Managing Integration and Disintegration Processes in the Modern Urbanism Settlements - the Case of New Belgrade

1. Case genesis

1.1 Historical review

New Belgrade is spanning over about 4,050ha formerly floodable, marshy, non-inhabited ground of a Bezanija field on the estuary of river Sava into Danube; it is a space in between two once independently established cities: Zemun (now the Belgrade's municipality) and Belgrade (now the traditional city core). Physically the terrain is bordered by soil plateau on the west, right bank of the Danube on the north/northeast and left bank of the Sava on southeast/south.

During middle age the area were border zone from Austria to Turkey and since nineteenth century, to Serbia. The most important for the history of the future settlement was railroad establishing in 1883. and building of the Railroad Bridge over the Sava year later, which was essential for the connection between Middle Europe and Middle East. But thoughts about the terrain on the left Sava bank as a potentially direction of the Belgrade's development with aim of integration with Zemun, are began only in new-formed Kingdom of Serbs, Croats and Slovenians (Kingdom of SHS) after the WWI in the year 1918. when the Sava River wasn't state border any more, and when two spatially close cities (Zemun and Belgrade) formally become parts of the same country.

By building city bridge over the Sava in 1934, connection between Zemun and Belgrade were enabled, and it was confirmed by administrative union of the two cities. War stopped on terrain leveling and building on the ground between Zemun and Belgrade, so the only buildings on the site were those of the Belgrade's fairground, which was built in 1937. used as a concentration camp during the WWII, under the Gestapo. During that period, in occupied Serbia, Sava again become the border river and Zemun and the New Belgrade's terrain, since 1941. were become part of the Independent Croatian State.

After the WWII Yugoslavia was established as a "winner state" at the side of antifascism. Social system of the Yugoslavia was socialism/communism in difference from the previous monarchy (Kingdom of SHS), and logical choice for the capital was Belgrade, which once was also the capital of the monarchy. Initiative for the building on the New Belgrade's terrain was derive from the government of Communist party of Yugoslavia which was gave order for make the strategy to the authorized bodies and to a professional city-planners organizations. In the year of 1948. building of the infrastructure was started, and shortly after, first buildings emerged. In-between 1960. building on the New Belgrade's territory was in the full run and in those time it gains main characteristics of it's today's appearance.
Modern urban structure of the central zone of New Belgrade in its short historical development of about six decades, established strongly important integrative function for the two historical centers: Belgrade and Zemun. Integration in sense of realizing physical and cultural continuity of the unique urban structure is achieved. (Blagojevic, 2004.)

Last decade of the XX and the beginning of the XXI century are marked with the huge historical, socio-political changes in Yugoslavia - war, separations, state disintegration into the territories of single Republics... Serbia is now an independent state in the process of the transition toward market economy and capitalism. Changes that are happening are also considerably reflecting on the space of the New Belgrade - the most inhabited Belgrade's municipality, with the around 220.000 inhabitants.

1.2. Genesis of the idea
Idea of the linking together territories of Zemun and Belgrade into one urban totality appears logical after the Kingdom of SHS was established. In 1923. Belgrade's Master Plan, vision of the city's development toward west and integration with Zemun territory into one unique urban whole, was suggested. However, realization of the "new city" starts after the WWII with changed socio-political conditions in Yugoslavia.

According to Lj. Blagojevic, building of the New Belgrade was based and supported on socialistic urban and spatial planning system, with the preconditions:
- generous financial support from the abroad (loans, gifts, etc..);
- investments concentrated to a huge projects and programs (technical infrastructure, industrial complexes, mass housing...)
- public ("collective", "social"...) ownership of a land in the city;
- almost unlimited amount of the agricultural land which use could be changed to a city land, for building - all on favorable terms, with the very low cost, mostly by unjust expropriation;
- very strong mechanism for taking and allocating finance and other resources for the programmed collective (social) housing building;
- at disposal, very favorable bank loans for infrastructure building, housing, etc.. (Blagojevic, 2004.)

First suggestion for the planning the modern city after the war was in "Draft regulation of the Belgrade on the left Sava bank", made by arh. Nikola Dobrovic in 1946. Next year, followed the Draft's ideas, a competition for the State and Government buildings and Urban Plan on New Belgrade, was announced. Although the competition finished without winner, it was established basic principles. Consensus was reached - that the concept of the new town has to be a modern urban structure, formally independent from the historical centers of Belgrade and Zemun with its own center and strict functional hierarchy. That can be seen as a key point in process of New Belgrade planning and as a milestone of the preparing the strategy of the new Master Plan. (Seissel, 1947.) Building the New Belgrade began in 1948., based on the Draft, without finally defined urban plan. During that period New Belgrade was built by number of the young "builders/volunteers" - participants of the "Youth Working Actions".

Political and ideological orientation of those who has political power in the state - that Belgrade has to become political, economy and administrative centre of Yugoslavia, easy found a "professional respond" in the idea of "making the New Belgrade"; this connection between politicians and aspiration of the professionals/urban planners and architects, is explicable from the several points of view:
- idea of the Zemun and Belgrade connection was already established and realization was facilitate by fact that this space wasn't build before;
- close range of a traditional Belgrade core enabled to clearly present the "break up with the past", by completely different image - building forms and structures (from the old Belgrade's Kalemegdan fortress one can see skyline of the modern city on the other bank of the river).
- this ground - "polygon" for the building of the modern functional town, under the principles of CIAM Athena's charter, represents extreme professional challenge for the professionals - architects and urban planners of those times in Belgrade and Yugoslavia, (author of the Belgrade's Master Plan from 1950., arh. N. Dobrovic writes: "Plan of the New Belgrade is designing on a clear paper, without any previous layout, in scale of 1:5000.")
- Master Plan from 1950. foreseen for the Belgrade to triple the number of the inhabitants (from around 300,000 to a 1 million) and the territory of the New Belgrade was seen as an important spatial resource for the inhabitation.

It is important to notice that in those times in socialist/communist states of Eastern Europe cities are spreading on principles of functionalism and modern urbanism, but New Belgrade is a specific example because here the TOWN INSIDE THE TOWN has been built, not the satellite settlement at the city periphery. New Belgrade represents the core, the focus of urban space of city of Belgrade - practically, increases of the city’s territory is foreseen in its midpoint. However, the crucial is the fact that New Belgrade, as an elite town of Federation has an important representative role, which has substantially marked its difference comparing to satellite settlements and other "new towns" in Yugoslavia. (Blagojevic, 2004.)

On those ideological bases building of the New Belgrade continues during '50. in XX century, to be in more detail defined in 1960. "Plan for Central Zone of New Belgrade"

![Figure 2: Central zone of New Belgrade - model, 1960.](image1)
![Figure 3: Palace of Federation (built 1955-1961).](image2)

On the line between Palace of Federation and future New Belgrade's railroad station (direction "northeast - southwest", normal to Danube) representative public area was planned; it was with considerable dimensions - 1,6 x 1,6km, composed of three squares in the row (manifestation square - in front of Palace of Federation, central and the station square), with three urban blocks on each side - the corner once were strictly for habitation and the core ones also for the extra complementary uses of city center. All the blocks around the center were realized until the eight decade of XX century with common characteristics: designing structure were worked out by one author or a team of several authors; architecture of the buildings were also act of one or two authors; it is often that the same author make spatial composition of the block and design the buildings; all blocks were realized for habitation with withdrawal of introducing the uses of central zone.

Although Master Plan for the Belgrade which was done 1972. under the title "Belgrade 2000" confirms concept of the realization of the Central Zone of New Belgrade as it was previously designed (with the huge public area, as one of the Belgrade's center and the central core of the New Belgrade), finally, by building the highway and after that by realization of the habitation block at the place where the "station square" was planned (1989.) and sport arena at the place of the "central square" (1999.), praxis abolish "Plan for Central Zone of New Belgrade". During the ninth decade of the XX century there were many critics on urban form of New Belgrade, specially on the Plan for Central Zone (e.g. M. Perovic study from 1985. and International Competition for Improving the urban structure of the New Belgrade, 1986.)
Those critics were founded, as in real problems so far registered in the New Belgrade's space (fact that city centre contents were not build, made mono-functional, predominantly habitable zone - New Belgrade were experienced as a monotonous space, with non-human dimensions, called "city as a bedroom"), as in new postmodern streams that emerged in profession (which called for "return to a traditional block and the street" as an imperative). As a result of these critics, during the ninth decade of the XX century the idea of "more compacting" - thickening the structure of New Belgrade is found, with the recommendations:
- make streets to be "more human in scale", with the contents accessible to a pedestrian;
- build architecturally recognizable buildings, with strong "identity"
- reconsider scale of the super-blocks and make smaller one, "more human in scale";
- introduce polifunctionality - new contents and uses, businesses, culture, entertainment...

In the last decade of XX and in beginning of XXI century, "thickening" the New Belgrade's structure has been happening, but mostly not in accordance to those principles.

2. Explication of a problem

Visually clearly recognizable difference of the New Belgrade's form comparing traditional Belgrade, during the whole its short history marked far bigger difference which exists on a sociological and cultural level - huge antagonism of native "Belgraders", inhabitants of traditional Belgrade, specially those who on any way were represented "old" system of monarchy and capitalism, and new-inhabited "New Belgraders" - who often were part of the ruling system. As social studies shows, social structure of the inhabitants of New Belgrade were extremely homogenous with predominantly employment in non-manual sector - in state's and party's administration, business associations and banks, while for the workers there were satellite settlements on the periphery. (Blagojevic, 2004.) Practically, living in the New Belgrade, almost all to last decade of XX century, meaning to carry some kind of a "stigma", based on the social antagonism, since it points out to a person who - or is the part of a system or is supported it by acceptance to live there; and "the system", as it is clear now, was in decay and not sustainable.

With the political changes in the country, from the '90-s, citizens of Belgrade slowly started to change their perception on New Belgrade based on politics and make the new one based on the ecological, morphological and economic facts: it's characteristic morphology with plenty of parks, greenery and open spaces for the recreation and leisure; in the same time with plenty of open spaces for constructing and almost no property owners problems. Nowadays territory of New Belgrade seems to be very interesting for the new investors (domestic and from the abroad).
Socio-political changes that are happen today in Serbia characterize transition from the non-market to market oriented economy, with denying of the public (common) property and with the need for clear identification of the property owners (which will help to identify the competence /rights and the obligations). This also denying/destroys the ideological foundation of a concept on which the New Belgrade was build, opening row of a problems and questions about managing its further development under the new conditions.

However, it is interesting to understand the thought of a Lj. Blagojevic, that the New Belgrade is a conceptually and physically unfinished and accordingly - "unsuccessful" city, what in the same time, under the contemporary conditions, represents greatest potential for its realization to be a successful city. (Blagojevic, 2004) Follow that line it is very important to notice the integration and disintegration processes which developed nowadays in the New Belgrade, with aim to slow down or eliminate such an influences which could make it to be unsuccessful but finished city.

3. Standpoint

Life of a city implied existence of the integration and disintegration processes - forces which tends to cause a whole to break up into small parts or pieces are always present; according to a contemporary scientific knowledge (theory of chaos) even more intensive than those which hold the totality to be compact. The question is whether the disintegration process is always negative and the integration always positive? And - what is, for this paper purpose, assumed as a process of integration and disintegration in the modern urbanism settlements?

Authors took a firm that "disintegration" in this particular case isn't accepted and that it represents basically negative trend, the one which can cause alienation of the inhabitants from one another and from the city, by spatial fragmentations and by building "intro-oriented" structures and/or fenced elite neighborhoods, by style and by content uncoordinated with the surrounding.

Standpoint took for purpose of this paper implied focus to the morphology and uses, while other important aspects (social, economy, ecology) are to be viewed in function of the given two (morphology and uses), not separately. This - because the essence of the paper is to analyze trends which can contribute to the space of New Belgrade to sustain and to improve its specific identity in whole urban structure of city of Belgrade, and to foster its "integrative" potential at the city level (connection with the river, with the Zemun, possibility to create polycentric Belgrade, with the new center on the other bank of the Sava).

In order to successfully manage integration and disintegration processes, registered them is of essential importance. Comparative analysis of the specificities of the building structure of the New Belgrade is necessary basis for further work.

4. Specificities of the New Belgrade's building structure
- traditional morphological structure versus contemporary buildings

"Traditional morphological structure" means "standard types" of New Belgrade's structure, the one which was explicated in previous chapters, they are:

1T) super-blocks, with predominantly purpose for habitation with following functions (greenery, parking, groceries, schools and kindergartens) built by the same investor, as a compact whole

2T) pavilions - single standing buildings, often for the socio-political institutions and for companies which in those times has "state" approval as a "state companies" (Municipality, Palace of Federation, Ministry of Internal Affairs, "Energoprojekt" company ...)

3T) inner-oriented complexes assembled from the several single buildings of the same architectural style - in the second half of '70., and in the first half of '80. the Local Community
Centers were build as specific centers for the needs of the inhabitants (with different shops, supermarkets, handicrafts, libraries... even cinemas...)

Contemporary buildings at the New Belgrade can be classified by typology as follows:

1S) **super-blocks**, this type is rarely build today on a way it formerly built (by one investor, as a compact whole), but it exists

2S) **modified super-blocks** - when the structural building in block is done by several investors, during longer time period

3S) **pavilions** - buildings of the business companies (domestic and the abroad) in areas which inherits such a type of building (with aim to build more compact or/and to "fill" spaces that are still not build)

4S) **almost continually placed** new buildings (usually for business) in green area of the main streets (Boulevards) with the idea of the "structure compactness"

5S) **inner-oriented mega-structures** for any kind of supplies, entertainment, parking... (mega-markets, shopping-malls...)

**Table 1: Comparative analysis of characteristics of traditional morphological structure and contemporary buildings at the New Belgrade**

<table>
<thead>
<tr>
<th>Morphological elements</th>
<th>CHARACTERISTICS of traditional morphological structure</th>
<th>CHARACTERISTICS of contemporary buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Parcel</td>
<td>- Denying the land parcelation; traditional land parcelation was annulled by expropriation (it could be said that parcel is identify with block)</td>
<td>- Need to define property owner system; standard land parcelation</td>
</tr>
<tr>
<td>Traffic</td>
<td>- Hierarchy of the streets network: a) super-blocks are rounded with the wide streets (Boulevards) with great traffic flow; b) in the super-blocks there are secondary network of streets with less traffic flow - Parking is on the open parking spaces on the edge of block, and on the streets of secondary network; few blocks are with the underground garages</td>
<td>- Inherited hierarchy of the streets network is respected; pedestrian street/communication is introduce in case of block with the semi-dug garage where the ground level is for the garage and car traffic and pedestrian communication is on plateau “above the terrain”, accessed by stairs.</td>
</tr>
<tr>
<td>Public spaces, greenery</td>
<td>- A kind of denying the public space (public space is “everywhere”, and it is the way of its denying); - A kind of denying the public square: rarely there are squares, but without specific contents around... - Existence of the big city park by the river bank - Streets (Boulevards) which rounded blocks are morphologically shaped with wide belt of green area - Inner block spaces rich in greenery, inadequately maintained</td>
<td>- Inherited problem of the public space denying still doesn’t solved adequately; several cases with well arranged “belonging area” to a parcel of a new business building - aim is to animate the spectator (well maintained greenery, fountains, sculptures, billboards...) - Inherited problem of the public square denying - New continually placed buildings are often located in the ex wide belt of green area - Space of a city is rich in greenery at whole, but inadequately maintained</td>
</tr>
</tbody>
</table>
Block
- Type of super-blocks prevail; single buildings (pavilions) - sporadic
- Specifically coordinated morphology of buildings in block (vertical-horizontal; in accordance to a modern urbanism principles; for example, with high solitaires next to the 5 storey buildings)
- Monofunctionality - only use is habitation, with its following functions - greenery, parking, groceries, schools and kindergartens
- Huge free open spaces; organized parking
- Identical buildings, identical ambiences - denying of the city, making visual orientation difficult

Building
- Contemporary architecture; innovations were almost required
- Flat roofs
- Equal treatment of the facades (often there are solitude buildings with every-side facades as a "main one")
- Building with concrete, prefabricated building

- Single pavilions has been building much often then in last period
- More "leveled" vertical regulation (there are no high solitaires although it is planned /but on the few locations)
- "Thickening" the inherited structure, new buildings inside the blocks
- There are buildings continually with the street front
- Integration of the uses (by mixed-used development principles)
- There are attempts for raising the attractiveness even when there are the same buildings in the block (by different materialization, colors...)

5. Integration and disintegration processes in today's New Belgrade

It was said that it is supposed that disintegration represents negative trend which lead to an impoverishment of the whole picture and of the sense of a city; for the purpose of this paper it's also necessary to define the notion of the integration.

Generally accepted criteria for the qualitative urban design by which the "place" could be designed as a pleasant, livable, vibrant.. could be used as guidelines for designing a building which could be integrated with the surrounding:
- **recognizability** (stressed entrance, clear boundaries, logically connected and harmonically composed buildings and nature, emphasized colors...)
- **safety** (adequate illumination, without isolated parts, clearly envisaged from the around, in human-scale proportions, with controlled traffic...)
- **accessibility** (easy to approach from the surrounding, parking ensured...)
- **morphological accordance with the surrounding** (coordinated proportions of the buildings: masses, horizontal and vertical regulations; coordination between style).

Looking at comparative analysis of traditional structure and contemporary buildings at the New Belgrade (table 1), it seems that contemporary buildings already "solves" some of the disintegration problems - specially at the level of **recognizability**, **diversity**. This is expected, since now there are private, autonomous investors who invest the finance among other things with the aim to build, not only the business space but also the "advertisement" - kind of a symbol for company.
However, aspect of the accessibility is not always properly taken into consideration, when new buildings are designing in New Belgrade, specially in case of block with the semi-dug garage where the ground level is for car traffic and pedestrian communication is on plateau "above the terrain", accessed by stairs. In such a cases, processes of disintegration are noticed - owners/users of the locals on the pedestrian level in one such a block, after around 10 years still are not satisfied with accomplishments (number of visitors/buyers, profit), what is significant, bearing in mind that the location is attractive and that in nearby surrounding similar function has a success.

Safety, as an element of integration also is not always properly taken; this is particularly for the business buildings - working hours problem - the fact that nothing is happening in those location on evenings and by weekends. Recommendation is to reconsider possibilities for the mixed-use - to incorporate a kind of clubs, restaurants, even limited number of apartments. This phenomenon is not so present in the New Belgrade, since it's build as a habitation zone and the surrounding is still rather "vibrant"; but there are trends and it is useful to mark them.

Question of the morphological accordance with the surrounding is the most complex, but also the most flexible - "style coordination" is dependant on fashion - sometimes something simply "goes with something" and sometimes "it cannot goes.." But one can relay on a filed of a "visual perception" and rules about it - proportions, relations like; big-small, full- empty, etc.. It is wide filed of a research, beyond the theme of this paper, but it's emphasized as an important aspect of "integration". Possible recommendations from this aspect will be: respect the building line, realize harmonious distances between buildings (as for the visual harmony, as for sunlight), consider when use new materials for the facades, consider relation with the context...

Trends noticed in relation to a morphological accordance with the surrounding:
- in some cases distances are not respecting, what is seen as a negative trend
- building in accordance to tradition - blocks, with harmonious proportions and distances between buildings.. a positive trend
- as a bad example /negative trend it is noticed the way of "compactness", thickening the structure, by continually placed buildings along Boulevards in the former green zone; this is specially negative trend in cases when the new buildings along Boulevards are near by the old once (when distances are nor "respected"); as a trend it has also to be controlled because green zones along the Boulevards has to be preserved in the certain scale
- "compactness", thickening the structure is also happened inside old blocks and sometimes it is positive trend (when respecting the morphology, distances...), but sometimes is negative (when disrespect the context).
6. Conclusion

<table>
<thead>
<tr>
<th>Integration</th>
<th>disintegration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building in accordance to tradition - blocks, with harmonious proportions and distances between buildings, and with the attempts for raising the attractiveness even when there are the same buildings in the block (by different materialization, colors...)</td>
<td>Building in a manner of recognizable typology (e.g. super-block) but without characteristics of &quot;contemporary and innovative&quot;, use of a materials and styles in a way that suits traditional core, not the modern urbanism settlement</td>
</tr>
<tr>
<td>morphological accordance</td>
<td>morphologically uncoordinated</td>
</tr>
<tr>
<td>Investors invest the finance among other things with the aim to build, not only the business space but also the &quot;advertisement&quot; - kind of a symbol for company.</td>
<td>Occurrence of a morphologically uncoordinated buildings, with inharmonious vertical regulation, inharmonious masses, like there are no &quot;regulations for type and code&quot; - e.g. when the number of different investors build in a continuous row</td>
</tr>
<tr>
<td>recognizability</td>
<td>morphologically uncoordinated</td>
</tr>
<tr>
<td>Continually placed buildings along Boulevards in the former green zone, but in accordance with the type and style in surroundings, with the harmonious distances from the already present buildings, with the useful uses for the inhabitants</td>
<td>&quot;Thickening&quot; the inherited structure, by building close to already present buildings (also causes problem with the less sunlight)</td>
</tr>
<tr>
<td>morphological accordance, accessibility</td>
<td>morphologically and ecologically uncoordinated</td>
</tr>
<tr>
<td>Integration of the different functions (as in mixed-use development: habitation, work, recreation, shops…)</td>
<td>- Occurrence of the continually placed buildings with the &quot;main&quot; and the &quot;marginal&quot; facades, which is not characteristics of this part of the city, and it's shouldn't become a trend</td>
</tr>
<tr>
<td>accessibility</td>
<td>morphologically uncoordinated</td>
</tr>
<tr>
<td>Well arranged &quot;belonging area&quot; to a parcel of a new business building - aim is to animate the spectator (well maintained greenery, fountains, sculptures, billboards…)</td>
<td>Areas with complex of business buildings - working hours problem - the fact that nothing is happening in those location on evenings and by weekends</td>
</tr>
<tr>
<td>recognizability, accessibility</td>
<td>not safe enough</td>
</tr>
<tr>
<td>&quot;Elitism&quot; - creating &quot;ghettos for privileged&quot; with fence around the complex and guards - isn't in accordance with the New Belgrade tradition</td>
<td>inaccessibility, alienation</td>
</tr>
</tbody>
</table>
It is possible that by designing new buildings in modern urbanism settlements with respecting above quoted processes of integration and by alleviating or stopping the disintegration ones, could be established dominance of the integrative forces, under the control of (sometimes inevitable) disintegration processes.

References

3. KU 476, Beograd oct.1992. (Cultural Heritage Preservation Institute of Belgrade, documentation)
5. Seissel, Josip (1947) Konkurs za urbanistički plan Novog Beograda, Arhitektura, No. 3
6. Škalamera, Željko (1973) Područje Novog Beograda na istorijskim planovima, Urbanizam Beograda, No.25