SOCIO-DEMOGRAPHIC CHANGE AND URBAN DEVELOPMENT – A CASE STUDY OF NOVI SAD IN SERBIA

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Abstract
This paper presents a case study of a city of Novi Sad in Serbia, which has, over the last couple of decades, undergone radical changes within its social and spatial structure.

In the 1990ties, specific societal, political and economic conditions have led to the great transformations in demographics, since the city has been rapidly populated by refugees from the former Yugoslavia. This has caused great changes of the built form, especially the uncontrolled urban sprawl. The transitional context at the beginning of the century brought about new processes, which caused further imbalances between the city of Novi Sad and its hinterland. This increased rural-urban migration and the volume of commuting, spatial dispersion continued and a new process of densification of the city core-area also occurred. The aim of this paper is to address the magnitude of the problems caused by specific circumstances and the demographic shift accompanied by the fragmented urban development.

Key words: demographics, social structure, housing, urban sprawl, migration

Introduction

Cities of today are dynamic, rapidly-evolving organisms of change. Contemporary urban landscapes reflect the ever-increasing pace of these changes, driven by place-specific conditions, on the one hand, and the homogenizing influences of globalization, on the other. Cities, their authorities, professionals and citizens try to wrestle with the situation within economic, social and environmental transformations. New city-images thus created often lack coherence and identity and need to be restructured in order to meet the real needs of the local communities. At the same time, the inter-urban competition is accelerating, so the transformed city-spaces have to become easily recognizable in a broader context in order to make their presence on the “global map” more visible. The key obviously lies in full understanding of different factors that form urban spaces and the possibilities to control and manage their interactions.
Therefore, the question of the mechanisms of how different social, economic, historical and physical conditions coincide in the formation of space and/or its transformation is of great importance for urban researchers, practitioners and policy-makers. To begin to tackle the large and complex question of how different conditions interplay in the formation of urban spaces, in this paper we propose a case-study of the city of Novi Sad, the medium sized city, second largest regional center in Serbia and the capital of predominantly rural Autonomous Province of Vojvodina. Over the last couple of decades the city of Novi Sad has undergone radical changes both within its social and spatial structure that even today are unparalleled in the region in terms of their nature and rate. The specific societal, political and economic conditions led to considerable transformations in demographics. The influx of population left the deep imprint on the city’s character – the built form was changed considerably in order to accommodate this demographic boom. In this specific case, the negative consequences of both demographic and socioeconomic change overlapped and many monotonous environments, lacking spatial complexity and articulation were created. The aim of this paper is to address the magnitude of these problems that can be traced on various spatial levels, ranging from individual lot to the large urban ensembles. The specific interface of demography and spatial development will be further examined as the contribution to the idea that the description and analysis of demographic changes and their spatial consequences need to be contextualized (Großmann et al., 2008). The demographic processes of various kinds that occurred since the 1990ties in the city of Novi Sad will be considered and explained in the context of their social, economic and political embedding, which will then be interpreted as inducements to urban development. These complex and contradictory forces will be analyzed with an aim to comprehend the image of a city that has been radically changed and is still undergoing transformations. Additionally, the paper will tackle the question: What is the role of urban planning for creating the urban structure that could facilitate future sustainable development?

City of Novi Sad

Novi Sad is located in the northern Serbian Province of Vojvodina, in the Bačka District. According to the most recent official census from 2002, Novi Sad is Serbia's second largest city, after Belgrade (Statistical Office of the Republic of Serbia, 2003). The city is located on the border of the Bačka and Srem regions, on the banks of the Danube river and Danube-Tisa-Danube Canal, while facing the northern slopes of Fruška Gora mountain (figure 1). It is an industrial and financial centre of Serbian economy and also one of the biggest construction
sites in the region. The city is 75 km away from Belgrade – the capital of Republic of Serbia, and about 90 minutes drive from Belgrade Airport, which connects it with metropolises across Europe.

Figure 1 – Novi Sad, Danube and the Petrovaradin Fortress

Since 1945, Novi Sad has been the capital of Vojvodina, a province of the Socialist Federal Republic of Yugoslavia and Serbia. The city went through rapid industrialization and its population more than doubled in the period between World War II and the breakup of Yugoslavia. After 1992, Novi Sad was part of the Federal Republic of Yugoslavia, which, in 2003, was transformed into the State Union of Serbia and Montenegro. Since 2006, Novi Sad is a part of independent Republic of Serbia.

**The foundation of Novi Sad and the formation of the city-image**

Novi Sad grew out of the small settlement of civilians that was built in 1694 around a rampart opposite the Petrovaradin Fortress. At the outset of Habsburg rule near the end of the 17th century, people of Orthodox faith were forbidden from residing in Petrovaradin and Serbs were largely unable to build homes there. Therefore, the new settlement (at that time called Petrovaradiniense, Rascianica civitas trans Danubium situata or Ratzen Stadt) started growing along the other bank of the Danube, where the river was the narrowest. Its history has always been characterized by constant struggle and aspirations for the advanced, useful, good and peaceful co-existence for the benefit of all its citizens, who were initially the Serbs, Germans, Jews, Greeks, Hungarians and Tzintzars.
The settlement officially gained the present name Novi Sad (Neoplanta in Latin) in 1748 when it became a “free royal city”. Very soon afterwards the city has become a prominent regional center of different activities, especially those related to economy, culture and politics. At the same time, it remained dependant of its agricultural surroundings, as well as vice-versa, so the relations between urban and rural realms remained symbiotic and balanced. As a consequence of the process of becoming a regional center, the city has undergone the major changes in its urban structure. A small town on the periphery of the Hapsburg monarchy has received the markings of a modern European city (Stančić & Lazović, 1999). In the city nucleus many valuable buildings can be found, representing a mixture of different architectural styles – gothic, baroque, secession, neoclassicism and modern architecture. The main city square, dominated by the catholic church and the City Hall, is still a visual marker of urban identity (figure 2). The traditional city-character partly remained in some of the oldest neighborhoods in the city (Stari Grad, Rotkvarija, Podbara and Salajka) which merged in 1694, in the time when the city was formed.

![Figure 2 – The main city square](image)

New neighborhoods, like Liman, Detelinara, and Novo Naselje, with modern high-rise residential buildings emerged from the fields and forests surrounding the city, to foster the huge influx of people from the countryside following the World War II. Rationalization and industrialization in the construction of residential areas were considered here as necessary to resolve the issue of housing shortage. This has created a number of functional, environmental, social, technical and economic problems in these neighbourhoods that are typical of many other multi-family housing complexes built in the post-war period throughout Europe and also in other parts of the world.

**Suburbs of Novi Sad**

Besides the urban part of the city (which include “Novi Sad proper”, Petrovaradin and Sremska Kamenica), there are 12 more settlements and 1 town in the
municipal area. Sremska Kamenica and Petrovaradin, on the right bank of the Danube, were separate settlements in the past, but today are parts of the urban area of Novi Sad. 23.7% of inhabitants of the municipality live in the suburbs. The largest suburbs are Futog (18,582 inhabitants), and Veternik (18,626 inhabitants), which have, over the years, grown and physically merged with the city. The suburb of Futog is officially classified as urban settlement, while other suburbs are mostly rural (table 1).

Most isolated and the least populated suburb of Novi Sad is Stari Ledinci, with only 823 inhabitants. Ledinci, Stari Ledinci, and Bukovac are located on Fruška Gora slopes and the last two have only one paved road, which connect them to other settlements in the municipality. These suburbs have a strong rural character and are highly dependant on the City of Novi Sad and its functions. Some towns and villages in separate municipalities of Sremski Karlovci, Temerin and Beočin which border the City of Novi Sad, share the same public transportation and are also economically connected to Novi Sad.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Category of the settlement</th>
<th>Urban municipality</th>
<th>Population (2002 census)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Begeč</td>
<td>village</td>
<td>Novi Sad</td>
<td>3,335</td>
</tr>
<tr>
<td>2</td>
<td>Budisava</td>
<td>village</td>
<td>Novi Sad</td>
<td>3,825</td>
</tr>
<tr>
<td>3</td>
<td>Bukovac</td>
<td>village</td>
<td>Petrovaradin</td>
<td>3,585</td>
</tr>
<tr>
<td>4</td>
<td>Čenej</td>
<td>village</td>
<td>Novi Sad</td>
<td>2,115</td>
</tr>
<tr>
<td>5</td>
<td>Futog</td>
<td>town</td>
<td>Novi Sad</td>
<td>18,582</td>
</tr>
<tr>
<td>6</td>
<td>Kać</td>
<td>village</td>
<td>Novi Sad</td>
<td>11,166</td>
</tr>
<tr>
<td>7</td>
<td>Kisač</td>
<td>village</td>
<td>Novi Sad</td>
<td>5,471</td>
</tr>
<tr>
<td>8</td>
<td>Kovilj</td>
<td>village</td>
<td>Novi Sad</td>
<td>5,599</td>
</tr>
<tr>
<td>9</td>
<td>Ledinci</td>
<td>village</td>
<td>Petrovaradin</td>
<td>1,641</td>
</tr>
<tr>
<td>10</td>
<td>Rumenka</td>
<td>village</td>
<td>Novi Sad</td>
<td>5,729</td>
</tr>
<tr>
<td>11</td>
<td>Stari Ledinci</td>
<td>village</td>
<td>Petrovaradin</td>
<td>823</td>
</tr>
<tr>
<td>12</td>
<td>Stepanovićevo</td>
<td>village</td>
<td>Novi Sad</td>
<td>2,214</td>
</tr>
<tr>
<td>13</td>
<td>Veternik</td>
<td>village</td>
<td>Novi Sad</td>
<td>18,626</td>
</tr>
</tbody>
</table>

Table 1 – the suburbs of Novi Sad
Demographics

In the last two decades the city of Novi Sad has undergone a considerable change in demographics. Clearly, the population processes had societal, political and economic causes and were mainly war-related. According to the census from 1991 Novi Sad had a population of 179,626 and the city has always been experiencing negative population growth rates (Popov, ed. 2005). In 2002 the city had an urban population of 191405, while its municipal population was 299294 (Statistical Office of the Republic of Serbia, 2003). According to estimation from the end of 2004, there were 306853 inhabitants in the city municipal area. In May 2009, the population of the urban area of Novi Sad is estimated by the city registry to be 252041, while the population of municipal area is 366857. The city has an urban population density of 1,673.7/km² (4,340.3/sq mi) (Statistical Office of the Republic of Serbia, 2003).

Most of the inhabited places in the municipality have an ethnic Serb majority, while the rural suburb of Kisač has an ethnic Slovak majority. Many different ethnic groups live in Novi Sad and six official languages are spoken. Therefore, the city, as well as the whole region of Vojvodina, is known as emblematic for symbiotic coexistence of different cultures and cultural patterns in relatively small area (table 2).

### Demographics of Novi Sad

<table>
<thead>
<tr>
<th></th>
<th>2002 census</th>
<th>Municipal area</th>
<th>Novi Sad proper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>299,294</td>
<td>191,405</td>
<td></td>
</tr>
<tr>
<td>Serbs</td>
<td>75.5%</td>
<td>73.91%</td>
<td></td>
</tr>
<tr>
<td>Hungarians</td>
<td>5.24%</td>
<td>6.03%</td>
<td></td>
</tr>
<tr>
<td>Yugoslavs</td>
<td>3.17%</td>
<td>3.69%</td>
<td></td>
</tr>
<tr>
<td>Slovaks</td>
<td>2.41%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Croats</td>
<td>2.09%</td>
<td>1.84%</td>
<td></td>
</tr>
<tr>
<td>Montenegrins</td>
<td>1.68%</td>
<td>2.23%</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>9.91%</td>
<td>12.31%</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 – the ethnic structure of the Municipality of Novi Sad

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1 The estimation was published on December 31, 2004 by the Statistical Office of the Republic of Serbia.
At the end of 2005, Statistical Office of Serbia published a list of most developed municipalities in Serbia, placing City of Novi Sad at No.7, with 201.1% above Serbia's average. In March 2007, the average gross salary in Novi Sad was amounted to 42,476 Serbian dinars (approximately 525 euros or 715 US dollars at the time), being one of the highest in Serbia. The average net salary was 30,352 Serbian dinars (approximately € 375 or US $ 510). The region contributes to about 11% of the total national GDP, and its national income per capita is 60% over the national average.²

**New city-scape**

As can be concluded from the figures above, a significant shift in demographics that Novi Sad has experienced since 1990 can be compared to the one that followed the World War II. The recent demographic changes had two significant peaks – one was war-related and the other one came as a result of post-communist transitional process and the rise of economical activities and employment. Nevertheless, urban planning and its mechanisms could not rise up to the challenges of the new demographic status of the city.

The migrations at the beginning of 1990ties following the wars on the territory of former Yugoslavia provided the context for the rapid expansion of Novi Sad, which thus reflected not only spatial but also political and socio-economic changes that previous master plans could not anticipate. The uncontrolled sprawl firstly formed a ribbon development along the main access road connecting the inner city with the suburb of Veternik, founded in 1918 as a small settlement for veterans of the World War I. The next phase of growth involved emergence of the complex consisted of individual houses built illegally on arable land in order to accommodate war and post-war immigrants from Croatia and Bosnia and Herzegovina. Even the specific housing typology was created by building several houses on the same individual lot. These illegal structures were built by the members of the same family that came from the western regions of former Yugoslavia or by refugees that occupied the space without the consent of the original land owner. Even today the ownership of property is not easy to establish.

Over the next 10 years population of the suburban settlement of Veternik doubled to 18,000. At the same time, the multi-family residential complexes were built with an aim to foster new inhabitants of the city and in 2004, a gated community for the “nouveau riche” was also incorporated in the existing fabric (figure 3). This brought new contrasts on both spatial and social levels, since the suburb became inhabited by the people of widely diverse background and socio-economic status. Along came the shift in the socio-cultural life and weakening

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² According to the basic data of the Regional Chamber of Commerce
of the sense of traditional community and its values. Additionally, and independent of the specific war-related demographic changes, globalizing trends in economy, politics and lifestyle in general that have dominated the end of the twentieth century have contributed to the devitalization of community cohesion. A typical highly fragmented suburban landscape was created – amorphous zone, wherein the fundamental transformation processes represent “inconclusive times in the urban dynamic” (Rossi, 1982). All these processes have caused blurring of the urban-rural distinction and eroding of the harmony between built environment and nature. This has brought new and different relations, since the city has always been strongly rooted in its agricultural hinterland. The western fringe of the city (both the suburbs of Veternik and Futog) is today characterized by loss of identity and continuity, disorganization of trafficking networks and modes, lack of infrastructure and public buildings/spaces, as well as lack of working places and many other necessary services.

![Figure 3 – The suburb of Veternik – illegally built houses and a gated community](image)

As Vockler remarked, the “informalisation of the cityscape” is a by-product of the large-scale deregulation that characterized all aspects of society at the time (Vockler, 2008). The institutional actions planned for the areas “attacked” by informal housing are today limited to legalization of illegally-built individual houses. The process of illegal building continued and is still happening today as a result of a significant shift of social and economic structure that came along with migrations. Although Republic of Serbia has put an enormous effort in
building legal framework for legalizing illegally-built houses, there is still a great number of home owners that would rather face a possibility of penalty than collect all the necessary documents to legalize the house. This process is not limited to individual housing, but can also be observed in the matter of multi-family housing situated in the city center itself.

After the first cycle of the demographic shift, the pressure of new residents has not been accompanied by new economic activities, which has resulted in low growth rates of investment and employment. The transitional context that followed at the beginning of the century brought about new market opportunities, which were limited to the inner city, causing further imbalances between the city of Novi Sad and its suburbs. This increased rural-urban migration as well as the volume of commuting, not only from the suburbs but from the neighboring municipalities and especially among working people and the students. As an outcome of this “new wave” of population pressure, spatial dispersion continued, but a new spatial process also occurred. The specific densification of the city core-area was carried out without the proper housing policy resulting in illegal building, low quality architecture and the creation of whole urban blocks of houses/apartments/rooms for rent. The building sector was able to offer high profits, which led to the privatization of the housing market. The conditions fueled the emergence of large real estate developers and builders that became one of the dominant forces in the city (figures 4 and 5).

![Figures 4 and 5 – The large construction sites](image)

Important social phenomenon, that should be stressed here, is the fact that the demand for “living in the center of the city” has been very strong since the beginning of the 1990’s, and still is a preference of the greatest number of the city dwellers. Following the urge of the real-estate market, in the past years, number of high-rise buildings (10 or more stories) has been increased, although many urban plans anticipated City of Novi Sad as a place of low- to medium-rise. As a result, urban conditions in the city centre decreased, especially in the sense of lack of open spaces, since the multi-family structures replaced the individual houses on many properties, leaving the same area of unbuilt space on
the individual lot. This was accompanied by low quality of architecture and construction standards. The aesthetics of many newly built multi-family edifices could be, at least, object of serious professional debate. On the other hand, this problem could also be analyzed as a consequence of low fees that architects charge for their designs.

Figure 6 – The inner courtyard

Since this densification came as a result of more or less spontaneous and very fast building process (usually without any building permit), no green areas, infrastructural corridors or sufficient number of parking places have been developed (figure 6). As a result, it is estimated that urban greenery in the city nowadays covers only 5-10% of the total urban area. In the past year, the City government has started a few programmes in order to increase this percentage, being aware that “there are strong public-health arguments for the incorporation of greenery, natural light, and visual and physical access to open space in homes and other buildings” (Jackson, 2003).

**Urban planning and its role**

Urban planning in the City of Novi Sad, since the end of the World War II and until 1990’s followed the planning achievements of the time (late modern and postmodern movement). Urbanization and urban planning have been the main objectives of modernization for the former Republic of Yugoslavia and a priority of the socialist state. After the great demographic change, urban planning in the city became secondary activity to building process, which arose as a priority due to the certain economic situation and the lack of housing estates. At the same time, the existing legal framework was insufficient and the
governmental institutions were unable to enforce laws and regulations (Vockler, 2008).

Today, we could address the issue of urban planning in the city according to the views of Alfasi and Portugali, who concluded that two main areas of criticism can be identified in current planning thought. (Alfasi & Portugali, 2004). The first, the post-modern approach, rejects absolute truth and reason. It challenges modern thinking by condemning attempts to rationalize reality as being false and irrelevant. In regards to urban planning, the postmodern claim is that science is incapable of controlling society and space, and should not try to do so. “The second is the self-organization approach, which refers to systems (such as the city) that are complex and open in the sense that their boundaries allow a flow of material and information, and are difficult to predict or govern. Order and stability spontaneously emerge from within the system, through a process called “self organization”. Still, contrary to their statement that “the aim of urban planning is to regulate or make order out of what occurs in the city is doomed to fail” (Alfasi & Portugali, 2004), we believe that, when high percentage of illegal buildings is present in the urban matrix, careful urban planning can make a change, especially in the sense of quantity and quality of public spaces. In this particular case, these spaces should enhance the sense of place and also the traditional multi-cultural and multi-ethnic character of the city by providing a new focus for community interactions. In accordance to this idea, City of Novi Sad launched three architectural and urban design competitions in the past six months, with an aim to raise the awareness on urban issues and improve the quality and identity of the existing urban image.

Ministry of planning and environmental issues in Republic of Serbia is preparing the new Law on planning, which has caused a strong debate in professional circles regarding the issue of flexibility in planning and the level of planners’ discretion to make decisions. According to Booth “it is clear that ultimate discretion is the exact opposite of law. It is also clear that some level of discretion is needed in every administrative act, including planning. Discretion becomes a problem when it is not conducted within acceptable or accountable limits” (Booth, 1996).

Alterman developed a five-phase model of “policy response to crisis”, which related to the role planning plays during urgent and unexpected situations. The five phases she offered describe the transition from “shock—a quest for understanding” (Phase 1) to “focusing” and the “slaughtering of sacred cows” (Phase 2) to gradually coping with the “macro change”, which is the new emerging order, while entering the “post crisis management” of Phase 5. In her inductively conceived model, “action” (Phase 3) comes before “planning” (Phase 4), as it has been shown on the example of City of Novi Sad, and that, in
spite of the centralization of power and decision-making, “ancillary goals” must lead the way (Alterman, 1995).

In the introduction to the symposium “Putting the Future in Planning”, Myers emphasizes two difficulties that limit the role of planners in shaping the future (Myers, 2001). The first is that, in complex urban situations, forecasting that provides grounds for visioning is forever uncertain, as the consequences of planning activity are only seen several decades later. The second is that it is not easy to legislate decisions that relate to the future, as reaching agreement among many stakeholders about the end state of planning is often not possible. Both the principles of regeneration and the partnership models should also be specific to the location and the community, and project-based (McCarthy, 2004). In the City of Novi Sad, numbers of actors define goals and strategies of the future urban development. The broad spectrum comprises of city government, architects, planners and other professionals, large land owners, developers, citizens and various local and non-governmental institutions. These parties often don’t have the same vision of how the future of the city should look like. As shown in this case, the necessity of producing holistic approaches which include both settlements and settlers becomes more and more obvious (Güzey, 2009).

As put forward by Deakin and Allwinkle, plan-oriented regeneration and the development of the city should, therefore, be realized through strategic moves based on location-dependent data which will focus on the real needs of communities in relation to their sustainability (Deakin and Allwinkle, 2007).

Conclusions

Cities around the world have been increasingly faced with demographic changes during the last decades. The central idea of this paper is that cities are mirrors of change in societies and that the spatial aspects of any social and demographic transformation should be studied carefully. Additionally, urban spaces are the most visible representatives of the location-specific conditions as well as of increasingly fluent and variegated forms of the globalized society.

These presuppositions were examined in the case-study of the city of Novi Sad in Serbia, the medium-sized city that was transformed by two decades of rapid change and still copes with major refiguring of urban landscape. A century ago Novi Sad was largely a provincial city with the specific Central-European character, at the same time rooted economically in its agricultural hinterland. Nowadays, the city is struggling with infrastructural difficulties which came as a consequence of rapid demographic change that happened due to significant shift of economic, social, environmental and political circumstances. These conditions followed the war on the territory of former Yugoslavia and the transition from a planned to a market economy. As a consequence, the city was
faced with the rapid transformation of its urban image, the lack of housing estates, quality urban space and identity. Therefore, we find necessary to stress the need to create more habitable and memorable places that would foster new meanings and distinct identities, encourage attachment and ensure community cohesion. In the particular case of the complex, shifting urban environment, planning and design process should adopt a holistic approach, taking urban macro-economic and social processes into account and searching for the ways and means of social integration (Güzey, 2009). By engaging in these issues, we aim to highlight the need to plan and design places that can accommodate and adopt change – the quality which would enable the creation of more unique shared identities and also a certainty to survive societal and demographic shifts.

References