

Past and future of the prefabricated housing estates at the example of Vienna and Bratislava – social, ecological and building cultural aspects



1. Initial position

The prefabricated housing estates are an important part of the European culture, social and economic history. They represent the ideas of modern architecture and modern town planning of the second half of the 20th century with all her advantages and disadvantages. In the prefabricated housing estates of the European towns live millions people. The future of the prefabricated housing estates is already on account of her huge volume not only an architectural and constructional, but above all also a society-political challenge. To form the future successfully, however, the look is also required in the past and the analysis of the present.

2. Research questions

As a succession project of the INTERREG IIIA – project „Rehabilitation of the Prefabricated Housing Estates in Vienna and Bratislava (PWB)“ pursues this book and exhibition project the aim to make a contribution to the renewal of prefabricated housing estates for the purposes of a sustainable development. The most important question is to what extent the prefabricated housing estates still correspond to the demands of present housing demands and life-styles. The research strategy aims on elaboration of new society-politically topical research questions, above all social as well as ecological and energetic aspects should be examined. In the book project „Prefabricated Housing Estates. Renewal of the Building Cultural Heritage in Vienna and Bratislava“ questions concerning a comprehensive renewal – under conclusion constructional, architectural, social and environment-related aspects as well as the questions dealing with housing policies were introduced. The concepts of the quality of life and housing quality as well as the questions of the sustainability belong to the most important research accesses here. The population structure, residential satisfaction and social living in the Viennese prefabricated housing estates belong also to the research objectives. Further segregation-, gentrification- and suburbanisation-developments were analyzed in connection with the phenomenon of the housing estates. Other topics are the housing politics in Slovakia, the architecture-historical and town planning aspects as well as the typology, constructions and prefabricated building technologies.

3. Methodology

The results of the research of the predecessor's project „Rehabilitation of the Prefabricated Housing Estates in Vienna and Bratislava (PWB)“ are developed in this research project on the one hand and, on the other hand, they are made to the professional world as well as the public interested in research field accessible. In the publication published at the Fraunhofer publishing company „ Prefabricated Housing Estates. Renewal of the Building Cultural Heritage in Vienna and Bratislava“ (2009) a research model dealing with the development of a comprehensive draught for the prefabricated building rehabilitation as well as the methodical research design are introduced. The project was interested in furthering the transdisciplinary cooperation between science, research and economy. The results of the student competition „Prefabricated Housing Estates – Modern Dwellings of tomorrow“ give one insight into the problems of architectural renewal.

Finally, concrete renovation proposals were presented, transdisciplinary pilot project „Comprehensive Rehabilitation of a Residential Block in Bratislava-Petržalka“ was carried out. An important concern is the intensification and enlargement of scientific and professional discourses at the international level. In the year 2009 the exhibition „Prefabricated Housing Estates in Vienna and Bratislava between Vision, Everyday Life and Innovation“ was shown in Czech Republic at four places (City Council of the city of Ostrava, VŠB University of Technology Ostrava, Competence Centre of Brno, Foundation for Architecture and Civil engineering in Prague-Nadace ABF). Within the scope of the exhibition opening in Prague (October 2009) an International conference „Industry and forms of the house building. Present experiences and perspectives of the house building - lasting development and house building“ was held in Prague.

4. Content results

Prefabricated housing estates show– like all the other town quarters – negative and positive aspects in the most different manner. Structural, design- or infrastructure-related and functional deficiencies are balanced by numerous positive aspects that, however, were and are but rarely brought up for discussion.

This critical setting to the architecture and the town planning of the modern age must be new discussed. Remarkably the relatively high housing satisfaction remains in contrast to the criticism of the experts and to the bad image of prefabricated housing estates in Vienna as well as in Bratislava in public.

The present results show that the flexibility of the prefabricated building manner and the compact structures allow a contemporary social as well as architectural and constructional-energetic renovation.

In view of the analysis of the demographic and socioeconomic structure (in particular the ageing and immigration) all future open and green space designs should give priority to rendering open spaces flexible enough to allow for different functions and uses.

Comprehensive renewal not only enhances structural quality but the overall architectural quality of the building per se. The objective of the rehabilitation of prefabricated housing estate lies in improving architectural design, correcting functional-operational defects and eliminating spatial monofunctionality and monotony. This also improves the quality of housing and living.

Structurally, the rehabilitation of prefabricated housing estates boasts good preconditions because they are easy to rehabilitate due to the nature of their surface, usually boast good location quality and often also good infrastructure. The energy savings potentials are very high by a thermal renovation (see pilot project). The simple structures offer good possibilities for architectural design with solar

measures. Thus these buildings can more than others become communicators of a positive future perspective of the solar age. Moreover, the promotion of rehabilitation measures by the EU would entail ecological advantages and employment effects. An improvement of the residential quality and quality of life is also thereby achieved.

5. Project support

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6. Term / of Present status

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