

PhD thesis (University of Belgrade, Serbia)  
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RESEARCH INTO THE PATTERNS OF USE OF PUBLIC OPEN SPACES  
FOR THE PURPOSE OF NEIGHBOURHOOD REGENERATION:  
A CASE STUDY OF THE CITY OF BANJA LUKA

SUMMARY

Dissertation deals with **the problem of approach to spatial transformation of inherited mass housing neighborhoods** in function of their urban regeneration. The concept of *the neighborhood unit* as a method of planning and design of the housing units produced in different environments different effects on quality of life, but related problems as well. Urbanity problems are visible both in the social domain in the form of poor connection between people and people and places, and in the spatial domain in the form of the poor livability of public spaces. Many neighborhoods in Western Europe have already undergone or are currently undergoing a process of urban regeneration. Although the connection between the spatial characteristics of neighborhoods and the problems of urbanity is recognized, applications of regenerative measures often remain in the socioeconomic domain. The basic question of this study is how to define a model of spatial transformations of the mass housing neighborhoods, which may contribute to the positive effects of the process of urban regeneration, especially the progress of vitality and socialization?

The starting assumption of the study implies that the model of spatial transformation of the public housing neighborhoods should be designed with the knowledge of the socio- spatial relation underlying the patterns of the collective life of the neighborhood. Public spaces and their use are an important component of this relationship. The presence of people in the open spaces does not imply the existence of urbanity, but it is a necessary condition to establish the relationship between people and space and communication between people with each other. The organization of space and its physical characteristics influence the relationship between people, their activities and ideas.

The main result of the dissertation is the analytical device for analyzing the configuration of public space that is defined in the form of a universally applicable typology. The main purpose of the typology is to measure the capacity of urban structure and architecture of the neighborhoods for supporting the collective patterns of use of open public spaces. Application of proposed typology is carried out on one representative modern neighbourhood with collective dwelling units in Banja Luka (Bosnia and Herzegovina), built in 1970s. Typology examines the connection between public open spaces themselves and indoor and outdoor spaces as the main spatial criteria for supporting the co-presence and spontaneous surveillance. Configurational analysis of the neighbourhood is then compared to the results of field research about territorial practices of residents. It showed that assumed characteristics of urban form, such as distance between the street and building entrances, number of entrances related to the size of open area and building interface characteristics are relevant in the context of territorial complexity of neighbourhood. Proposed typology can be used as an additional analytic tool in process of urban regeneration of public

housing neighbourhoods and intuitive urban design of public spaces, for testing the weak points of urban and architectural form in the context of sociability and social behaviour.



Representative modernist neighborhood “Borik” in Banja Luka (Bosnia and Herzegovina), built in 1970s. Map by author showing the configurational types of open public spaces. Street neighborhoods (red), small yard neighborhoods (grey blue), enclave neighborhoods (blue), optional public space without direct entrances to collective residential space and no paths (dark blue), private space (light grey), public space with restrictions to use (dark grey), public spaces without direct entrances to collective residential space, but with paths.