Regeneration Challenges of Modern Cities: The Case Study in New Belgrade

Introduction

Belgrade metropolitan region is challenging rapid urban growth in last two decades. Its historical core is facing the over-built areas and usurpation of public property, while the periphery is exploding in development and large-scale spreading to the hinterland. However, there is one place that is not on the outskirts of the city, but in its central part and is obviously expressing porosity for new structures. It is a modern city of New Belgrade with very distinctive urban character. Well-known Modern paradigm left huge open spaces that are questioned since political and social shift in the 80's. During the 90's country transition, followed by political, economical and social quakes, weakened the legislative and regulative conditions. It led to another extreme: encouraged growth of structures that don't recognize existing heritage. Direct consequence is performance of *hybrid* spaces, less or more livable, but surely unsustainable.

This paper explores design strategies and regeneration schemes that will lead this kind of spaces into more responsive solutions. On one hand, there are inherited structures that must be taken in future plans and considerations. On the other, this research is trying to develop possible recommendations for future development of non-built areas. The basics lie in methodology of pedestrian oriented design, i.e. stimulating pedestrian movement as sustainable type of transport and improvement of space livability. The focus is on physical characteristics and program along the main artery in New Belgrade, with respect and parallel analysis of a street in historical core of Belgrade.

Heritage and **Development: Theoretical Basis**

Built more than half century ago Modern cities are becoming the focal point in contemporary debates about their role and reviving in global network of cities. Several questions are being examined now again regarding this cities, such as protecting modern heritage, reconsidering its urban form in light of the projected massive demand for new housing and redesigning its open public spaces in order to adjust them to human scale (Milakovic and Vukmirovic, 2011).

In Europe and beyond, there is a growing trend for protecting the architectural heritage of the 20th century. Among international organizations that have initiated activities towards protection of the architecture of modern movement, as the most important may be singled out two initiatives. The first encouraged and led by the Council of Europe, and the other known as *DOCOMOMO* (*International Working Party for Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement*). They triggered questions and possibilities to protect the identity of the object types and urban ensembles. This is supported by the fact that architecture, produced under the influence of the modern movement, reflects an important period of our modern history and that it has recognizable values of heritage.

The Convention for the Protection of the Architectural Heritage of Europe recognizes three main categories – monuments, sites and urban complexes. Having in mind that this paper is dealing with issues in the domain of urban planning and its case study is New Belgrade, it is important to emphasise not only a building or site, but its position as a whole. Thus, the third group, which is relevant for this study, is formulated as: "groups of buildings:

homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest which are sufficiently coherent to form topographically definable units." (Council of Europe, 1985) It means they must not only be homogeneous, but also to comply with the qualitative criteria and be sufficiently coherent to form geographically definable units. Qualitative criteria are set on the premise that an age of properties for protection is not conditional. They qualify if they are deemed to be an outstanding feature of the built environment, i.e. of historical, archaeological, artistic, scientific, social or technical interest. New Belgrade has being set in the crucial historical period of the 1940s, in which the principles of modern movement in city planning have been consistently applied. It played an important role as one of the most significant urban developments in Yugoslavia of that time. Its role continues to play today, since it became the experimental polygon of transformations, as a consequence of social, economic, politics as well as ideological change.

Since the Council of Europe could not adopt precise criteria to be valid at the international level, a wider more general criteria has been set. Among other things, all parties in the *Convention* "have a duty to encourage the most appropriate use to be made of the protected heritage of this period, whether it be used for cultural or museum purposes or more generally for economic, commercial or residential purposes. Encouragement should be given to finding new uses which take account of the needs of present-day life so that buildings are not allowed to fall derelict, provided the new use does not run counter to the architectural or historical significance which was the reason for their protection" (Council of Europe, 1991). Modern city planning predominantly had functional zoning as one of the starting points. However, this was often criticised as contemporary trends lead towards dispersed functions and urban diversity. Thus, this is the key paragraph for further revisiting, since it reflects the principles of integrated conservation, with emphasis on links between the protection of the architectural heritage and cultural, environmental and planning policies.

In parallel, there is a re-launch of debates in the field of urban renewal. On one hand, public and professional criticism of this kind of the settlement has been leading to the abandonment of this housing model, in terms of complete remodeling, changes in physical density and repurposing of their urban structure. On the other hand, in light of the increasing demand for residential spaces, and the fear of consequential further encroachment on the countryside, these types of urban form are again re-examining. High density urban living is widely promoted as the solution, and suitable models are sought (Dunnett, 2000).

Having the genuine principle of sustainability as a starting point, that places should explore their uniqueness and build upon them, this paper goes on to examine this relationship more closely. Inter alia, these kind of settlements are a *fourth pillar (culture)* of our modern history, since they represent very important period of development of our society, in Serbia as much as on a global scale. However, they are recently faced with the challenges of using their space in contemporary way of a life style, and at the same time losing their spatial identity and character. The discussion often leads to the conclusion that these processes are potentially harmful and may create many negative effects on the overall urban diversity and richness of urban heritage globally (Bajic Brkovic and Milakovic, 2011). Therefore, this paper concentrates on relation between heritage and development, in order to find more responsive solutions that will provide urban liveability, quality of urban life and urban diversity.

Heritage versus Development: New Belgrade's urban pattern

New Belgrade has been planned and constructed as a modern, functional city in former Yugoslavia in the second half of the twentieth century, on the empty terrain between two historical cores of Zemun and Belgrade, and bordered by two rivers Sava and Danube. During last six decades of the realization and development, its urban structure undergone substantial transformation, for which can be said that mostly represent direct consequence of

social, economic and political quakes. These processes can be described in two main periods, with the key point between them.

The first was the period of planning, designing and developing of New Belgrade's urban structure in accordance with modernist principles (CIAM and Athens charter). It represented a symbol of a "heart of new Yugoslavia", new post-war social and political context of a supranational political community in which the dominant ideas were peoples democracy, equality and internationalism. Its urban actors were mostly public-administration workers class with middle-range incomes. Considering New Belgrade in the Master Plan of Belgrade from 1950., the main objectives were: (i) construction of the new city of New Belgrade, (ii) application of contemporary urban theories and practices conforming with the given environmental and societal conditions, and (iii) equality of urban quality of life on the whole territory of the city of Belgrade. The last proposition, thus, aimed at achieving continuity between Belgrade and Zemun by an integrative urban structure of New Belgrade. which now fully included housing blocks, recreation, commercial, leisure and cultural facilities, interlocked with the government and party buildings (Blagojevic, 2005). Although it wasn't classical dormitory in concrete, it became a unique phenomenon, failed to be realized as the complex center and supported only with one predominant function - housing. Its connectivity also stayed only in theory on planning level. The design of public and housing buildings followed the international paradigm of pure and simple geometric forms, put into sun and greenery, and strict street system network. New Belgrade was realized as a city in the societal, i.e. public property, and for a long period had no internal economic dynamics. Its center remained an economic, social and physical void (Fig.1). However, these fails left space for some future transformations, i.e. open strategy layout.

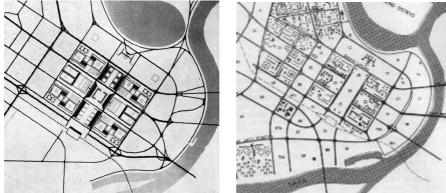


Figure 1. (left) Plan of New Belgrade Central Zone from 1960. in which the central axis, parallel to the historical cities, is in focus of activities (authors Martinović *et al.*, 1960), and (right) where realized structures (mostly housing) from 1983. and the empty zone of axis can be seen (*Izgradnja*, 1983).

International competition *The Future of New Belgrade* in 1986. can be considered as the breaking point in its development. The results was mainly designs which denied that the central area of activities is between new planned railway station and administrative state building, as a parallel line to old parts of the city. Offered solutions proposed that the main boulevard is exactly the one connecting the old core of Belgrade and Zemun, and that would finally establish the first idea of spatial connectivity. This was the last time when New Belgrade was reconsidered not only as a plot or building, but as a whole.

The next was a period of transformations which have the main impact on changing open urban pattern of New Belgrade into more traditional closed scheme. Stimulated by international trends, this area has commenced its new lifecycle and its disadvantages turned out to be potentials: the low index of built areas has been recognized as spaces for large development projects, while infrastructure and connectivity provided good backup. However, all of this is happening without much regard for the built heritage. Most of the projects designed and constructed then were based on the Master plan from 1962, but two significant points should be emphasized here. The first one is that this new structures respects only the horizontal plan not the vertical as well (Fig. 2). The second is its direct consequence: New

Belgrade's open spaces takes on the contours of traditional concepts. It gets facades along the streets, which interferes with original urban scheme. In this *hybrid* spaces now is clear distinction between physical structures that represents two different epochs: the modern and traditional (Milakovic and Vukmirovic, 2011).





Figure 2. New Belgrade is being rapidly filled by what is understood to have been lacking in the socialist epoch, i.e. commercial and business development (author Mira Milakovic).

The Municipality of New Belgrade today covers an area of around 4,000 hectares and is inhabited by 250,000 people. It is becoming the biggest and most productive building site in the region, with the highest level of direct investments in the whole municipality and the biggest economical and market value growth. Its new role as a downtown is producing challenges for (re)definition of spatial and structural level and in the field of possible adapted strategies for actual and future steps. Thus, it can be presented as a pivot in urban (re)development of the city of Belgrade.

Having in mind all written above, the issues of (re)functionalization and morphological remodeling become central. However, the heritage values should not be forgotten. Applicable regulations recognize the central zone of New Belgrade as the property enjoying the status of precedent protection, and as a whole. That means: "including conservation of existing urban and architectural concept values and its further improvement in terms of remodeling and improving standards of living with complementary contents, while respecting the authentic values of modern urban architecture" (Urbanistički zavod Beograda, 2002). The following study will show that these standards are partially improved, but without much regards to the existing heritage. It also shows the lack of a detailed development strategy.

Regeneration challenges: possibilities of pedestrian environment in New Belgrade

The starting point of this analysis is that the quality of open public spaces is proportional to the number of its users. Therefore, further research will focus on the presentation of spatial elements that encourage pedestrian movement. Emphasis is placed on the analysis actual and possible future physical characteristics of new built structures along the Boulevard Zoran Djindjic. The theoretical framework is put within the domain of urban design, in which the works of several authors are important.

One of the most influential critics of Modern settlements, Jane Jacobs presented the idea of organic city development, which would drastically reduce and destimulate the need of using cars in favour of walking and public transport (Jacobs, 1977). She believes this can be achieved by implementing the principle of diversity in the form of various urban facilities, structures built in different periods of time, increasement of density and reducement of apartment block's size.

Bill Hilier in his book *The Social Logic of Space* and *Space is the Machine* presents a general theory of relations between people and space in urban areas and discusses various aspects of space and its usage. Similar views were presented by Jan Gehl (Gehl *et al.*, 2006). They established a list of features (function, transparency, scale, etc.) that are relevant for pedestrians moving at a speed of 5km/h. In this case, as the ground is more interesting and diverse, urban environment is more attractive. In addition, the focus here is on the text *Close encounters between buildings*, in which he relies on the characteristics of

human perceptual apparatus. In relation to the context, Gehl observed frame of perception - urban scene - which is defined by the following elements: scale and rhythm, transparency, appeal to multiple senses, texture, diversity of activities and vertical rhythm of facades (Gehl *et al.*, 2006).

According to Bazik "physical barriers determine the peoples' flow; buildings' content defines the movement purpose; disposition modifies orientation in space; volume creates the perceptive structure of urban space; secondary plastic forms and details make identity; and the equipment reflects experience and behaviour (Bazik and Stojanović, 2007: 1). Also, urban space could be considered as "physical framework of public domain" that integrates physical dimension of built space / artefact, and social dimension / public space as public place created by different motivation of people grouping (Bazik and Stojanović, 2007: 3).

Furthermore, urban design should aim to: (1) Address the connections between people and places by considering the needs of people to access jobs and key services; (2) Be integrated into the existing urban form and the natural and built environments; (3) Be an integral part of the processes for ensuring successful, safe and inclusive villages, towns and cities; (4) Create an environment where everyone can access and benefit from the full range of opportunities available to members of society; and, (5) Consider the direct and indirect impacts on the natural environment (Office of Deputy Prime Minister, 2005: 14).

On the other hand, walking is recognized as a key indicator of healthy, efficient, socially inclusive and sustainable communities and acknowledges the universal rights of people to be able to walk safely and to enjoy high quality public spaces anywhere and at anytime (WALK21, 2006). In addition, the *International Walking Charter* is trying to create a culture where people choose to walk. Thus, this study is based on three strategic principles of this Charter: (no. 2) well designed and managed spaces and places for people, (no. 4) supportive land-use and spatial planning, and (no. 8) a culture of walking (WALK21 2006, 1).

The basic principle of several projects dealing with pedestrian movement was to determine approaches that aimed to promote pedestrian movement as a sustainable transport mode and to identify measures that improve the quality of pedestrian movement and its direct environment. The basic principle of these projects is based on the established *green hierarchy of traffic participants*, where the pedestrian movement is at the top. In addition to this, the visions of these projects are the following: the pedestrian is the measure of the city and its traffic, people can walk freely and safely in a beautiful and clean city, the number of injured or killed pedestrians must be kept to a minimum and that pedestrians are not in a subordinate position in relation to vehicles (Gunnarsson, 2001).

In his study of New Belgrade urban structure, Prof. Perović analyzed the relationship between the block dimension and the built density in historical Belgrade core and New Belgrade, through implementation of the historical Belgrade structure in New Belgrade and vice verso (Fig. 3). "The result is a tedious, rambling space with completely lost human scale, the space that looks more like a scheme, or a sketch that has been built, then as part of the city in which people should live" (Perović, 1985).



Figure 3. Loosing the human scale (author: Miloš Perović, 1985).

It can be said that these authors share opinions regarding the characteristics of the physical aspects of pedestrian environment and the effect it has on the choice of walking as a form of movement in the cities. Based on this, a study has been conducted along of the Boulevard Zoran Djindjic in New Belgrade. The main objective of this research is to show the transformation which could take place within the urban fabric of New Belgrade in public open spaces, which measure is a man, not the car.

The reasons for analyzing the potential of Boulevard Zoran Djindjic to become pedestrian-friendly space lies in the results of survey conducted on two (end) parts of the street during (Milakovic and Vukmirovic, 2011). One part of the street included the newly built physical structure that belongs to block 21, and the other was spontaneous/informal physical structure built in block 1. The aim of mentioned research was to determine the characteristics of the existing physical structure that emerged according to the human scale. The focus was on monitoring the activities and physical characteristics of ground floors, with special reference to Gehl's criteria of function and scale (Gehl *et al.*, 2006). Within the criteria of functions, facilities and specifics of the border areas were observed, while the scale was analysed through the number of units (vertical division in ground floors) and rhythm.

Table 1. Comparative review of analyzed elements in blocks 1 & 21 (Milakovic and Vukmirovic, 2011).

Criteria/Characteristic	Part of route that belongs to block 1	Part of the route that belongs to block 21
The level of protection according the Belgrade Master Plan 2012	Under the regime of full protection	Under the partial protection
Level of respecting regulation law	Spontaneously and informal built physical structure	Physical structure partially respects regulations according to the Master plan from 1962 (in horizontal sense)
Length of the analyzed route	120 m	240 m
Rhythm of content units in ground floors	6 units in 100 m	15 units in 100m
Characteristics of activities in ground floors	Modest variation in activity	Large variation in activity
Ground floor openness to a public space	30% surface area in comparison with total ground floor façade surface	75% surface area in comparison with total ground floor façade surface
Ground floor activity in comparison to the openness	passive	active

The above study has shown that a newly constructed physical structure in one part of Boulevard Zoran Djindjic is corresponding to pedestrian measures, and thus can be characterized as a zone that has the potential to become a qualitative urban public space. Specific research results are presented in Table 1.

A. Study of the main artery in historical core: Kralja Milana Street

Kralja Milana Street is located in the old part of Belgrade and is one of the city's main arteries. The street begins at Slavija Square (one of the biggest in old part of town), and ends at the beginning of the pedestrian area, which includes a Knez Mihailova Street and Republic Square, which is the very center of Belgrade historical core (Fig. 4).



Figure 4. Kralja Milana Street (source: http://www.flickr.com/photos/28572961@N06/3032683709/ accessed 27th July 2011).

This street was reconstructed in 2002. It has contributed to improving the urbanity of this open space, offering tourist facilities, promoting a positive image of the city, etc. In addition, a contribution was made in terms of economic and developing sense by attracting new investments and creating opportunities to create public-private partnerships. According to the project author Prof. Bazik, who has continued to monitor changes on this route, in the past seven years "a lot of street facades were renewed, many stores were reconstructed or changed their purpose, store-windows were redesigned, and the store opening hours extended to include weekends" (Bazik and Stojanović, 2007). This reconstruction also contributed to the creation of open space that is "accessible, barrier free, safer and more pleasant for all citizens and passer-by" (Bazik and Stojanović, 2007: 8).

Furthermore, changes are reflected in the form of: (1) Revitalization of the facades through initiative of the city authorities and the project "Beautiful Serbia", (2) Renovations of stores, which in some parts spread on the whole block, (3) The appearance of changing the original store function, (4) The increased presence of stores' foreign names and commercials, (5) Contribution to the genesis of renewal processes of urbanity and (6) Realization of space for new events (Bazik, 2008: 214-215).

Having that in mind, Kralja Milana Street was seen as a signature case study. Besides these characteristics, observed are the key morphological features and quality of space that refers to the criteria of legibility and attractiveness of urban public open space. Thus, special attention was devoted to: the coverage of open space along the axis, the activities in the buildings ground floor and the distribution of dominants (Fig. 5).



Figure 5. Characteristics of Kralja Milana Street: (top) Coverage of open spaces along the axis; (middle) Ground floor activities; (bottom) Distribution of dominants (author Milena Vukmirovic).

The length of this street is 1132m. It is formed by a series of traditional street blocks, which main characteristics is overlapping of the regulation and construction line. Height of buildings is ranging from three to eight floors, but the general impression is that horizontal as well as vertical continuity has been achieved. The average width of the street cross section is 24m.

The street begins and ends with the dominant by its height, form and position. There is six more buildings along the axis that have dominant character. Their distribution on the observed route is approximately - one dominant on every 200 m of length.

Ground floors along the Kralja Milana Street have an active character, at 80% of the total street length. The main ground floor features include: diversity of content, 10-15 units at

100m long route and transparency greater than 50% of the corresponding surface of the ground floor facade.

B. Study of the main artery in New Belgrade: Boulevard Zoran Djindjic

Boulevard Zoran Djindjic in large part of its length belongs to the part of New Belgrade designated as the central zone. This zone covers 9 blocks, which dimensions are 400x400m and 600x400m (Fig. 6).



Figure 6. Boulevard Zoran Djindjic (marked as red) and its position in New Belgrade's central zone (marked with black dots and gray fill), (author Milena Vukmirovic and Mira Milakovic).

The length of the observed route is 2986m, and the width of the narrowest part is 78m, while in some parts exceeds 200m. Based on this dimensions and in comparison with the Kralja Milana Street, it can be concluded that the Boulevard Zoran Djindjic is three times longer (Fig. 7).

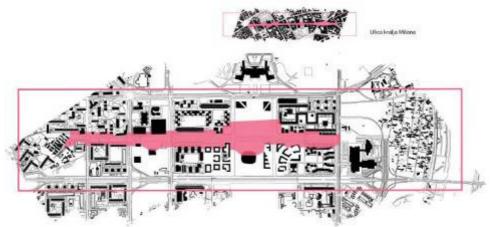


Figure 7. Dimension comparison in the same scale of (on the top of the figure) Kralja Milana Street and (in the bottom) Boulevard Zoran Djindjic (author Milena Vukmirovic).

The street is formed of an open blocks, which main characteristics are free-standing buildings in "sun and greenery". That means it is "free" of continual street front. Height of buildings ranges from 2 to 17 stories, but the general impression is that there is continuity neither in the horizontal nor in vertical regulation.

As for the dominants, at the beginning of the street there is one shifted from the main axis of the street. At the end of the street it doesn't exist. There are three dominants along the route, which mainly dominates by its form and position: Belgrade Sports Arena, Mercator shopping mall and the church of St. Demetrius. Distribution of these dominants along the axis is one dominant per 600m.

If we observe the street in its entire length, it can be said that ground floor activities have passive character. The research conducted in 2011 showed that only a short part of the route, belonging to the block 21, has a character that suits the basic needs of pedestrians.

The length of this part of the route is 240m, which represents less than 5% of active ground considering both sides of the street fronts (Fig. 8).

One of the interesting characteristic of Boulevard Zoran Djindjic is a large green area, which extends along the axis/middle part of the street and has a width of about 20m. This area is not used at all by visitors, it represent a green area which separates the carriageway with a different direction. In one small part it has been turned into an open parking space.

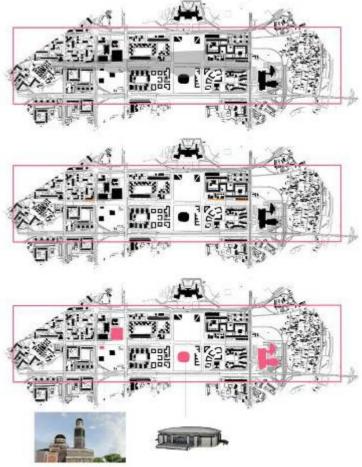


Figure 8. Boulevard Zoran Djindjic: (top) Coverage of open spaces along the axis; (middle) Ground floor activities; (bottom) Distribution of dominants (author Milena Vukmirovic).

Having in mind all written above, it can be concluded that almost the entire route of Boulevard Zoran Djindjic can not be characterized as a space in human scale, i.e. as a pedestrian friendly environment. However, taking into account the specifics of New Belgrade and following the parameters of the routes in the historical core (Kralja Milana Street, Elysian Fields in Paris, Boulevard Diagonal in Barcelona, etc.), some experiences of foreign examples, theoretical knowledge and their combination in the various planning documents, it is possible to get to a model aimed to improve this kind of an open space and adapt it to the pedestrians needs.

C. The concept for improving urban space of Boulevard Zoran Djindjic

Based on this preliminary analysis, planning documents, adopted competitions (which relate only to certain parts of the route), foreign/local experience and theoretical knowledge, a framework has been established that could serve as a further development guide in morphology as well as in activities (Fig.9). Its aim would be to improve the space and turn it into a neighborhood that would carry a human dimension and thereby increasing the intensity of its usage.

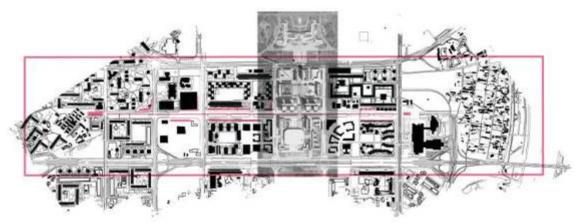


Figure 9. Boulevard Zoran Djindjic_Framework for future interventions (author Milena Vukmirovic).

Framework for future considerations and interventions that could be implemented along the axis of Boulevard Zoran Djindjic would include:

- Defining beginning and end of this route by introducing dominants;
- Implementing new dominants along the axis that would be distributed in relation 1 dominant per 200m of route length;
- The achievement of continuity in terms of horizontal regulation, which would create urban corridor in human scale. The edges and height of the corridor should not jeopardize the physical structure that emerged in different historical periods and which is the main feature of New Belgrade's identity;
- The urban corridor should be given the character of the active space by implementing different contents, and by establishing an appropriate rhythm and transparency in human/pedestrian scale (Fig. 10);
- Planned new physical structure that represents the current planning framework in certain areas of the route (block 21, block 1, blocks 25 and 26) should follow the logic of establishing an urban corridor, primarily in the ground floor;
- Construction of a light railway should further increase the number of destinations that are reflected in the position of its stops. These locations can serve as additional points of activating the Boulevard;
- The park and green space should be designed to offer a number of different environments, such as facilities for sport, recreation and relaxation.

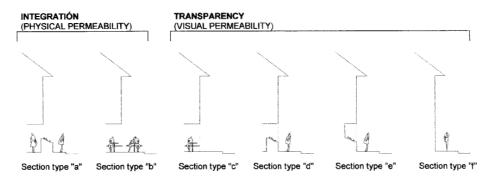


Figure 10. From physical interaction between inside and outside to a more or less visual permeability (section c to f). Studies by Toma's Gil Lopez. (Gehl *et al.*, 2006: 40).

These interventions would aim to form new, *hybrid* environment - an open urban public space, which will simulate the characteristics of space in the historical core, but that will not threaten the dominant character of the existing physical structure, activity and lifestyle specifical to New Belgrade. In addition, this would intensify use of public open spaces and the environment would be created to really suit as the central part of the city, as this area of New Belgrade is usually called.

Conclusion and possible recommendation guidelines

In achieving urban liveability, quality of urban life and urban diversity, there is a need both to encourage innovation, and to protect and preserve the best of our past. Therefore, future development should be based on an understanding of spaces' historic character. Within this context, it is possible to appreciate the relative value of different buildings and spaces.

Although it has already become a place of numerous paradoxes, transformations and mutations, New Belgrade is still unfinished project, which lacks strategic consideration of sensitive reconstruction issues, notwithstanding its references to the values of particular modernist buildings, sites and open block character of its urban structure. Furthermore, it is necessary to provide the core 'ingredients' that will help achieve an urban regeneration and contribute to sustainable urban living. Having that and heritage premises in mind, there are two groups of recommendations that could be applicable in New Belgrade as well as in other Modern cities in Europe and beyond.

The first group considers morphology. In this case, tha basics lie in morphological compability, which means that new built structures must be in coordination with the existing ones. Possible recommendations would be:

- building in respect with the horizontal regulation, which means that the construction line should be respected, with the harmonious distances from the already present buildings (very important, because of the initial modernist idea of 'sun and greenery' which is compromised in existing site of New Belgrade),
- vertical regulation and masses should be in harmony (very important, for the same reason as previous criterion),
- coordination in style, as well as regulation for type and code (less important, some
 differences can contribute to the place liveability and diversity, as well as to avoid
 monotonous surrounding),
- relation with the context, as for the visual harmony and cultural heritage (important),
- building in green zones shouldn't be forbidden, but must be controlled (important, green zones along Boulevards should be preserved in certain scale, but thickening the structure can be allowed if compactness and continuity can be achieved).

The second group deals with activities. To achieve urban integration means "thinking of urban open space not as an isolated unit, but as a vital part of the urban landscape with its own specific set of functions. Public space should be conceived of as an outdoor room within a neighbourhood, somewhere to relax and enjoy the urban experience, a venue for a range of different activities. Public spaces work best when they establish a direct relationship between the space and the people who live and work around it" (English Partnership and The Housing Corporation, 2000). These can be summarised as follows (all these recommendations are very important, especially in Modern cities, in which the dominant function was housing, and people were mostly car-dependent):

- increasing the intensity of activities and people within an area in order to achieve sustainable neighbourhoods,
- getting the right mix of activities and uses, in different levels: within buildings, streets, urban blocks and neighbourhoods,
- encouraging cultural innovation and community participation in decision-making,
- facilitating easy movement and contact by giving priority to walking, cycling and public transport, and integrating movement patterns with land use (the network of public spaces provides a web of connections that offers people a range of choices when deciding to make local journeys in the course of their daily lives).

Furthermore, successful urban regeneration is design-led, but this does not mean that design alone will be sufficient. It must be followed by investment in health, education, social services, community safety and jobs. Design can help support the civic framework within which these institutions function successfully (English Partnership and The Housing Corporation, 2000). Thus, the general guidelines could be:

- · prevention of illegal land usurpation by private investors,
- · improvement of design product's quality, in order to raise standards of urban development,
- · significant area regeneration projects should be the subject of a design competition,
- · encourage creating 'cultural landscape' in accordance with the european conventions,
- strengthen the connections with old parts of the city (for example, boosting construction along the main boulevards that connect Belgrade and Zemun, and keeping internal block spaces in original scheme as a heritage site; creating cultural, infrastructure, community or 'green' networks on the city level),
- preparing a strategy by local authorities for their public realm and open space, dealing with design, management, funding and maintenance,
- establishing partnership between authorities and other profit and non-profit organizations (owners, heritage protection institutions, developers and host cities' communitities).

References

Bajic Brkovic, Milica and Milakovic, Mira (2011) "Planning and Designing Urban Places in Response to Climate and Local Culture: A Case Study of Mussafah District in Abu Dhabi", *SPATIUM International Review*, in press.

Bazik, Dragana, and Stojanović, Jelena (2007) Accessible and Safer Pedestrian Environment: Four Years of Belgrade Experience, in *20th ICTCT workshop: Towards Future Traffic Safety - Tendencies in Traffic Safety Research based on 20 years of exerience.* Valencia: Universitat de València – PRU.

Bazik, Dragana (2008) *Relacijski prostor grada_ Projekat_Tekst_Realizacija_*. Beograd: Arhitektonski fakultet Univerziteta u Beogradu.

Blagojevic, Ljiljana (2005) Back to the Future of New Belgrade: Functionalist Past of the Modern City, in *Vienna: AESOP Congress 2005, Book of Abstracts.* Vienna: Technische Universität Wien, http://aesop2005.scix.net/cgi-bin/papers/Show?204, accessed 29th July 2011.

Council of Europe (1985) *Convention for the Protection of the Architectural Heritage of Europe* (No. 121), Granada, http://conventions.coe.int/treaty/en/treaties/html/121.htm, accessed 11th July 2011.

Dunnett, James (2000) Le Corbusier and the city without streets, in Deckker, Thomas (ed.) *The Modern City Revisited*. London and New York: Spon Press, pp. 56-79.

English Partnerships and the Housing Corporation (2000) *Urban design Compendium*. London: Llewelyn-Davies.

Gehl, Jan, Kaefer, Lotte Johansen and Reigstad, Solvejg (2006) "Close encounters between buildings." *Urban Design International*, no. 11, pp. 29-47.

Milaković, Mira and Vukmirović, Milena (2011) New Life of Modern Cities: The Transformation and Renewal of Public Spaces in New Belgrade, in Schrenk, M., Popovich, Vasily V. and Peter Zeile (eds.) Change for Stability: Lifecycles of Cities and Regions. The Role and Possibilities of Foresighted Planning in Transformation Processes. Proceedings of 16th International Conference. Rannersdorf: CORP – Competence Center of Urban and Regional Planning, pp. 655-665.

Office of Deputy Prime Minister (2005) *Planning Policy Statement 1: Delivering Sustainable Development.* United Kingdom: Crown Copyright.

WALK21. International Charter for Walking. London, www.walk21.com, accessed 14th May 2011.

Urbanistički zavod Beograda (2003) *Generalni plan Grada Beograda 2021*. Beograd: Urbanistički zavod Beograda.

[About the authors]

Mira Milaković, Department of Urban Planning Faculty of Architecture University of Belgrade, Serbia, mira.milakovic@gmail.com

Milena Vukmirović, Department of Urban Planning Faculty of Architecture University of Belgrade, Serbia, milena.vukmirovic@arh.bg.ac.rs