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SPACES BETWEEN PREFAB RESIDENTIAL BLOKS IN BULGARIA

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Abstract. *Large-scale residential complexes having a global trend initially in the US and later in Europe after World War II as a result of rapid urbanization, industrialization, over-production and concentration of enormous human resources in big cities. Then called micro areas and today they represent a real challenge to solve in terms of depreciated buildings, as well as degradation and obsolescence received in the past spaces. Attempts to achieve universal solutions to the housing problem in this period inevitably lead to a number of urbanistic and planning difficulties raise questions about their appropriateness.*

Keywords: *the urban spaces, residential complexes, occupancy, planning*

1. Introduction

Large-scale residential complexes having a global trend initially in the US and later in Europe after World War II as a result of rapid urbanization, industrialization, over-production and concentration of enormous human resources in big cities. Later this trend is evident in the so-called socialist camp for the same reasons. Attempts to achieve universal solutions to the housing problem in this period inevitably lead to a number of urbanistic and planning difficulties raise questions about their appropriateness. Early in the development of this mass housing and formed therein spaces immediately after the war. Its heyday was in the 60s and 70s and during the 80s and 90s already seen the first attempts to seek appropriate practices for their renewal. In Bulgaria, as in other countries of the socialist bloc, these complexes arising from technological euphoria and social engineering without taking into account existing traditions of living and social environment. Then called micro areas and today they represent a real challenge to solve in terms of depreciated buildings, as well as degradation and obsolescence received in the past spaces between residential blocks.

In the past, investors cheered the design of longer and wider buildings and in later time rehabilitated perimeter building from the beginning of these processes. As is known, this has led to increasing coefficient of intensity of development. The designers worked with the minimum distances between residential buildings ($1,7 \div 2H$), although thus theoretically impossible to accommodate the necessary parking lots, sports, children's and other sites. Moreover, the development of the concept of "magnetism", according to which buildings retain its inhabitants off to about 20m. from their entrances, justified reducing the distances between buildings, even allowed to go down and below normal 3-hour sunshine on their facades.

All this contributed to the general scruffy appearance of the blocks of flats in the new residential complexes. They create the image of "desert", a place in which to invest in vain to maintain, much unfinished square space, which could be further built. That is why, residential complexes built in the 60s and 70s, have significantly more areas with vegetation than realized during the 80s, when green areas begin strongly reduced.

Diversity and improvised improvements made neighborhoods interesting and lifefull, but not closer to the modern idea of a quality place to live. The total number of panel apartments in Bulgaria today is about 30% of the housing stock. The dynamics in the development of socio-economic relations over the past 27 years have changed the face of the panel complexes. Trade centers spontaneously entered the residential environment. The processes of social restructuring and stratification of society are still less pronounced due to the retaining force of property ownership and limited opportunities for financial investment. Still grown requirements for the residential environment are the reason for the departure of prefab housing estates of residents who can afford it. In parallel, wealthy entrepreneurs buy and renovate apartments for sale at significantly higher prices and, especially, for the purpose of renting (not to be overlooked doubling of the population in the capital in

those same 27 years). However, there remain thousands of families, and not only in Sofia, laden with the burden of ownership without funds for its maintenance and renewal.

The problems of the residential quarters built by industrialized technology in 60-70 years of the last century, have their physical, social, economic, demographic and environmental aspects. Material and obsolescence of the buildings is readily apparent. Demographic changes in the age structure, size and number of households, the scale of unemployment and the change in lifestyle impose different requirements on the size, content and functional organization of both the buildings and the spaces between them. Existing buildings can not meet these requirements due to serious structural difficulties in attempts to internal changes.

In this regard, it is appropriate to seek main roads out of this negative trend caused by the limited capacity of the state and its people mastering the above processes. Regarding the spaces between residential blocks we undoubtedly define basic question to solve - land ownership. From then on, everything can be solved quickly and efficiently in a more or less acceptable compliance of the country.

The comparative analysis of the problems and the state of block spaces in different parts of Europe shows that there are great similarities but also differences between them. The same features of the environment perceived by residents as positive or negative. Main advantages of these spaces for some people are major drawback for others. For example, vacant space between the blocks are perceived ambiguously - for some they provide space, air and greenery, while for others they are a potential resource for sealing construction with new features.

Implemented measures to solve the problems of these areas are costly and inefficient because only concern the buildings and very little aesthetics of the environment and its functional use. Physical deficiencies of the buildings deepening social problems of the residents and the lack of adequate policies on these free areas inevitably leads to their natural degradation.

Approaches and measures for renovation of spaces.

Approaches to update these territories based on a common understanding of the global objective of sustainable development with its three main aspects: economic, social and environmental - namely the achievement of a balanced and stable living environment. Regarding the spaces between blocks it means building and managing a harmonious and healthy environment capable of operating long-term physical and social cost, with minimal negative impact on nature.

The consequences of climate change on the one hand, required to take measures to preserve the environment by improving the energy efficiency of buildings and reducing pollution, and on the other, to be sought resistant combinations of architectural and vegetative volumes suitable date species composition, which could also directly affects the energy balance of the surrounding buildings (Fig. 1).

After maintaining basic pedestrian axis, it is possible to allow residents in housing estates to surround their block spaces, and even over time and to sell. In this way the municipality will save money on maintenance and could concentrate its efforts in the development and intensive support "green backbone" of the territory. Municipalities should be tasked with developing a unified concept for the reconstruction of these free areas. The formation of a separate yard around the apartment block changes the character, spirit and atmosphere of the environment. Enclosure provides much better opportunities for management and maintenance of lawns, trees and shrubs and flowers (Fig. 2).

Walled courtyard is more beneficial for mothers who could leave their children unattended. In parallel, the yard provides a higher level of safety of the residents of the ground floor.

Conclusions

Ownership of housing and land in the neighborhoods is a key factor in the program for renovation and modernization of these spaces. Private home ownership in Bulgaria and the lack of ownership of land and adjacent areas is a major obstacle to the successful implementation of these programs. The worsening state of the buildings will force owners to seek joint efforts to address the problems. The creation of public-private partnerships such as housing companies or associations with broad representation of owners, municipalities, government, NGOs and other stakeholders can be an important factor in solving the problems of spaces.



a. Positive example for renovating spaces with a clear structure Planning and integral participation between architectural design, landscaping and public works



b. Negative example with its own sake composition of alley network led by excessive ambition for design, deepening the problems of the existing spaces between residential blocks

Fig. 1. Projects of competition ARCHMODUL "New Life for prefab complexes"



a. "Tcarigradski residential complex"



b. complex "Cite Jardin"
Fig. 2. Residential gated communities

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