

Available online at www.sciencedirect.com



Procedia Engineering 161 (2016) 1863 - 1867

Procedia Engineering

www.elsevier.com/locate/procedia

World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium 2016, WMCAUS 2016

Post-Socialist Transformations of Green Open Spaces in Large Scale Socialist Housing Estates in Slovakia

Katarína Kristiánová^{a,*}

^eInstitute of Landscape and Garden Architecture, Faculty of Architecture, Slovak University of Technology in Bratislava, Námestie slobody 19, 812 45 Bratislava, Slovakia

Abstract

Generously designed broad green open spaces belong to the most characteristic features of the large scale socialist housing estates in Slovakia, designed and built in the second half of the 20th century. Open spaces were designed to satisfy the requirements of the socialist society and were well equipped with roads, parking places, pedestrian walkways, waste collection sites, and also vast green spaces with children playgrounds and sport grounds. Many of these spaces, equipped by artworks and fountains, represented architectural qualities of the modernism of the second half of the 20th century. However, the concept of large scale socialist housing estates and their broad green open spaces had its failings and shortcomings, too, manifested mainly by the deficiencies in maintenance, loss of control, or safety. Open public spaces are spaces intensively reflecting the cotemporary needs of the communities for their use. The new socio-economic conditions after the fall of the communist regime have created new societal demands that nowadays transform the open public spaces.

The paper traces the transformations of open green spaces in the large scale socialist housing estates in Slovakia, generated by the new socio-economic conditions after the change of the regime and by the new demands, using the case studies of large scale socialist housing estates in Bratislava. Results of the research show the losses of green open spaces caused by densification of housing, civic amenities, and parking spaces. The cultural heritage values of open green spaces representing exceptional landscape architectural qualities of the modernism of the second half of the 20th century are not protected and maintained. Only few examples of successful green space regeneration have been found.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Peer-review under responsibility of the organizing committee of WMCAUS 2016

* Corresponding author. Tel.: +421-915-482-151. *E-mail address:* kristianova@fa.stuba.sk Keywords: Green infrastructure; mass housing estates; public space transformations; post-socialist city;

1. Introduction

The construction of large residential complexes and prefabricated panel housing estates solving the demand for housing belongs to the most characteristic features of the urban development in Slovakia in the socialist period of the second half of the 20th century. Urban planning gained particular importance, and in the design of large scale mass housing estates, modernist concepts of dwelling in multi-storey buildings, standing in the middle of extensive green areas, and modernist approaches towards creation of public space, were followed. The quality and the original urban concept of housing estates from this period mirrored the socialist era and the "collective dream" [1].

Generously designed broad green open spaces belong to their most characteristic features. Open spaces were designed to satisfy the requirements of the socialist society and were well equipped with roads, parking places, pedestrian walkways, waste collection sites, and also vast green spaces with children playgrounds and sport grounds. Many of these spaces, equipped by artworks and fountains, represented architectural qualities of the modernism of the second half of the 20th century [2]. The concept of large scale socialist housing estates and their broad green open spaces had its failings and shortcomings, too. Broad green open spaces suffered problems of maintenance, loss of control, or safety [3].

The new socio-economic conditions after the change of the communist regime have created the new demands of society towards the open public spaces in the mass housing estates, and today, the current requirements continue to transform them.

The main aim of the research is to examine the transformations of open green spaces in the large scale socialist housing estates in Slovakia, using the case studies of large scale socialist housing estates in Bratislava, and to identify the character of the main changes of open green spaces in the examined mass housing estates, generated by the new socio-economic conditions after the change of the regime and by the new demands today.

2. Material and Methods

The first concepts of collective social housing in Bratislava are dated to the end of the 19th century, the interwar period brings in the first modernist concepts of housing complexes, but the first mass housing estates are built in the postwar period, in 1950s. Zeman, Jankovich and Lichner [4] divide the period of housing estate construction in the second half of the 20th century into six basic stages. Moravčíková et al. [5] alter the periodization into four stages: 1955-1960, 1961-1975, 1976-1981 and 1982-1995. In the first stage the housing estates of Krasňany, Kukučínova - Škultétyho, Februárka, Ružová dolina, Teplická and Hostinského were built. In the second stage it was the first large scale housing estate Ružinov, in the third stage the largest housing estate Petržalka with its 50 000 flats, and in the fourth stage Devínska Nová Ves and Dlhé Diely, were built.

For the purposes of the research, we have selected housing estates, representing each stage in the mass housing development, where the transformations of open green spaces have been studied: Februárka, Teplická, Hostinského, Ružinov, Petrržalka, Dlhé Diely. The changes of the spatial area of the open green spaces have been examined using the comparison of the available urban planning documents and projects of housing estates, the historical and the current aerial photographs of the area. The on-site observations in housing estates have been conducted with an objective to assess the current condition of green spaces and their equipment. The research followed main steps: 1. identification and comparison of the original and the contemporary spatial provision and patterns of open green spaces within the urban structure of housing estates, 2. identification of the valuable historical great green space concepts implemented in the urban structure of housing estates and their transformations patterns today, 3. identification of the current successful examples of green space regeneration in housing estates.

3. Results and Discussions

The results of the research in the examined housing estates in Bratislava – Februárka, Teplická, Hostinského, Ružinov, Petrržalka and Dlhé Diely indicate significant transformations of open green spaces generated by new socio-

economic conditions after the change of the regime and by new demands. The main finding is the identification of losses of green spaces caused by the building up of the open spaces in urban structure of housing estates – by densification of housing, commercial and civic amenities, and by parking spaces. The on-site observation has revealed lacking maintenance of open green spaces. The cultural heritage values of open green spaces representing exceptional landscape architectural qualities of the modernism of the second half of the 20th century are not adequately protected and maintained. In the studied areas only few examples of successful green space regeneration have been found.

3.1. Losses of Green Spaces

The main finding resulting from the comparison of the original and the contemporary spatial provision of open green spaces within the urban structure of housing estates is the identification of losses of open green spaces. The losses are caused by various building activities – the open green spaces in urban structure of housing estates are built up by densification of housing, by development of commercial and civic amenities and services (Fig. 1), as well as those, which were previously lacking in housing estates, for example churches (Fig. 2). In many cases, the quantitative loss of green spaces did not mean by itself the loss of the quality of open spaces, on the contrary, the urban structure was enriched by new functions and the previously vast unused open spaces got a new use.



Fig. 1. Losses of open green spaces by densification of urban structure by housing, commercial, and civic amenities development, example of housing estate Ružinov, Source: https://www.geoportal.sk/sk/aplikacie/mapka/.



Fig. 2. Example of housing estate Teplická – development of church complex in the central open space of the housing estate. Source: https://www.geoportal.sk/sk/aplikacie/mapka/.

The trend of the substantial increase in the number of vehicles per capita, densification and new commercial activities in the area of housing estates cause occupancy of green spaces by parking spaces (Fig. 3).



Fig. 3. The former green spaces equipped which children playgrounds are transformed to parking places – example from housing estate Hostinského. Source: Google street view.

3.2. Lack of Maintenance

In the examined housing estates, the problems of maintenance of vast green open space areas in municipal ownership have been observed. The spaces adjacent to block of flats are often planted and maintained by residents, but the plantations lack concept and quality.

3.3. Loss of Architectural and Cultural Heritage Values

The design of open green spaces of the large scale socialist housing estates represented in many cases exceptional landscape architecture qualities, but the research shows that the cultural heritage values of the modernism of the second half of the 20th century are not adequately protected and maintained. For example, the most outstanding example, the Park of Andrej Hlinka (former Park of Karol Šmidke) in Ružinov housing estate, designed by architect Ferdinand Milučký, was included in the List of municipal landmarks and has been restored, but the new tree plantings do not follow the original ideas of planting design by Alfonz Torma (Fig. 4).



Fig. 4. The plantings of new trees in the Park of Andrej Hlinka in Ružinov housing estate document lacking conceptual approaches towards preservation of landscape architectural values of the modernism of the second half of the 20th century. Photograph: Dana Marcinková, 2015.

The children playgrounds and landscape design of the courtyards in the housing estates belong also to those spaces which represented the outstanding landscape architecture values and features of the modernism of the second half of the 20th century. However, in many cases their values have been lost, and today their fragments are readable in the open spaces of housing estates only in few cases.

3.4. Successful Green Space Regenerations

Few examples of public green space regeneration have been found in the studied housing estates, mainly in the area of housing estate Petržalka, for example regeneration of Vlastanecké square, Ovsišťské square, regeneration of the park on the square Hraničiarov.

4. Conclusions

The open green spaces of the large scale socialist housing estates undergo significant changes, generated by the new socio-economic conditions after the change of the regime and by the new demands today. As mentioned by Šlachta [6], the attempts of architects to "humanize" the environment of the large socialist housing estates were not successful. Bugarič [7] is speaking about the post-socialist transformations of public space from modernism to consumerism. Treija et al. [8] point out many pressures, essentially market-related and driven by short-term thinking, transforming green open space in large scale housing estates towards unsustainable development. The results of examination of the transformations of open green spaces in the large scale socialist housing estates in Bratislava show the losses of green open spaces caused by densification of housing, civic amenities, and parking spaces. Landscape architectural qualities of modernism of the second half of the 20th century are not protected and maintained. Only few examples represent successful green space regeneration. These results suggest that local governments, municipal authorities, planners, communities and stakeholders should give more attention to various aspects of planning and management, protection and maintenance of open green spaces in the large scale socialist housing estates, to prevent the negative and promote the positive trends of their transformations.

Acknowledgements

The paper was prepared with the support of Juraj Illéš, who provided help during the research - with the collection of materials and on-site research.

References

- L. Vitková, Changes of Slovak housing estates current problems and perspectives of the creation of living environment (in Slovak), Životné prostredie 49 (2), 2015, pp. 67-73.
- [2] K. Kristiánová, R. Štěpánková, Park public space as cultural heritage of modernism of 2nd half of the 20th century, examples from Bratislava (in Slovak), in: Architektura a urbanismus 2. poloviny 20. století, Vysoká škola báňská, Ostrava, 2013, pp. 94-99.
- [3] K. Kristiánová, R. Štěpánková, Public green spaces of housing structures of 2nd half of the 20th century wins and losses of Bratislava (in Czech), in: Proměny architektury 2. poloviny 20. století, Vysoká škola báňská, Ostrava, 2012, pp.147-152.
- [4] Zeman, J., Jankovich, I., Lichner, J., Housing construction in Slovakia (in Slovak), Vydavateľstvo Alfa, Bratislava, 300 p., 1990.
- [5] Moravčíková, H., Topolčanská, M., Szalay, P., Dulla, M., Ščepánová, S., Toscherová, S., Haberlandová, K., Bratislava Atlas of Mass Housing (Bratislava Atlas sídlisk), Slovart, Bratislava, 344 p., 2011.
- [6] Š. Šlachta, Changes of Bratislava housing estates after 1990 (in Slovak), Urbanita 21(1), 2009, pp.12-15.
- [7] B. Bugarič, Transformation of public space, from modernism to consumerism, Urbani Izziv 17 (1-2), 2006, pp. 173-176.
- [8] S. Treija, U. Bratuškins, E. Bondars, Green open space in large scale housing estates: A place for challenge, Journal of Architecture and Urbanism, 36 (4), 2012, pp. 264-271.