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Report

'Identity formation of Large-Panel Housing Estates'

Scholarship at Vienna University of Technology, Department of Urban Design in the framework of program of The Ministry of Education and Science of Ukraine

duration of stay: 01.10.2013-30.12.2013

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REPORT

by Natalia Mysak, 2nd year PhD-student of the department of Design and the theory of architecture, Institute of Architecture, Lviv Polytechnic National University about results of scientific scholarship at department of Urban Design, The Vienna University of Technology from 1.01.2013 to 30.12.2013.
Research theme: 'Identity formation of Large-Panel Housing Estates'
Scientific supervisor – Prof. Dr. Sc. Ing.-Arch. Bohdan Cherkes
Scholarship at department of Urban Design, The Vienna University of Technology was held under the guidance of
Ass. Prof. Dipl.-Ing. Dr.techn. Dr.h.c. Andreas Hofer,
Univ.Ass. Dipl.-Ing. MBA Dr.techn. Elisabeth Leitner.

STUDY PLAN task | result

1. Field research of the integration of large-panel housing estates in the Viennas structure | *7 Viennese large-panel housing estates were visited, general condition of residential environment of large-panel housing estates in Vienna was analyzed.*
2. Educational excursion to International Building Exhibition in Hamburg 'IBA-Hamburg 2006-2013' | *In the framework of International Building Exhibition a number of excursions, lectures and presentations concerning the further development of Hamburg (and in particular, an alternative approach to improve the living environment of residential areas) were visited ('Excursion IBA Hamburg' | Excursion zu Entwicklungssteuerung | LVA Nr. 260.060 | EX | 2.0 ECTS | WS 2013/14)*
3. Elaboration of studies and theoretical researches of transformation processes and modernization projects in large-panel housing estates in Europe and, in particular, in Vienna | *Literature review concerning transformation processes of large-panel housing estates and experience in modernization and possible intervention in urban structure was made. Co-authors of the research 'Plattenbausiedlungen. Erneuerung des baukulturellen Erbes in Wien und Bratislava' Vera Kapeller and Christoph Gollner were interviewed.*
4. Study of research methods and methodologies which were used in theoretical works on architectural identity and large-panel housing estates | *Issue of large-panel housing estate identity research method was analyzed. An article 'Perception of the Soviet Large-Panel Housing Estates in the Process of Their Development and Transformation' was prepared for publishing.*
5. Formation of the theoretical framework of the research 'Identity formation of Large-Panel Housing Estates' | *Theoretical framework of the research was drafted. Some aspects in such articles as 'Formation of the Architectural Identity Concept in the Context of Large-Panel Housing Estates of the Postwar Period in Europe', 'Origins and Transformation of City Unit Concept in the Soviet Urban Planning' were outlined*

Thesis 'Identity formation of large-panel housing estates' contains 3 levels: architectural (principle of mass housing construction), urban planning (principle of integral design) and social (identity formation depending on context). Accordingly, it is important to take into consideration big amount of aspects in the research. Large-panel housing estates were built all over the Europe and outside its borders, got local features and had been modified depending on the context. These urban structures also exist in Vienna. Also Vienna has a rich history of social housing, in recent years it occupies a top-position in the ranking of the most comfortable cities in Europe, pilot projects and methods of construction and modernization of housing are implemented here. During my scholarship I had an opportunity to get to know about the living environment of the city, analyze its structure in terms of 'user' and on the base of already made investigations by Austrian and researchers of other countries and my own experience make assumptions regarding the possible application of the Vienna experience in Lviv.

Large-panel housing estates built in 1960-1980 years in Vienna make up around 4% of housing stock of the city. In contrast, in some industrial cities of Ukraine large-panel housing estates became a home for up to 80% of the city population. Accordingly, the problem of these structures in Ukraine is much more urgent than in Austria. However, taking into account experience in social housing approach of construction and modernization in Vienna, Austrian examples are important for implementation of positive changes in such urban structures as in Lviv.



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22., Rennbahnweg



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22., Eipeldauer Strasse



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22., Eipeldauer Strasse

Principles of the so-called International style of large-panel housing estates didn't become really international: housing estates, which were based on almost the same principles, have been developed quite differently in different contexts, obtaining local peculiarities. However, number of features that are common for most of these structures can be defined. For example, both in Lviv and Vienna large-panel housing estates are introduced in media, literature and other secondary sources like unsuccessful, with increased criminality and weak social component, with low standard of living and quality of housing. Weak identity and lack of psychological connection between residents and their living environment is another common feature of large-panel housing estates. It should be noted that despite the fact that the highest level of homogeneity attained housing estates built in the former Eastern Bloc, inhabitants of Vienna districts also consider it like one of the main environmental problems. I believe that search for solution of this problem can help to find effective tools for development of such areas. Important feature of the Soviet large-panel housing estates compared with Western Europe, and in particular Viennese housing estates, is especially large courtyard between buildings. In early 1980th they didn't confirm their effectiveness as communicational or recreational places. During active motorization this green yards became big parking areas. However, in Vienna a lot of housing estates built in 1960-1980th were provided with parking structures that noticeably reduce the number of cars in open spaces. In addition, open spaces of Viennese estates are not seen as a construction ground for new housing. Only necessary infrastructural facilities were built near main transportation hubs of estates. Moreover, relatively smaller green spaces are easier to fill with functions.

Due to the investigations of Viennese researchers, big open spaces were always perceived like the main advantages of living in the large-panel housing estate. At the same time, residents of Viennese estates confirm that there are not enough infrastructure objects, design is not appropriate and foster dilapidation and conflicts between users. They demand creation of additional leisure facilities.

In Vienna large-panel housing estates are in the city ownership, while in Ukraine after independence obtaining in 1991, complicated process of privatization started. So, now ownership structure in Lviv is visible even on collageous façade. It might be an obstacle for realization integrated modernization projects.

Another very important aspect is location of housing estates and transport connections with main city spots. In Vienna it differs from estate to estate: some of them have good connections with other parts by U-bahn, other are linked with the rest parts of the city only by bus lines. Authors of 'Plattenbausiedlungen. Erneuerung des baukulturellen Erbes in Wien und Bratislava' create the vision of comprehensive rehabilitation of large panel housing estates. This vision involve improvement of the architectural structure but also bring some new functions, qualities and opportunities for people living in the estate and surrounding. Among the improvements façade redesign, functional modifications, additions and enlargements, creation of added housing space by means of loggia enlargement, glazing, addition of stores, functional modifications or redesign of green spaces in the immediate vicinity of the flats were mentioned. Researchers summarize, that the main improvements should be aimed at architectural design, correction of functional defects and elimination of spatial monofunctionality and monotony.

Also there is a great potential for Viennese housing estates to become ecological hubs on the city map. Rehabilitation offers better chances of complying with ecological requirements than constructing a new building. To such decision came a lot of architects who worked in this direction. For example, very precise calculations were made by Lacaton&Vassal about estates and separate residential buildings in France. Moreover, structurally rehabilitation of large-panel housing estates has good preconditions due to the nature of built structure surfaces, estates are usually good located and have good infrastructure.

Also large-panel housing estates in Vienna became home for newcomers with migration background. And very important is the fact that ghettos formation in Vienna is not articulated and there are no open social conflicts between dwellers. Also in Viennese estates there exists a tradition of participation management and co-working with dwellers. Of course such initiatives are only partly applicable in Ukrainian context, while Austria and Ukraine have different ownership structure. Issue of modernization and demolition needs very precise analysis, while wrong decision can cause negative urban, ecological, social, economic sequences. Every housing estate needs individual approach, but in general in existing situation researchers are inclined that it is more sustainable to modernize housing estates in Vienna.

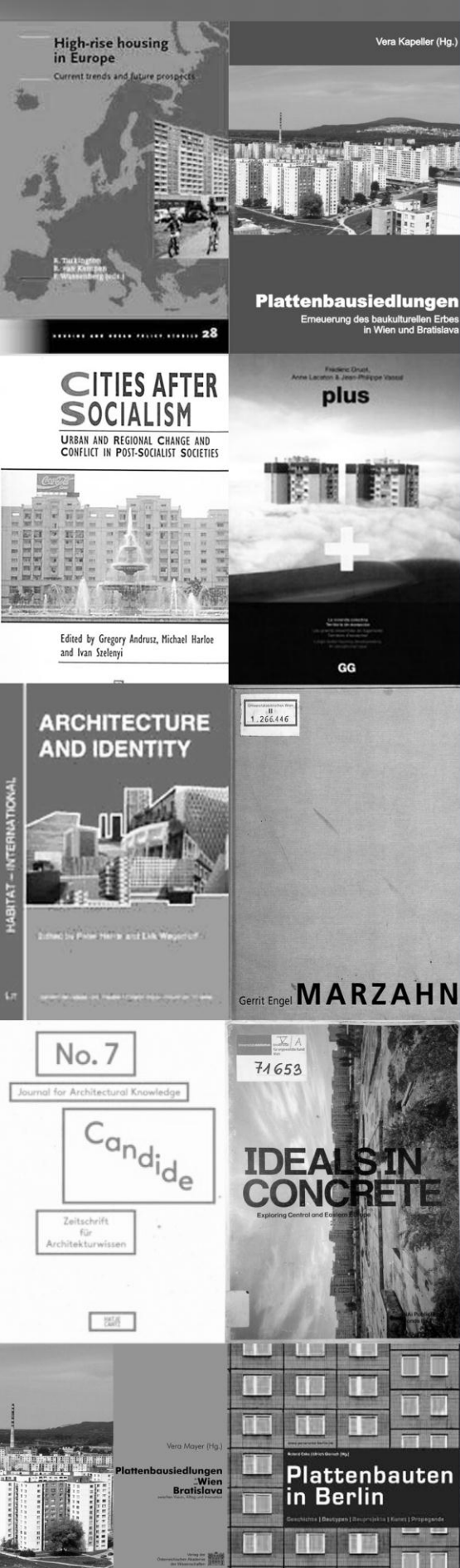


Besides, research field of built structure and open access to numerous library stocks, Vienna offers extremely wide possibilities for expanding architectural practice understanding. In my point of view, architectural design approaches in Vienna is very interactive. Future dwellers are maximally informed and engaged in designing process. During my scholarship I had an opportunity to attend numerous architectural presentations, events and exhibitions, in particular - Mies Festival, which took place at the biggest construction site in Europe at the moment - Aspern Seestadt, architectural exhibition 'Gemeinde baut - Wiener Wohnbau 1920 bis 2020', 'archdiploma13', meetings with representatives of Viennese architectural firms who shared with audience their experience in creation of sustainable communities and participation design.

Also particularly important for me was an excursion to Hamburg to International Bauausstellung in the framework of educational program of the department of Urban Design of TU Wien, which was conducted under supervision of Elisabeth Leitner, Andreas Hofer and Judith Lehner. Almost unlimited amount of lessons can be learned from IBA. It impresses by its scale, comprehensiveness and integrity of big variety of social institutions. To my point of view, a leitmotif of the exhibition was an establishment of connection human-place-human through the mediation of urban space. IBA became a logical continuation of long-term program of elimination of spatial ethnic segregation and natural creation of cultural mix and showed new possibilities and tools for creation of stable society. However, despite the partial ethnic segregation that still exists, the city is not divided into separate images, and shapes its new identity. Despite the fact of multiculturalism, or maybe because of it, Hamburg remained traditional rich and innovative city.

The project was formed by 3 main compounds – governance, places and themes. It became a perfect platform for interaction and demonstrative example, how directly every citizen can influence on the urban processes. To my mind, creation of a new identity of the central margins of Hamburg is one of the most important tasks of IBA. It was very important to show potentials of this area, which usually remains underestimated and therefore ineffectively used.

Environmental issues in the time of climate change, besides other preferences, are an effective way of branding such areas as Wilhelmsburg. In that area it is possible to incarnate projects, which can be never done in the central part of the city, where urban fabric is very dense and functionality loaded. IBA is an important investment for the city, while such events contribute to attracting new intellectual and intercultural resources, professionals and investors. IBA is a local phenomenon and, I think, its principles cannot be implement in Lviv in the same scale, but it is important to start using a lot of the IBA-tools separately. However, there is a vast field for urban activities in Lviv and there are a lot of opportunities to work in a decentralized way, directly with residents. Also there is no such cultural diversity in Lviv, but there are still a lot of contradictions. And some means of urban transformations that were used in Hamburg also can be implemented in Lviv: ways of information representation, methods of interaction with dwellers and their active participation, revealing the way of urban acupuncture, means of social engineering will be a good example and guidance that can be used, but in a more local scale.



- Articles written during scholarship:

1. Perception of the Soviet Large-Panel Housing Estates in the Process of Their Development and Transformation

Abstract: In the article there are derived general features of perception of the Soviet Large-Panel Housing Estates, their ideological basis and meaning shifts after the collapse of the Soviet Union according to social transformation.

Key words: large-panel housing estate, post-soviet housing estate, transformation, identity, transition, integrity, social engineering

2. Formation of the Architectural Identity Concept in the Context of Large-Panel Housing Estates during the Postwar Period in Europe

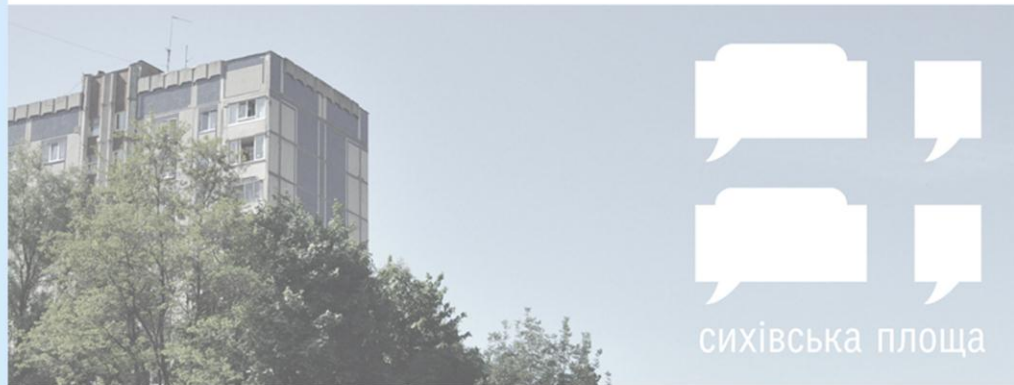
Abstract: The article reviews principles of mass housing construction and process of its implementation in Europe during the postwar period. Homogeneity was considered as one of the main problems of the large-panel housing estates regardless of contexts. In this respect, identity formation can be considered as one of the most important factors that counteract the monotony and anonymity of environment. Interconnection between concepts of 'large-panel housing estate' and 'architectural identity' is established in the article. It will help to perceive phenomenon of transformation of housing estates from the other point of view and simultaneously expand the concept of architectural identity. Also new concepts 'architectural self-identity', 'primary identity' and 'secondary identity' were defined.

Key words: large-panel housing estate, mass housing, microrayon, neighborhood, transformation, architectural identity, architectural self-identity, primary architectural identity, secondary architectural identity

3. Origins and Transformation of City Unit Concept in the Soviet Urban Planning

Abstract: Origins of Soviet planning unit of the city – microrayon, built due to the principles of integrated urban planning during the postwar period are explored in the article. Attention is paid to the main principles of Soviet housing estates designing and transformation during the late socialism. Also housing conditions of microrayons after collapse of the Soviet Union, and their functioning in the modern context are highlighted.

Keywords: district, microrayon, System of stepped services, Garden city, integrated design, neighborhood unit, 'Sotshorod', transformation.



- Concept of a new local media of the large-panel housing estate Sykhiv in Lviv – website 'Sykhiv Square' – was drafted. It is based on participation and identity impact principles.

Web site 'Sykhiv square': new virtual public space.
 'Conventional public space of so-called 'dormitory' districts didn't become a place of communication. Instead, we spend much time in a virtual informational realm, which is available everywhere 7/24. 'Sykhiv square' is a combination of virtual and physical dimensions of the city by means of creation of universal platform for strengthening social ties among residents of the area – first of all active youth – of the largest housing estate of Lviv – Sykhiv, stimulating local initiatives to improve physical realm of the estate, reducing consumption, forming a new identity of Sykhiv and distribute it also to dwellers of other districts'