.de/viewer/rest/image/15490917/fennpfuhl_gutachten.pdf/full/max/0/fennpfuhl_gutachten.pdf. Accessed 26 August 2016.

Bater, James H. 1980. *The Soviet City: Ideal and Reality: Explorations in Urban Analysis*. London: Edward Arnold.

Becker, Heidede, and Ralf-Peter Löhn. 2002. "Soziale Stadt" - Ein Programm gegen die sozialräumliche Spaltung in den Städten. http://www.bpb.de/politik/innenpolitik/stadt-und-gesellschaft/75720/grundlagen?p=all. Accessed 24 September 2017.

Belousov, V., and I. Smolyar. 1972. Научно-технический прогресс в

градостроительстве и пути повышения качества планировки и застройки городов. Architecture of USSR (2): 7–13.

Berezhna, A. Y. 2009. Приватизація Житлового Фонду і Формування Ринку Житлово-Комунальних Послуг. *Cities' Community facilities (Communalnoe hozyaistvo gorodov)* (87): 109–115.

Bernd, M. 2016. How post-socialist is gentrification? Observations in East Berlin and Saint Petersburg. *Eurasian Geography and Economics* (57(4-5)): 565–587. doi: 10.1080/15387216.2016.1259079.

Better Sychiv. 2017. Креативний Львів - Сквер Гідності (Creative Lviv - Dignity square (in Ukrainian).

Bezirksamt Lichtenberg von Berlin. 2017. Stadtumbaugebiet Fennpfuhl Bezirk Lichtenberg.

https://www.stadtentwicklung.berlin.de/staedtebau/foerderprogramme/stadtumbau/filea dmin/user_upload/Dokumentation/Projektdokumentation/Lichtenberg/WG_Fennpfuhl/P DF/Fennpfuhl_18-09-17.pdf. Accessed 7 December 2017.

Bezirksamt Neukoelln. 2019. Quartiersmanagement Wie funktioniert

Quartiersmanagement? (How does neighborhood management work?(in German).

https://www.berlin.de/ba-neukoelln/politik-und-verwaltung/quartiers-management/qm-gebiete/. Accessed 5 May 2020.

Bittner, Regina, and Andreas Weinand. 1998. *Kolonien des Eigensinns: Ethnographie einer ostdeutschen Industrieregion (Colonies of Stubbornness: Ethnography of an East German Industrial Region (in German)*. Frankfurt: Campus-Verl.

Bobrova, A., I. Verbytskyi, and P. Fedoriv. 2018. Модернізація чи знесення: як проводити реконструкцію застарілих житлових районів: (Modernization or demolition: how to carry out reconstruction of outdated residential areas (in Ukrainian). https://mistosite.org.ua/articles/modernizatsiia-chy-znesennia-iak-provodyty-rekonstruktsiiu-zastarilykh-zhytlovykh-raioniv. Accessed 27 May 2019.

Boichenko, A., Sh. Ginsburg, and P. Zherdetskiy. 1961. *Строительство жилых* зданий из крупных панелей. Из опыта Главкиевстроя. Moscow: Gosudarstvennoe Izdatelstvo literatury po Stroitelstvu, Architekture is Stroimaterialam.

Bouryak, A., Antonenko N., and I. Lavrentiev. 2017. Leonid Tyulpa. The architect of the period of mass industrial development. *ZARCH* (8): 154–169.

Brattfisch, Rainer. 2007. Kahlschlag statt Entwicklung (Clear cutting instead of development (in German). https://www.berliner-mieterverein.de/maga-zin/online/mm1107/110720.htm. Accessed 19 January 2018.

Bronovitskaya, Anna. 2013. Открытый город: Советский эксперимент. In *Aesthetics during years of the Thaw: new in architecture, art, culture*, ed. Olga Kazakova. Moscow: ROSSPEN.

Bundesministerium des Innern, für Bau und Heimat. 2013. Instrumentell-strategische Handlungsfelder (Instrumental-strategic fields of action (in German).

http://www.staedtebaufoerderung.info/StBauF/DE/Programm/SozialeStadt/Programm/Handlungsfelder/Instrumentell-strategisch/instrumentell-

strategisch_inhalt.html?nn=766208. Accessed 15 September 2018.

Bundesministerium des Innern, für Bau und Heimat. 2018. Programmstrategie Soziale Stadt (Socially Integrative City Program Strategy (in German).

https://www.bmi.bund.de/SharedDocs/downloads/DE/publikationen/themen/bauen/woh

nen/programmstrategie-soziale-stadt.pdf?__blob=publicationFile&v=2. Accessed 22 May 2020.

Bundesministerium des Innern, für Bau und Heimat. 2019.

Städtebauförderungsprogramm "Soziale Stadt" (Urban Development Program "Socially Integrative City" (in German).

https://www.staedtebaufoerderung.info/StBauF/SharedDocs/Publikationen/StBauF/Sozi aleStadt/Flyer_SozStadt_2019_barrierefrei.pdf?__blob=publicationFile&v=2. Accessed 22 May 2020.

Bundesministerium für Raumordnung, Bauwesen und Städtebau -BMBau-. 1994. Grosswohnsiedlung uebersicht 1994. Drucksache 12/8406. http://dipbt.bundestag.de/doc/btd/12/084/1208406.pdf. Accessed 20 June 2018.

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit. 2016. Integrierte städtebauliche Entwicklungskonzepte in der Städtebauförderung:Eine Arbeitshilfe für Kommunen (Integrated urban development concepts in urban development funding: A working aid for municipalities (in German).

https://www.staedtebaufoerderung.info/StBauF/SharedDocs/Publikationen/StBauF/Arbeitshilfe_ISEK.pdf?__blob=publicationFile&v=5. Accessed 25 August 2017.

Bundesministerium für Verkehr, Bau und Stadtentwicklung. 2009. Bürgermitwirkung im Stadtumbau (Citizen participation in urban redevelopment (in German), 140th edn. Bonn: Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS).

Bundesministerium für Verkehr, Bau und Wohnungswesen. 2003. Dokumentation zum Bundeswettbewerb "Stadtumbau Ost" - für lebenswerte Städte und attraktives Wohnen (Documentation on the federal competition "Urban Redevelopment East" - for livable cities and attractive housing (in German).

https://www.bbsr.bund.de/BBSR/DE/Veroeffentlichungen/ministerien/BMVBS/Sonder veroeffentlichungen/2005undaelter/DL_DokumentationBundeswettbewerbSuO.pdf?__b lob=publicationFile&v=6. Accessed 29 January 2018.

Bürger, I. 2016. *Excurison Gorbitz Krautersiedlung*. Project "Unloved Heritage - Socialist City" excursion Berlin-Dresden-Halle 19-23 September 2016, Gorbitz, Dresden, 20 September 2016.

Busmann, Friedrich. 2010. Projekte der IBA-Stadtumbau in Halle an der Saale Balanceakt Doppelstadt - Kommunikation und Prozess Internationale Bauausstellung Stadtumbau Sachsen-Anhalt 2010 (Projects of the IBA Urban Redevelopment in Halle an der Saale Balanceakt Doppelstadt - Communication and Process 2010 International Building Exhibition Urban Redevelopment Saxony-Anhalt (in German).

https://m.halle.de/VeroeffentlichungenBi-

naries/478/418/iba_2010_halle_14_12_08_druck.pdf. Accessed 4 May 2020. Busmann, Friedrich, and Tore Dobberstein. 2009. Baustart (Construction start (in German). https://m.halle.de/VeroeffentlichungenBinaries/474/409/ibamag2_baustart print.pdf. Accessed 5 May 2020.

Bylinkin, N.P, and A. V. Ryabushin. 1985. *История советской архитектуры* (1917-1954). Moscow.

Council of Ministers of the Ukrainian SSR. 1987. Об утверждении Положения о Государственном комитете Украинской ССР по делам строительства (On Approval of the Regulations on the State Committee of the Ukrainian SSR for Construction Affairs (in Russian): N 210.

Council of Ministers of USSR. 1968. Об утверждении Положения о Государственном комитете Совета Министров РСФСР по делам строительства (Госстрое РСФСР), а также структуры центрального аппарата Комитета (RESOLUTION No. 60 of January 26, 1968: On the Approval of the Regulation on the State Committee of the USSR Council of Ministers on Construction Affairs (Gosstroy of the USSR), as well as the structure of the central apparatus) (in Russian): N 505.

Council of People's Commissars of the RSFSR. 1921. О Государственных Поставках: Совет Народных Комиссаров РСФСР (On state contracting and supply: the position of the Council of People's Commissars of the RSFSR (in Russian): No. 69. Danielzyk, R., and M. Sondermann. 2018. Informelle Planung (Informal Planning (in German). In Handwörterbuch der Stadtund Raumentwicklung: (Hand dictionary of urban and spatial development(in German), pp. 963-974. Hannover: ARL - Akademie für Raumforschung und.

dena. 2016. Etappenziel bei Modernisierungsprojekt in der Ukraine erreicht Model project German-Ukrainian Efficiency Houses (in German).

dena. 2019. Перші ластівки (First Shots (in German).

Didenko, Kateryna. 2018. Соціальна політика та житлове будівництво у Харкові у 1920-1930pp (Social politics and housing construction in Kharkiv in 1920-1930s (in Ukrainian). *Visnyk Budivnytstva* 92 (2): 51–58. doi: 10.29295/2311–7257–2018–92–2–51–59.

Drahanov, S. 2015. About the Organization "Association for Innovative Development of Households". https://www.association-ihd.org/associationihd/#rec182127073. Accessed 15 January 2021.

Drozdovsky, A., and E. Krasnova. 2015. *Наши дорогие Черемушки (Our dear Cheryomushki (in Russian)*. Odesa: Vikna Odesa.

Dudkina, O. 2014. Планування території: Аспекти Забезпечення Збалансованого Розвитку Регіонів: (Planning of territory: aspects of providing balanced development of regions. (in Ukrainian). *Ukrainian science: past, present, future* 1 (19 /1): 42–50. Düwel, Jörn. 1995. *Baukunst voran! Architektur und Städtebau in der SBZ/DDR (Building art ahead! Architecture and urban development in the SBZ/DDR (in German)*. Berlin: Schiler Verlag.

Dyachenko, N. T. 1977. Улицы и площади Харькова (Streets and squares of Kharkiv (in Russian), 4th edn. Kharkiv: Prapor.

Dyenkov, D. 2018. Тепле місто Жовква (Warm city Zhovkva (in Ukrainian): Ideas Which Change Cities: Ekonomichna Pravda.

Eastern Ukrainian Centre of Community Initiatives. 2017. Community Development. http://totalaction.org.ua/en#. Accessed 8 January 2021.

Elstermann, Franziska, Kerstin Hoffmann, and Antti Papian. 2015. Integriertes Handlungskonzept "Soziale Stadt"Neustadt 2025 (Integrated action plan "Social City" Neustadt 2025 (in German). https://m.halle.de/push.aspx?s=downloads/de/Verwaltung/Stadtentwicklung/Raeumliche-Konzepte//Soziale-Stadt-Neusta-09790/Handlungskonzept_Neustadt_.pdf. Accessed 28 August 2019.

Fedoriv, Pavlo. 2018. Що Україна знає про свої міста (спойлер: надто мало) (What Ukraine knows about its cities spoiler: too little(in Ukrainian). https://mis-

tosite.org.ua/articles/shcho-ukraina-znaie-pro-svoi-mista-spoiler-nadto-malo. Accessed 15 March 2019.

Fedorov, V. V. 2014. Планировка и застройка населенных мест (Planning and construction of residential areas (in Russian). Moscow: Infra-M.

Fedoseeva, Taina. 2018. В Одессе урбанисты и архитекторы придумали, как сделать "жилым" двор на Черемушках (In Odessa, urbanists and architects have figured out how to make a residential courtyard "livable" in Cheryomushki (in Russian). Odessa: Mayak.

Fisher, Jack C. 1962. Planning the City of Socialist Man. *Journal of the American Institute of Planners* (28:4): 251–265.

Flierl, Bruno. 1998. *Gebaute DDR: über Stadtplaner, Architekten und die Macht; kritische Reflexionen 1990 - 1997 (Built GDR: on urban planners, architects and power; critical reflections 1990 - 1997(in German)*. Berlin: Verl. für Bauwesen. Förster-Baldenius, B., and M. Rick. 2003. Hotel Neustadt. https://raumlabor.net/hotel-neustadt/. Accessed 6 August 2021.

French, Richard A. 1979. *The socialist city: spatial structure and urban policy*. Chichester [u.a.]: Wiley.

French, Richard A. 1995. *Plans, pragmatism and people: the legacy of Soviet planning for today's cities.* London: UCL Press.

Friedmann, John. 2005. Globalization and the emerging culture of planning. *Progress in Planning* (64 (3)): 183–234. doi: 10.1016/j.progress.2005.05.001.

Gehl, Jan. 2018. *Micma для людей (Cities for People (in Ukrainian)*. Kyiv: Osnova. Gentile, Michael. 2015. The "Soviet" factor: exploring perceived housing inequalities in a midsized city in the Donbas, Ukraine. *Urban Geography* 36 (5): 696–720. doi: 10.1080/02723638.2015.1012363.

Geschäftsbereich Planen, Bauen und Straßenverkehr Halle. 2007. Stadt Halle (Saale) Intergriertes Stadtentwicklungskonzept (City of Halle (Saale) (Integrated urban development concept(in German).

http://www.halle.de/VeroeffentlichungenBinaries/266/199/br_isek_stadtumbaugebiete_2008.pdf. Accessed 1 July 2016.

Giprograd. 1990. Giprograd Information CHBP Study Tour. http://dipromisto.gov.ua/files/Publications/BookGiprograd1990.pdf. Accessed 5 March 2019. Gladchenko, M. 2019. Евгения Губкина: "Любим мы нашу архитектуру или нет это не волнует ни девелоперов, ни власть": Interview with Yevgeniya Gubkina. (Yevgeniya Gubkina: "Whether we love our architecture or not - neither developers nor authority care" (in Russian). http://www.korydor.in.ua/ua/opinions/evgenija-gubkina-modernizm.html. Accessed 28 April 2019.

Gnatyuk, O., and A. Oreschenko. 2017. Просторові трансформації житлового мікрорайону постсоціалістичного міста (на прикладі Вінниці). *Visnyk ONU* (22(1)): 149–158.

Golden pages Kharkiv. 2011. Проспект Правды Путеводитель по Харькову и Харьковской области: Kharkiv and Kharkiv oblast Guide Pravda avenue (in Russian). http://guide.kharkov.ua/?route_id=3&street_id=15. Accessed 20 November 2016. Gorczyca, Katarzyna. 2016. The Social Transformation of Large Housing Estates in Poland at the Turn of the 21st Century. Sociologický časopis/Czech Sociological Review 52 (6): 861–892. doi: 10.13060/00380288.2016.52.6.289.

Gorun, O. 2021. Харьковчане просят создать еще один урбан-парк на Салтовке (Kharkiv residents are asking for another urban park on Saltovka (in Russian)): Objectiv.

GOSSTROY USSR. 1966. *СНиП II-К.2-62 Планировка и застройка населенных* мест. Нормы проектирования: *СНиП II-К.2-*62.

Grigorieva, A. G. 2010. Решение жилищной проблемы советских граждан в годы «оттепели» (The solution to the housing problem of Soviet citizens in the years of "thaw"(in Russian). *Theory and practice of social development* (4).

Grunze, Nico. 2017. Ostdeutsche Großwohnsiedlungen: Entwicklung und Perspektiven (East German large housing estates: Development and Perspectives(in German). Wiesbaden: Springer VS.

Gutnov, A. E. 1984. Эволюция градостроительства (Evolution of urbanism (in Russian). Moscow: Stroyizdat.

Gutnov, A., Glazychev, V. 1990. "Мир архитектуры. Лицо города" ("The world of architecture. The face of the city" (in Russian). Moscow: Molodaya Gvardiya.

Haller, Christoph (ed.). 2002. Leerstand im Plattenbau: Ausmaß - Ursachen - Gegenstrategien (Vacancy in prefabricated buildings : extent - causes -

counterstrategies (in German). Berlin: Leue.

Hannemann, Christine. 2000. *Die Platte: industrialisierter Wohnungsbau in der DDR (The slab: industrialized housing construction in the GDR(in German)*. Berlin: Schelzky und Jeep.

Hoffmann, Kerstin. 2016. *Halle Neustadt*. Project "Unloved Heritage - Socialist City" excursion Berlin-Dresden-Halle 19-23 September 2016, Halle (Saale), 22 September 2016.

Horbal N. I., Romanyshyn S. B., and Shalin A. S. 2019. Ринок нерухомості України: тенденції та перспективи (Ukrainian Real Estate Market: Tendencies and Prospects (in Ukrainian). *BusinessInform* (3): 149–154. doi: 10.32983/2222-4459-2019-3-149-154

Hunger, B. 2019. Renewal of Large Housing Estates, German Experiences. In *Mass Housing in the Socialist City Heritage, Values, and Perspectives: Case studies in Germany, Russia, Ukraine*, ed. B. Engel, 144–153. Berlin: DOM publishers.

Ilchenko, Svitlana. 2013. Креативне місто як шлях подолання урбаністичної кризи (Creative city as a way to tackle the urban crisis (in Ukrainian). In *Місто і оновлення*. *Урбаністичні студії*, ed. S. Shlipchenko, V. Tyminskyi and A. Makarenko, 154–164. Kyiv: Heinrich-Böll-Stiftung Ukraine.

IWO. 2009. IWO e.V. unites private and public partners in the network "Housing and Construction Eastern Europe". http://www.iwoev.org/UEber-uns.8.0.html. Accessed 15 October 2018.

IWO. 2015. Support of residential property communities in Ukraine in the energetic renovation of residential buildings.

IWO. 2018. Model project German-Ukrainian Efficiency Houses.

Izmozik, V. S., and N. B. Lebina. 2010. Soviet St. Petersburg: "a new person" in the old space. 1920s-1930s.: (Socio-architectural micro-historical research). St. Petersburg: Kriga.

Kalabin, A. V., and A. B. Kukovyakin. 2017. Mass housing construction: problems and perspectives. *Academic Bulletin UralNIIproject RAASN* 1–6.

Kazakova, Olga. 2014. Свободная планировка: Интервью с Ниной Крайней. (Free layout: an interview with Nina Krainyuya (in Russian). In *Археология периферий (Archeology of periphery (in Russian)*, 252–256. Moscow Urbanistic forum, Moscow, Moscomarchitektura building. 5-7.12.2013. Moscow: MEGANOM.

Kazanskiy, N. N. 2017. Большая советская энциклопедия (Bolshaya Sovetskaya Encyclopedia (in Russian). https://bigenc.ru/domestic_history/text/v/2372636.

Keidel, Thomas. 1997. Leipzig-Grünau: Verkehrssituation, ruhender Verkehr,

Grünakzeptanz. In *Großwohnsiedlungen in europäische Städten (Large housing estates in European cities (in German)*, ed. Evelin Müller (Hrsg.), 29–37: Institut für Länderkunde Leipzig.

Keller, Carsten. 2005. *Leben im Plattenbau : zur Dynamik sozialer Ausgrenzung*. Frankfurt: Campus-Verl.

Khan-Magomedov, S. O. 2001. *Архитектура советского авангарда Книга вторая Социальные проблемы*. Moscow: Stroiizdat.

Kharkiv City Council. 2011. Programs to support housing cooperatives, housing cooperatives and associations of co-owners of multiapartment buildings in the city of Kharkov: No. 514/11.

Khoroshkovatyi, Alexei. 2017. История создания Салтовки: от поселка до самого большого района Харькова. (The history of the creation of Saltovka: from the village to the largest district of Kharkov (in Russian). Kharkiv.

Kibirev, S., and O. Olhova. 1970. Разработка типового проекта на новом этапе массового жилищного строительства (Development of standard design at the new stage of mass housing construction (in Russian). *Architecture of USSR* (7): 1–9. Кірепко, М. 2014. Критерії оцінювання результатів реформування житловокомунального господарства України на основі показників і індикаторів звітності.

Економіка та держава (Economy and State) (3): 135–138. doi: 10.32702/2306-6806.2014.3.

Knorr-Siedow, T., and C. Droste. 2005. *Large Housing Estates in Germany: Overview of Developments and Problems in Berlin: RESTATE report 4b.* Utrecht: Faculty of Geosciences, Utrecht University.

Kompetenzzentrum Großsiedlungen e.V. 2018. Über das Kompetenzzentrum Großsiedlungen e.V. Zweck und Ziele: About the Competence Center Large Housing e.V. Purpose and objectives. http://www.gross-siedlungen.de/de/55_Zweck_und_Ziele.htm. Accessed 12 October 2018.

Kozak, Viacheslav. 2018. Фандрайзинг як інструмент розвитку територіальних громад в умовах децентралізації. *Public Administration and Local Government* (3(38)): 131–141.

Kravchuk, Y. 1954. Use of standard houses and their series. *Architecture of USSR* (8): 2–11.

Kravets, Anna, and Nazarij Sovsun. 2012. Культура побуту в окремому районі. In *Анатомія міста: Київ*, ed. Nadiya Parfan and Anna Khvyl', 100–107. Kyiv: Heinrich-Böll-Stiftung Ukraine.

Kulichenko, I. 2021. Четвертый и самый большой: в Харькове открыли урбанпарк: (The fourth and the biggest: they opened an urban park in Kharkov (in Russian): Izvestiya Kharkov.

Lawhon, Larry Lloyd. 2009. The Neighborhood Unit: Physical Design or Physical Determinism? *Journal of Planning History* 8 (2): 111–132. doi: 10.1177/1538513208327072.

Leetmaa, K., J. Holvandus, K. Mägi, and A. Kährik. 2018. Population Shifts and Urban Policies in Housing Estates of Tallinn, Estonia. In *Housing Estates in Europe*, ed. Hess D., Tammaru T., van Ham M., pp 389-412. Cham: Springer.

Leningrad City Council of People's Deputies. 1979. Об плане распределения жилой площади на 1979 год и мерах по дальнейшему совершенствованию системы учета и распределения жилой площади(On the plan for the distribution of living space for 1979 and measures to further improve the system of accounting and distribution of living space (in Russian)): N 237/45.

Liebmann, H. 2007. Citizen participation in urban redevelopment processes - examples from Urban Redevelopment East: (Bürgermitwirkung an Stadtumbauprozessen – Beispiele aus dem Stadtumbau Ost(in German)). *Informationen zur Raumentwicklung* (1): S. 27-35.

Lindner, M., H. Gerth, and M. Buhtz. 2004. Leerstandsmanagement in Plattenbauten finanzielle, technische und soziale Aspekten (Vacancy management in prefabricated buildings financial, technical and social aspects (in German).

https://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/ministerien/bmvbs/forschung en/1998_2006/Heft116_DL.pdf?__blob=publicationFile&v=1. Accessed 29 May 2021. Löbner, L. 2016. *Halle Neustadt 2.0*. Project "Unloved Heritage - Socialist City" excursion Berlin-Dresden-Halle 19-23 September 2016, Halle (Saale), 22 September 2016. Lutska, V. 2019. У ЖК «Комфорт Таун» сплеск квартирних крадіжок. Чи

сприяють паркани та охорона підвищенню безпеки?: Hmarochos.

Lyasheva, Alena. 2018. Джентрификация: красивое слово или реальный процесс? *Spilne* (11).

Lyasheva, Alena. 2019. Жилье в Киеве: почему мне негде жить? *Spilne* (12): 52–67. Lyasheva, Alena, and Jana Openko. 2019. Джентрифікація та просторова нерівність по-київськи: випадок Оболоні. *Spilne* (12): 63–68.

Madanipour, A. 2004. Marginal Public Spaces in European Cities. *Journal of Urban Design* (9 (3)): pp. 267–86. doi: 10.1080/1357480042000283869.

Makoveichuk, Yuriy. 2019. *Masterplan of Kharkiv*, Yermilov Center, Kharkiv, 10 November 2019.

Matusevich, N., and A. Tovbin. 1970. Блокировка стандартизированных секций: комплекс возможностей и условий. *Architecture of USSR* (7).

Meerovich, M. G. 2008. *Наказание жилищем. Жилищная политика в СССР как средство управления людьми.* 1917-1937. Moscow: Russian political encyclopedia, Fundation of the First President of Russia B.N. Yeltsin.

Meerovich, M. G. 2011. Ernst May: "Rational" Housing for Russia. *Architekton: izvestita Vuzov* (36).

Meerovich, M. G., and N. V. Antonenko. 2018. Начальный этап Хрущевской жилищной реформы в Украине на примере жилого района Черемушки, г. Одесса. *Naukovy Visnyk Budivnytstva* 2 (92): 145–152. doi: 10.29295/2311–7257–2018–92–2–145–155.

Meisersky, M. 2016. История одесских хрущевок (History of Odesa khrushchevki (in Russian).

http://webcache.googleusercontent.com/search?q=cache:84uvQeZlVAUJ:www.happym isto.od.ua/urbanism/istoriya-odesskih-hrushchevok+&cd=6&hl=uk&ct=clnk&gl=de. Accessed 26 September 2018.

Metspalu, Pille, and Daniel B. Hess. 2017. Revisiting the role of architects in planning large-scale housing in the USSR: the birth of socialist residential districts in Tallinn, Estonia, 1957–1979. *Planning Perspectives*, (33:3): 335–361. doi: 10.1080/02665433.2017.1348974.

Meuser, P., and B. Zadorin. 2015. "Towards a Typology of Soviet Mass Housing. Prefabrication in the USSR 1955-1991". Berlin: DOM publishers.

Meyzersky, M. 2014. *Трудная история одесских Черемушек*. Odessa: Нарру Misto. Mezentsev, Kostyantyn, and Yulia Stebletska. 2017. Житлові масиви соціалістичного міста: минуле та майбутнє "хрущовок" Києва. Іп *Урбаністична Україна: в епіцентрі просторових змін*, ed. Kostyantyn Mezentsev, 227–236. Kyiv: Phenix. Mezentsev, Kostyantyn, Georgii Pidgrushnyi, and Natalia Mezentseva. 2015. Challenges of the Post-Soviet Development of Ukraine: Economic Transformations, Demographic Changes and Socio-Spatial Polarization. In *Understanding Geographies of Polarization and Peripheralization: Perspectives from Central and Eastern Europe and Beyond*, ed. Thilo Lang and Sebastian Henn, 253–268: Palgrave Macmillan.

Mezentsev, Kostyantyn, Michael Gentile, and Nataliia Mezentseva. 2018. An island of civilization in a sea of delay? Indifference and fragmentation along the rugged shorelines of Kiev's newbuild archipelago. *Journal of Urban Affairs* 5 (41): 654–678. doi: 10.1080/07352166.2018.1503544.

Milyutin, N. A. 1930. Соцгород. Проблема строительства социалистических городов. Moscow: State. Publishing House of the RSFSR.

Ministry of Regional Development, Construction and Communal Sevices of Ukraine. 2013. Настанова щодо розподілу територій мікрорайонів (кварталів) для визначення прибудинкових територій багатоквартирної забудови (Adjustment for

Distribution of the Micro-districts(Quarters) Territories for Determining Adjacent Territories of Multistory Buildings (in Ukrainian): ДСТУ-Н Б Б.2.2-9:2013.

Ministry of Regional Development, Construction and Communal Sevices of Ukraine. 2020. Draft Law of Ukraine "On the Complex Reconstruction of Quarters (Micro-districts) of an Outdated Housing Fund": Minregion.

Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine. 2019. Концепція публічного управління у сфері містобудівної діяльності (Concept of public management in the field of urban development (in Ukrainian). Kyiv.

Moroz, Olexandr. 2019. Housing and communal services: what changes in the new law? *Mistseve Samovryaduvannya* (8).

Müller, M. 2016. *Excursion in Prohlis*. Project "Unloved Heritage - Socialist City" excursion Berlin-Dresden-Halle 19-23 September 2016, Prohlis, Dresden, 19 September 2016.

Mysak, N. 2019. (Post-)Ideological Mass Housing Landscapes: Transformation Within the Sykhiv District in Lviv. In *Understanding Post-Socialist European cities: Case studies in Urban planning and design*, ed. Benkö, M. Kissfazekas, K., 118–133. Budapest: L'Harmattan.

Nashi Cheryomushki. 2015. About us. Odessa.

Nedučin, D., M. Skoric, and M. Krklješ. 2019. Post-socialist Development and Rehabilitation of Large Housing Estates in Central and Eastern Europe: A Review. *Tehnički vjesnik* 26 (6): 1853–1860. doi: 10.17559/TV-20181015174733.

Nemets, Lyudmila, Natalia Guseva, and Anastasia Mazurova. 2017. Індустріальний Харків: консервація чи шлях до розумного міста? Іп *Урбаністична Україна: в епіцентрі просторових змін*, ed. Kostyantyn Mezentsev, 357–374. Kyiv: Phenix. Neubert, U. 2010. Urban forest landscape on demolition areas in Halle - Silberhöhe. https://www.eukn.eu/news/detail/urban-forest-landscape-on-demolition-areas-in-halle-silberhoehe/. Accessed 7 July 2021.

Neugebauer, C., and Z. Kovacs. 2015. Paths of Socio-Spatial Change in Post-Socialist Cities – Insights from Five City-Regions in Central and Eastern Europe. In *Understanding Geographies of Polarization and Peripheralization: Perspectives from Central and Eastern Europe and Beyond*, ed. Thilo Lang and Sebastian Henn, 171–196: Palgrave Macmillan.

Novaković, Nevena. 2017. Configurational approach to revitalisation of public life in mass housing neighbourhoods. In *DOCONF17 Facing Post-War Urban Heritage in Central and Eastern Europe*, 1–12. DOCONF17 Facing Post-War Urban Heritage in Central and Eastern Europe, Budapest. 6-7.10.2017. Budapest: Department of Urban Planning and Design.

Odesa City Council. 2017. ПОЛОЖЕННЯ про постійно діючу робочу групу із взаємодії з об'єднаннями співвласників багатоквартирних будинків (in Ukrainian: PROVISIONS on the permanent working group on interaction with associations of co-owners of apartment buildings): No. 150.

Odesskiy Sait. Одесские Черёмушки - спальный район. Odessa: Odesskiy Sait.

Oleg Golubchikov. 2019. Олег Голубчіков: Пострадянське місто має стати відправною точкою для переосмислення простору та суспільства. (Oleg Golubchikov: Post-Soviet city should become a starting point for redefining space and society (in Ukrainian). Kyiv. *Spilne*. https://commons.com.ua/uk/holubchikov-interview/. Accessed 12 March 2019.

Oliynyk, Nataliya. 2009. Концептуальні підходи до формування стратегії реновації житлового фонду: (Conceptual approaches to the formation of a housing stock renovation strategy (in Ukrainian)). *Bulletin of the National Academy of Public Administration under the President of Ukraine* 71–79.

Pahl-Weber, Elke, and Dietrich Henckel (eds.). 2008. *The Planning System and Planning Terms in Germany: A Glossary*. Hannover: Academy for Spatial Research and Planning.

Panfilov, A. 2019. *Будівництво в розрізі. Благоустрій подвірь у містах: Construction in section. Improvement in the yards of the city (in Ukrainian).* Odessa: Pervyi Gorodskoi Odessa.

Paulsen, J., and F-T. Böger. 2013. Geschichte des Hauses: (The history of the house (in German)). http://www.mghhalle.de/mehrgenerationenhaus/geschichte-des-hauses/. Accessed 7 September 2021.

Pfeiffer, Ulrich, Harald Simons, and Lucas Porsch. 2000. Wohnungswirtschaftlicher Strukturwandel in den neuen Bundesländern. Bericht der Kommission. Stuttgart: Fraunhofer IRB Verlag.

Pichler-Milanović, N. 1999. Housing Privatisation in Central and Eastern Europe: From Policy to Practice. https://archive.unu.edu/hq/library/Collection/PDF_files/IAS/milanovich.pdf. Accessed 16 April 2021.

Polenz, Anja. 2015. RENATURIERUNG IN DRESDEN: WEIDIGTBACH IN GORBITZ KOMMT ANS TAGESLICHT. www.sachsen-fernsehen.de: Sachsem-Fernsehen. Polonchuk, V., V. Nesterenko, O. Matyazh, and Y. Romanenko. 2019. ОСМД в Харькове: куда уходят деньги: (ACMB in Kharkiv: where do money go (in Russian): Nakipelo.

Potter, F. 1994. Social Housing and Privatisation in Eastern Germany. Accessed 21 May 2021.

Projektbetreuung Stadt Halle. 2010. Die Internationale Bauausstellung Stadtumbau Sachsen-Anhalt 2010 in Halle an der Saale: Standort 6: Zentrum Neustadt. Belebung des urbanen Kerns. http://www.halle.de/de/Verwaltung/Stadtentwicklung/IBA-Stadtumbau-2010/Standort-6-Zentrum-06369/. Accessed 7 May 2020.

Prokopovich, S. N. 1952. *National economy of the USSR*. New York: Chekhov Publishing House.

Protz, Ralf. 2014. Initiative Energieeffizienz Ukraine. http://www.gross-siedlungen.de/de/113_DW_Artikel_10_2014_Energieeffizienzstrategie_fuer_die_Ukraine.htm. Accessed 13 April 2018.

Quartiersmanagement Prohlis. 2014. Bewölkerungsstruktur. http://www.qm-prohlis.de/Bevoelkerungsstruktur.24.html. Accessed 27 January 2017.

Rachinsky, A., and I. Panteleichuk. 2010. Вітчизняна бюрократія та її роль у процесах модернізації державного управління. Visnyk Natsional'noyi akademiyi derzhavnoho upravlinnya 38–47.

Richard Sendi, Manuel B. Aalbers, and Marcele Trigueiro. 2009. Public Space in Large Housing Estates. In *Mass Housing in Europe: Multiple Faces of Development, Change and Response*, ed. Rowlands, R., Kempen, R. van, van Kempen, Ronald, 131–156. New York: Palgrave Macmillan.

Ridosh, E. 2020. Просторове планування у новому адміністративнотериторіальному поділі. (Spatial planning in the new administrative-territorial division (in Ukrainian)). https://decentralization.gov.ua/news/12630. Accessed 5 July 2021.

Rietdorf, Werner. 1991. Vitalisierung von Großsiedlungen: Expertise;

Informationsgrundlagen zum Forschungsthema Städtebauliche Entwicklung von Neubausiedlungen in den fünf neuen Bundesländern / bearb. vom Institut für Städtebau und Architektur. Bonn-Bad Godesberg: Bundesminister für Raumordnung, Bauwesen und Städtebau.

Rietdorf, Werner. 1997a. Weiter wohnen in der Platte : Probleme der Weiterentwicklung großer Neubauwohngebiete in den neuen Bundesländern. Berlin: Sigma.

Rietdorf, Werner. 1997b. Zur Situation der Großwohnsiedlungen ehemals Sozialistischen Länder und zur weiteren Entwicklung der Großwohnsiedlungen im östlichen Deutschlands. In *Großwohnsiedlungen in europäische Städten (Large housing estates in European cities (in German)*, ed. Evelin Müller (Hrsg.), 7–16: Institut für Länderkunde Leipzig.

Röding, Anja, and Jacqueline Modes. 2012. 10 Jahre Stadtumbau Ost - Berichte aus der Praxis: 5. Statusbericht der Bundestransferstelle Stadtumbau Ost. Berlin:

Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS).

Röding, Anja, and Karin Veith. 2003. Dokumentation zum Bundeswettbewerb "Stadtumbau Ost" - für lebenswerte Städte und attraktives Wohnen.

https://www.bbr.bund.de/BBSR/DE/Veroeffentlichungen/ministerien/BMVBS/Sonderveroeffentlichungen/2005undaelter/DL_DokumentationBundeswettbewerbSuO.pdf;jsessionid=27C886176DF1DFF6AD3DE11CF17411DB.live21304?__blob=publicationFile&v=6. Accessed 15 November 2017.

Rosanov, N. 1977. Архитектура и индустриализация массового жилищного строительства. *Architecture of USSR* (09): 49–50.

Rudnytskyi, Andriy, and Iryna Duda. 2010. The architectural appearence of large cities - the case of Ukraine. In *Spatial Development of Polish and Ukrainian Big Cities at the Beginning of the 21st Century*, ed. Mykola Habrel and Marszał Tadeusz, 33–53. Lodz: Łódź University Press.

Rühle, D. 2016. *Excursion Geschichte von Fennpfuhl*. Project "Unloved Heritage - Socialist City" excursion Berlin-Dresden-Halle 19-23 September 2016, Fennpfuhl, Berlin, 19 September 2016.

Salzman, A. 1954. Пути усовершенствования архитектуры страндартизированных жилых зданий. *Architecture of USSR* (8): 6–9.

Samchenko, V. V. 1991. *Национальная экономика Украинской ССР: Statistics Year-book*. Kyiv: Technika.

SAS Regional- Verkehrs- und Umweltforschung GbR Dresden. 2012. Soziale

Entwicklung im Gebiet "Soziale Stadt" Teilgebiet Am Koitschgraben: Social

development in the area, Soziale Stadt" sub-area Am Koitschgraben (in German).

https://www.dresden.de/media/pdf/stadtplanung/stadterneuerung/sterna_soz_stadt_prohl is_koitzschgraben_Sozialstrukturanalyse_Wohngebiet_Am_Koitschgraben.2012.pdf. Accessed 8 June 2021.

Scientific Research Institute of Town Planning. About the Institute.

http://ndpi.com.ua/about us.html. Accessed 8 January 2021.

SE "UKRNDPICIVILBUD". 2012. About Institute «Ukrainian Scientific, Research and Design Institute for Civil construction» («Ukrainian Scientific, Research and Design Institute for Civil construction» (SE "UKRNDPICIVILBUD"). https://civilbud.com.ua/index.php/about-institute/360-about-institute. Accessed 8 January 2021.

Sedak, N. I., V. P. Dachno, and Y. I. Piskovski. 1987. *Архитектура Советской Украины*. Moscow: Stroyizdat.

Senatsverwaltung für Stadtentwicklung, Bezirksamt Lichtenberg. 2002a. Das Fördergebiet Fennpfuhl: Gebietscharakteristik.

https://www.stadtentwicklung.berlin.de/staedtebau/foerderprogramme/stadtumbau/Fenn pfuhl.15.0.html. Accessed 20 December 2016.

Senatsverwaltung für Stadtentwicklung, Bezirksamt Lichtenberg. 2002b. Integriertes Stadtteilkonzept für das Gebiet Fennpfuhl in Berlin- Lichtenberg.

http://www.stadtentwicklung.berlin.de/staedtebau/foerderprogramme/stadtumbau/fileadmin/_migrated/content_uploads/Fennpfuhl-Integriertes_Stadtteilkonzept-

Gesamtfassung.PDF. Accessed 26 August 2016.

Sergatskova, E. 2015. Как вдохнуть жизнь в постсоветский город на примере Харькова: (How to bring life into the post-Soviet city on the example of Kharkov (in Ukrainian). Kharkiv: Ukrainska Pravda.

Sharapenko, V. 1964. Наши градостроительные задачи (Our city planning tasks (in Russian)). *Stroitelstvo i Architektura* (4): 24–26.

Shaw, Denis J. B. 1983. The Soviet Urban General Plan and Recent Advances in Soviet Urban Planning. *Urban Studies* 20 (04): 393–403.

Shevchenko, L. 2017. Понастраивают тут: история советской застройки Одессы. Odessa: Mayak.

Shevchenko, L. 2019. Радянське житло: історія і перспективи. Spilne (12): 41–45.

Shirochin, S. 2017. Жилищный вопрос в Киеве и социальное неравенство: история проблемы: (The housing issue in Kiev and social inequality: the history of the problem (in Russian)).

Shirochin, S., O. Mychailyk, and K. Stepanets. 2018. Невідоме Лівобережжя 1960-1980ті. Kyiv.

Shkvarikov, V. A. 1963. Альбом конкурсных проектов экспериментального жилого района на юго-западе Москвы. Moscow: State Publishing House of Literature on Building, Architecture and Building Materials.

Shlipchenko, S., Tyshchenko, I. (ed.). 2017. (*He*)задоволення публічними просторами: Unsatisfaction with public spaces (in Ukrainian). Kyiv: Vsesvit.

Shupenko, R. 2021. Урбан-Парк на Салтовке: как будет выглядеть локация за 40 миллонов гривен: (Urban Park on Saltovka: How the location for 40 million hryvnias will look like (in Russian)): Newsroom.

Sievers, K. 2015. Lost in Transformation?: Raumbezogene Bindungen im Wandel städtebaulicher Erneuerungsmaßnahmen. Lübeck: Springer VS.

Sievers, K. 2019. Stadtumbau Ost - Solution to the Housing issue? Stadtumbau Ost - Lösung einer Wohnungsfrage? (in German). www.bpb.de/286642. Accessed 22 June 2021.

Sinitsyna, Elena. 2008. Строительная отрасль "Кому принадлежит Украина". *Комтегьан Ukraine* (187): 6.

Skubytska, Yulia. 2012. "Чужий" Спальний район. In Анатомія міста: Київ, ed.

Nadiya Parfan and Anna Khvyl', 78–88. Kyiv: Heinrich-Böll-Stiftung Ukraine.

Sobytia. 2007. Путешествие по городам. Харьков. Sobytia (August 32(149)): 30.

Spiegel. 1957. Ostberlin am Fennpfuhl. Spiegel (14): 54–56.

Stadt Dresden. 2012. Bund-Länder-Programm Stadtumbau Ost.

https://www.dresden.de/de/stadtraum/planen/stadtentwicklung/stadterneuerung/Stadtum bau_Ost.php. Accessed 21 February 2017.

Stadt Halle. 2018. Brückenschlag zur Neustadt von morgen: (Building bridges to the

New Town of tomorrow(in German)). AMTSBLATT der Stadt Halle (Saale) (12(26)): 3.

Stadt Halle (Saale) Fachbereich Wirtschaft, Wissenschaft und Digitalisierung. 2018.

Eine Vision für Halle-Neustadt Auf dem Weg in die Zukunftsstadt: (A vision for Halle-Neustadt On the way to the city of the future (in German)). https://halle.neu.stadt-2050.de/phase2/index-2.html. Accessed 5 August 2021.

Stadtplanungsamt Dresden. 2014. Integriertes Handlungskonzept Dresden Prohlis/Wohngebiet Am Koitschgraben: "Soziale Stadt – Investitionen im Quartier" Fortschreibung 2014.

https://www.dresden.de/media/pdf/stadtplanung/stadterneuerung/sterna_soz_stadt_prohis_koitschgraben_Fortschr__Int_Handlungskonzept_mit_anlagen_Maerz_2014.pdf. Accessed 20 May 2020.

Stadtplanungsamt Dresden. 2016a. Integriertes Handlungskonzept "Soziale Stadt Gorbitz 2" für den Zeitraum 2016-2025: mit den Handlungsfeldern und Projekten des "Europäischen Sozialfonds" (Grobkonzept).

https://www.dresden.de/media/pdf/stadtplanung/stadterneuerung/sterna_soz_stadt_gorbitz_Haluko_Gorbitz_2_.pdf. Accessed 20 May 2020.

 $Stadtplanungsamt\ Dresden.\ 2016b.\ Soziale\ Stadt:\ Gorbitz\ Integrated\ action\ concepts;$

Annex 5 (Soziale Stadt: Gorbitz Integrierten Handlungskonzepte; Anlage 5 - Eigentumsverhältnisse (in German).

https://www.dresden.de/media/pdf/stadtplanung/stadterneuerung/sterna_soz_stadt_gorbitz_Haluko_Anl_5_Eigentum.pdf. Accessed 21 September 2021.

Stadtplanungsamt, Stadt Dresden. 2016. Soziale Stadt: Prohlis/Am Koitschgraben. https://www.dresden.de/de/stadtraum/planen/stadtentwicklung/stadterneuerung/soziale_stadt/Prohlis_Am_Koitschgraben.php. Accessed 24 June 2016.

Stadtteilbüro "Am Koitschgraben". 2019. Stadtteilbuero am Koitschgraben. http://www.stadtteilbuero-am-koitschgraben.de/index2.php. Accessed 24 April 2020. Stäglin, Uwe. 2017. INTEGRIERTES STADTENTWICKLUNGSKONZEPT ISEK HALLE 2025.

https://m.halle.de/VeroeffentlichungenBinaries/757/1136/isek_2025_konzept_web.pdf. Accessed 4 May 2020.

Stahl, Anka. 2010. *Upgrading of Anton Saefkow Square (Aufwertung des Anton-Saefkow-Platzes (in German)*. Berlin.

Stahl, Anka. 2013. Roederplatz becomes final project of urban redevelopment in Lichtenberg's Fennpfuhl area (Roederplatz wird Abschlussprojekt des Stadtumbaus im Lichtenberger Gebiet Fennpfuhl (in German). Berlin: Senatsverwaltung für Stadtentwicklung und Wohnen.

State Committee of Construction, Architecture and Housing Policy of Ukraine. 1999. *On the Order of the Territory Division in Residential Neighborhood (Quarter) No. 228:* v0059241-01.

State Committee of the Council of Ministers of the USSR in Construction. 1958. *Residential buildings: SNIP II-B.10-58*.

STESAD. 2009. "Districts with Special Development Needs - The Socially Integrative City", Dresden Prohlis / residential area Am Koitschgraben Integrated Action Concept, 2009 update ("Stadtteile mit besonderem Entwicklungsbedarf – Die Soziale Stadt", Dresden Prohlis / Wohngebiet Am Koitschgraben Integriertes Handlungskonzept, Fortschreibung 2009 (in German). http://edoc.difu.de/edoc.php?id=0RHUA5J6. Accessed 17 May 2020.

STESAD. 2016. Development Concept Soziale Stadt-Prohlis (Entwicklungskonzept Soziale Stadt-Prohlis (in German)). http://www.qm-

 $prohlis. de/assets/EKO_Soziale \% 20 Stadt_Prohlis.pdf.\ Accessed\ 21\ September\ 2021.$

Street Culture. 2020. Презентація концепції урбан парку/центру на Салтівці: Presentation of the Urban Park/Center Concept at Saltivtsi (Presentation of the Urban Park/Center Concept at Saltivka (in Ukrainian)).

Supreme Soviet of the USSR. 1950. On the formation of the State Committee of the USSR Council of Construction.

Svush, Yuri. 2018. Сквер Гідності. Lviv.

Tanninen, T., R. Bittner, and H. Schmidt (eds.). 1994. *New Problems and Challenges for Housing Policy in East Germany: Lessons to Be Learned from the German Case.* Housing in Transition- East-West Dialogue on the New Roles of Actors in Changing Housing Policies, Dessau. Dessau.

Temelova, Jana, and Alena Slezáková. 2014. The changing environment and neighbourhood satisfaction in socialist high-rise panel housing estates: The time-comparative perceptions of elderly residents in Prague. *Cities* (37): 82–91. doi: 10.1016/j.cit-ies.2013.12.002.

Temelova, Jana, Jakub Novák, and Jana Jíchová. 2016. Safe life in the suburbs?: Crime and perceptions of safety in new residential developments in Pragues hinterland, Czech Republic. *European Urban and Regional Studies* (23(4)): 677–696. doi: 10.1177/0969776414534254.

The First Institute for Independent Evaluation and Auditing. 1997. Fundamentals of pricing in construction and standards of operation of buildings and structures. Saint-Petersburg: 42. https://www.zagorod.cc/stroitelstvo/19-sroki-ekspluatatsii-zhilykh-domov.html. Accessed 22 June 2018.

Tibbe, H., I. Böhm, and T. Henning. 2007. Großsiedlungen Marzahn-Hellersdorf IN-SEK - Integriertes Stadtteilentwicklungskonzept 2007 (Large housing estates in Marzahn-Hellersdorf INSEK - Integrated District Development Concept 2007(in German). https://www.berlin.de/ba-marzahn-hellersdorf/politik-und-verwaltung/aemter/stadtentwicklungsamt/stadtplanung/mdb-bamarzahnhellersdorf-stadtplanung-konzepte-insek_kurzfassung_2008.pdf. Accessed 21 May 2019.

Tsenkova, S., and B. Turner. 2004. The future of social housing in Eastern Europe: Reforms in Latvia and Ukraine. In *Adequate & Affordable housing for all*, 1–16. Adequate & Affordable housing for all, Toronto. June 24-27. Toronto: Centre for Urban and Community Studies.

Tyminsky, Vladyslav. 2013a. Do post-Soviet cities have future?: Case of Svitlovodsk. In *Micmo і оновлення*. *Урбаністичні студії*, ed. S. Shlipchenko, V. Tyminskyi and A. Makarenko, 205–215. Kyiv: Heinrich-Böll-Stiftung Ukraine.

Tyminsky, Vladyslav. 2013b. Three levels of system dissolution. In *Micmo і оновлення*. *Урбаністичні студії*, ed. S. Shlipchenko, V. Tyminskyi and A. Makarenko, 203–205. Kyiv: Heinrich-Böll-Stiftung Ukraine.

Ukrainian Ministry of Finance. 2017. В Україні будівельна галузь зросла майже на 23%. (In Ukraine the construction branch grew by 23% (in Ukrainian). https://minfin.com.ua/ua/2017/12/22/31554962/. Accessed 26 November 2018.

Underhill, Jack A. 1976. *Soviet New Towns: Housing and National Urban Growth Policy*. Washington, DC: U.S. Dept. of Housing and Urban Development, Office of International Affairs.

Urban, Florian. 2012. *Tower and slab: Histories of global mass housing*. New York: Routhledge.

Urenyov, V. 2017. "History of Cheryomushki", Odessa, 11 September 2017.

Vadimov, V. M. 2003. Детальні правила забудови центральних районів історичних міст як новий вид містобудівного регулятивну/ Традиції та новації у вищий архітектурно-художній освіті. *MCMXXXVI* (1-2): 122–128.

Vavirovskiy, N. 1964. Номенклатура комплексной серии типовых проектов общественных зданий для застройки городов и поселков: (Nomenclature of an integrated series of standard projects of public buildings for the construction of cities and towns (in Russian). *Zhilishnoe stroitelstvo* (10): 1–4.

Verkhovna Rada. 1992. The State Law for Privatization of Housing Stock.

Verkhovna Rada. 1995. Постанова Про Концепцію державної житлової політики (Resolution On the Concept of State Housing Policy (in Ukrainian)): N 254/95-BP. Verkhovna Rada. 2002. Law of Ukraine On General Scheme of Planning of the Territory of Ukraine: N 3059-III.

Verkhovna Rada. 2003. Закон України Про кооперацію (Law of Ukraine "On Housing Cooperation" (in Ukrainian): No. 1087-IV.

Verkhovna Rada. 2009. Закон Про Загальнодержавну програму реформування і розвитку житлово-комунального господарства на 2009-2014 роки (The Law About the Nationwide Program of Reform and Development of the Housing and Communal Services for 2009-2014 (in Ukrainian)): N 1511-VI.

Verkhovna Rada. 2012. Про внесення змін до деяких законодавчих актів України з питань регулювання містобудівної діяльності (Law of Ukraine on Amendments to Certain Legislative Acts of Ukraine Regulating Municipal and Urban Activities (in Ukrainian)): 5496-VI.

Verkhovna Rada. 2015. Закон України "Про особливості здійснення права власності у багатоквартирному будинку" (The Law of Ukraine "On features of ownership rights in an Apartment Building" (in Ukrainian).

Verkhovna Rada. 2017. Закон України "Про об'єднання співвласників багатоквартирного будинку" (The Law of Ukraine"On the Association of Co-Owners of a Multi-Apartment Building" (in Ukrainian).

Verkhovna Rada. 2020. Закон України "Про адміністративні послуги" (Law of Ukraine "On Administrative Services" (in Ukrainian): 5203-VI.

Virchenko, Pavlo, and Anastasiia Mazurova. 2014. Особливості територіальнофункціональної організації великого міста *На прикладі міста Харкова) (Features of the territorial and functional organization of the big city (on the example of the city of Kharkiv (in Ukrainian). *Chasopys sotsial'no-ekonomichnoyi heohrafiyi* 17 (2): 72–78.

Vlasenko, Yegor. 2016. Приватизація житла в постсоціалістичних країнах: причина та передумови (Housing privatization in post-socialist countries: the reason and preconditions (in Ukrainian). https://mistosite.org.ua/articles/pryvatyzatsiia-zhytla-v-postsotsialistychnykh-krainakh-prychyna-ta-peredumovy. Accessed 12 August 2018. Vlasenko, Yegor. 2017. Development of cooperative forms of housing ownership in Ukraine. https://mistosite.org.ua/articles/development-of-cooperative-forms-of-housing-ownership-in-ukraine. Accessed 21 August 2018.

Voinitsky, A., and J. Ilchenko. 2021. Стало известно сколько потратили на самый большой урбан-парк в Украине: (How much was spent on the largest urban park in Ukraine (in Russian)): My Kharkov.Info.

Walz, Susanne, and Julia Kunze. 2015. Was kann Quartiersmanagement vor Ort leisten und wen braucht es dazu? (What can neighborhood management do on the ground and who does it need? (in German). *vhw Forum Wohnen und Stadtentwicklung* Heft 6/2015 Quartiersmanagement (6): 313–316.

Wulf, H.-J., and E. Baum. 2002. Erfolge bei der Privatizierung von Plattenbau (Success by the Privatisation of Plattenbau (in German). In Leerstand im Plattenbau: Ausmaß - Ursachen - Gegenstrategien (Vacancy in prefabricated buildings : extent - causes - counterstrategies (in German), ed. Christoph Haller, 133–144. Berlin: Leue. Yuzhnyi Kurjer. 2017. Одесские Черемушки: принят проект модернизации хрущевок и строительства заправки. Odessa: Yuzhnyi Kurjer. Yuzvyak, Ignacy Jan. 2019. Деіндустріалізація минулого: неолібералізм і постсоціалізм у промислових руїнах Солотвина. Spilne (12).

Zhuravlev, A. M., and N. A. Naumova. 1975. *Архитектура жилых и массовых общественных зданий СССР. 1955—1970: (Architecture of residential and public buildings. 1955-1970 (in Russian).* Moscow: Stroiizdat.

Zöller, S. 2018. "Urban gardening"- Projekt in Halle-Neustadt: An der Eselsmühle geht es los ("Urban gardening" project in Halle-Neustadt: "At the Eselsmühle" starts (in German). Halle (Saale): Mitteldeutsche Zeitung.

Zuiev, Andrii. 2020. Project report "Integrated Urban Development in Ukraine". https://www.giz.de/en/worldwide/80902.html. Accessed 22 April 2021.