

CONFERENCE
PROCEEDINGS

**3RD INTERNATIONAL
ACADEMIC CONFERENCE ON
PLACES AND TECHNOLOGIES**

EDITORS
EVA VANIŠTA LAZAREVIĆ
MILENA VUKMIROVIĆ
ALEKSANDRA KRSTIĆ-FURUNDŽIĆ
AND ALEKSANDRA ĐUKIĆ

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Eva VaništaLazarević, Milena Vukmirović, Aleksandra Krstić-Furundžić, Aleksandra Đukić

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PLACES AND TECHNOLOGIES 2016

KEEPING UP WITH TECHNOLOGIES TO CREATE COGNITIVE CITY
BY HIGHLIGHTING ITS SAFETY, SUSTAINABILITY, EFFICIENCY,
IMAGEABILITY AND LIVEABILITY

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THE POSSIBILITIES OF SURVEY TO COLLECT AND USE MICRO-URBAN DATA ABOUT NEW COLLECTIVE HOUSING IN SERBIA

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ABSTRACT

Urban dimension of housing is an important topic in the research related to post-socialist urbanism. Nevertheless, the level of "micro-urban" research of housing, which deals with the relations between housing buildings and their plots, nearby structures and streets, is certainly less represented in research. The reasons for this consideration probably arise from the specificities of local context. In Serbia, this is evident in the case of new collective housing, which has been dominant type of newly-built housing in the last years. Knowing that it is often developed for free market, the influence of investors, who tend to maximise built capacities, is immense. In result, there are many open questions and challenges about the suitability of this housing at "micro-urban" level.

The aim of this paper is to find solutions to overcome the gap between current state in new collective housing in Serbia as a dominant type and the general lack of adequate research in the micro-urban characteristics of this housing type. Thus, the proposed paper will use the methodology of a survey to collect the information which has not been achieved by other scientific methods. The survey was conducted among the participants of the Summer school of urbanism in Kragujevac, Serbia, in May 14-15 2015. Therefore, respondent group were Serbian experts in urbanism and related professional disciplines. Their professional view and experience in this topic is analysed to form recommendations and guidelines for the improvement of current state in the practice of housing as the main contribution of the paper.

Keywords: Collective housing, micro-urbanism, Serbia, survey, experts

INTRODUCTION

Nowadays, there are many research cases dedicated to the urban dimension of post-socialist housing as a unique scientific topic, with many different subtopics (Petrović, 2004; Vujović and Petrović, 2005). Those cases which belong to subtopics close to social and economic aspects of post-socialist housing are prevalent here. Furthermore, they usually concern general or "macro-urban" housing issues on a large scale, such as social accessibility of housing, tenant rights, housing rents, etc. The researches connected to spatial-physical characteristics of concrete housing projects in environment are relatively rare. Knowing that they refer to the relations

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between housing buildings and their plots, nearby structures and streets, they can be described as "micro-urban" characteristics of housing.

The reasons for the previous consideration probably arise from the specificities of local context, which can be always described as unique. The statement that general urban policy in post-socialist societies has a reactive approach to existing local urban practice (Petrović, 2009) can be also used in the case of housing. Therefore, it is understandable that the overview of physical characteristics of housing requires a complex and wide research of local conditions and features (Milić, 2006).

In the case of Serbia, post-socialist influence is especially noticeable in housing construction, as "the most dynamic indicator of housing-market performance" (Tsenkova, 2005). Collective/multi-family multi-storey housing has been the dominant type of newly-built housing in the last years. This type of housing, that enables the maximization of built capacities and thereby profit, has been very convenient for newly-emerged free market and liberal capitalism in construction sector in Serbia. This phenomenon is also typical for some other post-socialist countries in Europe, such as Russia (Pickvance, 2002). Similarly to new housing, old collective multi-storey housing from socialist period in Serbian cities has also been in the focus of market, but in different way. The addition of extra stories or lofts on top of older buildings is seen as the "dominant model of post-socialist spatial change in inherited multi-storey housing areas in Serbia" (Vranic et al, 2015, p. 1). Some other well-known market-oriented types of housing, such as row-houses with lower density and smaller capacities, have been understandably neglected by private investors in Serbia due to lower expected profit (Ralević et al, 2014).

This pressure from Serbian market to use of exact typology and thereby formed physical characteristics have appreciably transformed residential areas in Serbian cities. Some functional elements can be easily described as positive –newly-built collective multi-storey housing has surely raised the level of the urbanity. However, there are many open questions and challenges about the suitability of new collective multi-storey housing at "micro-urban" level.

In contrast to its appearance in situ, adequate statistical² and research data about this phenomenon are scarce. Similarly, there is no corresponding act in national legislative framework. For instance, architectural and technologic aspects are arranged in the legislative act concerning standards and norms for the design of housing buildings and units. Some "micro-urban" elements are indirectly treated in it, through the standards about natural lightning (MGSI, 2012-15). Thus, the main problem is how to study current situation if the deficiency of appropriate scientifically valuable information is evident.

Therefore, the research aims to find solutions to overcome the gap between current situation in new collective housing in Serbia as a dominant type and the general deficiency of adequate statistical and research data. Accordingly, the paper offers a new approach, using the methodology of a survey to achieve the expected aim. The survey was conducted among Serbian experts in urbanism and related professional disciplines, to acquire results from their professional knowledge and experience in this topic. As a final contribution of the paper, these results are used to form recommendations and guidelines for the improvement of current state in the "micro-planning" of housing in Serbia.

METHODOLOGY: SURVEY AND QUESTIONNAIRE

The mentioned survey was conducted among the participants of the Summer school of urbanism³ in Kragujevac, Serbia, in May 14-15 2015. Thus, respondent group was Serbian experts in urbanism and related professional disciplines. All respondents answered to 8 main questions

² For example, only the issue of division between individual and collective housing was included in the last national census 2011 (SORS, 2013).

³ This is the most significant annual domestic conference in the field of urbanism.

about the “micro-urban” characteristics of new collective multi-storey housing in the area of their professional jurisdiction. Before that, the respondents had to pass through 4 introductory questions about their professional positions. 7 main questions were closed-ended ones with 4 or 5 possible choices. The respondents could opt for only one choice. The question No 2 was differently organized – respondents had to sort all given choices.

In total, 114 experts participated in the survey. With intention to better present surveyed experts, the structure of the respondents is given in brief, through the data from introductory questions:

- 92% of them belong to the field of urbanism. Other experts belong to close fields (cadastre, construction, transport, etc);
- 82% of them primarily works in the creation of the documents in urbanism and spatial planning (urban and spatial plan and urban design projects), as well as other spatially-oriented documents (for example, strategic documents);
- 76% of them are employed in public sector;
- 47% of them work in the positions related to local-level jurisdiction. Minority works in district-, national- and regional-level jurisdictions – 29%, 13%, and 7%, respectively.

RESULTS

The first two questions are related to the typology of newly-built collective housing buildings by general physical characteristics. Intending to clarify which type is dominant by the opinion of respondents, only one choice is required among several usual types (fig. 1) in the first question.

Nevertheless, selected choices make three pretty even groups (fig. 2), with the small preference of the type of row-building along the perimeter of an urban block (41%). This choice has been expected, because it maximizes the utilization of the building plot.

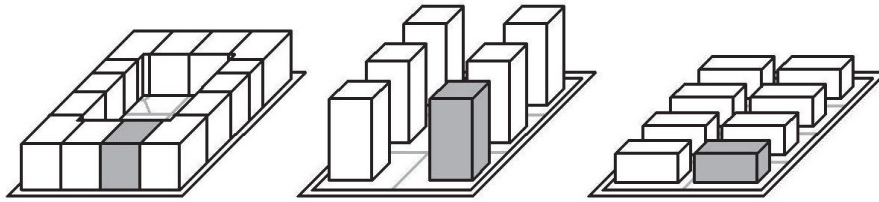


Figure 1: The types of new collective housing buildings given as options in the first two questions – row-building in block perimeter and detached buildings in the form of tower block and corridor building

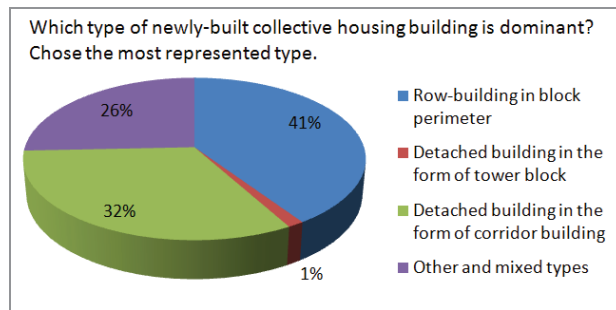


Figure 2: The distribution of preferred physical types of new collective housing buildings by one choice

The difference between the first two questions is in the different possibilities to answer. In second question, respondents had to sort all presented options from the most frequent type of new collective housing to the least frequent one (fig. 3). Four types are concretely named and the last option covers the other and mixed types. Here, two types have been proven as the most dominant in Serbian urban areas: row-building in block perimeter and detached building in the form of corridor building along accompanying plot. Similarly to previous, these two types maximize the utilization and the coverage of the built plot.

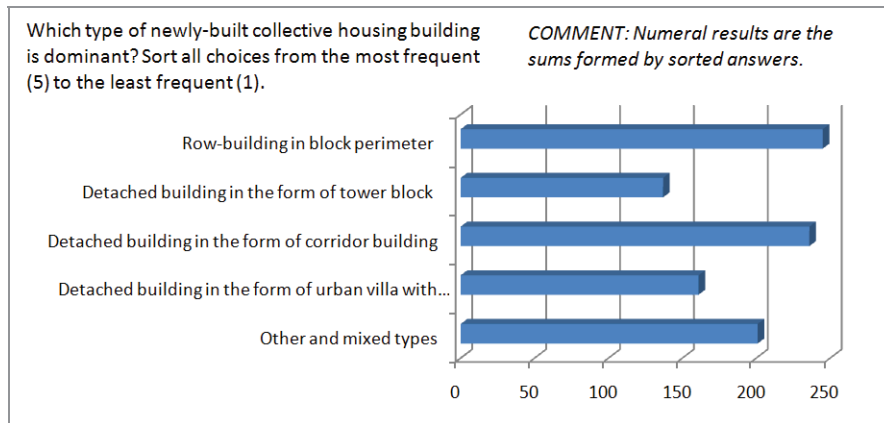


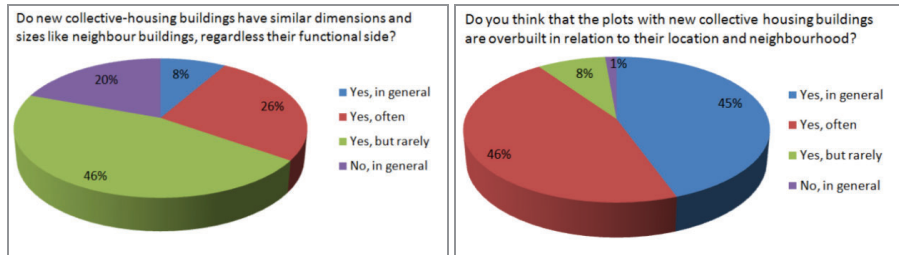
Figure 3: The distribution of preferred physical types of new collective housing buildings by the sorting of given choices

The next question was connected to the issue of appropriate size and dimensions of newly-built collective housing buildings in relation to existing neighbour buildings. This issue seems to be very evident in the case of Serbian cities (fig. 4-5).



Figures 4 & 5: The appearance of new typology in older residential areas (Source: B. Antonić)

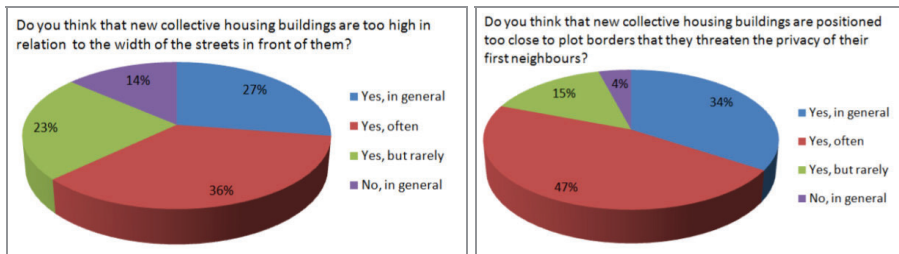
Almost half of respondents (46%) selected the choice which support the statement that new building usually omit, i.e. go beyond the size and dimensions of existing neighbour buildings (fig. 6). With the group which strongly support this stance (20%), it is clear that 2/3 of respondents think that new housing is not customized to existing urban fabric.



Figures 6: The issue of (dis)similarity of new collective housing buildings to existing neighbour buildings; Figure 7: The coverage of the plot with new collective housing buildings

This challenge about capacities' maximization, identified in the previous question, is further elaborated in the next question, where the issue of the coverage of the plot with new collective housing buildings is concerned (fig. 7). Expected problem with overbuilt plots is highlighted by the question. The results prove this expectation – more than 90% of respondents agreed that the plots with new housing are usually or generally overbuilt. It seems that problem with exaggerated construction in the last two questions is more evident in the case of surface than in volume.

However both questions have not touched the relations between new collective housing buildings and accompanied open public space. The next question asks about these relations (fig. 8). Concretely, it treats the relation between the height of the buildings and the width of the streets⁴ which are in front of them. The majority of respondents deemed that these buildings were too high for the width of accompanying streets, in general (36%) or in the most of cases (27%). This situation certainly makes a pressure to numerous features, such street parking, street greening, or natural lightening of both street and neighbour buildings.



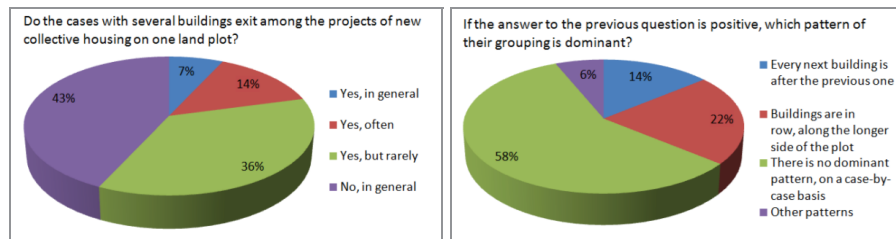
Figures 8: The relation between new collective housing buildings and accompanied streets; Figure 9: The issue of privacy between new collective housing buildings and the first neighbours

The sixth question (fig. 9) is created as a “sublimation” for three previous questions, because it included an understanding how spatial/physical relations and features in the analysed housing influence to the quality of human life. Thus, it considers that the level of privacy for the first neighbours of newly-built collective housing threatened by its building. The opinion of respondents is clear - new buildings generally (34%) or usually (47%) reduce the level of privacy to be observed as threatened.

The last two questions are connected to the possible examples of several newly-built buildings of collective housing on one plot. The seventh question (fig. 10) refers to the general appearance and the frequency of such grouping. The results present obvious division between respondents. The first half of them thinks that they are rare or on-existent in the area of their jurisdiction; the

⁴ Streets are introduced and named here due to they are the most often type of open public space.

second half has opposite opinion. Perhaps the regional differences of urban fabric in Serbian cities and towns and hereby caused different patterns of sizes and dimensions of building plots can be the explanation.



Figures 10 & 11: Grouping several newly-built collective housing buildings on one plot – frequency and typology

Regional differences can be also crucial for the last/eighth question, which applies to the typology of the mentioned grouping (fig. 11). The majority in respondents' group (58%) does not recognize any dominant typology or pattern of the grouping of newly-built collective housing on one plot. The concrete types, such as grouping in row along the longer side of the plot or grouping in parallel way, are in minority, with 22% and 14% supports respectively.

CONCLUSIONS

The results of the research present that urbanism-related professionals have usually negative attitude to the newer trends of newly-built collective housing in Serbia at "micro-urban" level. By their opinion, it is obvious that newly-built collective housing makes a huge pressure to all major elements of existing urban fabric in immediate environment. New buildings are the most often problem for themselves, owing to the overbuilding of their plot (91% answers). Then, they menace the neighbour buildings (81%) and streets (63%).

The reasons for this situation are certainly new economic circumstances in Serbia that is similar to the situation in other post-socialist countries in Europe. The influence of liberal capitalist model and free market has produced less regulation (Stanilov, 2009), which consequently has left much freedom for private investors in the sector of housing building. Thus, they tend to maximize the available capacities of building plots, causing observable problems relating to the coverage of plot, the proximity of new building to its neighbours, and the height ratios between new building and neighbour structures. The most often used type of collective housing is very rational type of raw buildings along building perimeter with 41% of answers in the survey. This is also indirectly supported by the results about the frequency and the typology of buildings' grouping.

The status and the possibilities of urban planning in Serbia have been doubtless linked with these problems in housing sector. Without new improvement, current tendencies will probably lead to bigger obstacles for urban development in the long term. To upgrade presented situation in future, special standards and norms for housing at urban level should be introduced and implemented through urban legislation as well as urban plans and projects. They must "tighten" adequate rules and provisions for housing building. Furthermore, urban planning should also use some "soft" measures, such the creation of guide documents, the education of future tenants, and the promotion of the best urban practice of newly-built collective housing.

The mentioned norms and standards should be particularly introduced in the case of the most triggering issues:

- Besides the relation to the dimensions and the shape of building plot, which is existing in the current legislation in Serbia, the standards should also cover the relations between the dimensions and the volume of new housing buildings and existing context;
- If the previous case is different, i.e. the dimensions and the volume of new housing buildings go beyond of those elements in existing context, the clarification of such approach should be elaborated through competent urban plans and projects (the aspiration to change typology, to increase urbanity, etc.);
- If new regulation tends to overly increase of the use of building plots, the limits should be introduced as obligatory standards. These limits must be supported by well-defined minimal living standards, such as the minimal ratio between height of building and the width of related street or the minimal percentage of green areas per building plot;
- The issue relating of the grouping of several newly-built buildings of collective housing on one plot seems to be insufficiently covered by adequate legislation and regulation. The prospective norms and standards need to better define possible typology in such projects in the case of both buildings and open spaces on the plot.

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