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Regenerative Design and Co-commitment as Decisive Factors in Mass Housing Revitalisation

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ABSTRACT

The paper introduces a participatory method for re-generation of the common spaces in residential neighbourhoods, especially in case of post-war mass housing. The method combines regenerative design and co-commitment that are recognized as decisive factors in mass housing revitalisation. The spatial focus of the research is on New Belgrade Blocks (Serbia) that are part of the larger phenomenon of the post-socialist urban heritage. The neighbourhoods that are part of this larger framework are having common attributes and facing similar issues nowadays. Comprehending and managing change in these neighbourhoods requires community-driven actions that would include all relevant stakeholders in the process through co-commitment. The actions, that would be based on regenerative and biophilic design, would ensure both maintenance of green spaces of the neighbourhoods, as well as integration of new nature-based solutions. The approach is enhancing the role of community and highlighting the important values of common spaces in ensuring vitality of mass housing and co-creating healthy and liveable environments. The paper is contributing to contemporary discussions on resilient cities and communities and promoting participatory and integrated urban renewal.

KEYWORDS

regenerative design, co-commitment, mass housing, revitalisation, common spaces



Figure 1. R-urban, AAA, 2008. (Photography © Andreas Lang, Source: Hiller et al., 2018)

1. Theoretical framework

The importance of participatory integrated planning has been present for some time in the urban discourse, especially when addressing the existing urban heritage. In addition to that, and in context of the increasingly important discussions on climate change and climate-related actions, the implementation of nature-based solutions in urban areas is an emerging topic. Not only theoretical studies and concepts, but also urban practices, are recognizing the importance of these topics. As this paper proposes, the convergence of these approaches and their further evolution into novel solutions is a key for co-creating healthy and liveable environments. The need for upgraded concepts has been recognized in the New Leipzig Charter (The New Leipzig Charter, 2020). As stated in the Charter, the integrated and sustainable urban development has been in the focus of multiple European and global agendas for some time (and also Leipzig Charter from 2007), and the concepts are still relevant today. Nevertheless, new global challenges that have direct impact on cities, such as loss of biodiversity, resource scarcity, demographic change, pandemics and rapidly changing economies are urging for upgraded concepts. As some researchers claim, “sustainability is no longer enough” (Wahl, 2019, Williams 2019). Regenerative design emerges as a new paradigm that goes beyond the neutral point of sustainability and catalyse a shift towards regenerative development dedicated to value-adding (Gibbons et al., 2018). The main attribute of regenerative design is the ability not only to ensure and maintain but increase capacities and well-being. Regenerative design strategies operate between social and biophysical components, fostering principles of self-organisation, resilience, biodiversity, biophilia, adaptive capacity, multi-scale networks and stakeholder engagement towards co-creation (Gibbons et al., 2018). Consequently, it accelerates the emergence of the socio-economic component in form of productive communities and circularity.

The regenerative design strategies operationalize and build upon the main principles of important charters and agreements (2030 Agenda for Sustainable Development – SDG 11, New Urban Agenda, Paris Agreement, European Commission’s Green Deal, New Leipzig Charter). Not only ecological and biophysical components but also the social components of regenerative design, such as self-organisation, multi-scale networks, stakeholder engagement and co-creation, are envisioned in these charters and agreements. The New Leipzig Charter promotes place-based, multi-level and multi-stakeholder approach and points out that a good urban governance, both governmental and non-governmental, is required in order to lead the transformation towards just, green and productive societies (The New Leipzig Charter, 2020). New Urban Agenda in particular addresses the question of collective commitment to enhance integrated and sustainable development. Co-commitment as multi-stakeholder commitment to co-creation and urban governance - not only as a reactive participation, but as a proactive and responsible approach - is critical for effective planning, implementation and monitoring of changes in urban environment. Co-commitment is a multi-level and continuous engagement to unlock the potential of institutions and individuals and build effective urban governance structures (The New Urban Agenda Illustrated, 2020). It is foreseen as a complementary tactic that ensures integrated and just socio-spatial development. Furthermore, it emphasises the pursuit of the common good that has been strongly addressed in the New Leipzig Charter – titled “The transformative power of cities for the common good”. The questions of common good, common interest and, ultimately, common spaces in cities are especially important in participatory (re)design processes. Furthermore, common spaces are recognised as socio-spatial elements in cities that are enabling critical thinking and creative testing of the solutions, and therefore enabling transformative actions towards regenerative cities and societies.

2. Common spaces as negotiation spaces

With a reference to the contemporary urban practices and policies previously mentioned, the paper addresses the problems of post-socialist urban heritage, namely post-war mass housing. Devaluation and deterioration are common attributes of the mass housing areas in Europe and beyond. The dialectic between preservation of this urban heritage and sustainable urban development and governance is at the core of urban heritage regeneration. As recognized at the World Urban Forum, 2020, “the common ground between often divergent approaches must be identified and tools developed to strengthen synergies between the two.”

The research identifies the important role of the common spaces in mass housing revitalisation - as *negotiation spaces*. The common spaces, that are the most neglected, underused and deteriorated components of post-war mass housing areas, at the same time represent important legacy of the post-socialist urban heritage, but also important biophysical components of cities and their green infrastructure. As such, they have the capacity to (1) address climate change and environmental issues in cities, (2) enhance social cohesion and proactive participation in existing residential neighbourhoods and (3) preserve the existing urban heritage and safeguard its values. Furthermore, (re)generation of the common spaces in these neighbourhoods would be a value-adding for the quality of the urban environment and the quality of life of the inhabitants.



Figure 2. New Belgrade common spaces (Photography © Zorana Jovic, Student Workshop, Belgrade, 2020).

The study proposes reaffirmation, reuse and reactivation of the common spaces in the post-war mass housing areas through regenerative design and co-commitment of the stakeholders. Stavros Stavrides, a researcher, teacher and activists, especially dedicated to the questions of commons, sees them as an open system shaped by people who believe themselves to be equally responsible, both in maintaining and repeatedly questioning them (Stavrides, 2018). Therefore, the importance of proactive participation of people and commitment to their living environment has been underlined in his studies on commons. The increasing discussions on the questions of commons, both in academia and urban practice, have been influenced by the economist and Nobel Prize winner Elinor Ostrom. Through an example of natural resources, such as forests, she is showing how they can be effectively managed by "commons-like organisations that allow a self-managed community of users equal access, without private ownership or state control" (Bingham-Hall, 2016). Ostrom underlines the importance of the polycentric governance beyond the dichotomous world of "the market" and "the state" (Ostrom, 1990). The common spaces are a perfect platform for testing these concepts and reinventing the public-private relations in urban environment, which is especially important in case of mass housing in post-socialist regions. Furthermore, the common spaces and processes of commoning are highlighting the importance of the right to the city as the right of the citizen as an urban dweller (*citadin*) and user of multiple services (Lefebvre, 1995), by offering an alternative to the privatization of land and acting in the interests of the common good. What is important to stress here is that the publicness of the common spaces can be as high as of the conventional public spaces. The common spaces are inviting and open to be used by non-residents as well. They can be re-generated and co-created through participatory process, and are always in the making, "emerging as people collectively develop their relations" (Stavrides, 2018).

The creation of urban commons, or, as Karin Bradley defines it, “open-source urbanism”, is applying “spatial tactics and architectural prototypes that can be copied, multiplied and developed by a multitude of users in different locales” (Bradley, 2015). Nevertheless, the open-source tactics overlayed with local specificities generate always unique results. Therefore, the place-based approach has an experimental character, and the tactics and methods are iteratively refined within it. With an aim to contribute to the development of these tactics and methods, the study develops and tests an education-exploration prototype as a platform for critical thinking and creative testing. Taking New Belgrade Blocks as the case study, the research applies participatory methods for co-assessment, co-design and co-validation of proposals, including residents and other stakeholders in the process of research. The following chapter will show the research process, tools and methods that were applied in the study on New Belgrade common spaces, offering methodological guidance that could be applied on similar cases.

3. The case of New Belgrade common spaces

New Belgrade is one of the largest modernist post-war mass housing area, with around 250.000 inhabitants today. It represents a very important case study within the larger phenomenon of the post-socialist urban heritage, and it is especially relevant for the studies on commons. The concepts of commoning are not new for New Belgrade. Actually, the whole New Belgrade was planned and built as a socially owned city, where housing was a common good. The ownership situation was very important for realisation of the mass housing project. The status of being socially owned has blurred the line between public and private spaces within the blocks, which was further supported by common spaces within the blocks, for example local community centres and urban common spaces. However, within the so called post-socialist transformation and housing privatisation at the end of the 20th century, the questions about the opportunities of collective and cooperative appropriation of space remain largely unresolved (Blagojevic, 2014). The common spaces of New Belgrade Blocks, although neglected, underused or misused over the time, represent valuable spatial resource and have great capacity to accelerate the revitalisation process of mass housing. Therefore, the thematic focus of the study was reaffirmation, reuse and reactivation of the common spaces of New Belgrade through regenerative and participatory design. The study was realised in a multi-stage research process over the period of 3 years, establishing a link between research and teaching, and testing different exploratory and participatory methods of research. The overview of the main aspects of research methodology will be presented in the following sections.

3.1. Education-exploration prototype

The research process profiled an education-exploration prototype, as an important approach in investigating built environment, and specifically residential neighbourhoods. Through the multiple stages, an extra-curricular learning model has been developed, applied and refined, as both teaching and research tool. In an iterative process, the researcher both studied and taught the possibilities of participatory and regenerative design for revitalization of New Belgrade mass housing. The education-exploration model acted as an extended learning environment and a reflective arena, and the common spaces acted as open laboratories for testing the innovative forms of education, exploration, problem-solving and co-creation.

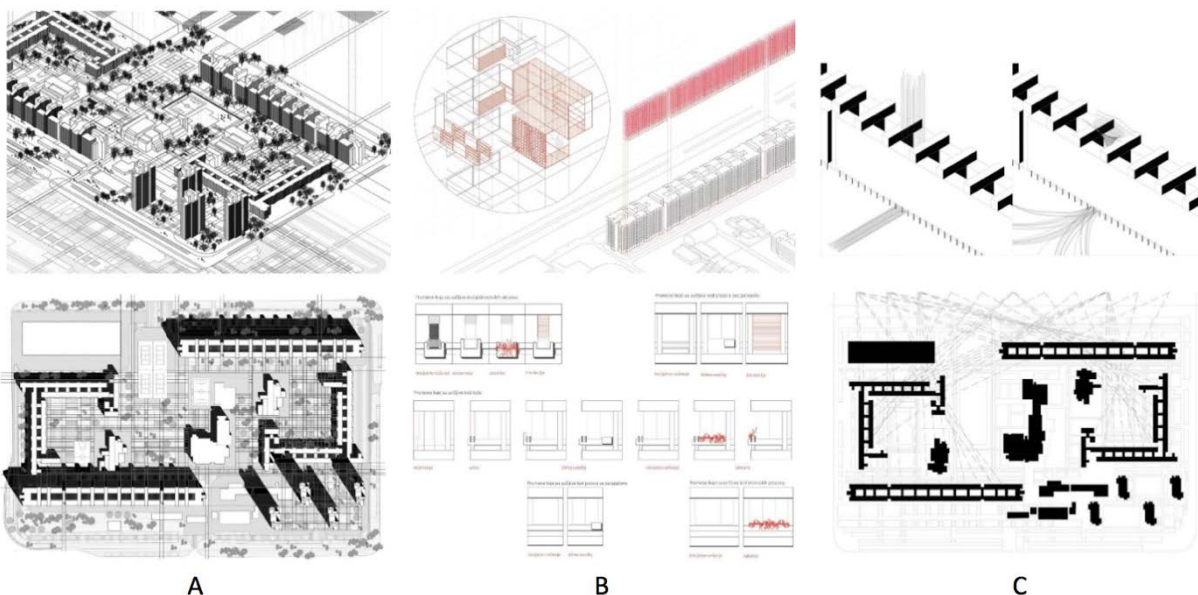


Figure 3. Results of the second stage of the education-exploration model: Transformation concepts for Block 23, New Belgrade. (Illustrations © (A) A. Maksimovic, N. Djuric, K. Dimitrijevic, M. Bozovic, (B) Z. Stanojevic, A. Stojanovic, N. Lalic, O. Miskovic, (C) T. Ciric, M. Ristic, J. Ristic, J. Korolja, Student Workshop, Belgrade, 2018).

The specific purpose of this education-exploration model is to improve the quality of learning experience for students. The place-based, exploratory approach is enriching their learning process, and enabling their social engagement in creating green, inclusive and aesthetic environment. It reflects on Bauhaus legacy in promoting multi-disciplinary, socially engaged and artistic-exploratory education model by offering a platform for critical thinking and creative testing. The education-exploration model enabled development and application of different participatory tactics and methods for assessment and co-creation of the urban commons.

3.2. Research process, methods and tactics

In the first stage of research a participatory tool for exploration and assessment of New Belgrade common spaces was developed and applied. Exploratory talks, in a form of semi-structured interviews, were used to collect testimonies of residents, informing the method of co-assessment (co-diagnosis).

The first stage had 3 steps:

- defining thematic framework and research tactics
- conducting empirical research
- comparative analysis

It was conducted within a seminar with Master students at the University of Belgrade – Faculty of Architecture. The researcher trained the students on how to conduct the interviews and how to identify the interviewees, designed, and then, together with students, refined the questions. The students conducted 48 on-site interviews, organised and represented the collected material. The researcher correlated and further analysed the outcomes afterwards using narrative and thematic content analysis. Some of the themes were: social cohesion, community centres, facilities, ownership, taking care, public and green spaces, aesthetics and living histories.

All the aspects highlighted the importance of:

- the common spaces as key values in spatial terms enabling social contact and feelings of freedom and
- the sense of community that could be main driver of change.

The second stage, with a reference to the previous research, was focusing on identification of common spaces of New Belgrade Blocks, investigation on their typology and form, eventually defining concepts for interventions in selected spaces. It was realised within an extended-model workshop with Bachelor and Master students at the University of Belgrade – Faculty of Architecture through a guided research-by-design and design-by-research process.

The second stage had 4 steps:

- observation and photo-documentation (photo-walk through the blocks)
- spatial analysis: mapping the key relations in space, analysing and reinterpreting the observed
- highlighting the important elements and defining new ones that could improve the current condition and relations
- design and representation

The results of the three groups that have studied the case of Block 23 will be elaborated here. The first group identified the landscape of open common spaces between the residential buildings as important for both preservation and intervention. Instead of transforming the urban morphology, this group proposed reuse of the existing micro-points in the landscape, their reaffirmation and regeneration. The second group was focusing on the facade of a linear residential building, aiming to develop an add on structure that would integrate new functions. The third group identified atriums as a typical spatial element that is emerging between the two residential tracts of the buildings. Their intervention was addressing the ambient characteristics of the atriums using water, light and reflection, and improving the quality of both open common spaces (addressing atrium's parterre - horizontally) and quality of dwellings (addressing the atrium as a void - vertically). (See Figure 3.)

The third stage was focusing not only on the biophysical aspects of the common spaces, but also their program and social component in enabling self-organisation, community engagement and co-creation. It had a character of an urban experiment, and besides students, it was again involving residents of the two blocks, Block 23 and Block 70a. At this stage, participatory mapping, photo-survey and programming of the common spaces were applied as research and design methods (See Figure 4.). The study was promoting direct participation of the local community in co-design process with the students. Nevertheless, it was concluded that comprehending and managing change in these neighbourhoods requires community-driven actions, however, including all stakeholders in the process through co-commitment. Therefore, the need and possibilities for collaborative governance have been studied in the next stage, which will be presented in the following section.

3.3. Co-commitment and collaborative governance

The study on collaborative governance tested a stakeholder workshop format as a multi-level and multi-stakeholder communication tool. The aim of this research method was to unlock the potential of institutions and individuals for co-creating effective urban governance structures and their commitment to integrated and just socio-spatial development.

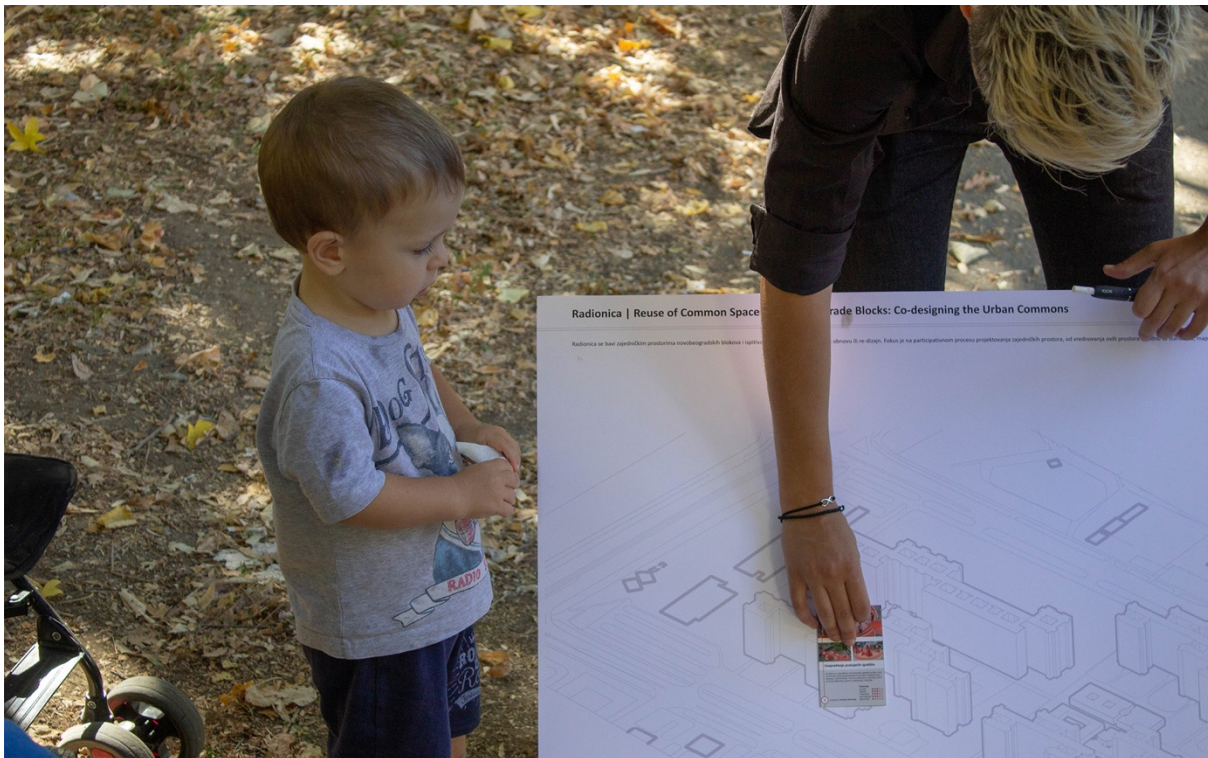


Figure 4. Participatory mapping, New Belgrade (Photography © Ivana Despotovic, Student Workshop, Belgrade, 2020).

It was organised as an open session with representatives of different expert-groups, such as heritage experts, policy makers, environmental experts, local authorities, urbanists, activists, citizens associations, residents and academia representatives. The open session enabled exchange of opinions and views through a guided and interactive discussion. The question of collaborative urban governance in mass housing revitalization and its implementation potential was addressed in relation to the existing national and international policies, planning frameworks, ownership situation and maintenance regulations. Therefore, it acted as a co-validation of the previous studies and reality check.

The following conclusions have been drawn:

- a good urban governance, both governmental and non-governmental, is required in order to ensure integrated and just development,
- multidisciplinary approach, inter-sectoral and inter-institutional communication is needed in order to ensure a balance between environmental, economical and social aspects,
- tools for empowering civil sector and their involvement in planning, implementing, using and maintaining urban commons are urgent,
- common spaces have a key role in facilitating innovative co-creation models,
- guidance for decision makers to take informed decisions about urban heritage and case study specificities are needed,
- guidance for citizens associations about possibilities and mechanisms for proactive participation in their neighbourhood are needed,
- guidance about rights, responsibilities and roles of all stakeholders is needed,
- pilot projects that would test innovative communication, planning and governance systems are needed.

4. Outlook

The research model presented in this paper has a potential for multi-level impact: knowledge production and knowledge sharing, awareness-raising and social engagement of stakeholders.

The approach safeguards the values of common spaces, that are important part of the modernist legacy, and highlights their importance in ensuring vitality of residential neighbourhoods and co-creating liveable environments. It promotes the aesthetics of vibrant and creative urban spaces, that are enabling open and diverse dialogue in cities.

Furthermore, it underlines the capacity of common spaces of not only enhancing social aspects and preserving urban heritage values, but also addressing environmental issues in cities. The interventions that would be based on regenerative design, would ensure both maintenance of the existing common spaces in the neighbourhoods, as well as integration of new nature-based solutions. Moreover, it would be a value-adding for the quality of the urban environment and the quality of life of the inhabitants.

The approach is advocating place-based research and tailored solutions, but also open-source research tactics and adaptable methodology. The presented model could be adapted to other cases and sites across Europe and beyond, contributing to development of new models of co-creation. As a methodological guidance it enables elastic thematic framework, which makes it reusable and applicable even to different topics or fields of education and exploration.

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