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THE SIMILARITIES OF EX - YUGOSLAV CITIES

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As the author of this work, that was written between 2001 and 2018 I would especially like to express my gratitude to my supervisor prof. dr. Grigor Doytchinov and experts prof. dr. Rudolf Klein and prof. Uroš Lobnik on the scientific side and to all my family members - they all have always been supportive through all the time of my doctoral research and studies.

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ABSTRACT

This thesis is written after a thorough structural analysis of urban structure of the cities and towns of the region of ex - Yugoslavia. A comparison of the urban fabric showed that the cities have similar development steps, similar structural units, but different development modes due to historical remains. The cities of the western, former Austro - Hungarian development history are treated differently than the cities of former Ottoman development history - significantly in the socialist development period. The understanding of the core structures and the city development treatments remain active until present day.

Keywords: ex - Yugoslav city, urban structure, socialist urbanism, city development, urban planning in Yugoslavia

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I. Preface

During my childhood I always believed that a normal way of life in our town was fairly similar to the way my neighbors were living: having a 700-square-meter property with a house dating from the 1930s, on a quiet street where you could play ball or fly a kite since there was hardly any traffic. Later on I discovered that my school friends lived in apartment blocks and I loved to go to their playgrounds – kids in individual houses did not own any playground equipment—with their big sandboxes and clean and neatly maintained greenery. I soon realized that people were living in very basic, functional apartments, in very uniform environments: the ceilings were low, the staircases were steep, the neighbors were rude. As a young teenager I experienced the “last wave” of the socialist concrete slab building expansion – the bold city extension was being built, two new schools were opened, people from other, mostly rural parts of the country were moving into town. I remember that the high density of building caused the planning and building of underground garages – my friends and I on simple bicycles explored the dark stories beneath the high-rise buildings before they were completed and left it unwillingly when the newcomers started to use it, and every one of us, including the bike, landed on the front of a Zastava 101, the “everyman’s car”, of the proud new resident.

In the last three years before the Yugoslav wars I traveled the country and soon realized that almost every city I visited seemed familiar. The new city parts were traceable, the old town cores were preserved, the architecture and urban planning were present, with similar languages. Even more: every time I made a journey to the West, this hidden language was not there: the Austrian, Italian and German towns were strange because they seemed to be lacking this deep inner conflict, something that I did not understand then.

The Yugoslav cities seem like urban planners’ sandboxes to me – the first impression is that all of them are carefully planned and have a great deal of interesting urban features to present to a visitor. This is but a veil. To unmask the secret of a city one has to understand its generating processes. This understanding comes to a dead end when a trained urban planner’s eye starts to encounter mistakes in the city fabric – and finally understands that several parallel urban faces exist. There is no need to focus on the “official” urbanism - this work will try to show that the cities share a number of parallel urban *modi vivendi*.

The underlying foundation of this research is a focus on the realized urban structures and city fabrics. This comparative study of the cities observed and investigated is clearly tied to the current state of their urban realities and has nothing to do with theories, desires and abandoned plans.

Thus this is not a work focused on the development processes and history of the cities, but rather on their state as is.

II. Introduction

This research has been undertaken as a comparative study: important cities, particularly as regards their structure, are analyzed and compared in order to discover common features. Where these common features can be defined, they are addressed and explained.

As a preliminary check of the cities shows, the urban structures of small and medium-sized cities - 100,000 inhabitants or more - up to the largest city in the observed region with 2 million inhabitants are examined. The cities of these sizes can be traced so as to identify historical city structures, as they are large and old enough to display historical development dynamics.

This research is geographically limited to the cities that belong to the area of the former Socialist Federal Republic of Yugoslavia (popularly known as ex-Yugoslavia), a country that existed from 1945 until 1991. For the purposes of demonstrating their similarities, some digressions to neighboring countries may be made.

The definition of the similarities may also include physical urban structure attributes as well as the basic ideological and historical reasons for their occurrence. This may lead to a divergence in the historical background: before the country of Yugoslavia was formed, the area traditionally belonged to two old empires: the Habsburg Empire in the west and the Ottoman Empire in the eastern part of the country. The goal of this research is also to pinpoint the city characteristics that may also be rooted in imperial city design principles. It is reasonable to expect that city developments of the two different imperial periods differ and that imperial traces would remain in the structure. As the area of research is defined with an area that bordered a historic state, the presumption that this state defined the cities in a uniform way is already contained within the research framework.

II.1 Research basis and framework

The basic knowledge and data required for observing, understanding and revealing possible similarities of the observed cities are the following:

- a. knowledge of the urban history of the region from Roman times to the end of the 19th century;
- b. the work of authors that explain the history of medieval cities in the northwestern former Yugoslav republics (Curk, Marinović-Uzelac) and of those that explain the history of medieval cities in the southeastern former Yugoslav republics (Kojić, Perović, Stojkov);
- c. the work of Miloš R. Perović, which deals with the dual character of the city of Belgrade;
- d. a basic understanding of the social and political context of the Socialist Federal Republic of Yugoslavia, a country that was formed during World War II and lasted until 1990;
- e. the work of authors that explain the functionalist (socialist) city development period (such as Braco Mušič, Ante Marinović-Uzelac, Borisav Stojkov);
- f. access to all the available historical data on urban planning and urban development; and
- g. access to spatial data - aerial and satellite photographs dating to the period after 2005.

To introduce the reader into the background of this research the following overviews have been prepared:

a. The urban history of the region from Roman times to the end of the 19th century

Regional town and city development has two periods in which cities are first mentioned: it is either the Roman period of towns such as Emona (Ljubljana, Slovenia), Spalatum (Split, Croatia), Pola (Pula, Croatia), Poetovio (Ptuj, Slovenia), Savaria (Szombathely, Hungary), and Singidunum (Belgrade, Serbia), or the founding of cities in the medieval period, for example, Marchburch (Maribor, Slovenia), Marsonia (Slavonski Brod, Croatia), Sarajevo (Bosnia and Hercegovina), Prizren (Kosovo), Skopje (Macedonia), and Podgorica

(Montenegro). The towns built in the Roman tradition were often founded as military camps (Ljubljana, Slovenia or Poreč, Croatia), as provincial cities (Pula, Croatia), or palaces (Split, Croatia). The Roman Empire had a distinct tradition in building towns and settlements in a highly ordered manner and the imperial cities were equipped with many public buildings that can be traced through archaeological surveying. Medieval city development of the observed region has other city founding and ordering principles. Since the observed area was divided and ruled by two empires, there are quite remarkable distinctions of note: the medieval cities of the western, Roman and Habsburg tradition and the coastal trade cities are almost always walled and fortified, while the medieval cities of the Ottoman Empire are walled only if they are strategically located and house military personnel. Some of the border cities of the western part are fortifications, while important trade cities like Sarajevo or Prizren lack fortifications around the city structure. The medieval urban development period could be considered the most colorful in history since there are roughly three state entities that can be observed in the area. It would be hard if not impossible to find similar city concepts in different governmental settings of the Middle Ages.

The new age and emerging of civil society added yet another dimension to the city structures. Apart from different political and governmental backgrounds, the key principle is upgrading the cities with new public buildings, the cities are to be bound to the railway system, and new forms of building and planning are pursued. The city fabric gets new extensions that are neatly attached to the older city structure (Maribor, Sarajevo, Podgorica), new boulevards are cut into the undefined city parts, and railway planning distinctively changes spaces near the town centers.

b. The work of authors that explain the history of medieval cities in the northwestern former Yugoslav republics¹ and those that explain the history of medieval cities in the southeastern former Yugoslav republics²

The history of medieval cities is presented in many Central European literatures, especially those of the German language area, but the cities of the western part of former Yugoslavia have been neglected in local literature since the end of World War II. Whether due to the lack of scholars familiar with Austrian and German sources or the political aversion to western knowledge during socialist times, an understanding of the medieval city has not been made available adequately to the public. The major urban history sources such as

¹ See Curk, Marinović Uzelac

² See Kojić, Perović, Stojkov,

Marinović-Uzelac are basic and present the medieval structures in general, without locating the ex-Yugoslav cities of western medieval history into the Central European network, while sources like Curk or Fister understand the fine logic of medieval Slovenian cities but fail to connect it to similar Austrian or German cities. The other, eastern part of ex-Yugoslavia and the Ottoman tradition is much better presented in complex works by Kojić, where the development of Serbian and Macedonian towns is explained in a comprehensive and appropriate manner. General city development principles are presented by Perović in his original and highly delicate manner.

c. The work of Miloš R. Perović, dealing with the dual character of the city of Belgrade

In his book "Iskustva prošlosti" (Experiences of the Past) Perović first addresses and describes the "traditional" and the "functional" city. In the chapter "Pouke prošlosti" (Lessons of the Past) a comparison and evaluation of both is provided. His comparison is based on observing and describing the urban fabric. The "traditional" city according to Perović is composed by using three main structural elements: the street, the square, and the urban block. The "functional" city, on the other hand, is derived from the Athens Charter of CIAM and used in postwar city development in a manner that knows only extensive development using two basic building types, the "meander" and the "skyscraper". The functionalist city is analyzed and the main problem exposed is the "conflict between the real urban processes that happen in a city and the abstract conceptual commitment that is not even doubted by the functionalist urban planners"³ His thesis on a clear distinction between a traditional and functional city structure is tested and confirmed in a comparison of the traditional historic Belgrade city structure and the "Novi Beograd" city functional extension - the structures are tested through a structural switch and fabulous relationships between the traditional and functional are revealed.⁴

Perović's significance is not in his critical attitude towards the functional city extensions; the primary importance of his work is rather in a sound observation of the two sides of the capital of the former Yugoslav state. Although radical - in general he treats the postwar interventions in the traditional city fabric as inadequate⁵ - in separating the urban structure into traditional or functional he serves as an authoritative and useful base author for all the ex-Yugoslav city and urban structure observations.

³ Compare Le Corbusier's early work to the New Belgrade meander shapes, see *Jeu Ville Radieuse*, 1938

⁴ See Perović [6]

⁵ Ibid

d. A basic understanding of the social and political context of the Socialist Federal Republic of Yugoslavia, a state that was formed during World War II and lasted until 1990

After the irreversible dismantling of the Socialist Federal Republic of Yugoslavia and after two and half decades of the transition period it is clear that the period between 1960 and 1990 was an urban experience that could only happen under the Yugoslav form of government. Walking a thin line between a planned economy and the principles and mechanisms of a competitive market economy, the government invented some tactical instruments that helped city development in many ways: first was the central principle of government and the importance it gave to two aspects of development - urbanization, which resulted in planning and building vast city extensions of entirely residential areas, and second, the development of public infrastructure rich in social, health and educational institutions as well as government offices. All of the residential developments were financed through smart local deduction of taxes bound to local salaries. The governmental investments were financed from central and sub-central budgets. One of the most innovative instruments was the “self-funding” mechanism, closely connected with the workers’ self-management system.⁶

The development system was effective in the 1960s and 1970s, but peaked in the 1980s and soon thereafter began its descent. At first the transition was focused mainly on issues relating to the economy as a whole, but then local wars broke out and a rapid change to a market economy took place, so the developments of the city fabric were no longer in the focus of the government and citizens. The cities of pre-1990s Yugoslavia remained roughly the same size as the cities in the 2010 population census.⁷

e. The work of authors that explain the functionalist (socialist) city development period⁸

Vladimir Mušič is a writer and practicing urban planner who describes his work and the period of urbanization of the 1970s in his papers and essays. The most important thing that Mušič observes is the system of planning, building and developing the city - it may

⁶ Self-management (*samoupravljanje*) is a workers’ management system, best described in “Samoupravljanje u Jugoslaviji, 1950-1976, Edvard Kardelj: Sistem socijalističkog samoupravljanja. Uvodna studija. Privredni pregled”, Beograd 1977, and self-funding (*samoprispevek*) is a legitimate referendum-voted funding system, whereby workers of a city decide to give a portion of their wages for building new social institutions which were not shortlisted in the state budget.

⁷ Statistics from <http://ghdx.healthdata.org/organizations/federal-statistical-office-yugoslavia>

⁸ See Mušič [11], Marinović Uzelac [2] and Stojkov [14]

seem that the planning system was fully adopted by the wider public, but in various texts Mušič describes the planning system as rigid in some ways and open to improvisation in other. Curiously, the methodology of urban planning was established in the region in the 1970s and has not been changed or altered since. The works of Borislav Stojkov reveal an attempt to explain the urban planning process in a “learning by doing” method since the methods, analytical tools and urban instruments are developed as various projects require attention.

f. Access to all the available historical data on urban planning and urban development

Access to the available historical data is tied to the city development history. As soon as the city history is studied, one can see how the cities are composed and grown. The historical approach to the structural state of the city can be misleading since history is usually observed in a linear pattern but city structure can almost never be reconstructed as a linear and coherent phenomenon. Nevertheless, the historical data can be used to connect the urban tissue to the city development principles of a historical period.

g. Access to the spatial data - aerial and satellite photographs that date to the period after 2005

Between 2000 and 2005 several similar platforms were set up: data from aerial and satellite photographs were merged and connected, thus forming usable tools for observation of physical urban structures throughout the world. These platforms have been increasingly developed and in 2010 the quality of spatial data is amazing - a simple publicly accessible observation tool is now almost all that is needed by the urban structure observer. Platforms like Bing⁹, GoogleMaps¹⁰ and other can easily help anyone to use satellite and aerial photography data.

⁹ <https://www.bing.com/maps>

¹⁰ <https://www.google.com/maps>

II. 2. Methodological foundation and framework

The method for discovering possible similarities among the observed cities is comparison as follows:

First, to observe and compare multiple cities within the borders of the former SFRY.

Second, to seek and find similarities in the observed cities (or to prove that none or no significant similarities can be found).

Third, to seek and find similar development periods of the cities and possibly to connect them to social, political and governmental periods (or to prove that no such connections can be made) - the hypothesis.

Fourth, to test the results of the hypothesis on other ex-Yugoslav cities.

Fifth, to apply the test results to the hypothesis and to set a valid, approved thesis that defines the results, whatever they might be.

III. The structure of this doctoral thesis

This doctoral thesis is structured in a specific way since there is no uniform apparatus for observing a group of cities in a similar way and the research is almost never connected to a visible clash of two imperial principles. For the observation and comparison of similar cities the book by Ton Hinse “The Morphology of the Times: European Cities and their Historical Growth” [34] is an interesting and balanced example of how to observe the structural characteristics of city history. For the observation of the structural modifications and the connection of the development power to the city development perimeter, the work of Carsten Jonas “Die Stadt und ihr Grundriss: Zu Form und Geschichte der deutschen Stadt nach Entfestigung und Eisenbahnanschluss” [18] was most helpful with its comprehensive approach.

This research was conducted in a linear way that can be traced through the structure of this thesis and the chapters were followed by conference papers and published texts that date from 2012 to 2018. The development and evaluation of this thesis can be described as follows:

1. Statement of hypothesis and observation of five similar cities
 - a) Choosing the five cities and structural observation
 - b) Establishing a hypothesis of similarities
2. Establishing a connection of structural developments and historical political power
 - c) Development patterns observation
 - d) Conclusions on the patterns, periods and structural units
3. Testing, exploring, and verifying the hypothesis
4. Thesis statement: the modified and improved hypothesis
5. Simplified thesis presentation

CHAPTER 1: FORMULATION OF THE PROBLEM AND METHODOLOGY

1.1 Formulation of the problem

This thesis examines the city fabric or the city structure as a whole. There is a geographical limitation to the observation of the city fabric: cities of the former Socialist Federal Republic of Yugoslavia are investigated. The cities in this region, which is defined geographically and politically, have a dynamic development history, and the results, the remaining traces of this development, are observed and compared. Since at first glance the cities have a similar composition pattern, the patterns and development phases are observed.

The youngest of the city development periods, the transitional development period, and the period before it, the socialist development era, were both common to the cities in the observed area. The former generation and development periods and the history before the 20th century were, on the other hand, quite different. The cities in the observed region have been guarding the outskirts of two incompatible empires: the southeastern cities of the region belonged to the Ottoman Empire and the northwestern to the Austro-Hungarian Empire.

The regional setup, construction, size and significance of the cities in the regional network, their urban appearance and the gradual development of the urban fabric of the observed cities show characteristics that are closer to Kostoff's¹¹ pattern studies than to those of other urban development scholars.

Since the history of the foundation of the observed cities in the region was very different – some were founded in the Roman era, other in medieval times – and because of the difference between the two empires the cities were part of, the socialist period of city development was a visible unification of the development, which can be observed through the Sorokin classification of groups. The generation of the socialist state development was based on only some of Sorokin's sociocultural characteristics: "1. Kinship, 2. Territorial proximity, 3. Language (nationality), 4. The state, 5. Occupational, 6. Economic, 7. Religious, 8. Political, 9. Scientific, philosophical, aesthetic, educational, recreational, ethical and other "ideological" values, 10. A nominal group of the elite: leaders, men of genius and historical persons."¹² As it turned out, the prewar and postwar states of Yugoslavia both failed to create a "Yugoslav" nation. But this research will reveal whether the postwar Yugoslav state could create something that could be called a "Yugoslav" city. Or even more: this observation will prove that the city development mechanisms and

¹¹ Kostoff, *The City Shaped* [25]

¹² Sorokin, *Society, Culture and personality*, p.173 [26]

governmental issues have created similar cities. In fact, the present existing urban structure of the cities can reveal the development strategies of various state governments in the region.

An additional observation could test if Sorokin's characteristics could be upgraded with a new category, "urban environment". This observation could show whether similar urban setups are also altering the societies into similar "urban tribes". And of course, the big questions are: "Was the ex-Yugoslav state powerful enough to create such sociocultural characteristics that were uniting people? Was the urban development so powerful as to create an urban nation?"

1.2 The observation method

The city fabric and structure is to be thoroughly observed and the development traces are to be compared between the cities. The comparison should probably reveal similar development period traces and is to undoubtedly reveal the preservation level of the different structural remnants. Perhaps a similar approach to preservation is to be expected and a similar distortion of the urban fabric is to be expected and should be observed during the transitional development period.

For the main structural differentiation of the city fabric, the Perović¹³ theory of city structure and two categories introduced by Perović, the "classical" and the "functional" city structure, is to be used. Based on these two categories, city development is simply divided into the two design principles, one being defined by one of the empires in power and the other from the time of socialist rule.

1.3 Cities selected for detailed observation

According to the historical setup, postwar Yugoslavia, i.e. the Socialist Federal Republic of Yugoslavia, was intended to be a new, coherent small empire. The imperial character was never mentioned or studied since the socialist state disagreed with all bourgeois legacies, but the influence of the country's capital and the relationship between the capital and provinces were typically imperial.¹⁴ In this thesis the urban planning legacy of the Socialist Federal Republic of Yugoslavia (SFRY) is examined. The cities observed were selected based on their size – not smaller than 50,000 inhabitants – and the former capital Belgrade

¹³ Miloš R. Perović, *Iskustva prošlosti* [6]

¹⁴ As understood by Harari [9]

was included because of its role in the urban development of the 1960s and 1970s as the representative example for all the other cities in the country.

An appropriate method had to be developed for studying the urban structure of the cities since it is impossible to gather and compare the urban plans, topographical maps and surveys, and these rarely depict the latest state of the urban development. In the search for gathering usable and comparable data on the urban structure and urban development, aerial photographs are considered a valuable instrument. The Google Maps platform¹⁵, invented, developed and fully accessible since 2005, seemed to be the best tool to examine the shapes and the structures of various cities. Initially lacking in precision, the platform extended and updated content in such a way that by 2010 the data on the cities became usable due to their universality, relevance and precision. Since then cities of Central Europe have been shown at almost the same level of detail and the quality of the aerial photographs provided was sufficient for viewing and studying the urban structures.

An untrained eye must first learn the basics in studying the aerial photographs; this was much more difficult in the times when these were available as black and white prints only. To study and understand information from color aerial photographs, simple techniques must be followed: these include the observation of the time when they were taken and consequently the observation modes of the textures, shadows, colors and shapes.

The first step is to divide the built structure from the unbuilt open space. This is easy: built structure is characterized by sharp edges, unnatural colors, orderly shapes and mainly orthogonal forms. They are easy to distinguish from the natural and semi-natural city elements since the non-built structures are mainly monochromatic and are in general connected with the topography of the surroundings.

The second step is to observe and define the linear elements—streets, rivers, and corridors—and separate them from other open space areas.

The built city structure is represented in vivid and sharp forms. As unexpected as it may seem, the colors help to understand the structures, too: the shape of the roof and its materials, the urban greenery and its relation to the built structure, and the shape of the road structure towards the urban pattern can be studied and the structure is easily recognized. Finally, the shadows can be observed and they reveal what is otherwise hidden in the topographic plans: the heights of the buildings and their projection show the distinctive relations of the urban structure towards the street profiles and urban greenery. (Fig.1.1)

The structures alone are to be traced and recognized to be put in a framework of urban development periods.

¹⁵ As found on <https://google.com/maps>

For this study more than 50 cities were considered after a detailed observation of their structure. The study itself began as a comparison between the city structure of Central Europe and the cities on the territory of former Yugoslavia. (Figs. 2 – 5).

In the first observation wave the observed cities were: Belgrade (Serbia), Bitola (Macedonia), Cluj Napoca (Romania), Doboj (Bosnia and Hercegovina), Dubrovnik (Croatia), Ferizaj (Kosovo), Gjillan (Kosovo), Gorizia (Italy), Graz (Austria), Idrija (Slovenia), Jesenice (Slovenia), Karlovac (Croatia), Kidričevo (Slovenia), Klagenfurt (Austria), Kragujevac (Serbia), Kraljevo (Serbia), Kranj (Slovenia), Koper (Slovenia), Kotor (Montenegro), Kumanovo (Macedonia), Ljubljana (Slovenia), Maribor (Slovenia), Mostar (Bosnia and Hercegovina), Murska Sobota (Slovenia), Niš (Serbia), Nova Gorica (Slovenia), Novo mesto (Slovenia), Osijek (Croatia), Pančevo (Serbia), Pecs (Hungary), Podgorica (Montenegro), Postojna (Slovenia), Priština (Kosovo), Ptuj (Slovenia), Pula (Croatia), Ravne (Slovenia), Rijeka (Croatia), Sarajevo (Bosnia and Hercegovina), Skhoder (Alabnia), Skopje (Macedonia), Slavonski brod (Croatia), Sofia (Bulgaria), Sombor (Serbia), Split (Croatia), Subotica (Serbia), Szeged (Hungary), Tetovo (Macedonia), Tirana (Albania), Travnik (Bosnia and Hercegovina), Trieste (Italy), Tuzla (Bosnia and Hercegovina), Užice (Serbia), Vienna (Austria), Wiener Neustadt (Austria), Zadar (Croatia), Zagreb (Croatia), Zenica (Bosnia and Hercegovina).¹⁶

1.4 The expected results

Observation and simple structural analysis of the aerial photographs can lead to the recognition of the urban development periods.

The main observation procedures of the city structure were promising: not only could the structure be clearly recognized but also the urban typologies were pinpointed and connected to the urban development periods.

The main questions that were posed in this stage of observation were:

- What are the attributes of the urban structures that can be seen in the aerial photographs or recognized using the Google Maps platform?
- Is it possible to deduce the urban development period from observing the aerial photographs?

The conclusion after studying the city aerial photographs was that urban shapes, roof colors, green space design, street widths and urban ordering principles can unmistakably reveal the period in which the urban structure was established. (Fig. 1.2)

¹⁶ The states are named by their historical appearance

For the observation method described above a thorough knowledge of the history of urban design and of basic principles of urban planning is required. Focusing on aerial photography is an extension of reading the urban detailed plans and is applicable only if the viewer understands the abstraction of presenting spatial decisions in designs.

After using the aerial photography as a basis for structural analysis, some similarities and characteristics of distinctive city development periods were found:

- Medieval core city parts are revealed through bent and narrow streets, triangular squares, irregular structures, orange tile roofs, lack of public green areas and very small private gardens; sometimes discernible fortification structures in more or less regularly structured city parts can be found, but these tend to be limited to the imperial border cities, which are designed primarily for defense purposes.
- The *Gründerzeit* city parts show a fully developed relationship between the closed city urban blocks and the intimate greenery inside them, and show a perfect harmony of three structural elements: the urban closed block, the street and the squares (as Perović understands and defines the “classical” city¹⁷); the public greenery is planned and is a relatively large area left out of city development. A special new category is the “public palace” typology, the buildings that are equipped with a square or neatly inserted into public green spaces (Fig. 1.3): these structures are represented in the mixture of green internal courtyards, orange tile roofs and neatly organized wide street profiles (Fig. 1.4).
- The modernist or socialist period structures are the realized utopia of the CIAM movement; the structures float in the semi-public greenery, the structures are clean and engineered, the roofs are flat and gray and the new typology, the solitary and long row block type, is accented through the long shadows falling on green and parking areas. Urban theory and urban development were made simple: the mostly residential buildings are inserted into large, green, open space areas so the buildings “float” in the green. (Fig. 1.5)
- The transition period or the turbo-urban period structures show that the city management tends to “beautify” the uniform harmonic city: almost every new building is accented, be it a shopping mall (Fig. 1.6), a ministry building (Fig. 1.7) or a hotel (Fig. 1.8). The urban structure is often ruined by the transitional space modification – the big box typology appears in the degraded city zones, the densification of the city structure is uncontrolled, the typologies mix. There is a significant detail about this period: the new developments are small in scale, partial and without the big gestures; they do not achieve the alteration of the urban context in the way that the developments of the other three urban development periods mentioned do. The transition period is not consistent in rearranging

¹⁷ Perović, p.37 [6]

the city and not powerful enough to be understood as a “city changing” urban development period.

Some of the most interesting cities were chosen and thoroughly studied in all their urban territory, i.e. throughout the urban fabric and suburbia, including the green elements inside and outside the city borders, the nearby rivers or sea. The analysis procedure included three levels:

- city view: a structural study of the relationship between the built and unbuilt environment [Fig. 1.9]
- urban structure view: a structural study of different city parts according to the readable and recognizable structural entities [Fig. 1.10], and
- detailed view: detailed reading of the urban fabric up to the urban block size [Fig. 1.11 and 1.12].

1.5. Cities chosen for detailed analysis and comparison¹⁸

For presenting structural similarities a selection of fifteen former Yugoslav cities was made and five of these were chosen on the basis of their ability to represent the common features in the best possible way. The cities selected for the structural pattern quality were Belgrade, Sarajevo, Split, Priština and Maribor.

Belgrade was chosen as an example of the large-scale city development of modernism and due to its importance as the “mother of ex-Yugoslav cities”. According to many distinctive theoretical studies of a modernist functional city it is also a starting point for seeking answers and defining the phenomena of an ex-Yugoslav city.

- Sarajevo, the capital of Bosnia and Herzegovina, was chosen because of its clear linear structure and gradual development readability: the urban development shows very clean development progress and all the true attributes of an ex-Yugoslav approach to urban planning.
- Split, the second largest city of Croatia, was chosen because of exquisite historical layers that were respected during all the urban development phases, and because of its very limited development possibilities due to topographic conditions and boundaries.
- Priština, Kosovo was chosen due to its planned development and the boost it received during the time of socialist modernism; the city was quickly overdeveloped and artificially equipped as the capital of an important and dynamic region.

¹⁸ The text of chapter 1.5. was published as a part of the research paper for the conference Architecture and Ideology in Belgrade, 2012, p.375 [19]

- Maribor, Slovenia is one of the cities that belong to the Central European urban tradition, yet shows all the development features that are similar to all the functional developments of former Yugoslav towns - and unique in the European context.

During the research, all the cities were visited at least three times and the conclusions of the observations were discussed with several local urban planners.

The big question of the distinction of the ex-Yugoslav city phenomena was opened at many discussions dealing with the modernist past of the former state urban development. As the ex-Yugoslav state differed from other European state setups, the urban planning and resulting city structures show clear distinctions from the cities of Central Europe on the one hand and from the cities of Eastern Europe on the other. Basically, the medium-sized cities of Central Europe do not show as bold an urban modernist development as the Yugoslav cities, and the cities of the Eastern European tradition show less respect for the existing urban layers than do the Yugoslav cities.

The first distinctive attribute of a typical ex-Yugoslav city is a higher respect for the historic urban fabric and the preservation of the detectable historic layers. This occurred in city developments where large new city parts were added to the existing prewar structure and a duality of the “old” and “new” developments was used for representation of the creative power of socialism. In a time when modernism and developments of postwar urbanization are a closed chapter, a clear principle is demonstrated in all the observed cities: the highest level of respect for the historic urban structures is inherent in the cities of the same former Yugoslav tradition: city developments are carried out in a way that least affects the existing recognizable structure and in a way in keeping with Central European principles of city renewal and revitalization. The principle of not touching the historic entities is extended to the functional city structures – they are mainly left out from the city developments in the period after 1990.

Following the historic layers means that the cities of former Yugoslavia have preserved a very good readability of the urban fabric; perhaps first performed in Sarajevo after 1878, the “culture” of respecting the qualities of the majority of the old urban fabric (with exceptions that are purely representative, such as the Sarajevo City Hall) and defining these qualities is a first step on the way to urban structure preservation, which is inherent in all urban planning procedures in old city structure modifications.

The proof for the unity of the “preservation of historic layers principle” lies in the fact that it does not matter what the historic layers are – be it the ancient Ottoman structure of the Tophane city part of Priština or the medieval city core of Maribor, the remains of the Roman Diocletian Palace of Split or Sarajevo’s Baščaršija Ottoman city business core with the mahala structures around it, the Austrian *Gründerzeit* closed city blocks in Belgrade,

Sarajevo or Maribor – the newer developments rarely interfere with the recognizable urban gestures, forms and structures of the past. In this way a sensible balance between old and new is achieved and it defines the ex-Yugoslav city. Many cities in the Central Europe neighborhood cannot trace the three above-mentioned urban structure entities, but many of the Eastern European cities can.

Figures to Chapter 1

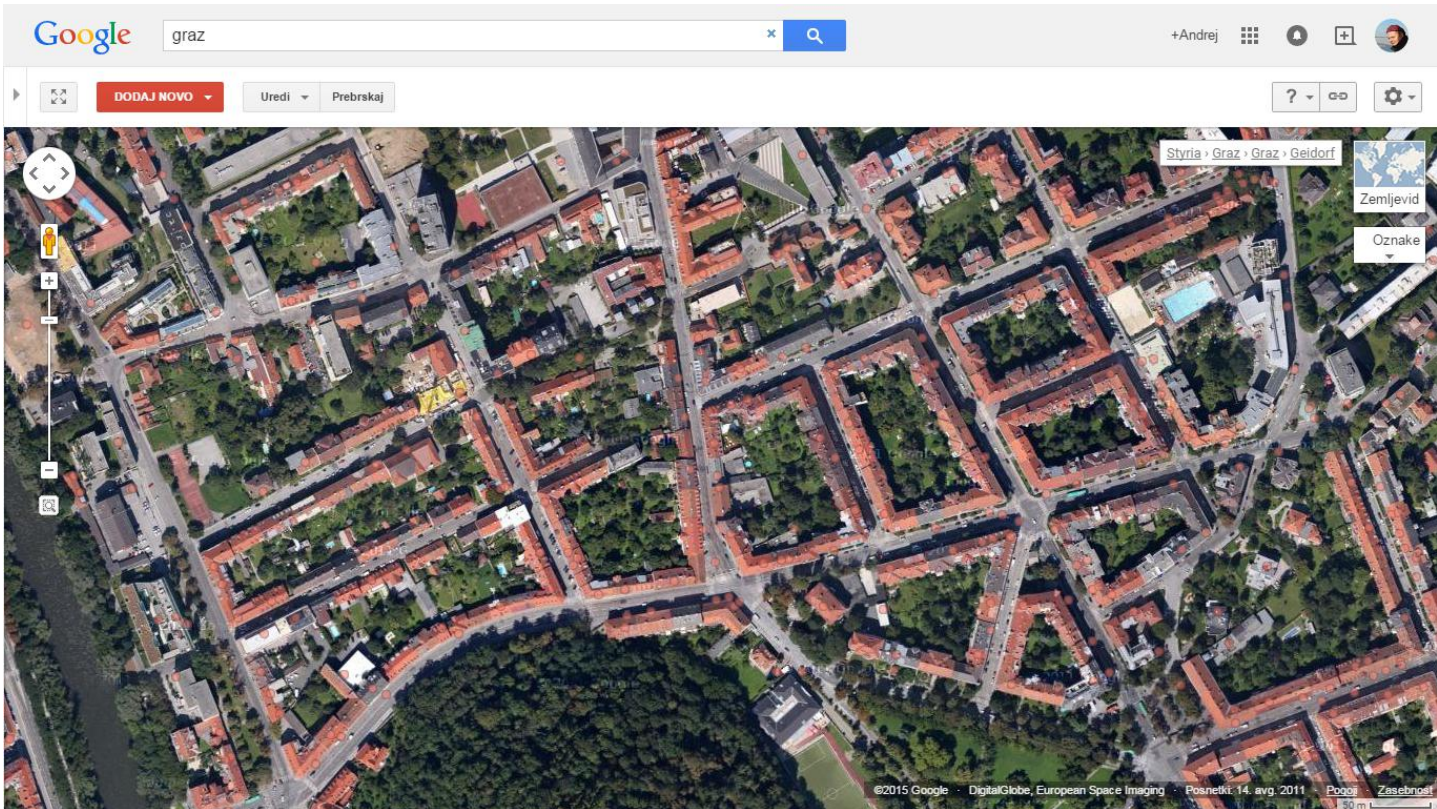


Fig. 1.1 The urban structure as seen on the Google Maps platform: an example of Graz, Austria, ©2015Google, Digital Globe, European Space imaging

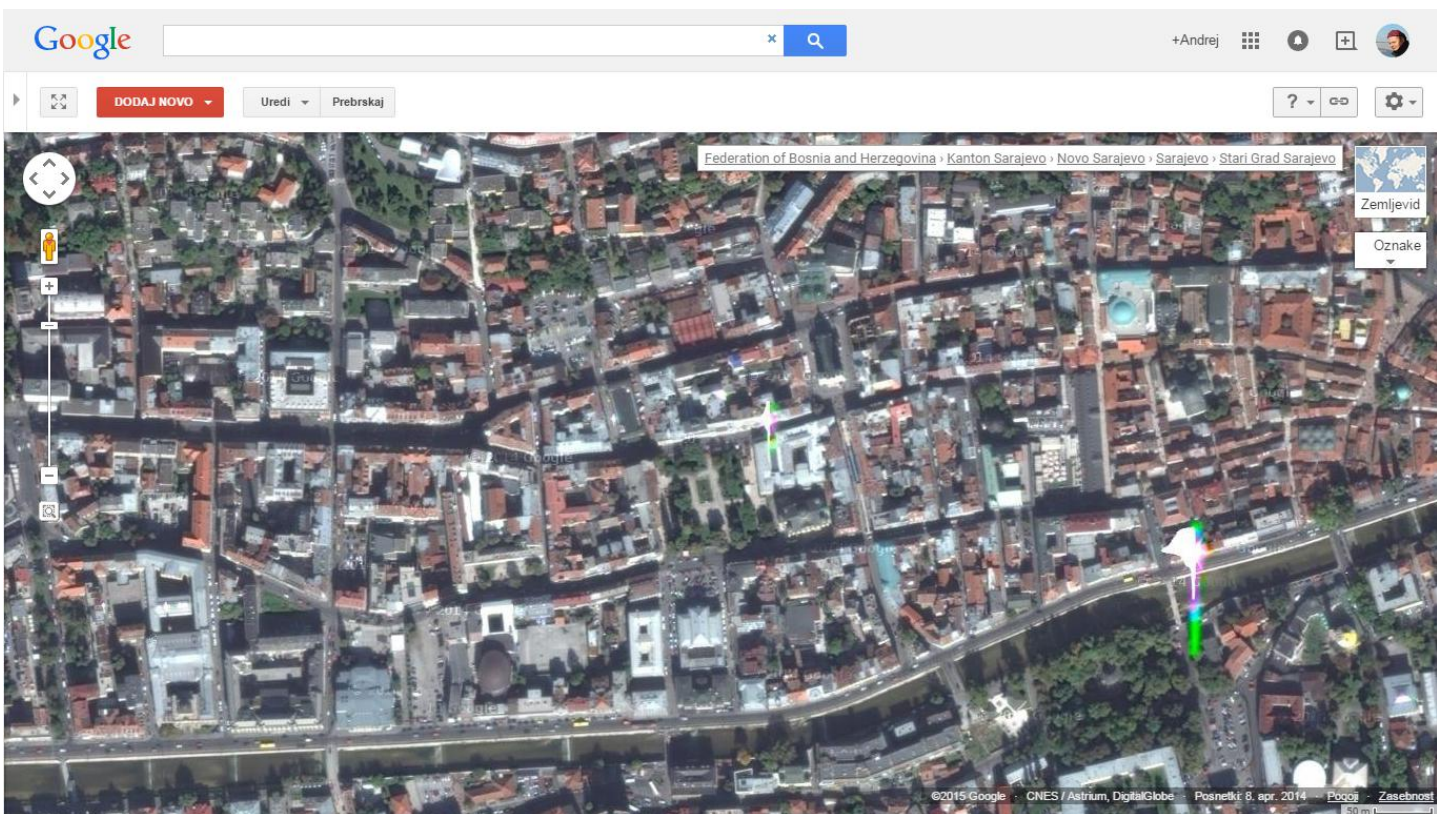


Fig. 1.2 Sarajevo, periods of Ottoman city and the Gründerzeit extension, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe

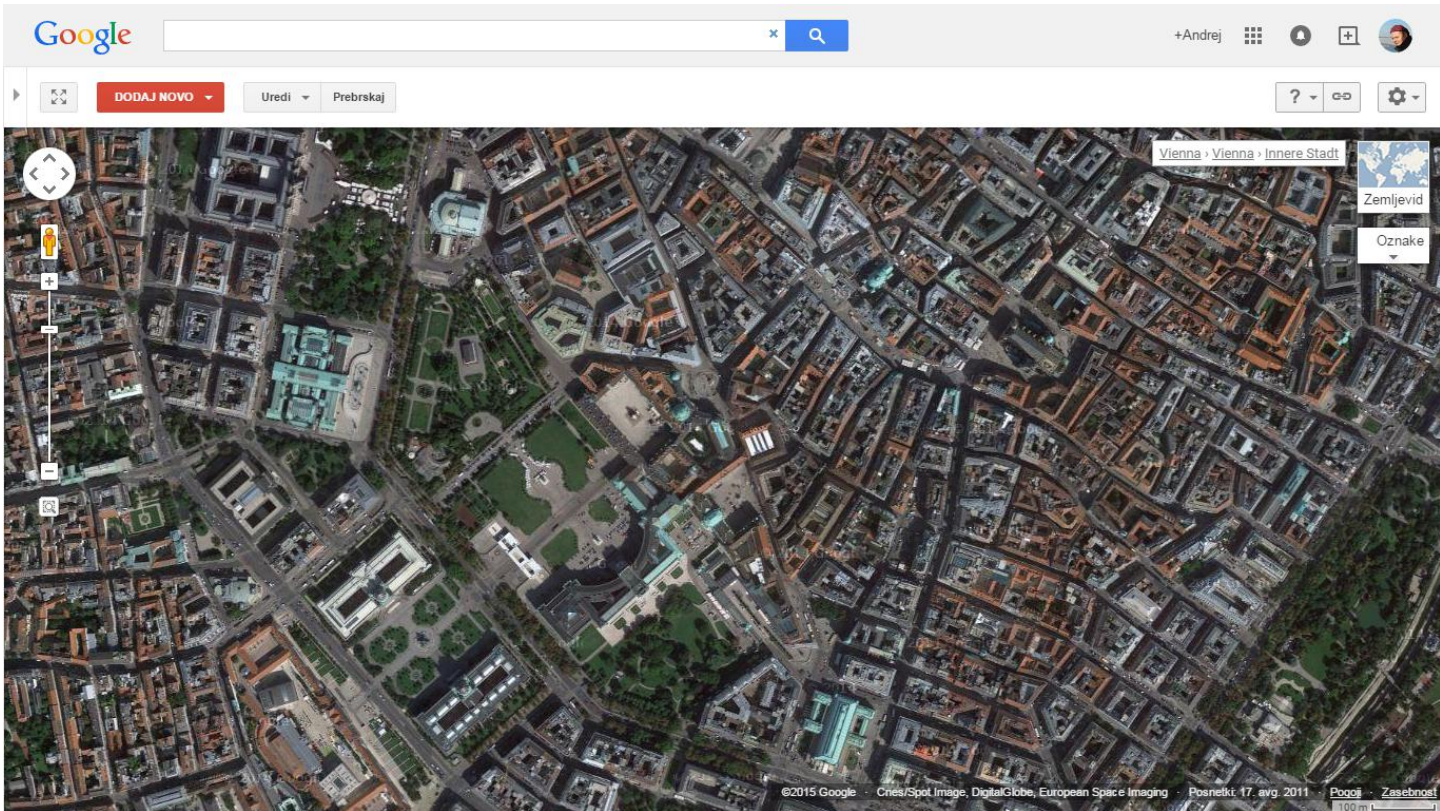


Fig. 1.3 Vienna, ring palaces, Google Maps, ©2015Google, Cnes/Spot image, Digital Globe, European Space Imaging

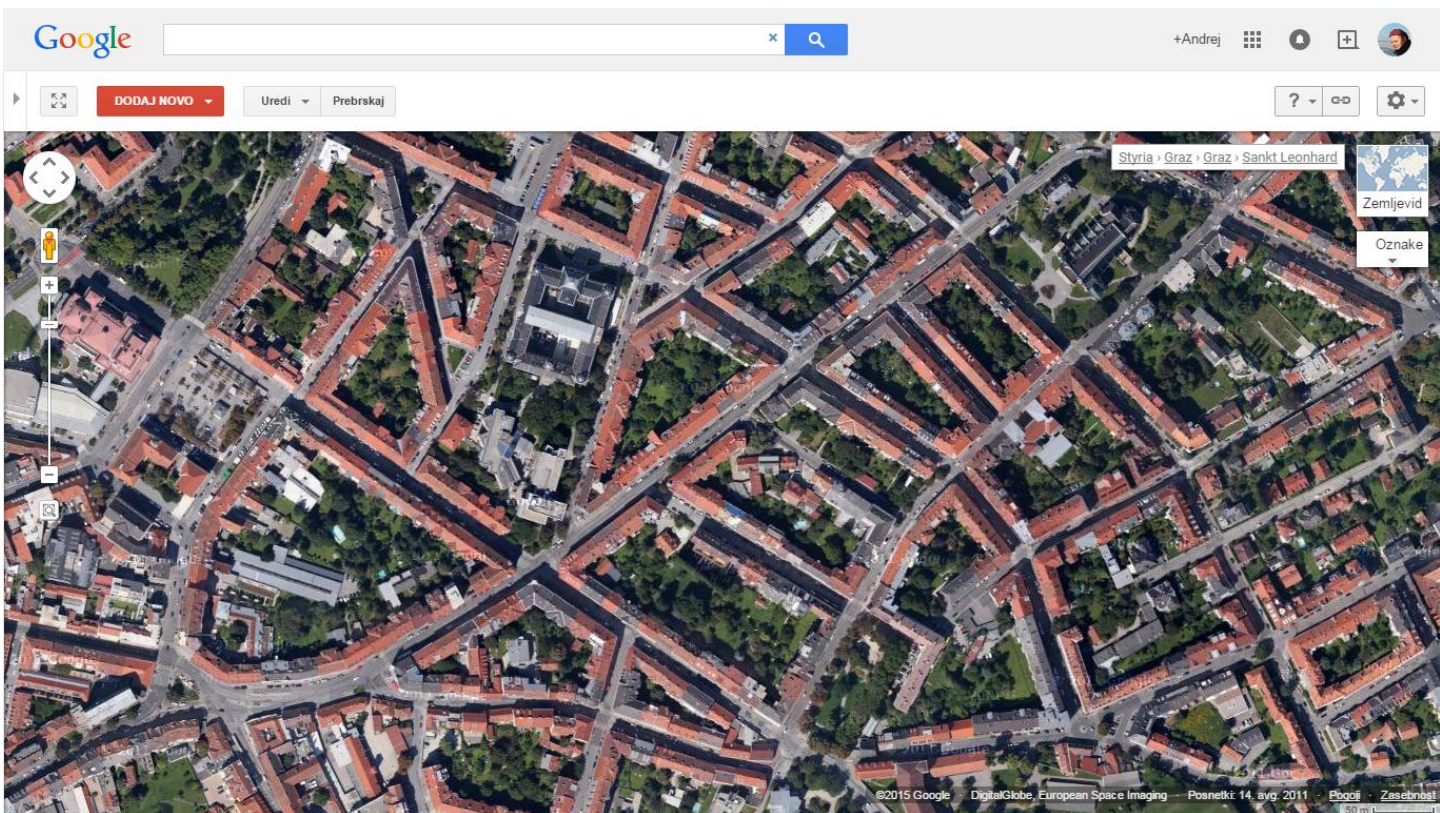


Fig. 1.4 Graz, the urban Gründerzeit structure, Google Maps, ©2015Google, Digital Globe, European Space Imaging

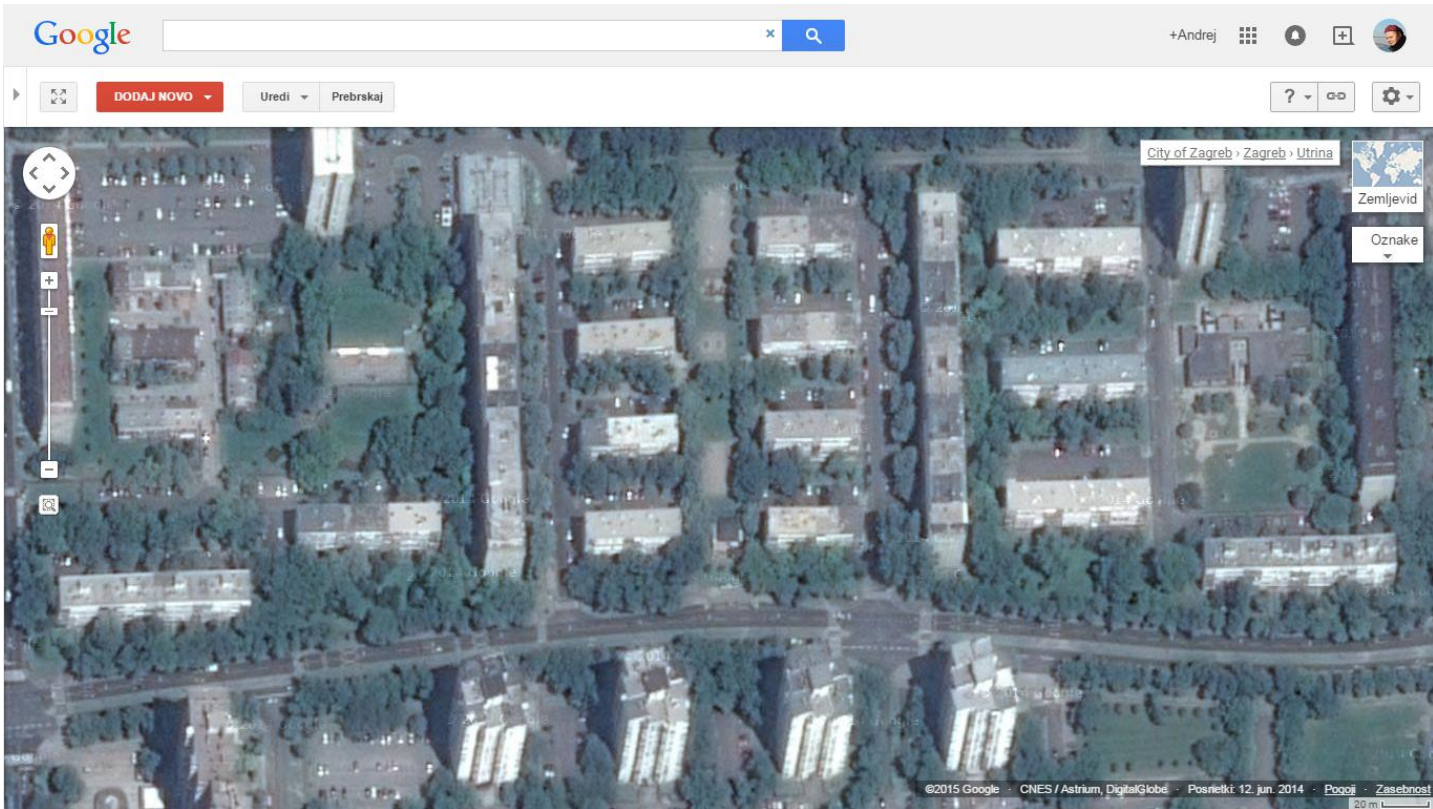


Fig. 1.5 Zagreb jug, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

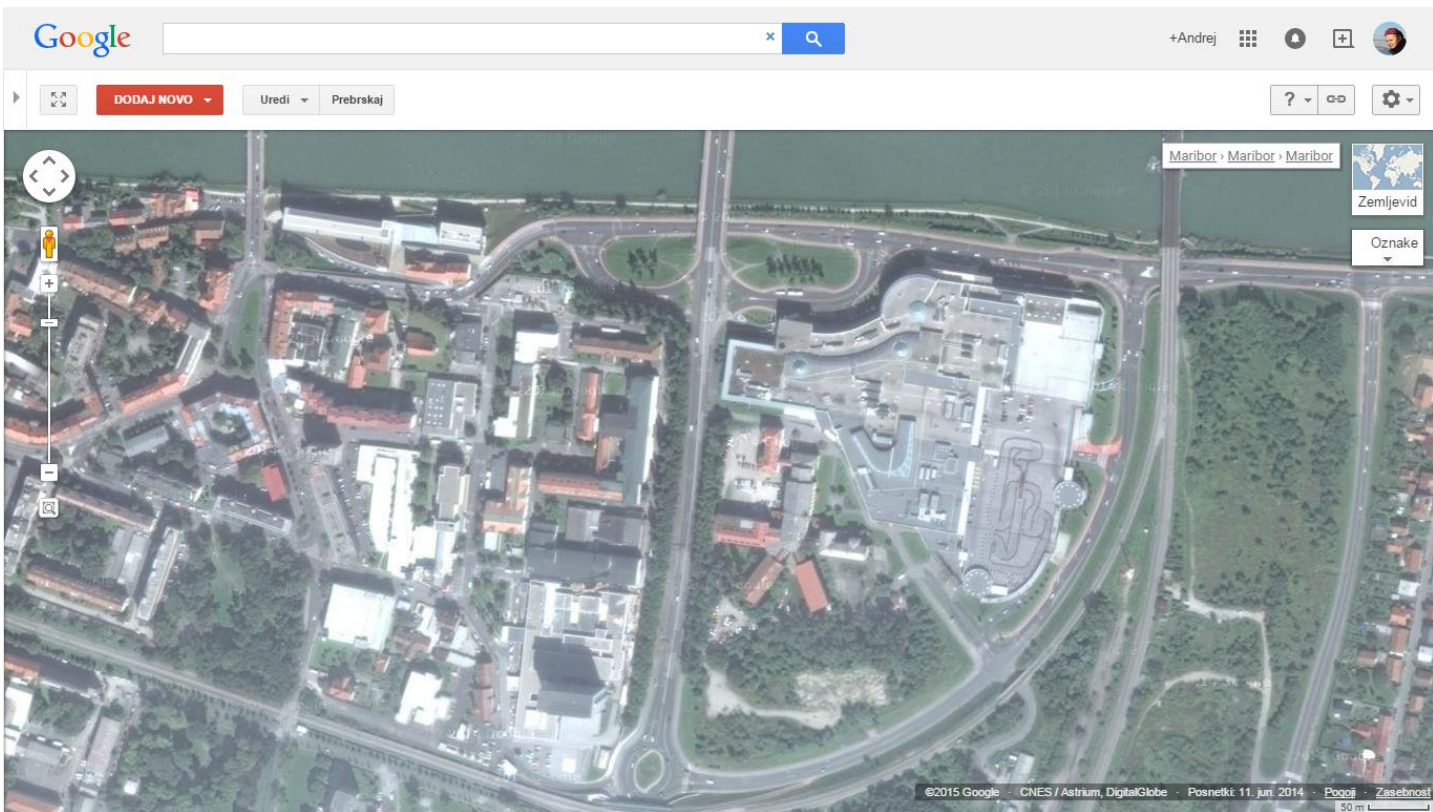


Fig. 1.6 Maribor, Europark, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

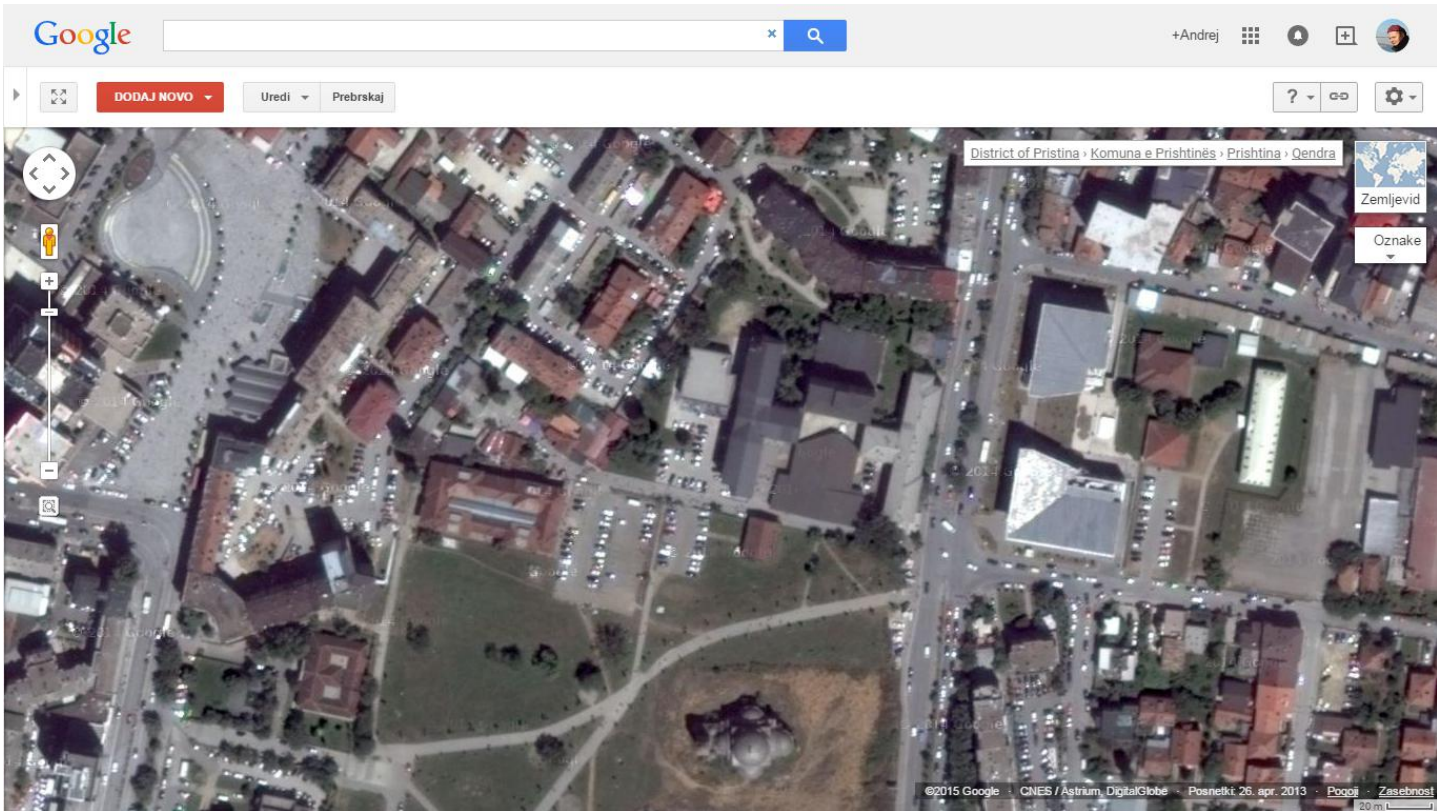


Fig. 1.7 Prishtina, Ministry building, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

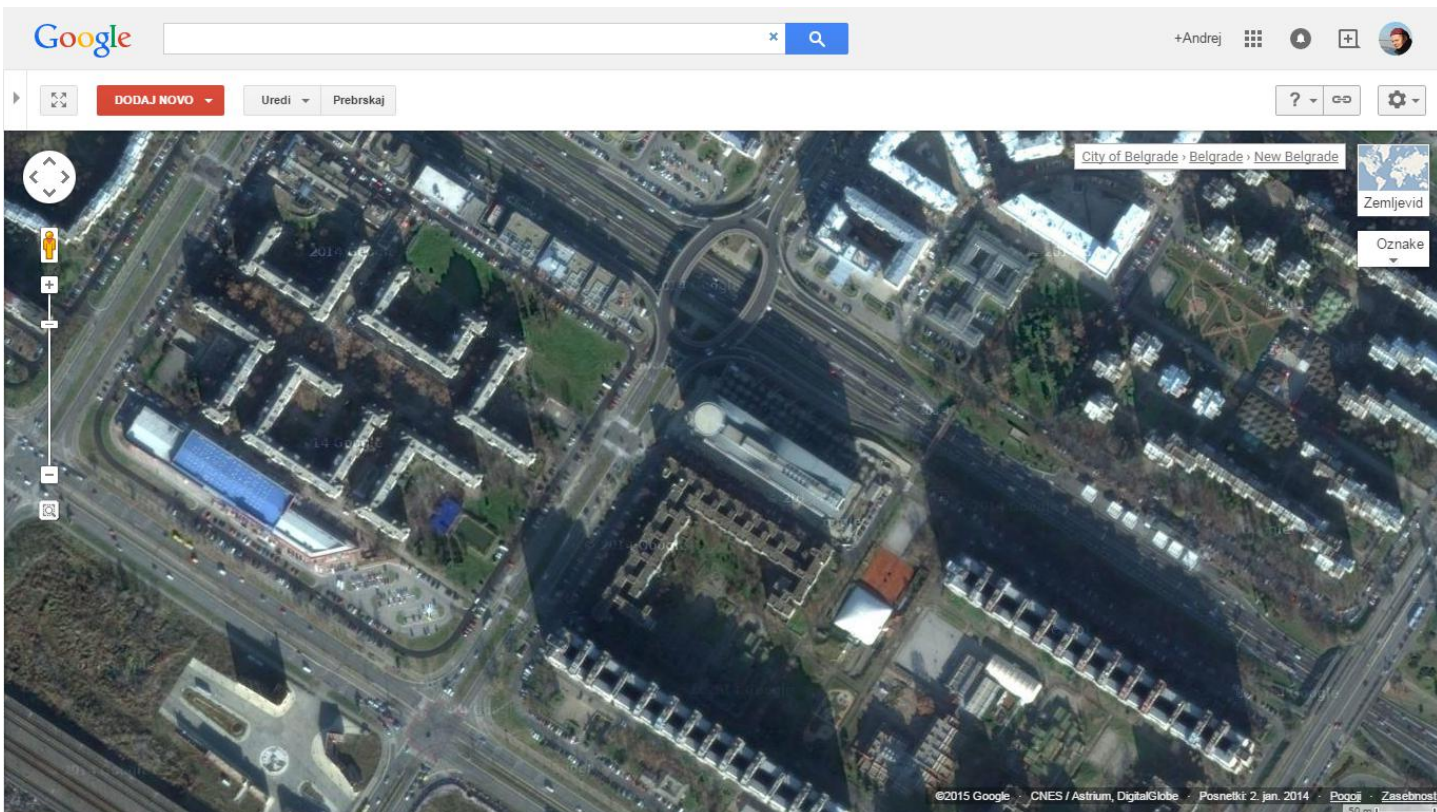


Fig. 1.8 Belgrade, Hotel at Novi Beograd, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

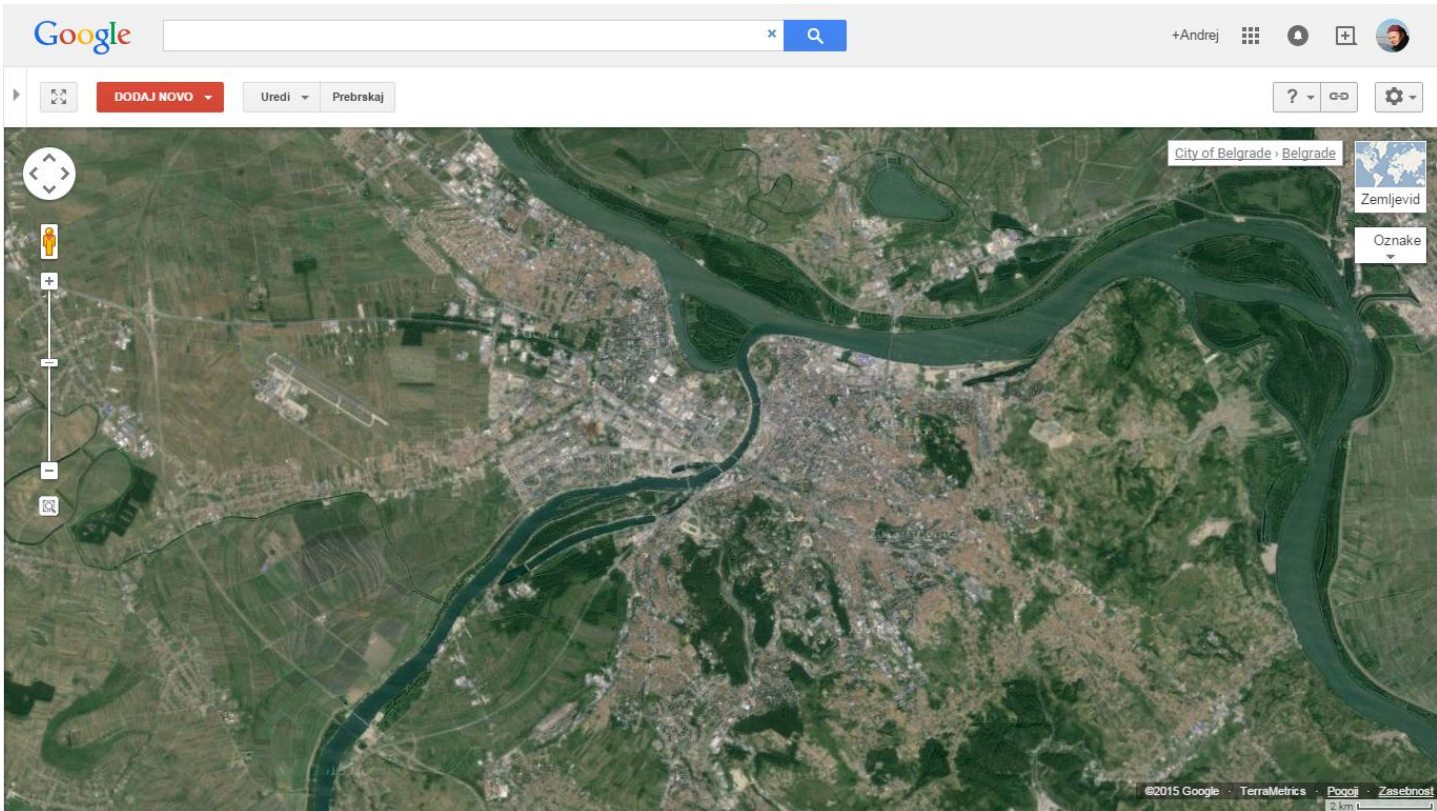


Fig. 1.9 City view of Belgrade, Google Maps, ©2015Google, Terrametrics

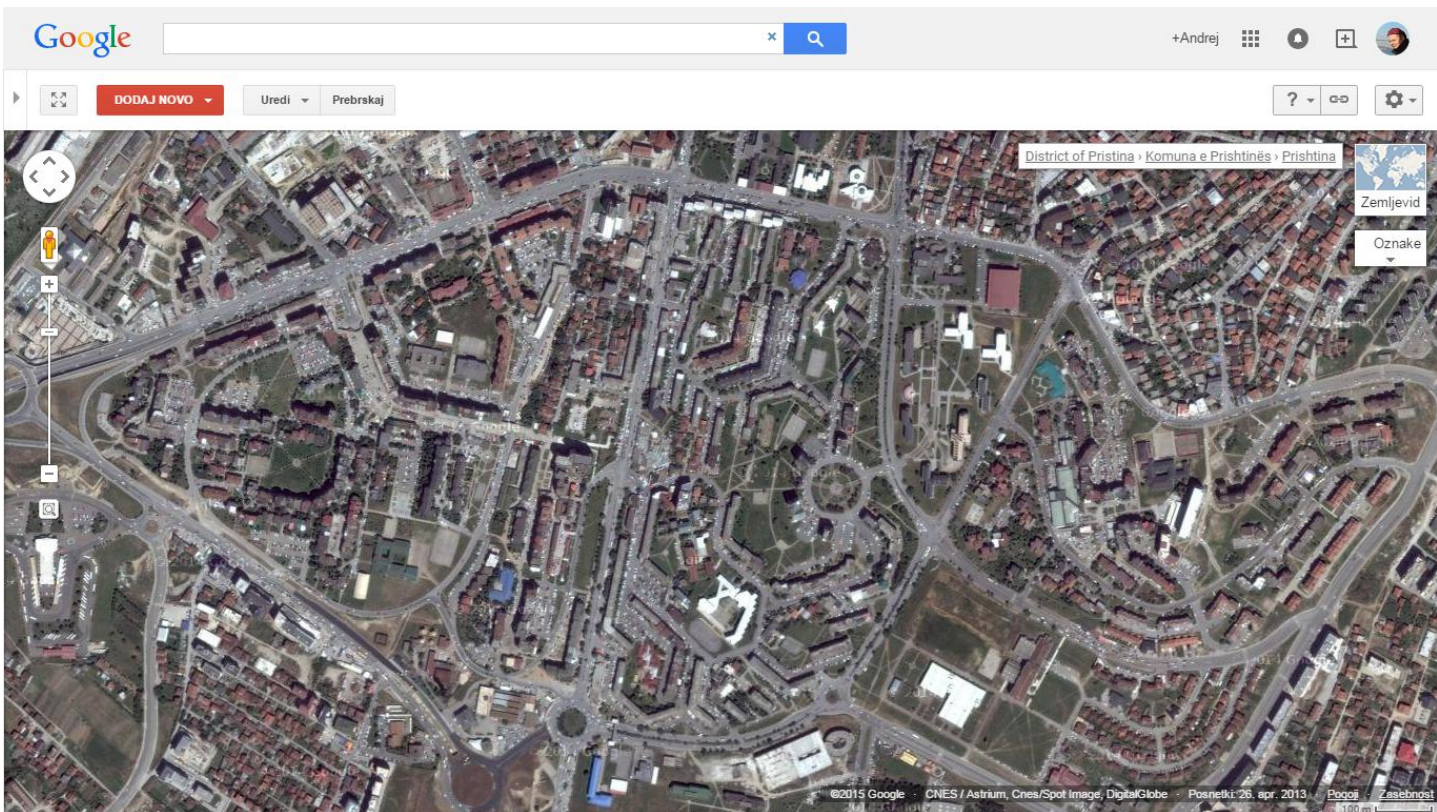


Fig. 1.10 Urban structure view of the southern extension of Prishtina, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe

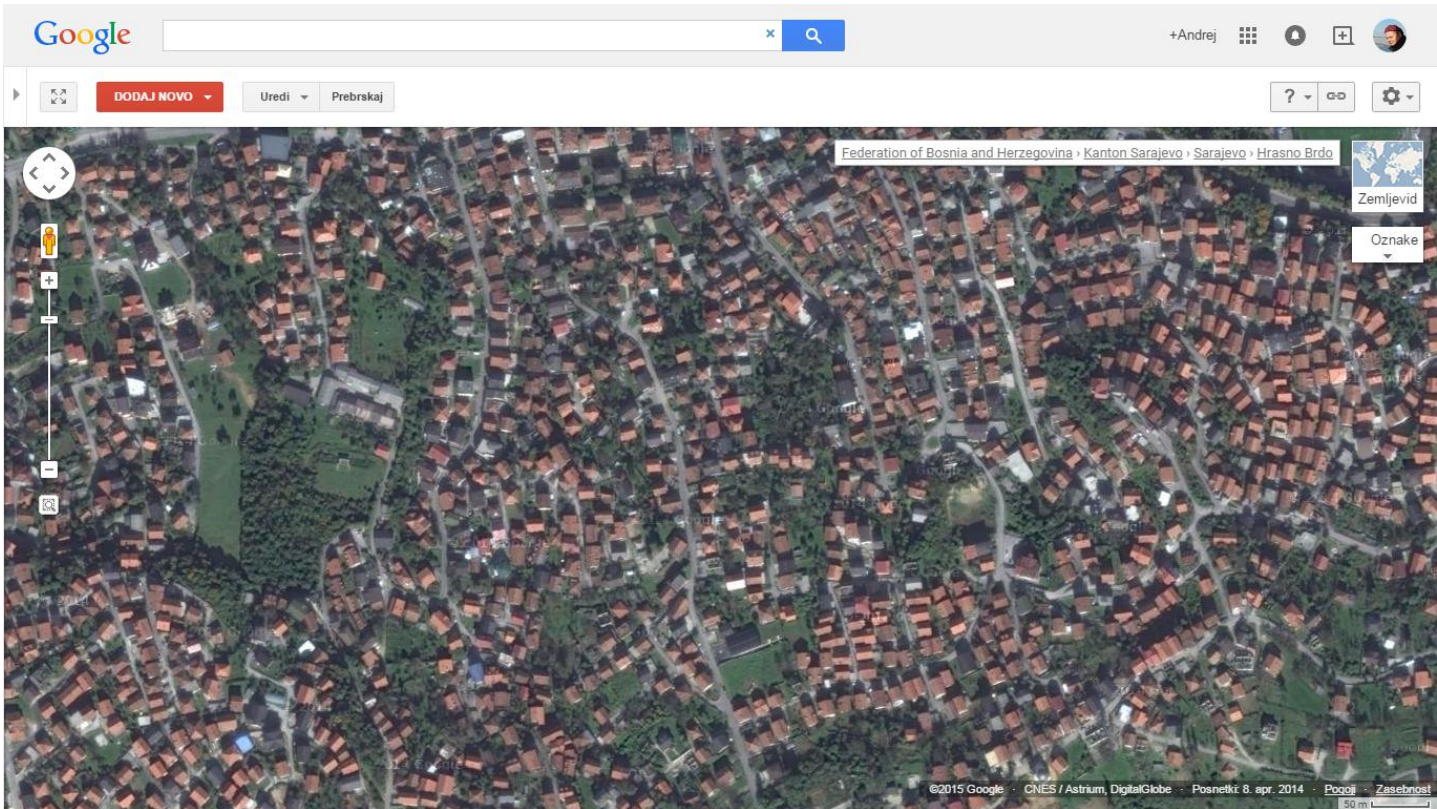


Fig. 1.11 Detailed view of Sarajevo southern outskirts, Google Maps, ©2015Google, CNES/Astrium, Digital Globe



Fig. 1.12 Detailed view of Belgrade Knez Mihajlo Street and Kalemegdan approach, Google Maps, ©2018 Digital Globe

CHAPTER 2: HYPOTHESIS: CITY SIMILARITIES

The similarities of most ex-Yugoslav cities are clearly observable – all the cities follow a growth pattern and matrix that show multiple identical phenomena.

The growth pattern shows that all the observed cities mentioned above follow growth phases that are shown in roughly four steps. The city development in the observed cities is not linear - the urban growth happened analogously to a staircase growing procedure¹⁹; after a steady period there is a relatively short dynamic expansion period. The following four periods are commonly seen in most ex-Yugoslav cities:

1. The pre-industrial period – the “core” period [Fig. 2.1]
2. The early industrialization and civil society expansion period - the *Gründerzeit* period [Fig. 2.2]
3. The socialist period: coexistence of functional city expansions and city core renovation [Fig. 2.3]
4. The turbo-urbanism period: the transitional, post-socialist structural city changes [Fig. 2.4]

These basic observations were published in my paper “Bye bye 20th century”²⁰ as provided in Appendix 1.

¹⁹ Šmid, The Four Urban Development Steps of the ex-Yugoslav cities, p. 74 [1]

²⁰ Šmid, Bye bye 20th century,[19]

2.1. The development period descriptions

2.1.1. The “core” period

The core period is the pre-industrial city fabric, be it the Roman or medieval foundations of the cities. The structure of this period is represented in roughly less than 10% of the current actual city area, covers the basic urban entity that usually dates to the Roman²¹ or medieval town²² and shows the basic nucleus structure of the city. Some of the cities are generated without the core, so the pre-industrial time frame is added to the definition. As the grain contains all of the information of the plant to be grown from it, the city core defines the potential to be developed later. The typical quality of the core entity of every city is that it contains multiple basic characteristics of the city that are to flourish later in their development. The core entity consists of the most valuable definitions of the spatial relations between places, open areas, street areas and built, closed blocks. The core entity also defines the relationships between the city and its major landscape surrounding such as the river, the sea, hills and similar (Fig. 2.5). As this is rarely upgraded based on sound and thorough reasoning, the city cores in all the ex-Yugoslav cities were mainly declared in the postwar period as “historic preservation areas”²³ without showing their spatial and urban design qualities.²⁴

The core period could be divided into stages according to the grade of the city completion. It could also be divided into the early period of founding the cities and the late period, which ends in the full blossoming of the medieval city structure. However, the typical city principles of the Roman Empire, south German or Austrian medieval and Ottoman city building practices (Fig. 2.6, Fig. 2.7) did not result in very different cities of today: the Roman city²⁵ with its magnificently clear city fabric and its impenetrable city walls does not differ a lot from the medieval south German and Austrian cities²⁶, and the “open” trading

²¹ See the examples of the Roman core of the military campus in Ljubljana, Slovenia, the Roman palace in Split, Croatia or the Roman military campus in Poreč, Croatia.

²² Such as a walled city of southern German cities as in the medieval Maribor city core or a town of the Ottoman Empire like Niš, the medieval town influence described by Marinović – Uzelac, p.75 [2] for the central European type and Kojić, p. 27 [16] for the southeastern Ottoman type.

²³ In cities where the postwar development was obstructed due to a distinct quality of the city core, the urban policies of industrial growth sometimes decided on a “bell jar” type of preservation – in Ptuj, Slovenia, the medieval city is wonderfully preserved because it was decided that 1950s industrial development would take place in nearby Kidričevo, Slovenia where a new industrial town was built “in the woods” as a settlement for the aluminum factory workers.

²⁴ The “core period” is not to be confused with the “city core area”, highly esteemed at the end of the socialist period, which is a way to classify and deal with the planned city core renovation. The legacy of this renovation is yet to be valued.

²⁵ For example, Split, Croatia, Belgrade, Serbia and Ljubljana, Slovenia as the most interesting cities founded by the Roman Empire in the scope of this work.

²⁶ For example, Maribor (Slovenia), Wiener Neustadt (Austria) or Klagenfurt (Austria), with the high period of the medieval walled city achieved in the 15th century.

cities of the Ottoman Empire²⁷ show a city fabric that proves that it is not the wall that makes the city structure medieval, but its fabric and its relationship between the “built” and the “open” structures. (Fig. 2.8, Fig. 2.9)

2.1.2. The *Gründerzeit* period²⁸

The fact that the cities of the observed region were all secondary, provincial towns in the period until 1918 should be noted at the outset. The period of early industrialization and civil society expansion was the first massive expansion after the medieval city period, and is widespread after 1848. On the one hand, the space for development needed by industry could only be found at the outskirts of the medieval city borders while on the other the public buildings required by civil society expansion could only be provided through massive changes in the existing inner city fabric²⁹. The main developments in the medieval city used the existing city design of public places and basically upgraded them, where this was possible given the scale. Larger public building complexes, such as courthouses with prisons, military barracks or health and educational facilities, were often planned at the outskirts of the medieval city borders; these new developments consistently influenced not only the neighboring development potential, but also co-designed the city traffic and municipal systems. In the cities tied to the Austrian Empire, there are two episodes that define this period: *Entfestigung* and *Eisenbahnanschluss*,³⁰ i.e. the “dismantling of city walls” and “connection of the cities to the railroad system”. There should be a clear distinction between the cities of Austrian background and of the Ottoman tradition; since the former are often unwallled, they do not need *Entfestigung*.

Although a totally different core period from the cities of the former Ottoman Empire, the main *Gründerzeit* urban extension attributes are very similar³¹. The basic attribute of this city development, which we can also call *Gründerzeit*, is the expansion and redesign of the classical city structure. The city is being “regulated” since the development asks for new space and areas, and due to the newly established imperial offices and institutions new public buildings had to be designed and built. The empires also upgraded the transport

²⁷ Focusing on the cities of the Ottoman Empire in the scope of this work, such as Sarajevo (Bosnia and Hercegovina), Skopje (Macedonia) or Prizren (Kosovo).

²⁸ *Gründerzeit* is used according to the German and Austrian meaning, defined as the period after the 1848 March Revolution when Industrialization and civil society were progressing, affecting urban planning and rapid city growth.

²⁹ Austrian urban planning cherishes the *Gründerzeit* period as the inner city development period; see Breittling [3].

³⁰ For the German cities a detailed development distinction is described by Carsten Jonas, p. 36 [18].

³¹ This can be seen very clearly in the cases of Sarajevo (Bosnia and Hercegovina) (Fig. 2.18) and Podgorica (Montenegro) (Fig. 2.19 and 2.21).

systems: the railways were typically the harbingers of development and they triggered industrial growth of the cities (Fig. 2.10, Fig. 2.11).

The four aspects of development - the public, residential, industrial and infrastructural expansions - inevitably and irreversibly changed the cities. The changes were also visible in other, new and distinctive structural units compared to previous ones: residential and public buildings were set up in an "imperial" manner, defining the new urban structure and also the new height of the city.

2.1.3. The socialist period

The next city expansion that inevitably developed and enlarged all the observed cities is that of the socialist period.³²

The functional city expansion and the city core renovation period are closely connected with the socialist era, which covers the period between 1945 and 1990. On the one hand cities were urbanized, expanded in a functional way, while on the other hand the city core was modified without structural interferences. Alongside these two official expansion and renovation urban policies an illegal city expansion was also taking place.

The coexistence of the two periods is explained by Perović,³³ and for all the cities in the ex-Yugoslav area the "imperial" city is shifted from Vienna and Istanbul to Belgrade. Belgrade as the city between the two influences developed a new pattern to expand the city structure and at the same time renovate and modernize the existing structures in a sensible way. As the urban planning was triggered with a 1959 master plan, the architectural development followed the detailed urban planning of the "Novi Beograd" and other city expansions. As Stojanović and Martinović document³⁴, the period was dynamic and resulted in the new capital at the end of the 1970s. With the theoretical and methodological foundations and practical overproduction the capital soon became the model for all the provincial cities of the socialist state. There were almost no issues that were not tested in Belgrade and then used and improved in the provincial cities and towns all over ex-Yugoslavia. The local architectural blends and schools resulted in a production which is coherent and harmonic. (Fig. 2.12)

³² In Szeged (Hungary) the city fabric reveals two distinct periods, the *Gründerzeit* and the socialist, clearly designed and neatly separated. See Fig. 2.20.

³³ Perović, p. 3 [6]

³⁴ Stojanović p. 13, Martinović p.115 [18]

The socialist period not only built new city parts, but also traditionally redesigned the existing city parts that were destroyed during World War II, such as in Maribor,³⁵ or developed regions of tourist settlements on the Adriatic Sea, and in the 1980s started to focus urban planning on revitalization, especially in theory³⁶, but also on practical occasions such as city core revitalizations.³⁷ (Fig. 2.13)

2.1.4. The “turbo-urban” post-socialist period

The turbo-urban period³⁸ covers the last urban expansion period. The political transition from socialism to parliamentary democracy and the dissolution of the Yugoslav state into smaller national states caused a traceable development that is rooted in a redefinition of the main city functions. Raising the standard of living brings new goods and expands services to city inhabitants. Although not of the same intensity in all the ex-Yugoslav cities, the turbo-urban period covers the years between 1990 and today, 2018.

The turbo-urban covers the residential, shopping, service and infrastructural developments of cities. The turbo-urban also triggers beautifications of the cityscape.

The developments are usually out of context or exaggerated in size, individualist, not bound to the city scale and out of keeping with the context. They are often not legally built or permitted.³⁹ If the developments are driven by the official city politics, they are often overpowered and hasty (Fig.2.14, Fig. 2.15).

³⁵ Šmid, Sozialistische “Forma Viva” 1945 – 1992 [23]

³⁶ Stojkov, p. 42 [14]

³⁷ Recer, Reichenberg, p. 17 [13]

³⁸ The turbo urbanism phenomena was defined by Kai Vöckler, p. 35 [4]

³⁹ Permissive in the sense that the developments are illegal when started and then “legalized” during or after the construction.

2.2. The comparison: depiction of development periods

The method of observing the four major city development period leads to inventing a new graphical method for the representation of the relative strength of a particular development period. It is obvious that the observed cities did not all share the same experience in living under simultaneous and stable growth conditions. The simplicity of defining these four growth periods becomes complicated in evaluating them from the aspect of “success of the urban development”. For example, the auspicious Split (Croatia) or Dubrovnik (Croatia) core period is much more integrated, harmonic, and coherent than the core period of Subotica (Serbia), which consisted of five villages that were thoroughly urbanized and merged together shortly before the *Gründerzeit* period. On the other hand, Priština (Kosovo) blooms in the turbo-urban period, but the core and the *Gründerzeit*⁴⁰ periods barely existed or were mostly uninteresting and dull.

The success of a particular development period is estimated for the cities through an evaluation method for each period of each observed city. Apart from the five cities mentioned, other cities are involved in this evaluation in order to test whether the method is significant and appropriate. All the cities are compared in a cross check matrix in such a way that every city and every period is given a numerical value. These values are then presented in a simple graph showing “the success/strength” of the development period for all the four periods of the selected city. The graph is labeled “the city development fingerprint” and these can be compared visually. (Fig. 2.16)

2.3. The city development fingerprint⁴¹

As city development happens in great steps, the four identifiable periods can be evaluated by the range and success of the urban expansion development. A simple graphical presentation shows the result of the comparison of several cities.

As the cities are compared, a graphic development period strength is presented and “fingerprint” graphics can be used for simple comparison of the city development.

On the x axis the periods are marked and on the y axis the strength or the success of the development period is shown (Fig. 2.17).

The city development fingerprint is used for comparison evaluations only. They are tied to the four development periods classified in this research.

⁴⁰ The *Gründerzeit* tag is not quite appropriate for the cities in the Ottoman tradition – it is used for comparison purposes here.

⁴¹ Šmid, The Four Urban Development Steps of ex-Yugoslav cities, p.76 [1]

Figures to Chapter 2

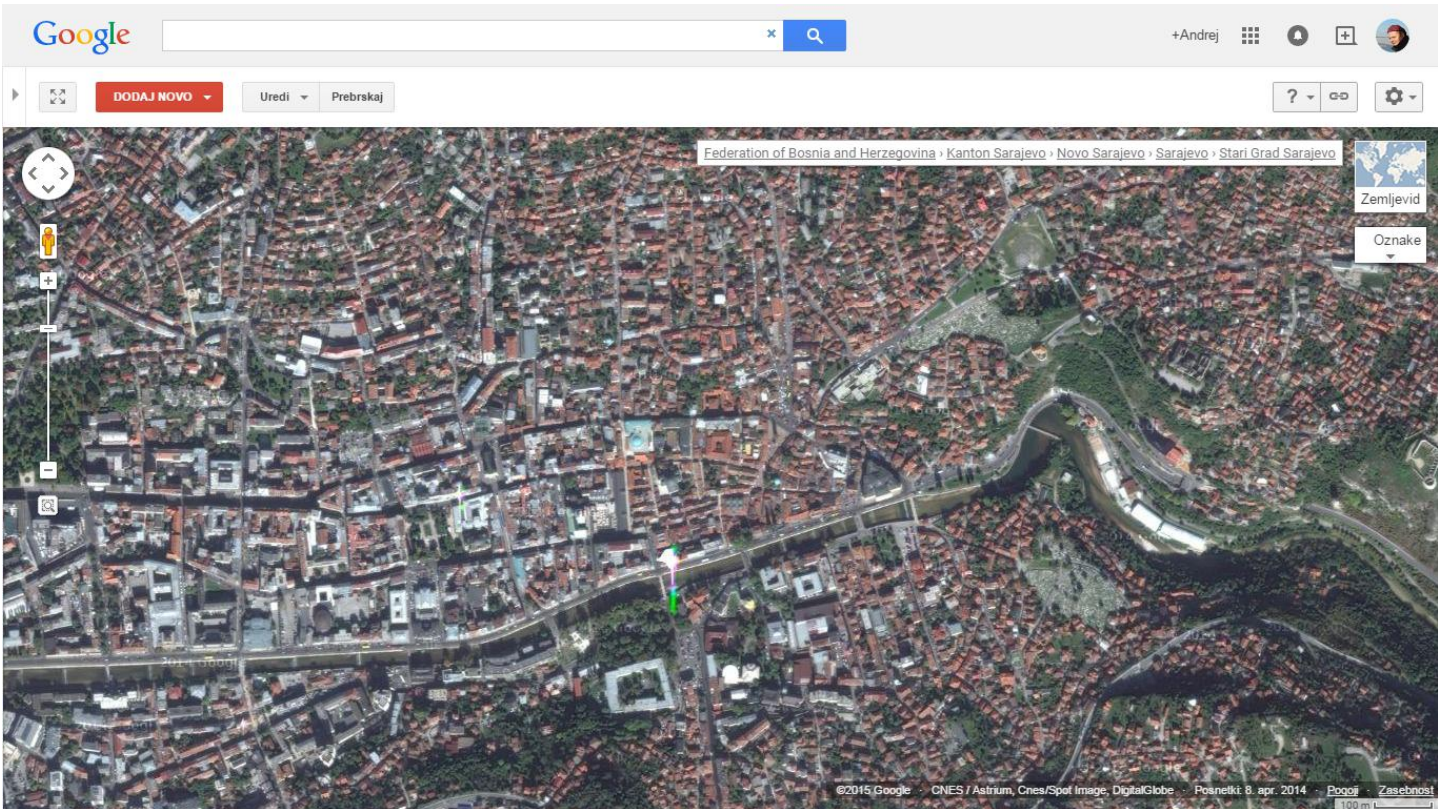


Fig. 2.1 Sarajevo city core: the Čaršija and the Mahalas, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe



Fig. 2.2 The Maribor »Gründerzeit« closed city blocks, a photograph by the author

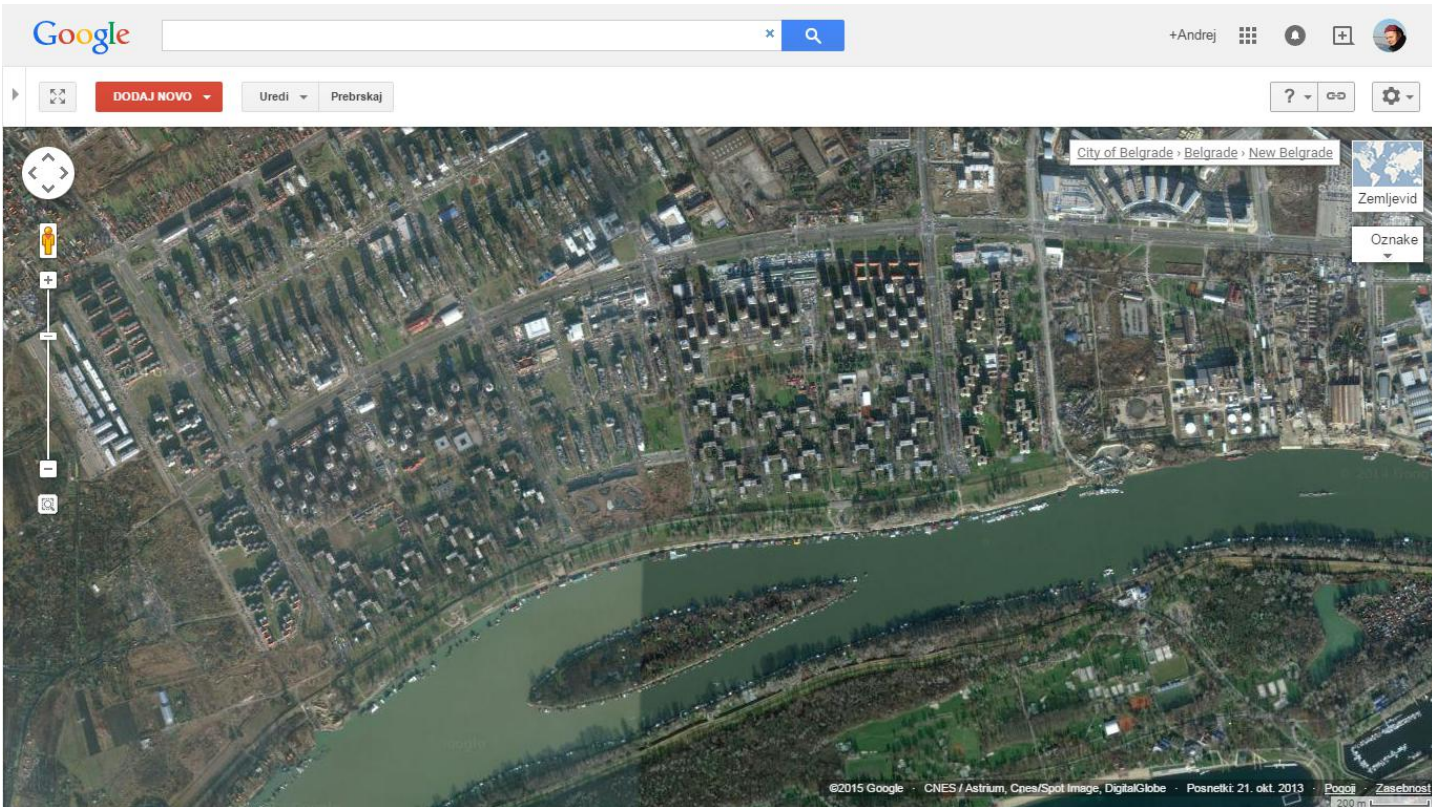


Fig. 2.3 The Novi Beograd contact to the Sava river – various neighbourhoods, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe

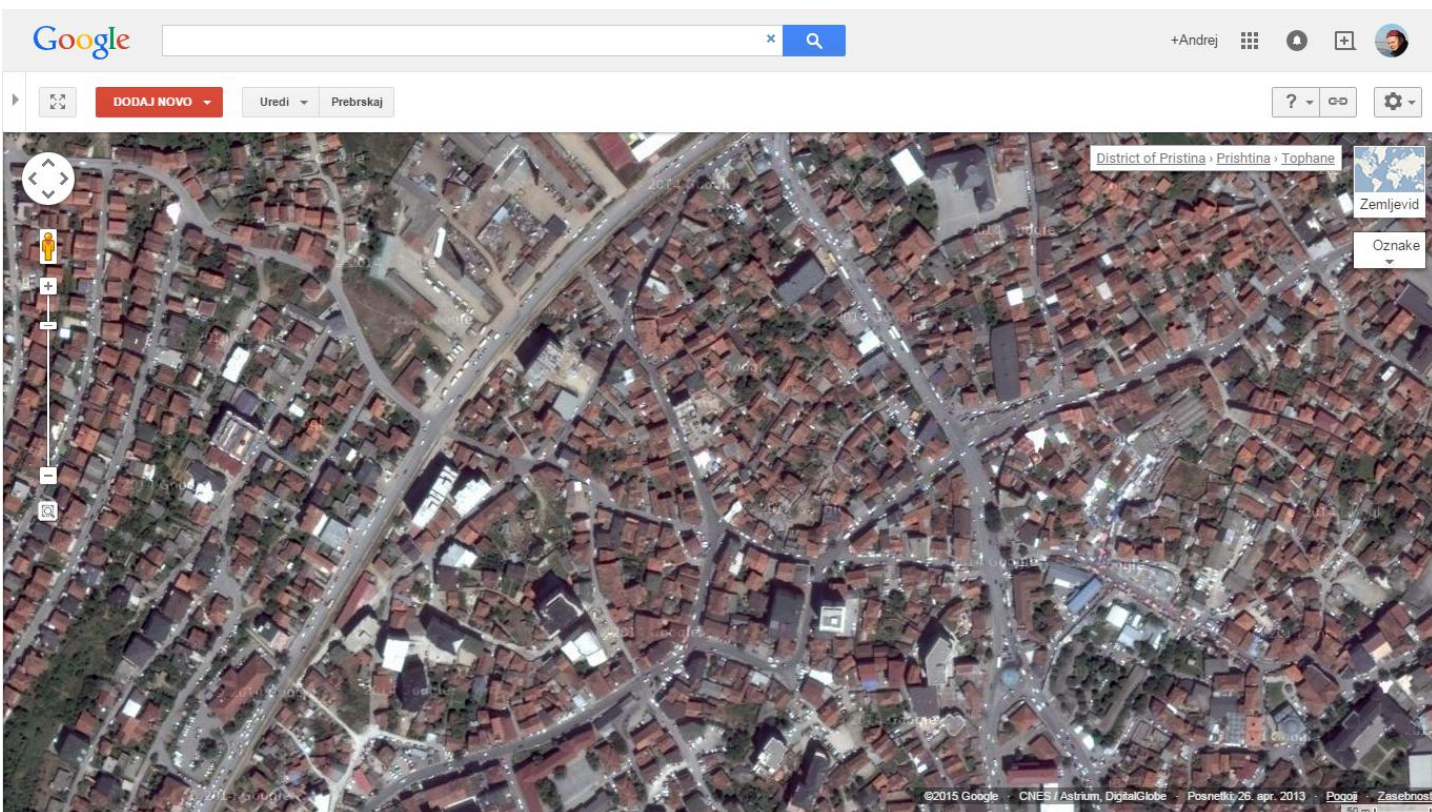


Fig. 2.4 Turbo urban development of the Priština Tophane city part; the structure is congested, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

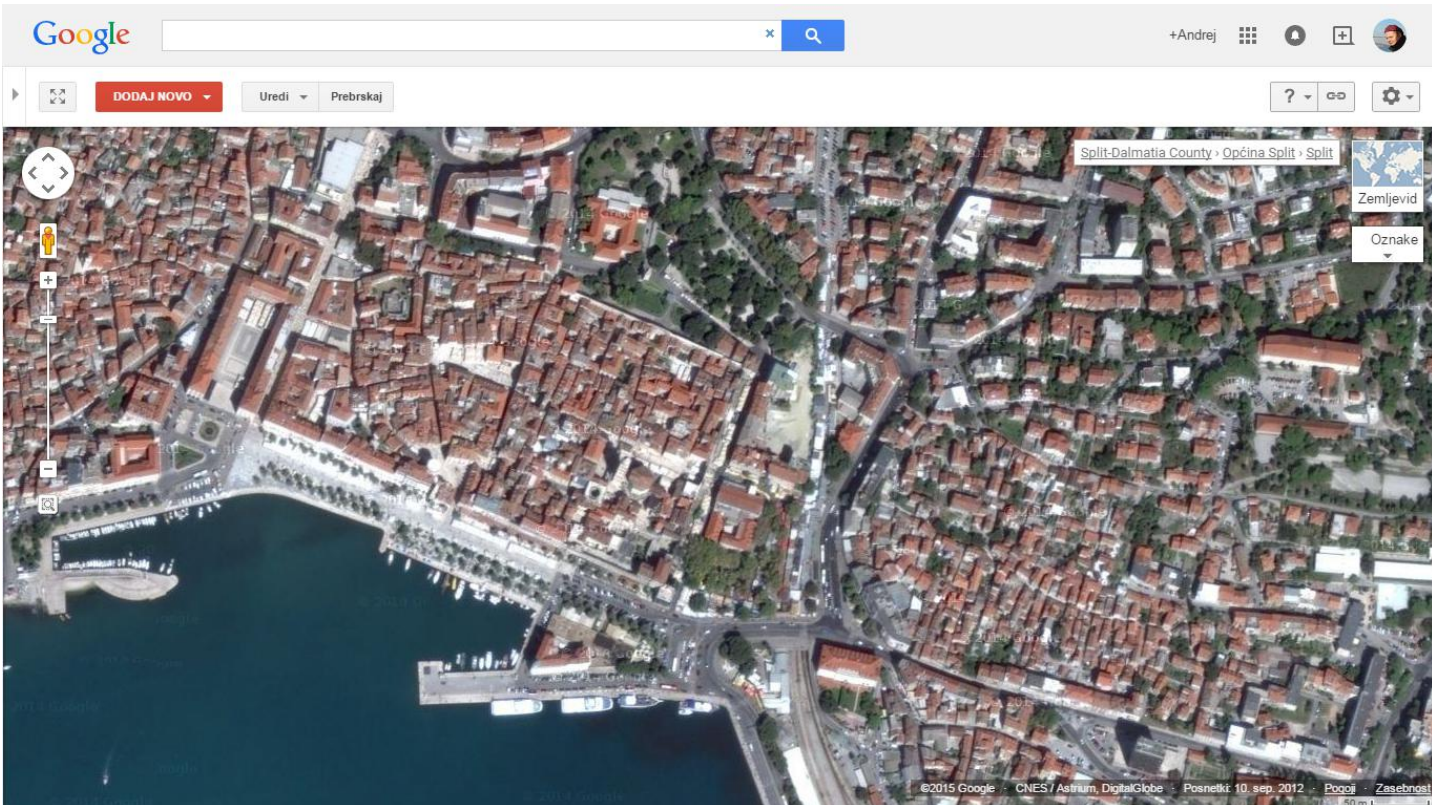


Fig. 2.5 Split, city core and the relation to the Adriatic, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

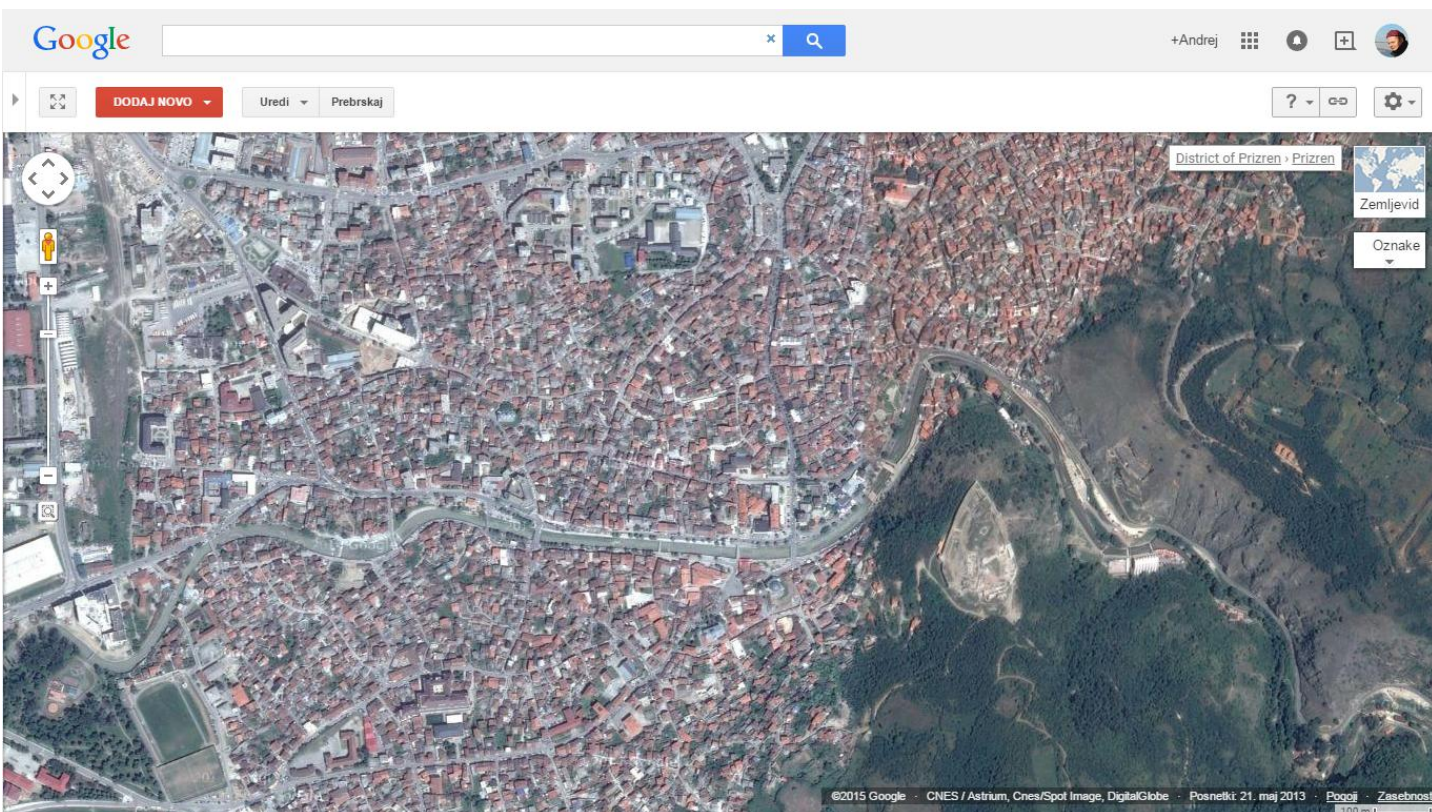


Fig. 2.6 Prizren, city core, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe

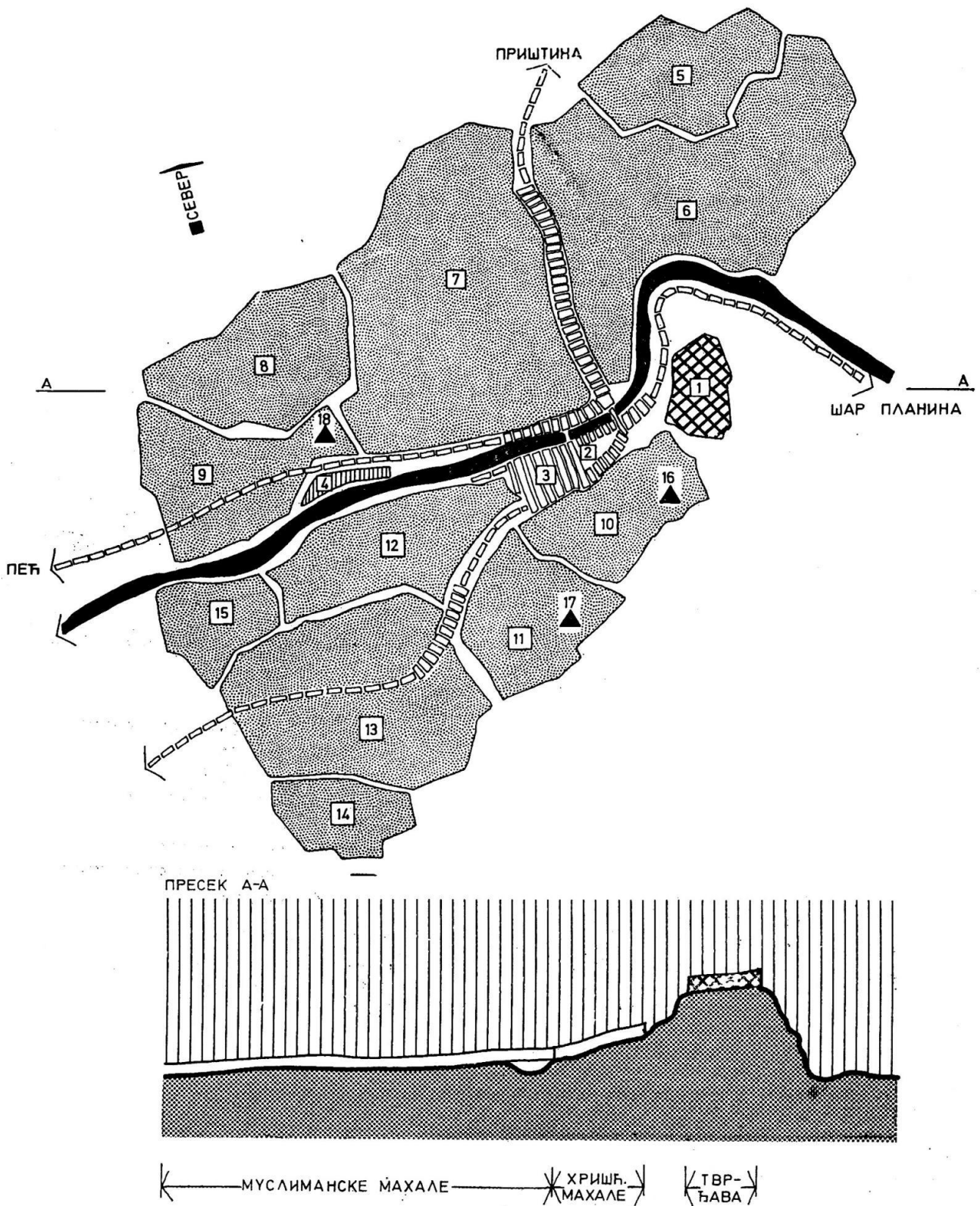


Fig. 2.7 Prizren, mahala spatial organisation scheme, Kojić, p.24 [16]

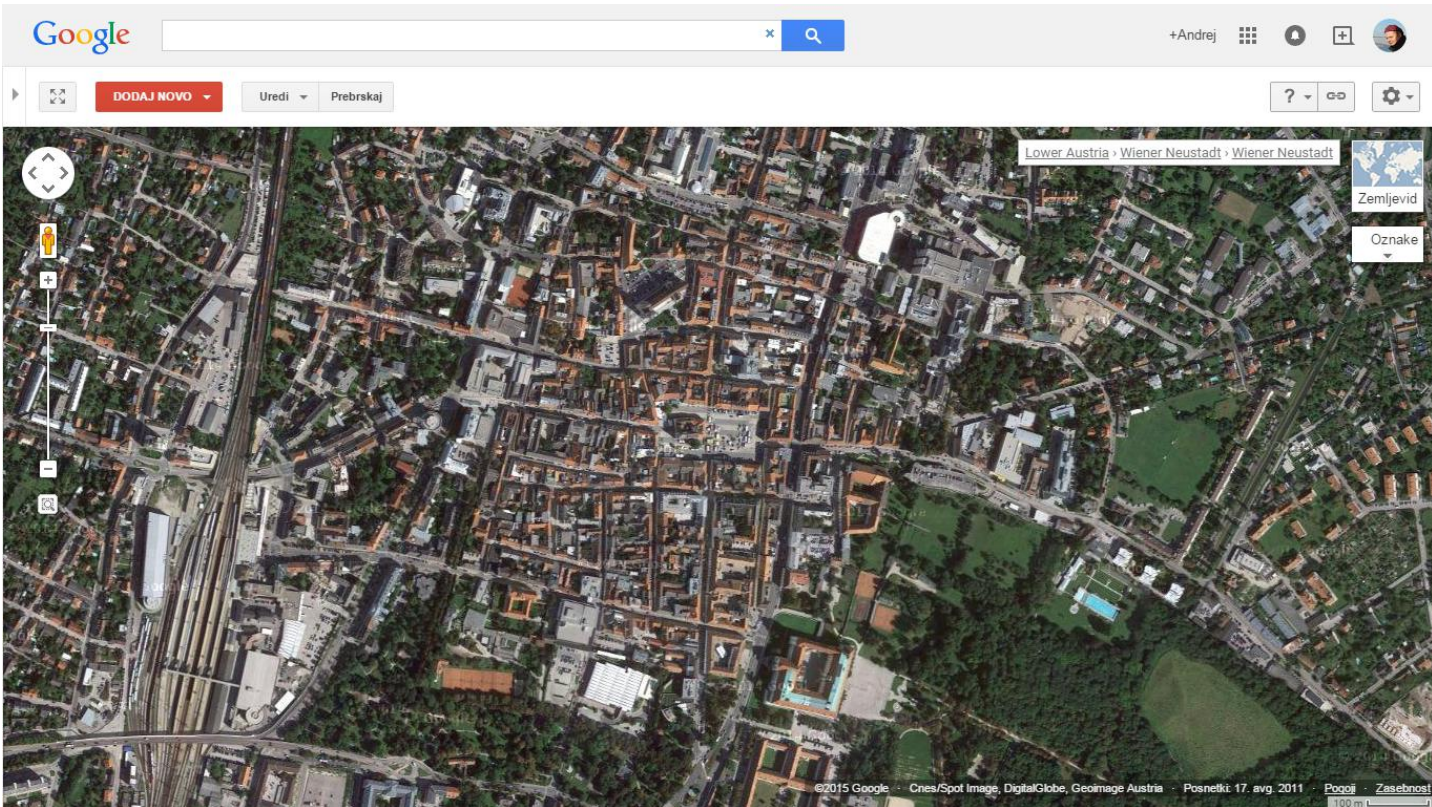


Fig. 2.8 Wiener Neustadt city core, Google Maps, ©2015Google, Cnes/Spot image, Digital Globe, Geoimage Austria

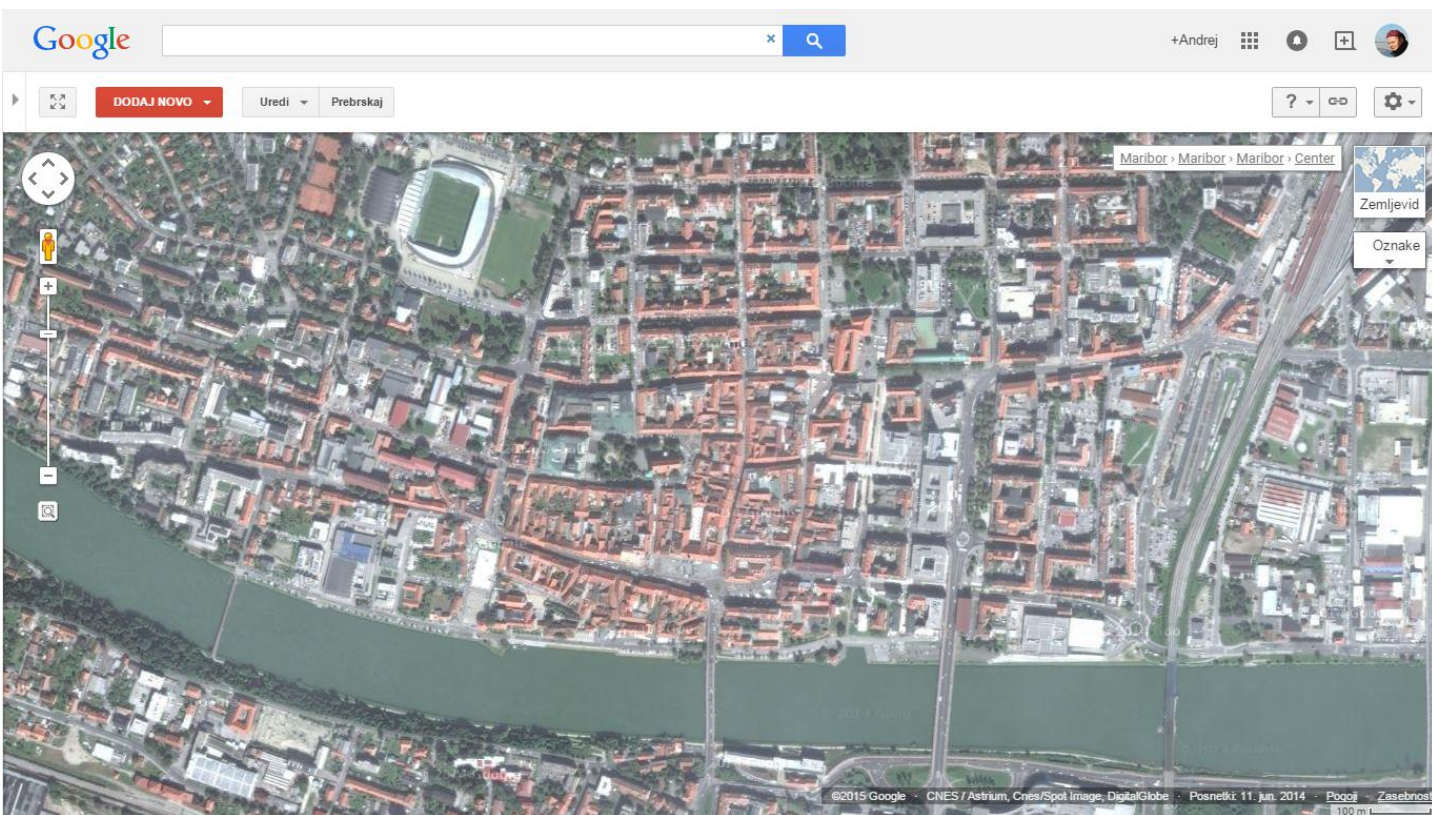


Fig. 2.9 Maribor city core, Google maps, ©2015Google, CNES/Astrum, Cnes/Spot image, Digital Globe

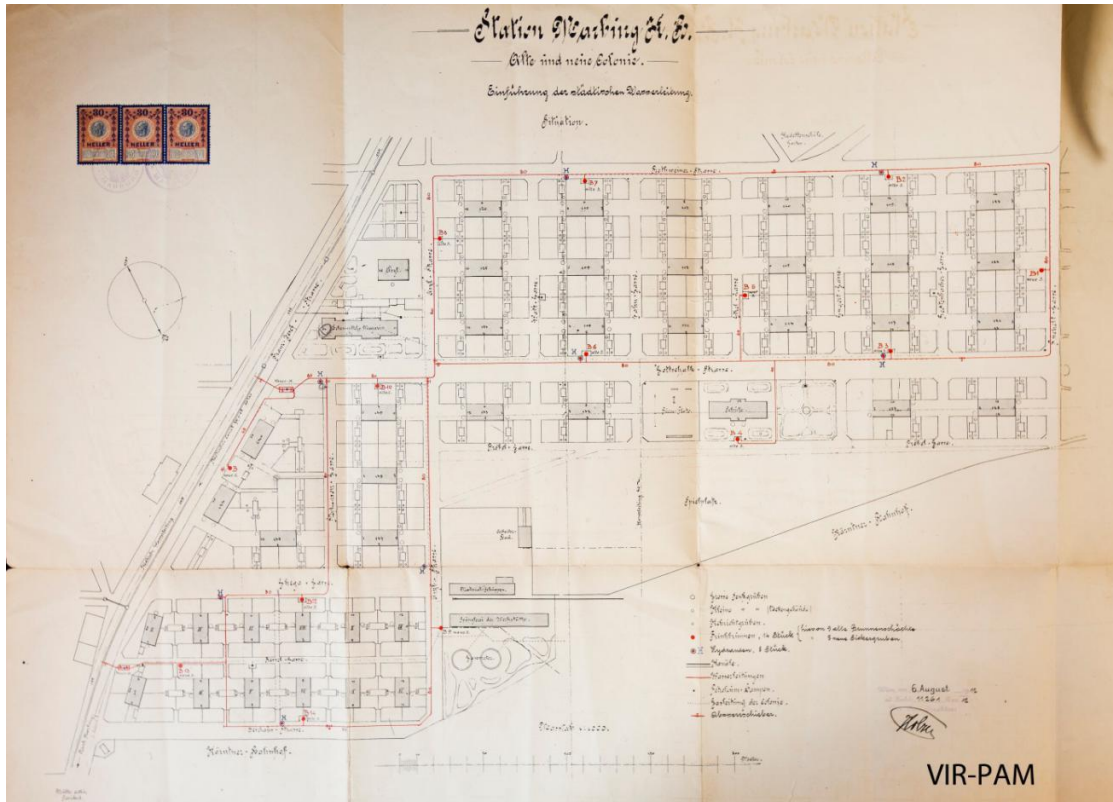


Fig. 2.10 Maribor railway workshops settlement »Železničarska Kolonija« was established when the Vienna – Trieste railways was built and Maribor was the workshop city on the half of the line, original Urban design, Pokrajinski Arhiv Maribor

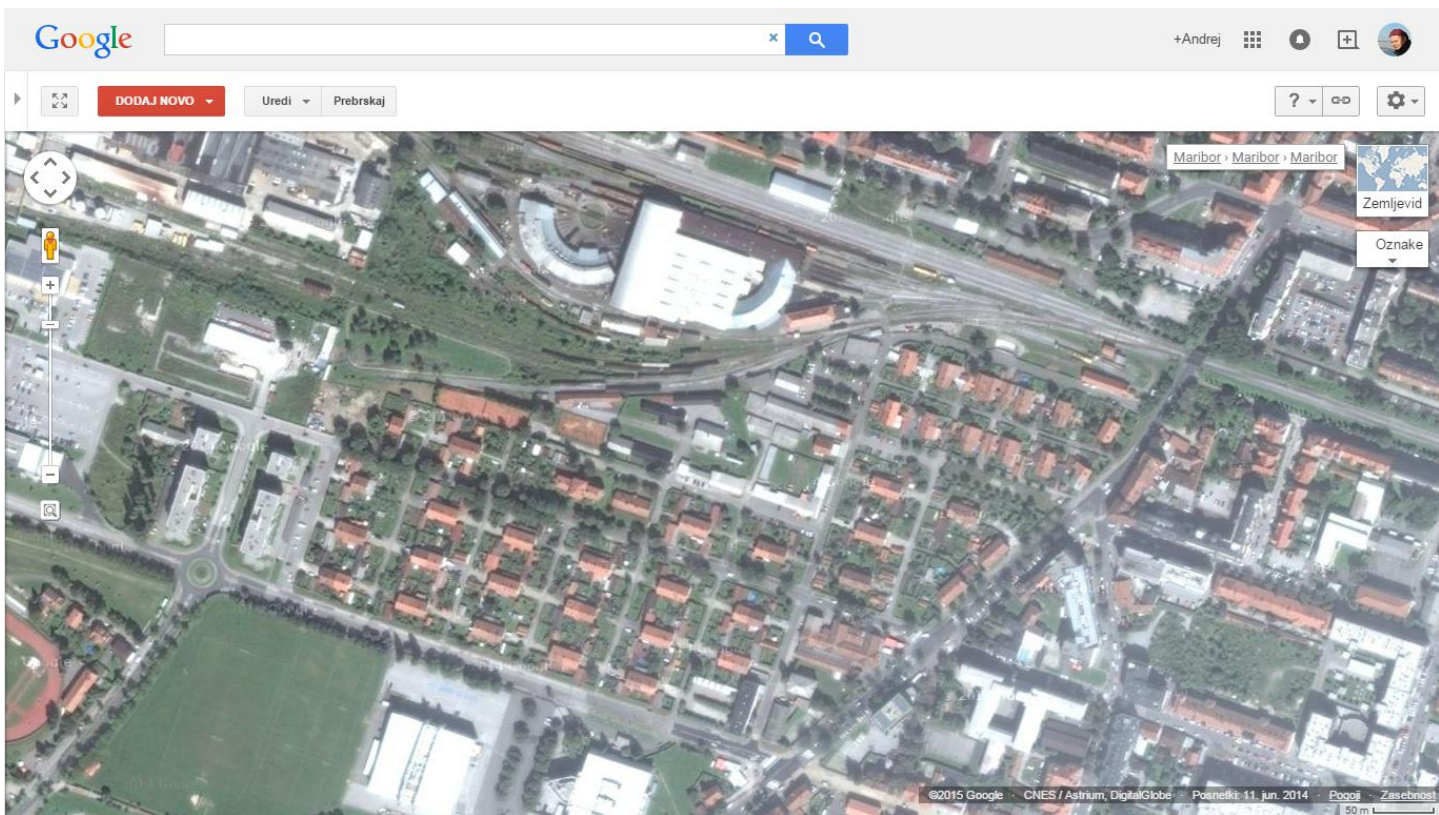


Fig. 2.11 Maribor railway workshops settlement »Železničarska Kolonija«, Google Maps, ©2015Google, CNES/Astrium, Digital Globe

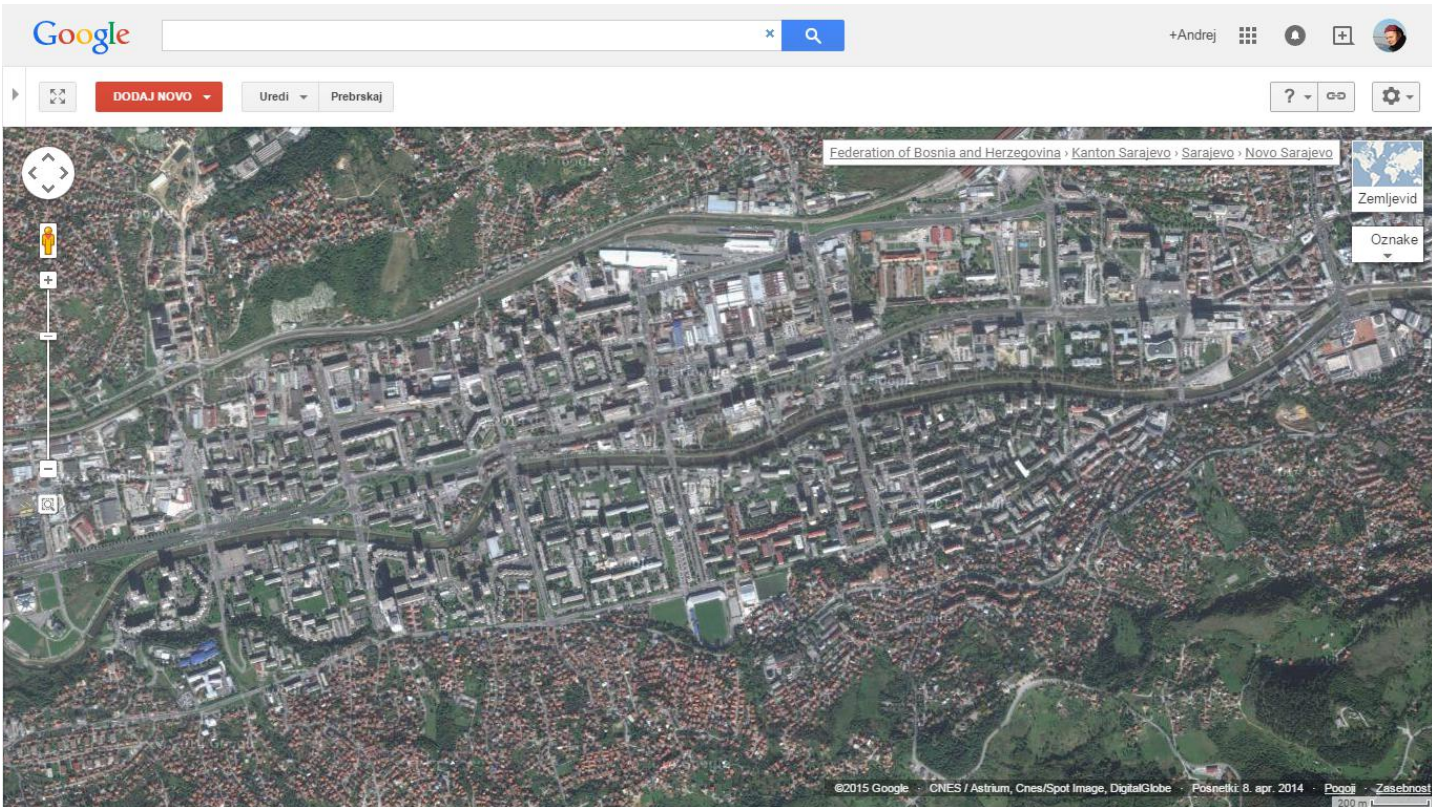
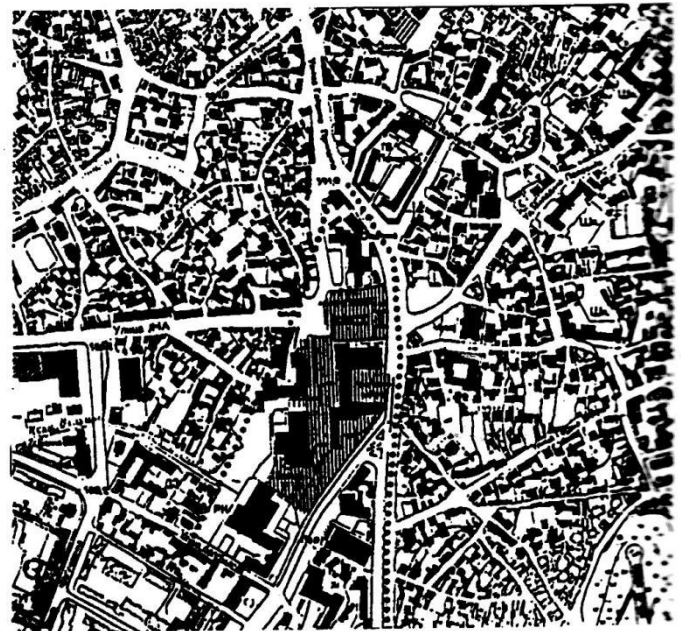


Fig. 2.12 Sarajevo, western socialist expansion and permissive outskirts individual buildings, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe



PRIŠTINA POČETKOM XX VEKA

PRIŠTINA DANAS

Fig. 2.13 Priština, comparison between the beginning of 20th century and in 1996, Stojkov, p.268 [14]

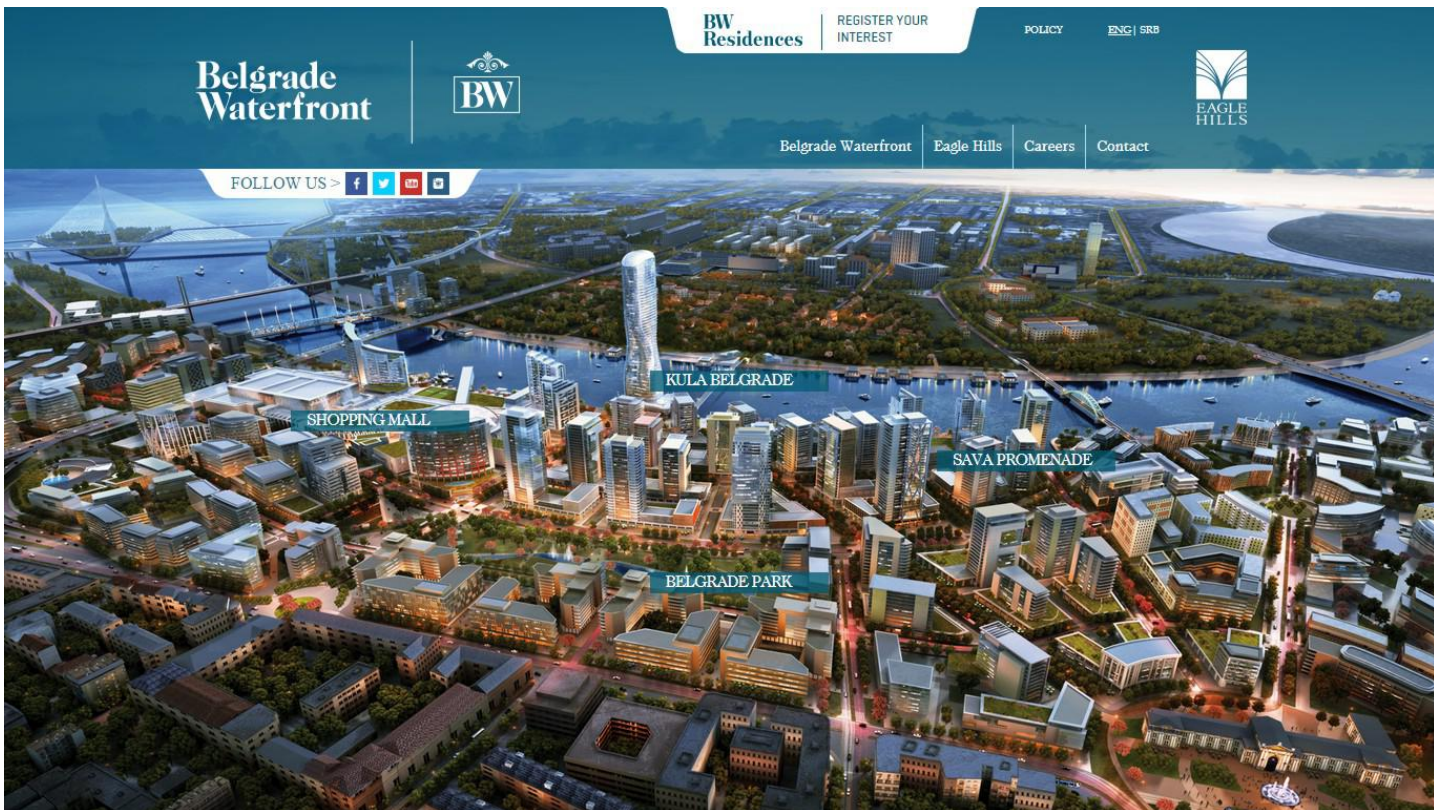


Fig. 2.14 Belgrade Waterfront simulation, from www.belgradewaterfront.com/en , 6.4.2015

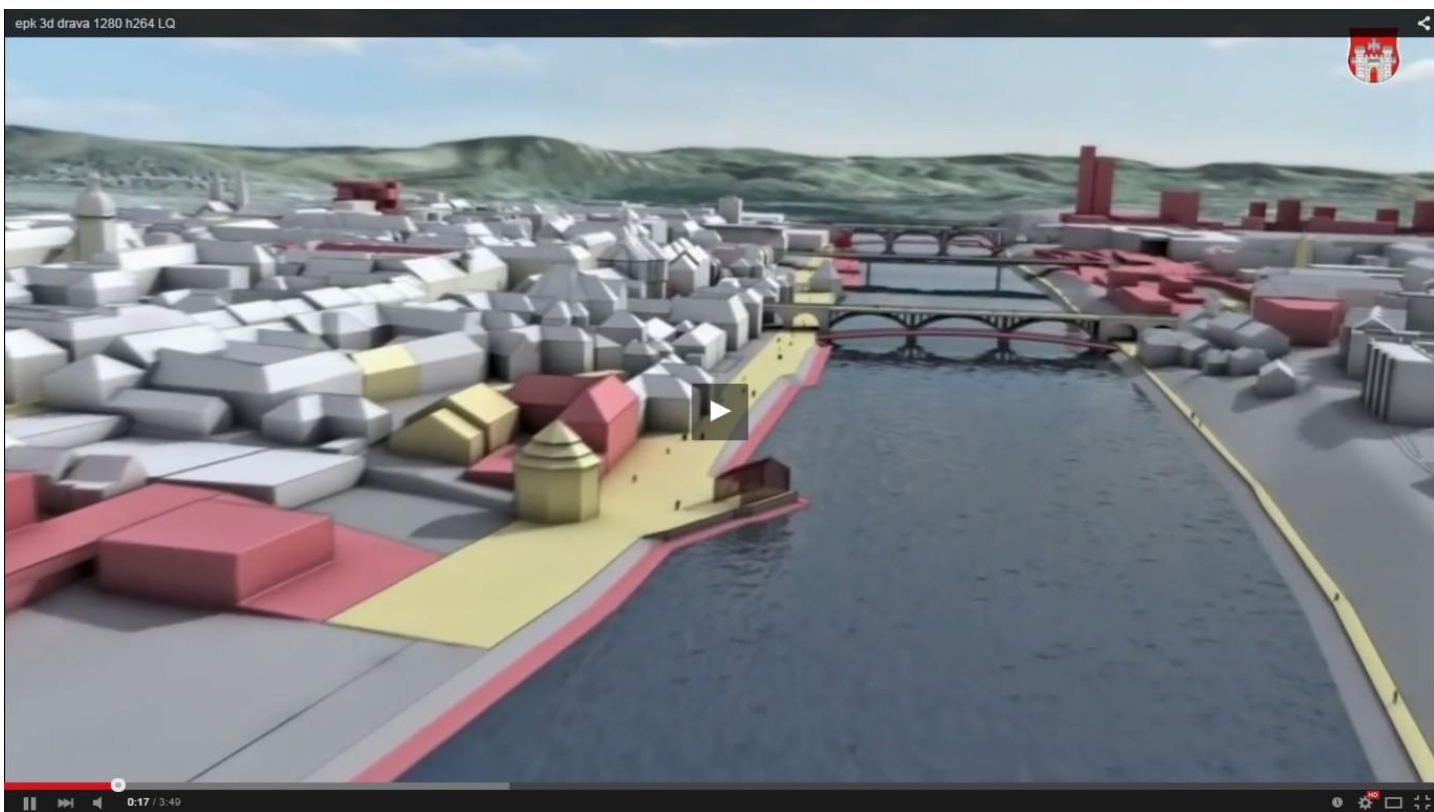


Fig. 2.15 Maribor EPK extension, from <https://www.youtube.com/watch?t=19&v=G5xZv1kmlI0> , 6.4.2015

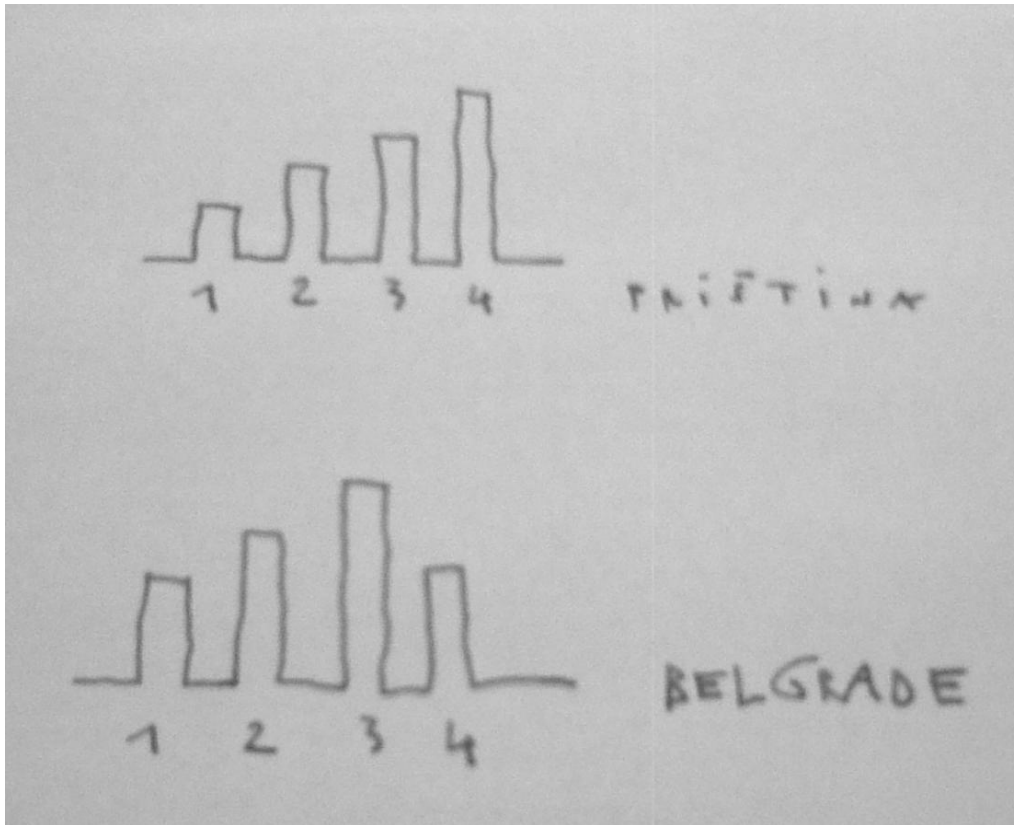


Fig. 2.16 City development fingerprints for Priština and Belgrade, sketch by the author

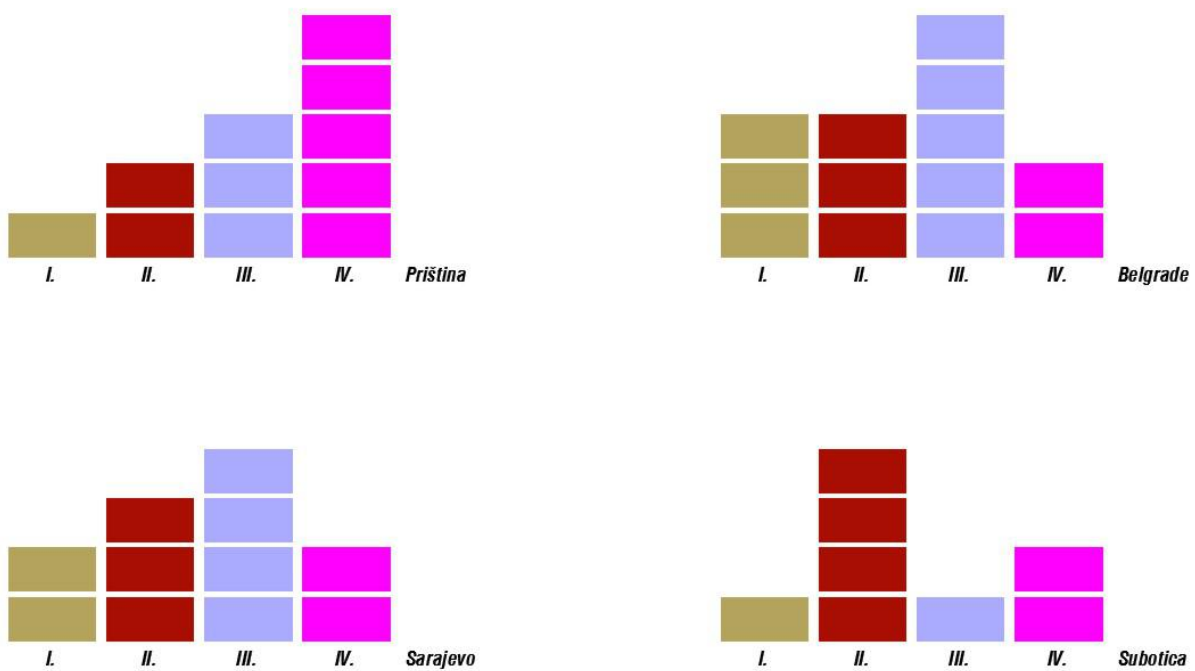


Fig. 2.17 City development fingerprints for Priština, Belgrade, Sarajevo and Subotica, graphics by the author

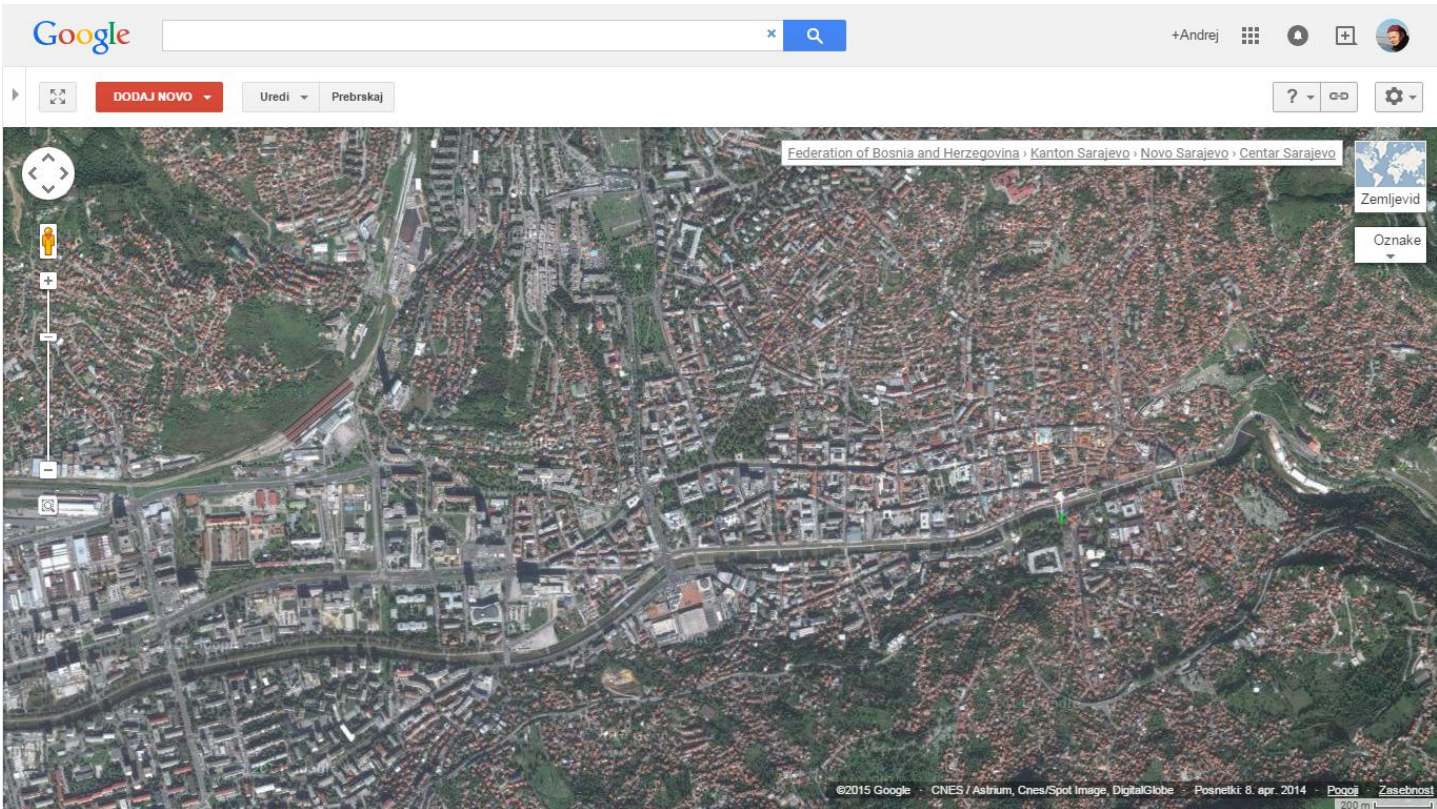


Fig. 2.18 Sarajevo city core – the Ottoman Čaršija and Mahalas are extended to the west in an Austrian »Gründerzeit« fashion, Google maps, ©2015Google, CNES/Astrum, Cnes/Spot image, Digital Globe

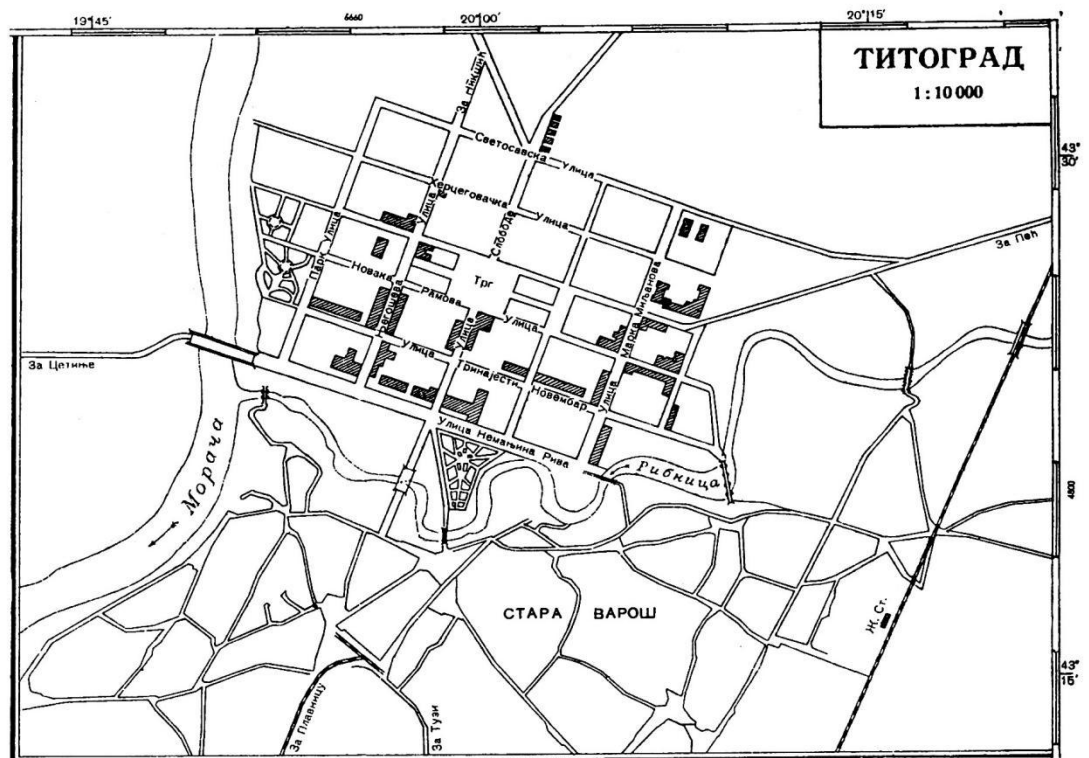


Fig. 2.19 Podgorica (former Titograd) city core – the Ottoman Čaršija and Mahalas are extended to the north in an »Gründerzeit« fashion, scheme from Kojić, p.81 [16]

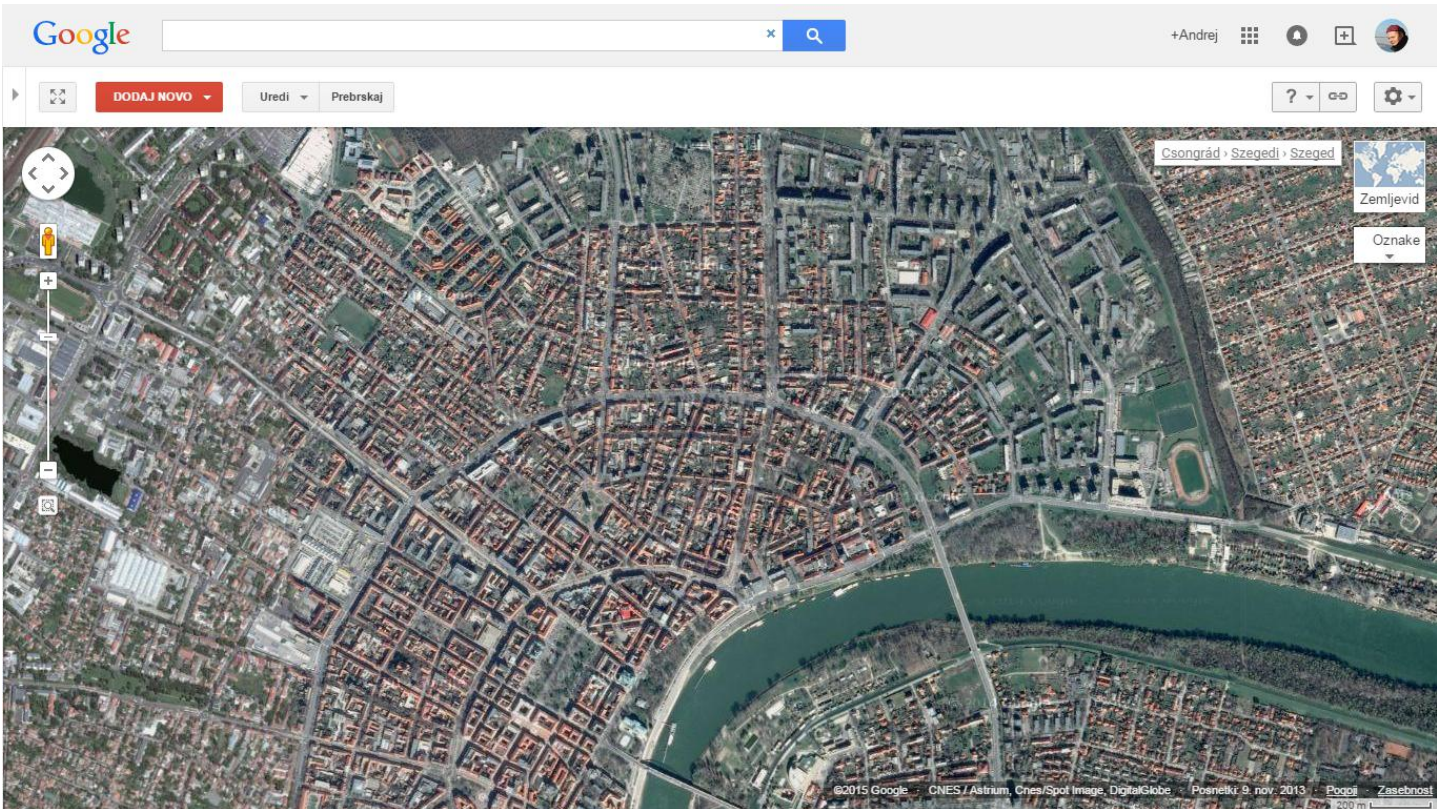


Fig. 2.20 Szeged, border between the »Gründerzeit« and the »Socialist« structure, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe



Fig. 2.21 Podgorica (former Titograd) city core, Google Maps, ©2018 Google

Appendix 1 to Chapter 2

Paper *“Bye Bye 20th century: Similarities in the urban development of ex-Yugoslav cities”*

Presented and published in Vladimir Mako (ed.) et al, International conference Architecture and Ideology, Proceedings, Belgrade, Faculty of architecture, University of Belgrade, 2012

Andrej Šmid⁴²

BYE BYE 20TH CENTURY;

SIMILARITIES IN THE URBAN DEVELOPMENT OF EX YUGOSLAV CITIES

Abstract | *From a two decades time distance the face of almost every former Yugoslav city appears to reveal three distinctive urban entities: they show three different faces: the »brave new city« of the socialist era; the »charming, always regenerating old, classical city« and the brutal, illegal, »under the carpet« city. All of them are results of the city management streams and the power relationships in the carefully constructed appearance of the »socialist urban planning«.*

The city structure comparison of five ex Yugoslav cities - Belgrade, Sarajevo, Split, Priština and Maribor - shows similarities that are almost intentional. The urban planning attitude throughout the history reveals three powerful ways of thinking and acting that generated three city planning principles and resulted in built zones and structures: the developments of the functional city parts, the preservation of historical structures and the permissive, half illegal city extensions.

After comparing these five cities today it only seems that the permissive, half illegal current is prevailing in the last twenty years of city development. Since the main urban development themes are not actual anymore, the former positions of the urban planners and architects are outdated; with the dissolution of the brave 20th century ideas the first decade of our century shows that the urban perception is altered – the positions of urban planning on the other side are mainly defended as unchangeable.

To develop the ex Yugoslav cities with similar urban history there are two statements an urban planner of the 21st century has to take into consideration. The first is that the 20th century is over and its city development principles are outdated. The second painful statement is that the position of the urban planner and designer has been irreversibly changed.

Keywords | *Urban planning, 20th Century, Belgrade, Functional city, Urban structure, Yugoslavia*

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1. INTRODUCTION

1.1. The research frame

The comparison research was completed in 2011 and is based on a study of urban structure of more than fifty cities in central and eastern Europe with focus on former Yugoslav cities. According to the available aerial photograph digital data [1] the cities of medium and large size (from approximately 100.000 to 2.000.000 inhabitants) were taken into consideration. The procedure included a detailed study of urban structure and urban fabric, research of the city urban development history and an observation of the entities and elements of the specific urban structures in comparison to the urban development facts. According to the gathered data structural similarities in former Yugoslav cities were recognized and defined.

1.1.1. The quality of spatial data

The spatial data and aerial / satellite photographs are very usable for the region since 2009 when all of the former Yugoslav territory and in general all Europe is covered in data that corresponds to a scale of at least 1:5000 scale. The scale is generally used in general and detailed urban planning and is suitable for various structural and studies of urban forms, data is easily and publicly accessible and the photographs depict enough actual state of the observed cities, i.e. the time gap between the photograph data and actual state of the city does not exceed three years.

1.1.2. The observation and comparison procedure

The chosen cities were thoroughly studied in all their urban territory, i.e. throughout the urban fabric and suburbia, including the green system of the city borders, the surrounded rivers or sea. The procedure included three levels:

- City view: a structural study of the relationship built / non built environment,*
- Urban structure view: a structural study of different city parts according to the readable and recognizable structural entities and*
- Detailed view: detailed reading of the urban fabric up to the urban block size.*

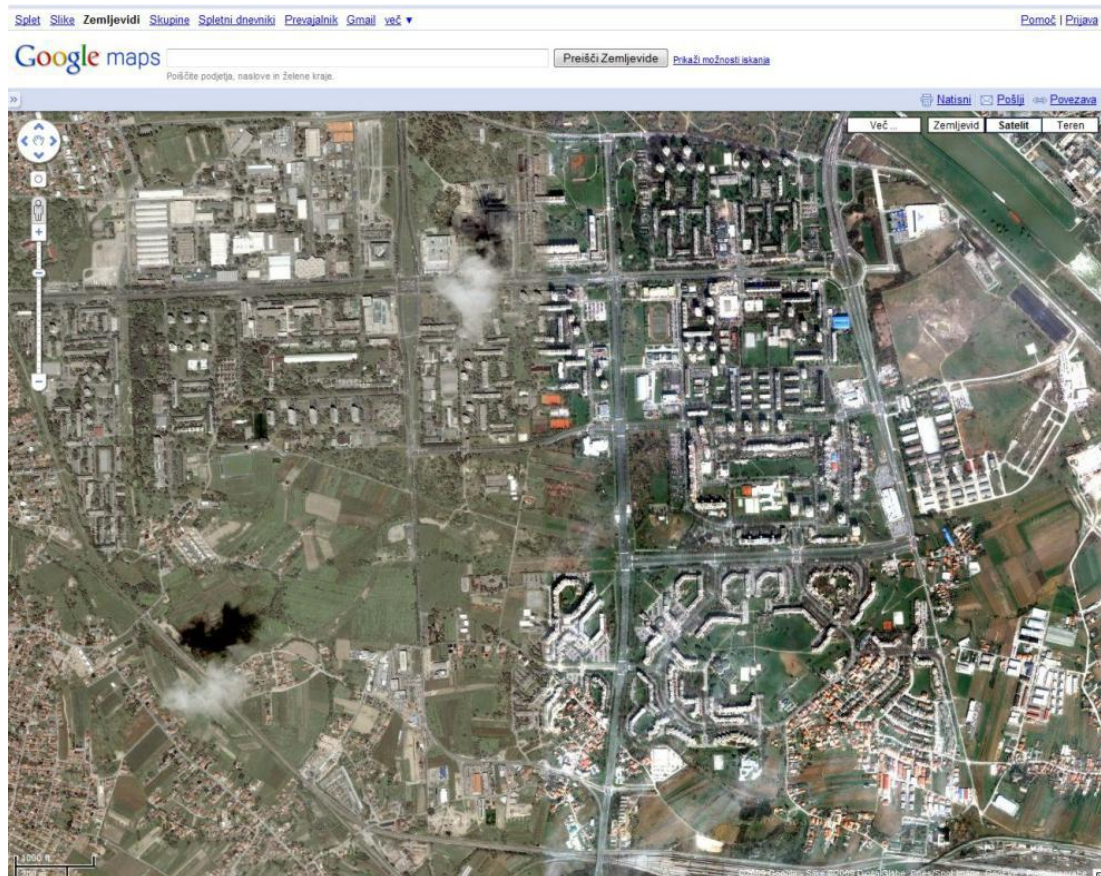


Fig.1: Urban structure of Zagreb, southern area “Novi Zagreb”, urban structure view (maps.google.com)

The procedure was captured in screenshot digital photographs that are representing the basic findings, these were later used to compare the city attributes. The research continued in detailed second wave of detailed view studies that were based on more thorough observation and additional check up of the recognized phenomena.

1.2. The compared cities

For presenting the structural similarities a selection of fifteen former Yugoslav cities was made and five of them were chosen on the basis of a good ability to represent the common features in the best possible way: the cities chosen for the structural pattern quality were Belgrade, Sarajevo, Split, Priština and Maribor.

Belgrade was chosen as the big-scale city development of modernism and in the sense of importance as the “mother of ex-Yugoslav cities”. According to many distinctive theoretic studies of a modernist functional city it is also a starting point for seeking for answers and defining the phenomena of an “ex Yugoslav city”.

Sarajevo was chosen because of its clear linear readability: the urban development shows very clean development progress and all the true attributes of an ex Yugoslav approach to urban planning.

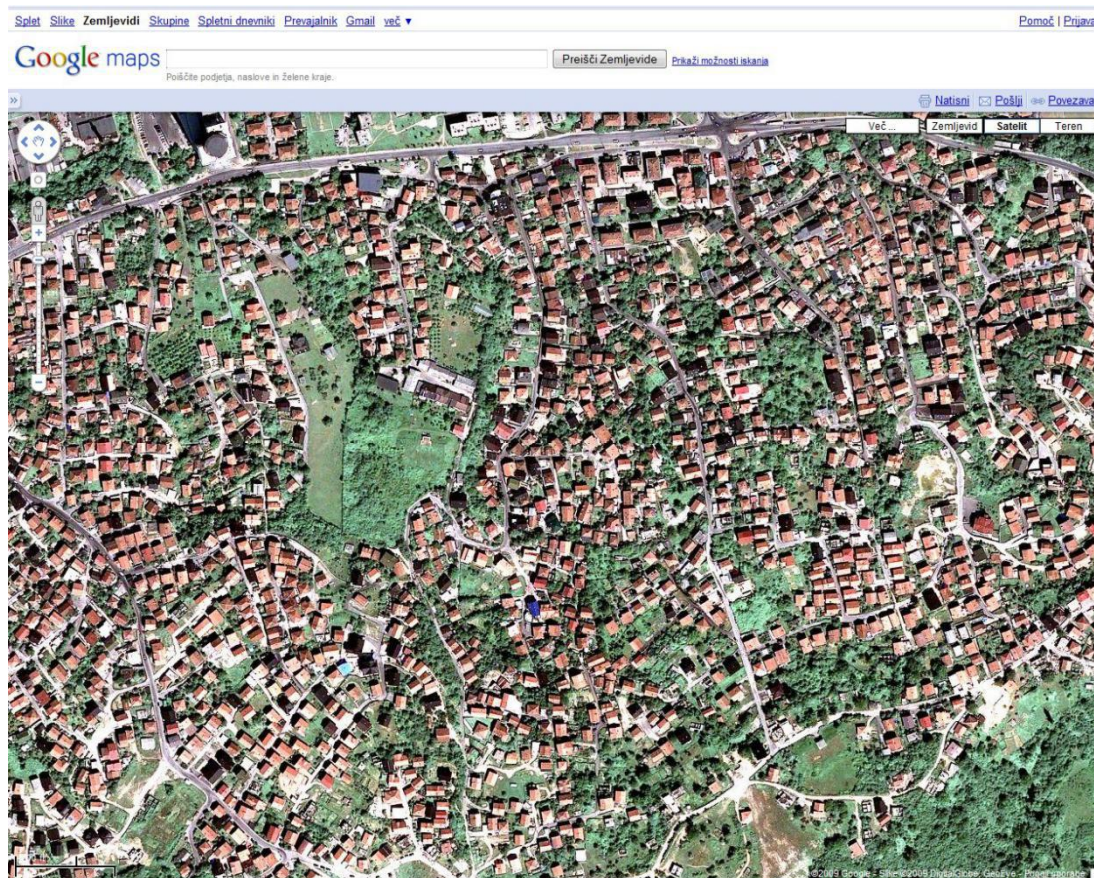


Fig.2: Urban detailed structure of Sarajevo, southern city area, detailed view (maps.google.com)

Split was chosen because of exquisite historical layers that were respected during all the urban development phases, and because of its very limited development possibilities due to the topographic circumstances and boundaries.

Priština was chosen due to its planned development and boost-up in the time of socialist modernism; the city was quickly overdeveloped and artificially equipped as a capital of an important region.

Maribor is one of the cities that belong to the central European urban tradition, yet shows all the development proceedings that are similar and unique for all the functional developments of former Yugoslavia.

During the research, all the cities were visited at least three times and the conclusions of the observations were discussed with several local urban planners.

2. POSITIONING THE EX YUGOSLAV CITY BETWEEN THE EAST AND WEST EUROPE

The big question of the distinction of the “ex Yugoslav city” phenomena was opened at many discussions dealing with the modernist past of the former state urban development [2]. As the ex Yugoslav state differed from many European state forms, the urban planning and the resulting city structures show clear distinctions from the cities of western Europe on one hand and from the cities of eastern Europe on the other. Basically the western cities do not show as bold urban modernist development as the Yugoslav cities and the eastern cities show less respect the existing urban layers than the Yugoslav cities.

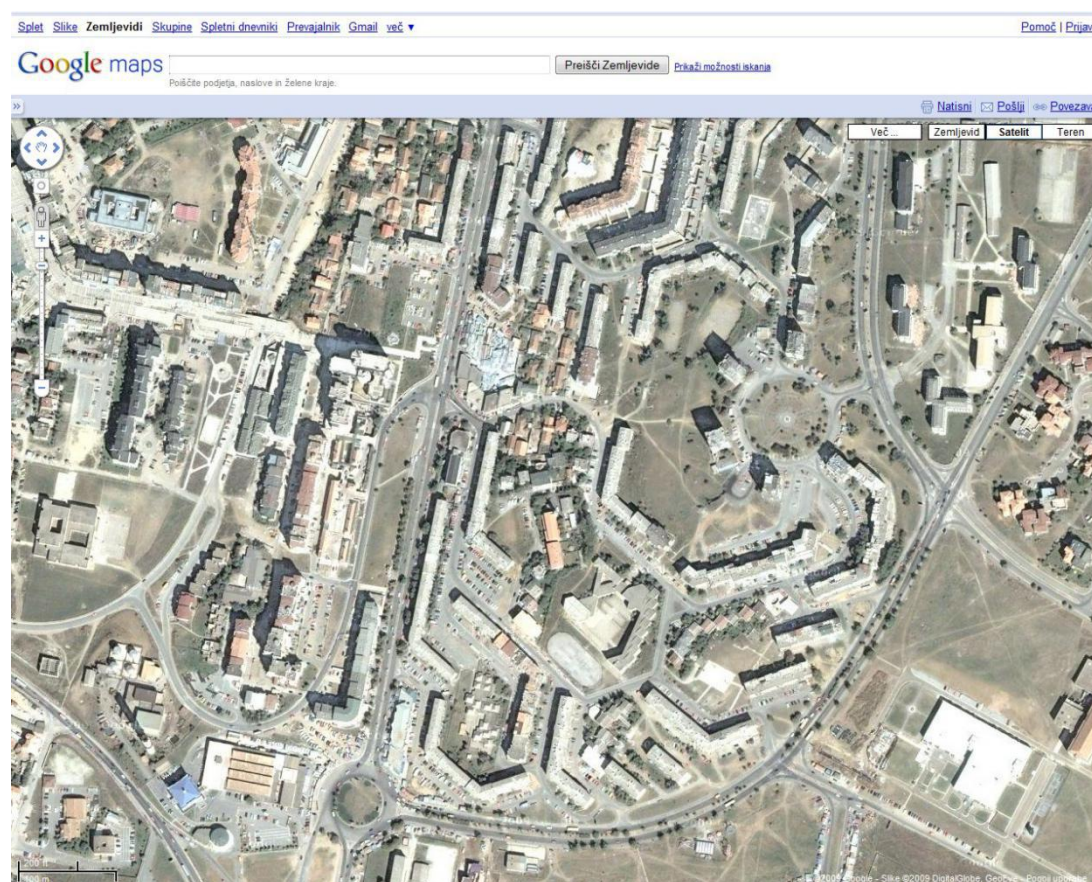


Fig.3: Southeastern city border of Priština, detailed view (maps.google.com)

2.1. The attributes of the city development following the historic layers

The first distinctive attribute of a typical ex Yugoslav city is a clear respect of the historic urban fabric and the preservation of the readable historic layers. In the time when modernism and developments of the post 2nd world war urbanisations are a

closed chapter, a clear principle is to be proven in all the observed cities: the highest level of respect for the historic urban structures is immanent to the cities of the same former Yugoslav tradition: city developments are performed in a way that at least affects the existing recognizable structure and in a way performed similar to the central European principles of city renewal and revitalisation. The principle of not touching the historic entities is extended to the functional city structures – they are mainly left out from the city developments in the period after 1990.

Following the historic layers means that the cities of former Yugoslavia have preserved an exquisite readability of the urban fabric; perhaps first performed in Sarajevo after 1878, the “culture” of respecting the qualities of the old structures and defining these qualities is a first root of the way to “urban structure preservation” which is immanent to almost all urban planning procedures in old city structure modifications.

The proof for the unity of the “preservation of historic layers principle” lies in the fact that it does not matter what the historic layers are – be the ancient Turkish structure of the Tophane city part of Priština or the central European city core of Maribor, the remains of the roman Diocletian palace of Split or the Sarajevo’s Baščaršija Turkish city business core with the mahala structures around it, be the Austrian “Gründerzeit” closed city blocks in Belgrade, Sarajevo or Maribor – the newer developments never interfere with the recognizable urban gestures, forms and structures of the past. In this way a sensible balance between old and new is achieved and it distinguishes the ex Yugoslav cities from the most cities in the eastern Europe neighbourhood. Perhaps it lies in the fact (or represents it) that the inhabitants of the former state never took any government or ideology for granted.

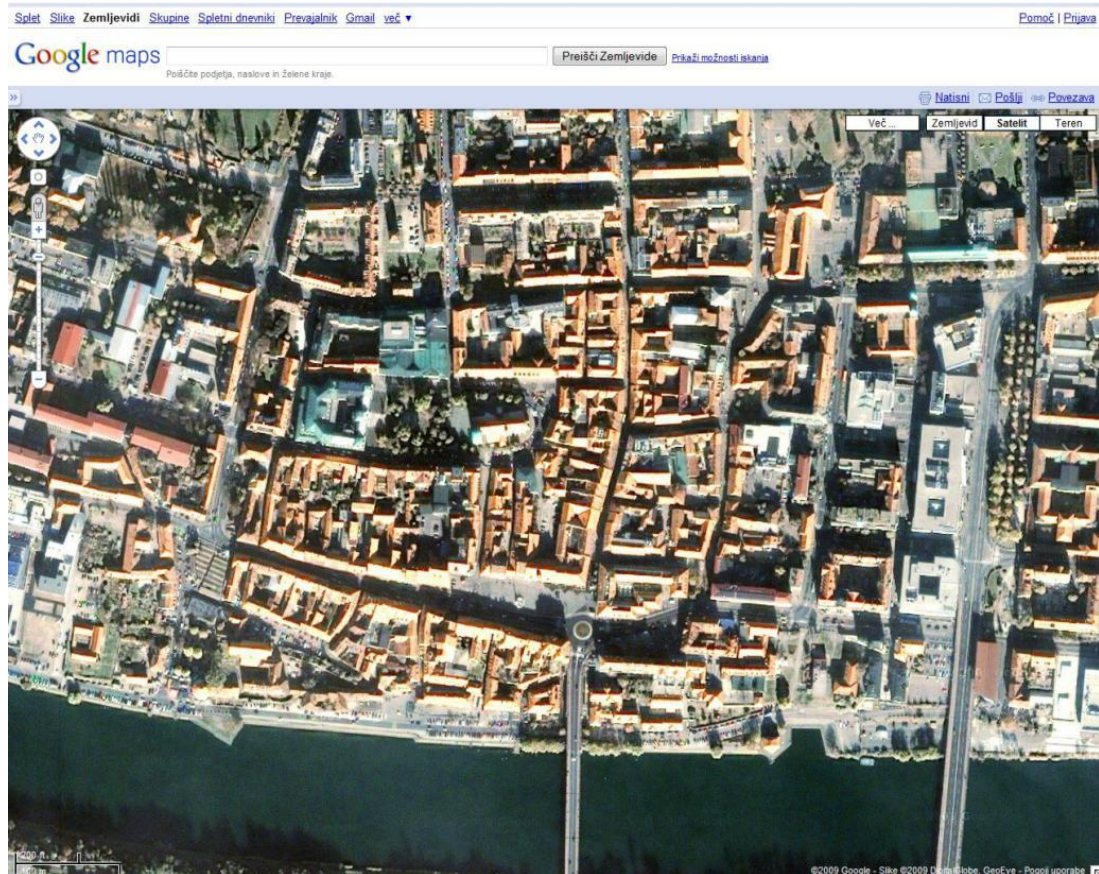


Fig.4: Maribor, the medieval city core, square of 500m length, detailed urban view (maps.google.com)

2.2. The pluralism of the two city principles in the 20th century

Apart from the glorious days of the urban modernist developments of the post 2nd world war urbanization it is impossible to overlook the two principles of city understanding. As Miloš R. Perović [3] confronts the two city principles, the “classical” city and the “functional” city in a harsh critical way, the reality shows that the city development and renewal have been done simultaneously and, from a time distance, without a real preference or competition.

Almost all the city developments in the former state oscillate from “functionalist” to “classical” right one after another or even simultaneously. The important fact is not the nature of development, but the understanding of both principles at the same time.

The society of ex Yugoslavia and the loose ideologic bonds of the architecture and urban planning have obviously tolerated both principles, and have made both urban results possible: on one hand the “brave new functionalist city” in the sense of the Athens Charter was built and right across the river the old city core was renovated. Such a cohabitation of two procedures in urban planning was not possible in

Bucuresti, Tirana or Skhodre and on the other hand large modernist urbanisations that created a duality between the new and the old city were out of the question in Graz, Vienna or Basel.

Such pluralist city development is found in the majority of relevant former Yugoslav cities of the medium size.

3. THE FOUR READABLE PERIODS OF EX YUGOSLAV CITIES

The research of the urban structure of the mentioned five cities shows that according to the principles notified as unique for the urban development in the former Yugoslavia there are four typical readable time and structure periods in the urban structure. Due to the circumstance that the city developments is performed in a not constant growth, but more in a way of “climbing the stairs”, the periods and modus of city expansion can be outlined in the four stages and types:

- *The core period is the beginning of the city development. It does not matter if the background is initiated by the Romans (Split, Belgrade), Turkish reign (Sarajevo, Priština), southern German provincial border government (Maribor), the core is fully formed and developed at the end of the medieval age.*
- *The city development of the “Gründerzeit” – the emerging of the civil society and the reforms that triggered the building of the public city facilities form the “classical city”, distinguished by three city elements: the urban block, the square and the city street. It is presented in the “dense” urban block form and the “garden” regulated suburban villa urban typology.*
- *The functional city extension – almost all the ex Yugoslav cities have been extended in the time of the modernization to the large city parts, built by the rules of the Charter of Athens.*
- *The “under the carpet” city and the “turbourban developments” are the bastard children of the “official” urban planning and all the cities know them: although not recognized and hated by the urban planners the vaste entities of non-regulated or half-regulated, badly organized city parts are a fact. On the other hand, they are vivid, livable, cheap to build, affordable and loved by the inhabitants.*

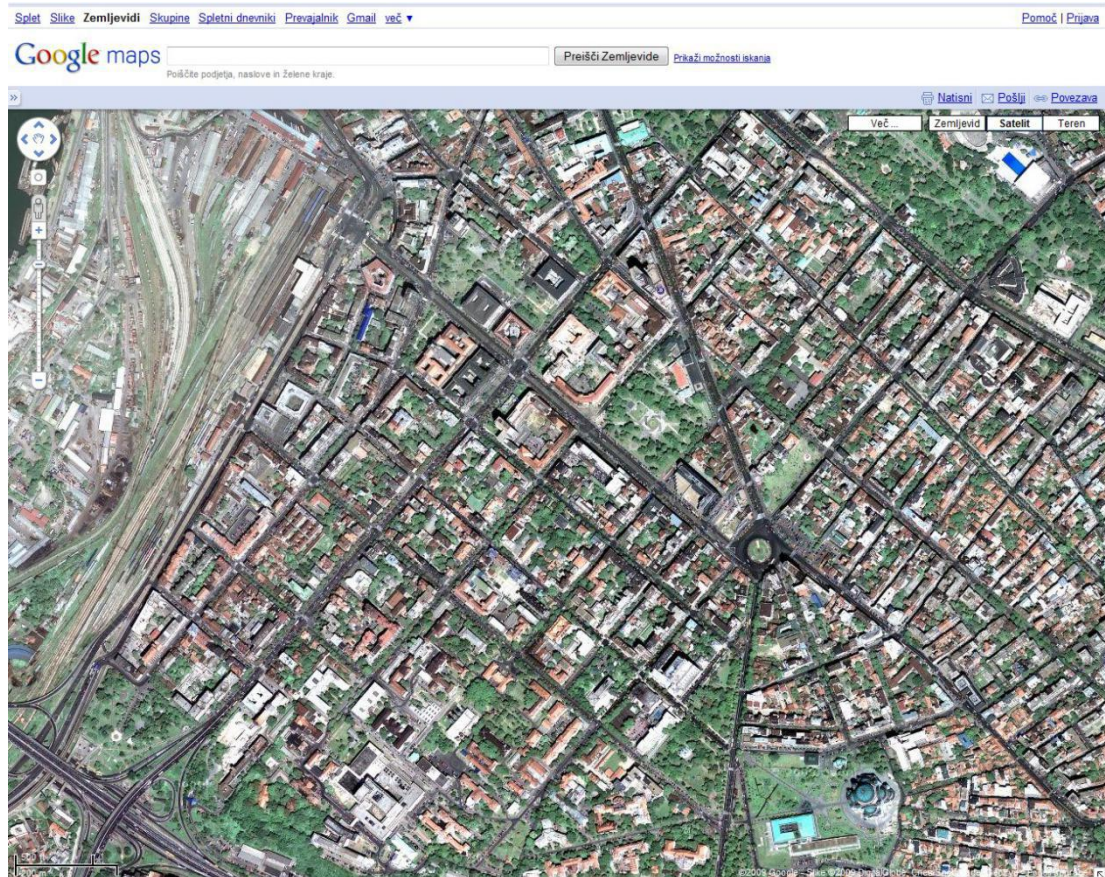


Fig.5: Readability of the “Gründerzeit” urban blocks, Belgrade, urban structure view (maps.google.com)

3.1. The functional and the modernist

The city form and the developments of the functional and the classical city can easily be misjudged by the modernist or contemporary architecture that builds it. The quality of the ex Yugoslav classical cities is that their architectural development is fully conform with the classical city principles: the architects of the modernist period show a great understanding of the public spaces, street and urban blocs in a completely classical fashion, be it in the Maribor medieval core or in the Belgrade streets. The classical city with its historical layering is mainly open to modern and contemporary architecture as long the architects understand the classical city.

It is also misleading that the functional city consists of modern architecture only - in understanding the principles building and extending it is possible and can be achieved. It only requires the same sensitivity as in building and rebuilding the classical city.

The one and the other urban planning principle are the “regulated” city scapes and they do not endure “unregulated” interventions. Although the urban planners are keen to initiate an urban culture [4], the task is almost impossible: the detailed urban design has almost nothing to do with the structural identity of the classical or functional city - it is unbreakably connected with the inhabitants and the users of the city.

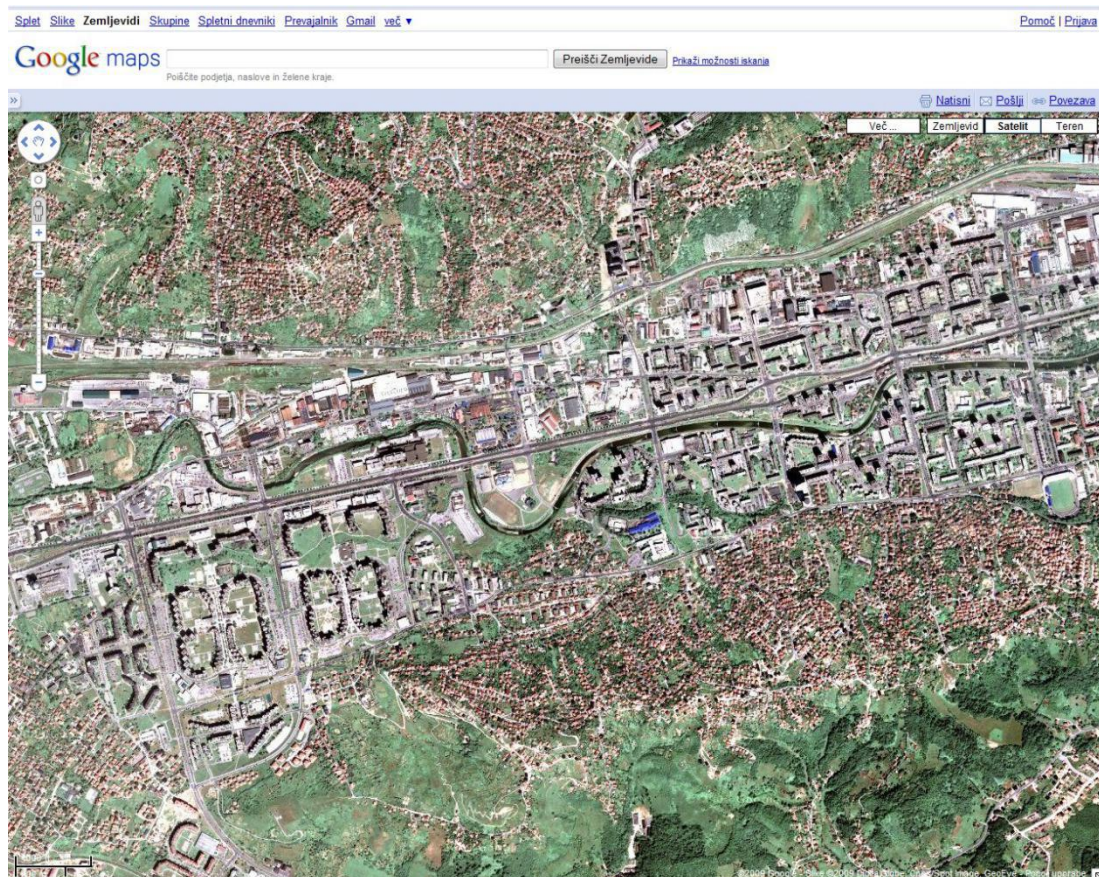


Fig.6: *Cohabitation of the functional and the illegal city areas, Sarajevo west (maps.google.com)*

3.2. The “turbourban” developments and the “illegal” urbanism

Sincerity of the users is best shown in the urban areas that have been growing since the functional city developments “in the shade” of the big functional city extensions. As the urban planners of the 20th century turned the blind eye to it, it grew to a status that was causing professional panic and was and still is revealing the modus operandi of the planners on one and inhabitants on the other side.

The non-regulated urban developments are a fact that cannot be ignored: it shows the other side of the society mechanisms, built “dark side” of city planning and city managing. It is also fact that it cannot be solved in the framework of the theoretic apparatus of the 20th century – but the 21st century offers multiple ways to access the solving of this so popular, so contemporary, so infinitely appealing and politically rewarding phenomena. The 20th century qualified it as “illegal” homebuilding, but the altered position of the architect and urban planner in the society presents it as a new challenge to create dense, irregular, vivid and colourful built areas as separate parallel urban realities aside the big city stories.

As the illegal city developments also affects zones that could otherwise be vital to the city renewal, such as the example of the Tophane area in Priština (Fig.7), a new strategy of urban management should be invented, since urban planning lost its role and lacks the triggering powers for any major development. Changing the role of the urban planner as the “leader of the built city progress” into the consultant of the civil initiatives and widening the opportunities of the unplanned development moves can present a real opportunity not to solve or to continue ignoring them, but to upgrade the “illegal” urban areas. Almost every city recognised them, many of them started to equip them, the next step would be upgrading them.

In this sense the altered role of the urban planners should be understood in the sense that Ezio Manzini proposed. [5]

4. CONCLUSION: THE URBAN PLANNING OF 21ST CENTURY

The urban planning in the states that followed the deconstruction of Yugoslavia left a legacy of five decades which shows undoubted ideologic, aesthetic, functional and procedural similarities realized in common architectural and urban heritage, but faces the new states and cities with almost identical problems. The largest of them is the one that caught the city governments without experience: cities are reorganized, redesigned, upgraded and renovated, but in most cases less and less inhabited: the demography shows that almost no city extension is really justified since the population growth is very poor and other needs for the city reorganization almost fulfilled and completed in the last two decades of so called transition.

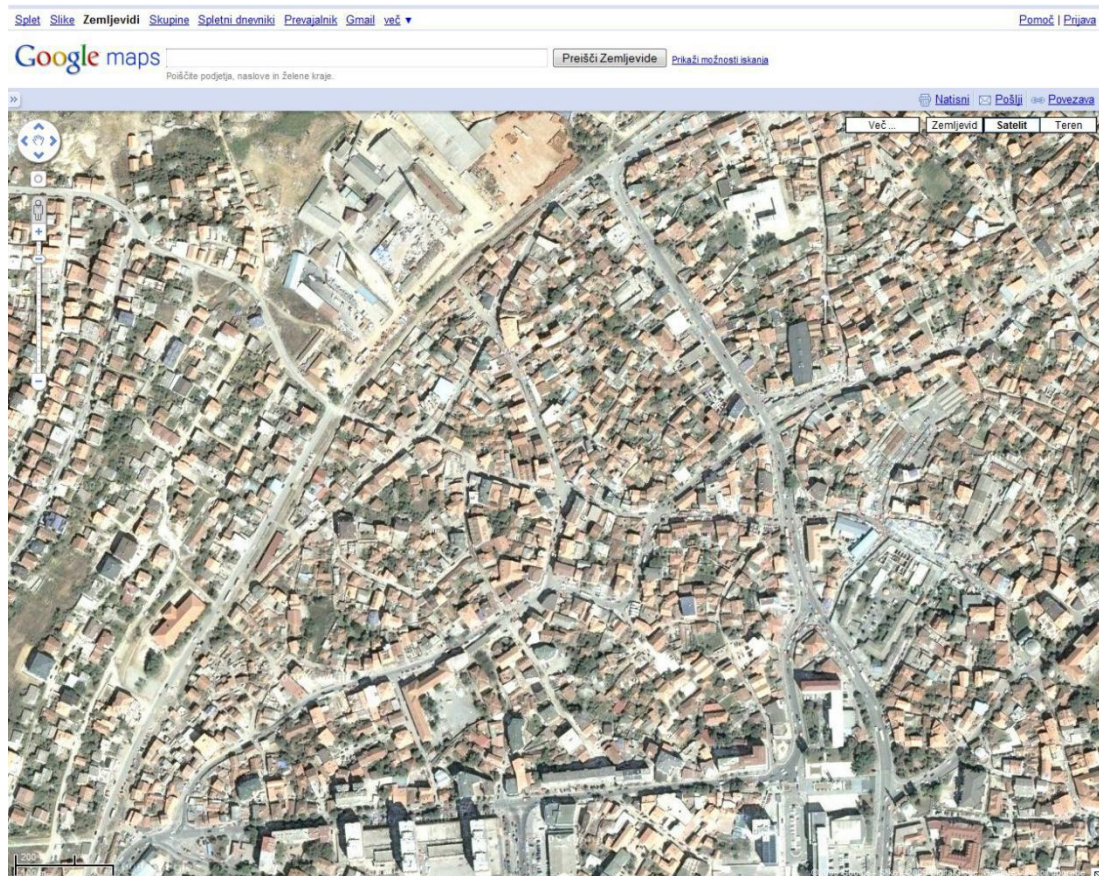


Fig.7: The “turbourbanism”, Tophane area of Priština (maps.google.com)

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Appendix 2 to Chapter 2

Paper "*The edge of Maribor through the prism of the edges of comparable ex-Yugoslav cities*"

Published in Mednarodna urbanistično/arhitekturna delavnica Maribor-jug = City:Edge: International urban planning/architectural workshop Maribor-South, Maribor, 2009-2010, ed. Uroš Lobnik, Peter Šenk, Maribor, Založba Pivec, 2014

THE EDGE OF MARIBOR THROUGH THE PRISM OF THE EDGES OF COMPARABLE EX-YUGOSLAV CITIES⁴³

Andrej Šmid

The city edge – typology and breakdown

Discussing the phenomenon of the city edge, it is first necessary to limit the research area to comparable cities. These include primarily the cities that share several similar characteristics besides the city edge: the relation to urban growth periods, the ways, cycles and scope of urbanisation in similar historical periods and, last but not least, the topographic characteristics of the wider area around the urban tissue.

Generally, the phenomenon of the city edges of ex-Yugoslav cities can be presented with the following classification:

- according to planning stages: planned and unplanned city edges;*
- according to topographic constraints: clammed and free city edges;*
- according to the density and typology of built structure: compact and perforated city edges;*
- according to the period and the prevalent urban planning policy: the city edges of the Middle Ages, the late 19th century classicism⁴⁴, rationalism of the first half of the*

⁴³ The present findings are part of a study on medium-sized cities in the area of former Yugoslavia, which is being undertaken in the framework of doctoral studies on “five cities” at the Faculty of Architecture, Graz University of Technology in Austria, and is concerned with similarities or defining common characteristics or even the type of a “Yugoslav city” (See A. Šmid, “Bye bye 20th century; Similarities in the urban development of ex Yugoslav cities”, in: International Conference Architecture and Ideology Proceedings (Belgrade: Faculty of Architecture, University of Belgrade et al., 2012), pp. 376–385, for the research scope and methodology of the structural study). As the study object is focused on examining structural and developmental characteristics of cities in the discussed framework, the structure and urban appearance of the city edge was also dealt with.

⁴⁴ The urbanist theory of the German-speaking area encapsulated the development of this historical period with a simple term of “Gründerzeit”. See e.g. P. Breittling, *In der Altstadt leben* (Graz: Leopold Stocker, 1982).

20th century, functionalism⁴⁵ of the second half of the 20th century and the edges of the 21st century urban liberalism.



Graphic material 1: the orthophoto of the clammed edge in the north-east of Maribor (maps.google.com)

The brief overview and classification based on the abovementioned criteria show that the focus of the specialised public is centred merely on a few types of the city edge: the planned city edge, the compact or perforated edge, mostly free or clammed and generally a product of the functionalist city of the second half of the 20th century. All other types of the city edge tend to be perceived as “a mistake in urban development”, though often entirely unjustifiably so. The harmonisation proposed for them reflects the doctrine, style and typologies in accordance with the key urban and development practice of the second half of the 20th century, which is almost exclusively rooted in the principles set forth in the 1933 CIAM Athens Charter. Such an approach is understandable from the viewpoint of the urbanist as the city creator, the role that urban planners continue to cling to tightly despite completely altered social conditions. On the other hand, when viewed from the perspective of the city edge as a spatial phenomenon, incomplete treatment is unacceptable. The fictitious quality and exposure of the compact city edge typical for the second half of the 20th century is strongly related to disproportionately large development expansions of cities in this period, as well as to fully observed crucial roots and parallelism of world practices based on both the Athens Charter and crucial utopian urban development projects by Le Corbusier. Last but not least, today the urbanist’s misconceived approach to

⁴⁵ The functionalist city is a term established by a simple distinction between the “classical or traditional” and “functionalist” city in *Iskustva prošlosti* by Miloš R. Perović. See M. R. Perović, *Iskustva prošlosti* (Beograd: Gradjevinska knjiga, 2008).

urbanism can also be justified with a complete absence of real capabilities and potentials for city expansion, particularly from the perspective of an extraordinary low demographic growth.⁴⁶



Graphic material 2: the ortophoto of the northern part of Pristina called Tophane reveals a major densification of the structure due to a relatively strong demographic growth (maps.google.com)

Perceiving the city edge as the element of the urban planning structure, it is thus necessary to consistently refer to its several characteristics. It is a fact that the north-eastern edge of Maribor is entirely different from its north-western edge; the clammed edge of the city in the Košaki district is structurally more reminiscent of the urban structure surrounding Sarajevo, while the urban green gesture along the Vinarska ulica street presents a city edge designed almost as expertly as the southern edge towards the Sava in New Belgrade, though on a smaller scale. Moreover, the south-western edge of Borova vas is quite similar to New Zagreb and its southern edge; the most clear-cut edge in Maribor so far, the one to the east of Pobrežje along the Ulica Veljka Vlahovića street, can be compared to the south-eastern edge of Pristina. As the unformed edge of the western edge of Studenci reveals similarities with numerous smaller towns in the flatlands, the built structure typology of the “big-box” architecture and the development of the radial road edge in the southern part of Maribor can be convincingly related to the liberalism of the twenty-first century town planning, be it in Graz, Zemun or the northern hinterlands of Split. While Ljubljana

⁴⁶ Pristina in Kosovo, one of the few cities that continues to grow, should be highlighted in the comparison of comparable cities in the area in question; due to real demographic needs and only secondly the role of the capital of the newly established state, relatively large city expansion, which cannot be ignored, has occurred. The city and its strategic aims of urban development always fluctuate between relatively strict principles and guidelines on the level of integrated development and complete permissiveness on the micro-urban level of planning classical urban elements.

delineated the “inner city” boundaries with its ring road in a similar manner as Paris, Maribor is defined with several different edges due to its topographic characteristics, including permissive and undeveloped edges, such as the Damiševo naselje area or the belt-like unformed structure to the south of the Limbuška cesta street.



Graphic material 3: The edge by the Sava in New Belgrade; the southern boundary of the No. 44, 45 and 70 apartment blocks (maps.google.com)

The principle of developing first-class transport infrastructure as a marker of the future city edge remains to be used as a crutch by superannuated urban planners, who are still rooted in the second half of the twentieth century. Employing large infrastructural gestures, they attempt to prove that they can control urban development. However, they neither understand nor direct the development, as they fail to establish active connections between urban construction and thoroughfare construction. The space in question offers numerous poor examples of such demarcation and urbanistically inappropriate treatment of arteries – in addition to the southern bypass in Belgrade and the northern bypass in Sarajevo, the Ljubljana ring road must be mentioned again, as well as the southern highway bypass in Zagreb. All mentioned demarcations were designed as thoroughfares aiming at co-creating an urbanistically congruent enclosing of space, but were realised merely as referential work successfully carried out by urban designers and road contractors. In most cases, comparable city edges delineated by large gestures of rivers or seas, such as the southern edge of New Belgrade by the Sava, the south-eastern edge of Split or the northern edge of the former Drava alluvial terrace in Maribor’s Tezno, have unfortunately not realised any surplus. Indeed, the quality of the urban structure cannot be created by a large linear gesture that limits it. In the urban expression of the functionalist city, a large linear gesture can be controlled by tower typology, as is

the case in Kocmut's project of apartment buildings by the right bank of the Drava, which has quite a lot in common with apartment buildings and the development of the northern bypass in Rijeka. A similar concatenation by the north-western edge of the city is evident in the built structure of the city edge in the Arberia area in Pristina, which emerged less than five years ago.



Graphic material 4: the northern Rijeka bypass; marking the perforated edge with three groups of apartment buildings (maps.google.com)

In my conclusion, I observe that the treatment of city edges is technically complex not only due to the structural phenomenon of the city edge in itself, but mostly due to understanding the context of individual types and structures that contributed to previous designs. Establishing new edges and new large gestures in space requires a deep understanding of landscape and natural borders of the city; moreover, with regard to topographic features it is vital to consistently dissociate enclosing structures in the flatlands from rugged, sloping and hilly urban areas. Any kind of establishment of new large spatial structures is technically false if their direction, intensity and orientation fail to observe the urban structure and possibilities for urban development in the area.

The city edge – reflections on the history of demarcating cities

The discussion about cities in the area of former Yugoslavia with regard to city edges and delimiting the urban tissue unveiled a fact related to a wider context of European history. Namely, in the Middle Ages, at the time of the emergence and development of many towns, two principles of urban development were typical for the area in

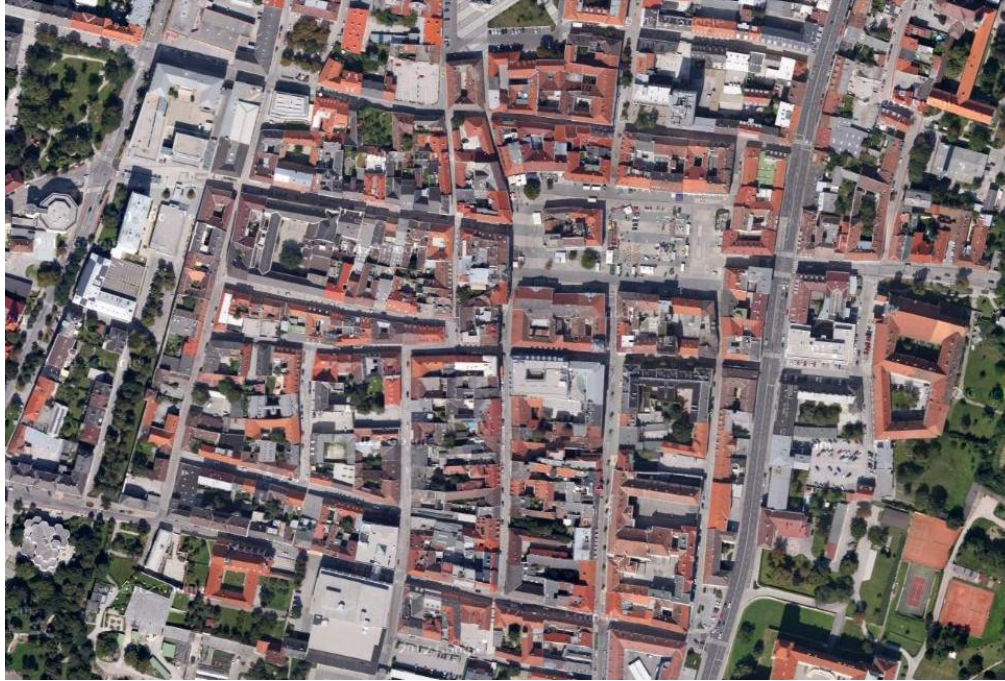
question. Running transversely through the area of former Yugoslavia, the border of the Ottoman Empire had a strong impact on the history of towns in two ways for at least half a century: the towns situated on the north-western side of the border between the “Turkish” and “Western” Europe were generally built as fortified, walled-in settlements protected from attacks, whereas the towns situated on the south-eastern side of the demarcating line were part of the Turkish state with a relatively stable administration organised for more than half a century, thus not having required any structural defence mechanism.

In addition to traditional central urban functions of commerce and administration, medieval town cores in the West also had a safety function, particularly so at the time of the emergence and development of independent towns on the Adriatic coast, whereas urban forms and structures of towns in the area of the Ottoman Empire had no other constraints except for topographic ones. Two opposing tendencies can thus be observed when it comes to the construction of towns that were also constructed for the purposes of safety. On the one hand, a successful town requires expansion; on the other hand, this expansion is not feasible, as it is only possible to protect a manageable area of the town. In today’s area of central and south Serbia, Bosnia and Herzegovina, Kosovo and Macedonia, there are no urban constraints of this kind and urban development expands from the centre. The wonderful historic core of Sarajevo cannot even be imagined without the so-called “mahalas” (traditional neighbourhoods) surrounding it; at the border of the Ottoman Empire, the location of churches in protected medieval towns is related to the central locality and protected tissue of the town, whereas in smaller towns mosques tend to be located at exposed landscape spots, often on cols.



Graphic material 5: Baščaršija, the historic core of Sarajevo, with clearly visible nearby mahalas and expansion of the centre linearly to the west (maps.google.com)

In our reflections on the city edge, it is important to remember the fact that the edge in the central European city partly springs from the city walls; perceiving the city edge is more closely associated with topographic than with created constraints of urban development where city walls do not have a protective function.⁴⁷



Graphic material 6: the Wiener Neustadt centre – similarities with the Maribor city centre in terms of urbanism and architecture are not coincidental (maps.google.com)

It is particularly interesting that in the second half of the 20th century city demarcation focused only on topographically simple sites; neighbourhoods were constructed mainly on flat, sunshine exposed terrains, such as the southern part of Zagreb, the south-eastern part of Pristina, the western part of Belgrade or Sarajevo's growth towards the west. Projects at topographically difficult and limited sites, such as the expansion of Split, are therefore even more significant.

⁴⁷ With regard to reconstructing the city edge, it would be reasonable to upgrade the theoretical apparatus of revitalisation interventions in the city, such as the methodologically presented groups of possible interventions in existing urban structures in B. Stojkov, *Urbografija, razvoj ideje o obnovi gradova u Srbiji* (Beograd: Institut za arhitekturu i urbanizam Srbije, 1997).



Graphic material 7: New Zagreb – a well-developed city edge, though also destroyed due to small structures, in a topographically undemanding area (maps.google.com)

The city edge – topical issues

Since the end of the first decade of the 21st century, the entire discussed area has witnessed a liberalisation of urban planning, less structured city management and the expansion of permissiveness to more significant parts of cities than before.

These conditions strongly affect the design of city edges, with perhaps the most pressing issue being the shift in the character of the city edge caused by the construction of radial ring roads and bypasses at the end of the previous century: broadly, it can be observed that the redevelopment of city edges, at the time affected by residential construction, sprung from the expansion of the city in the last decade of the 20th and the first decade of the 21st century. In this period of twenty years, the major driver of urban development has no longer been providing residential areas, but reorganising the city, as manifested in an increased number of programmes related to various shopping and entertainment centres, clusters of storage and production facilities and at least one sports and event megavenue and a cinema multiplex. Unfortunately, since the connections between these constructions are not organised, they have a disconnecting impact on the redevelopment of the city edge and radial roads, whether at the edges of Kosovo polje, Osijek or Zemun. Before Yugoslavia's breakup ex-Yugoslav cities were enclosed by residential areas, while twenty years later they are enclosed by "big-box" architecture of mostly foreign megastores.



Graphic material 8: Big-box architecture structurally encroaches the south-western edge of Osijek, otherwise an extremely well-developed city (maps.google.com)

The city edge and the role of urbanism in relation to unbridled construction

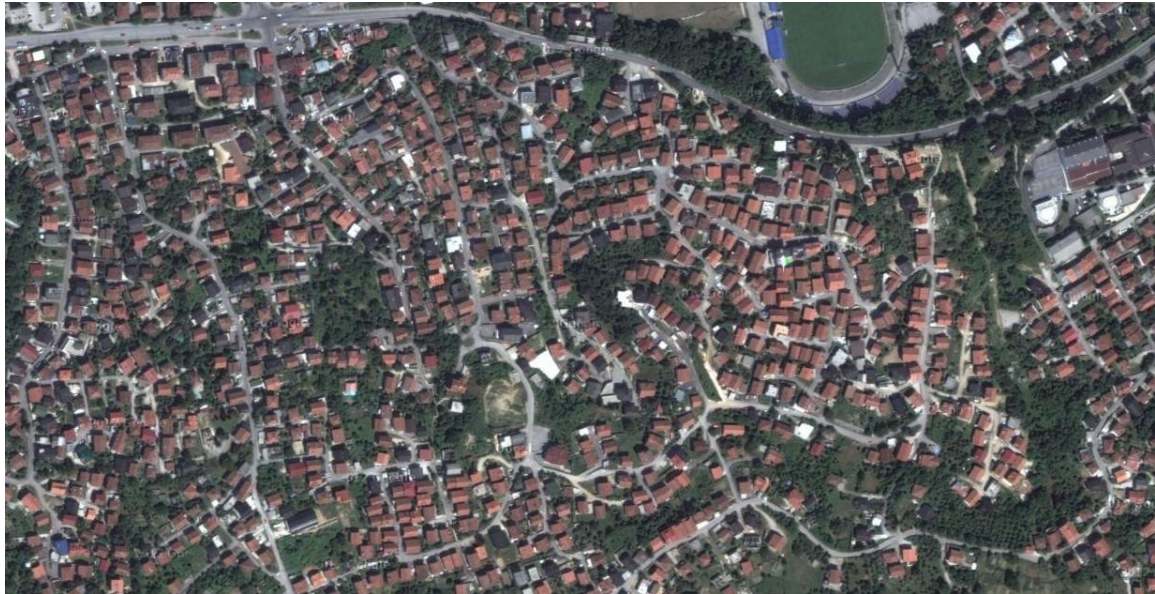
Despite the fact that permissive, unbridled construction in the entire area of former Yugoslavia was traditionally rarely a subject of professional discussion⁴⁸, this century and a completely altered role of urban planners brought a time that requires a professional discussion and comprehensive treatment of areas such as almost entire settlements in the north-eastern or south-eastern slopes of the suburban hills in Sarajevo, Kaluđerica, a now famous urban district⁴⁹ in Belgrade, or even the central Tophane in Pristina. What they have in common is liberality: the only limiting factor of urban planning is land subdivision and related ownership. In these areas, the role of the urbanist is interesting and not as vital, but basic: in terms of returning to the practice of the first half of the 20th century, it is first necessary to regulate the area⁵⁰,

⁴⁸ Uncontrolled settlements have become the topic of research only in the last decade, see e.g. A. Džokić, M. Neelen, N. Milikić, “Kaluderica od šklj do abv.”, in: *Med utopijo in pragmatizmom: arhitektura in urbanizem v nekdanji Jugoslaviji in državah naslednicah*, Umetnostna galerija Maribor, 10. februar – 22. april 2012 = *Between utopia and pragmatism: architecture and urban planning in the former Yugoslavia and the successor states*, Maribor Art Gallery, 10 February – 22 April 2012 (Maribor: Umetnostna galerija Maribor, 2012), p. 39.

⁴⁹ The term “neighbourhood” is intentionally avoided, as it describes a generally well-developed and planned area of urban development in 1970s and 1980s and has no similarities with other parts of the city and construction methods, be it the traditional, classical urban structure areas or hidden areas of illegal or unplanned, generally individual construction, resulting from the permissiveness of the city management system.

⁵⁰ In “neighbourhood urbanism”, the regulation in terms of separating the public and private space is almost immaterial except for infrastructure, while pre-war urbanism was familiar with it as one of the key instruments of city expansion; see e.g. pre-war regulation plans in J. Pirkovič Kocbek, *Izgradnja sodobnega Maribora, Mariborska arhitektura in urbanizem med leti 1918 in 1976* (Ljubljana: Partizanska knjiga, 1982).

including public transport, public utility and energy infrastructure as well as the infrastructure of free and green areas, while it is also vital to be aware that the final step of planning, i.e. the design or the reconstruction of urban planning, will most likely never be realised, which is why it is unreasonable to plan it at all.



Graphic material 9: The urbanism of Sarajevo, a linear city in the Miljacka Valley, is the complete opposite of Sarajevo's permissively constructed buildings on peripheral hills, with Grbavica serving as an example (maps.google.com)

The southern edge of Maribor

With regard to designing the urban structure of the area along the southern Maribor bypass, it should first be observed that workshop participants were confronted with a utopian task in an area without a traditionally formed city edge and, last but not least, a topographically clearly defined environment. The utopianism was evident before any designing began: the city has neither demographic needs for new residential constructions

nor a city administration that would be capable of implementing such a vast construction project aimed at urban development in the area in question. Since the area is characterised by an unformed city edge, urban designers must decide whether to approach the task as urbanists of the second half of the 20th century or attempt to understand the area development in terms of a spatial "opcode" mechanism, thus

taking a step closer to the role of the 21st century urbanist⁵¹ and using the workshop to establish the principle of a sustainable urban planning discourse with more sensibility in terms of the landscape and the context.

The fact that the area is already topographically formed gives rise to a triple conflict in solving the issue of the urban edge, as many large spatial gestures already exist or are planned in the area in question: undoubtedly, the first gesture is the relief edge as the northern Pohorje hillside joins the flatlands, the edge running in parallel with a change in the cover that creates the forest edge almost in the same place; the second gesture is an unimportant stream that runs from the Pohorje hillside towards the east; the third is the planned route of the southern bypass; and the fourth is a relatively unformed southern edge of the built structure by the Lackova cesta street. In relation to all other edges, the incredible impressiveness of Pohorje's forest hillside, its southern locality and related shadiness represent the most prominent feature, with the vertical orientation of built structure being the only feature that is equally perceivable.

The area tackled by the workshop is highly interesting only when the participants proposing design concepts are aware of all above-mentioned conditions. Should any urban planning concepts in this extremely demanding call for proposals be effectively feasible, its objective will be fulfilled.

⁵¹ The changed role of the urbanist is understood as in e.g. Ezio Manzini. See e.g. E. Manzini (2009), "Oblikovanje za družbene inovacije", in: *Trajnostne alternative v oblikovanju* (Ljubljana: Arhitekturni muzej in Društvo Pekinpah, 2009) or A. Šmid, "Vloga arhitekta in urbanista v dvajsetem in enaindvajsetem stoletju / The role of the architect and urban planner in the 20th and 21st century", in: *Trajnostni razvoj v šoli in vrtcu* (Ljubljana: Zavod RS za šolstvo, 2012), p. 29–31.

CHAPTER 3: BACKGROUNDS OF THE CITY DEVELOPMENT OF THE OBSERVED CITIES - URBAN DEVELOPMENT AND POLITICAL POWER

Urban planning is a mirror of the society. City development reflects economic power. The role of urbanism is fully defined by the political and governing powers. Urbanism in the states of the former Yugoslav tradition is first and foremost a matter of politics.

Although a very interesting topic to research, the results of the former Yugoslav urbanism cannot be separated from the powers that promoted its realization. Urban planning was not a discipline detached from the political and social mechanisms of the socialist society; a long-forgotten fact is that urban planning grew out of socialist planning, in pursuit of economic and industrial growth. The key to understanding urban planning in the former Yugoslavia lies in an understanding of the country's government.

In order to understand the most dynamic and distinguished period of the city planning of the former state, it is essential to accept the historical urban planning of the region as a non-homogeneous and very diverse field of activity.

The power mechanisms that govern a society can be seen in urban planning principles, and it is well said that the city cognition can be a step towards understanding the society.

3.1 The patterns of urban development

The three power mechanisms that governed urban planning in the former Yugoslavia are very different and can be observed as a cycle of three periods, each characterized by a distinct pattern:

- the "imperial" pattern
- the "independent" pattern
- the "transitional / twilight zone" pattern

The imperial pattern draws the attention of urban researchers of the region since the former Yugoslav territory lies exactly on the border between two great empires, each of which was able to develop a centrally ruled state with a provincial arrangement and cities that were strong seats of commerce, government, defense and production. These two empires, which were in constant tension along a border running roughly from Belgrade (Serbia) to

Split (Croatia), are the great Habsburg Empire of Austria on the northwestern side and the Ottoman Empire of present-day Turkey on the southeastern side. Since Central European sources glorify the western Habsburg Empire, it is very important to emphasize that the territory of the former Yugoslavia was ruled partly by Vienna and partly by Istanbul, hence the understanding of spatial order was rooted in these two imperial setups. From the view of untrained urban planners' eyes there is only the gradation of a Central European order diminishing from northwest to southeast, but this is an incomplete and incorrect understanding. Without knowing the Ottoman Empire's mechanisms for pursuing urban planning, it is very bold to set the research focus on Central European criteria only. At the same time, it is difficult to understand Ottoman urban planning principles when observed from the Central European angle.

3.1.1 The imperial pattern

The key to distinguishing the principles of urban planning of the two clashing empires on the territory which is yet to be acquired in 1918 by the Serbian ruling family is security. As the Habsburg Empire was always concerned about moving the border as far southeast as possible and delivering the "benefits of empire" to new inhabitants, as Harari describes the imperial expansion drive⁵², one of the main concerns of the state and the cities was obviously security. Since the 13th century every south German and Austrian city was walled and the southeastern border was guarded by military settlements such as Karlovac (Croatia) (Fig. 3.1), Slavonski Brod (Croatia) (Fig. 3.2) and Pecs (Hungary) (Fig. 3.3). Fear of the inhabitants produced dense compact cities and the walled compact cities were types that still live on in the theory of contemporary Central European city development. There are principles such as the so-called "city border lines", "densification of the city", and similar. In contrast, former Ottoman cities are not focused on closing the city border, because their clear intention is establishing an active market environment for the residents. Towns and villages with a traceable structure from Ottoman times can be defined as open structures, following the merchant roads and placing trade as the priority activity of the urban settlement. A complete lack of fortifications and other defense mechanisms such as a wall, river, artificial channels or similar proves that this "other" empire was highly self-confident, ruled by someone that was not overly afraid of being attacked. A fortress overlooking the main towns was merely the governor's palace with the local military troops that were necessary to maintain law and order or the city walls were erected for targeted protection that exceeded regular Ottoman towns⁵³. Towns such as Sarajevo (Bosnia and Hercegovina) (until 1878, Fig. 3.4), Prizren (Kosovo) or Skopje (Macedonia) (Fig.3.5) have a very distinctive urban core of this "open" form and pattern. Kojić researches and defines this

⁵² Harari, p. 190 [9]

⁵³ See Smederevo, Fig. 3.31

phenomenon and calls it “stari balkanski grad” (old Balkan town)⁵⁴ and ties it exclusively to the region and to the Ottoman imperial period.

It is most interesting that Sarajevo "switched" the empire: the core period shows a non-walled town of the Ottoman setup, the theatrical mahalas⁵⁵ on the slopes focused to the central čaršija, and the *Gründerzeit* extension was done in the fine imperial Austrian manner⁵⁶ with the regulation and the city structure setup of a "small Vienna". The interesting part is that Sarajevo's development did not start with the *Entfestigung* but was a very clean extension of the Čaršija⁵⁷ directed west along the Miljacka River. (Fig. 3.6)

In conclusion, we can assume that these two empires had very different characters and very different principles of urban planning. On the one hand there is the security-oriented city of South Central Europe, and on the other there is the trade-oriented city of South Eastern Europe. One should not forget two points: the first is that the southeastern European border is the Bosphorus Strait of Istanbul and the second is that the European Union has developed some imperial attributes as well (since there will be a southeastern part of Europe that will belong to another geopolitical setting for a long time).

3.1.2 The independent pattern

After World War II and the dissolution of the empires, the concept of national states changed the imperial principle only in extent and intensity: the postwar Yugoslav state was in effect a mini-empire. The city planning mechanisms and forms roughly followed the former Central European patterns until the end of World War II. The interesting part is that the Central European states, founded on imperial roots, have tried to find a way to avoid imperial principles and to find a new path to urban development.

Until the postwar period the “new principle” was fully accepted by the new states, which formed a new political bloc. The fine adjustment of this new order, established by CIAM in 1933 and successfully followed in the 1960s, 70s and 80s, is a matter of national character and the philosophy of those who had the power to initiate and influence the process widely known in the socialist states as urbanization.

As far as the former Yugoslav cities are concerned, the city appearance reveals similarities that cannot be ignored:

⁵⁴ Kojić, p. 7 [16]

⁵⁵ Mahala, an Ottoman city part, best described as “neighborhood” or “city quarter.”

⁵⁶ Spasojević, p. 156 [21]

⁵⁷ Čaršija, the central Ottoman city part, contains the main square, production and crafts streets, shopping and market buildings.

- Urban planning in former socialist Yugoslavia shows two contrasting images: the sweeping, large-scale “official” urbanism (Fig. 3.7., Fig. 3.8, Fig. 3.9) vs. the permissive, small-scale “laissez faire” urban developments (Fig. 3.10).
- Urban planning of the official type of urbanism took a two-pronged approach: bold planning and building of a new functional city alongside conservative inner city redevelopment and renovation (Fig. 3.11, Fig.3.12, Fig. 3.13).
- Urban planning and expansion of cities of former Yugoslavia in the postwar period was increasingly pursued in a “centralized⁵⁸ manner”; i.e. Belgrade took on the image of the “proto city” and it was developed in a unique manner as an example for all the other Yugoslav cities during the period of post WWII “urbanization”.⁵⁹ (Fig. 3.14, Fig. 3.15, Fig. 3.16)

3.1.3 The transitional “twilight zone” pattern

The role of urban planning as a discipline is being transformed from the former Yugoslav state through the transition into new seven states evenly and without many deviations despite separate new governments, legislative independence, and a long lack of professional contacts.

After two and half decades of a turbulent transition in urban planning that follows the transition of the society, it is obvious that the former urban planning mechanisms and practices have dissolved due to the following reasons:

- City development strategies are not pursued or are only partly pursued by those in political power.
- City managements are not able to set long-term strategies and pursue their realization.
- City managements are not able to understand, define and pursue common goals and public development strategies, since the politics of transition is not interested in these,
- The projects the city managements are interested in have a strong populist note and a short-term effect that can hardly be realized in comprehensive urban planning strategies.

From the point of view of the observer in the early 21st century, it is obvious that a major transition of the role of the architect and urban planner must be taken into consideration:

⁵⁸ The socialist practice of “centralized” urban decision making is politically and operationally not so far from “imperial” practice.

⁵⁹ CIAM-influenced ideas were always latent in the region; see the Cerknica (Slovenia), Jesenice (Slovenia) and Kranj (Slovenia) development plans of 1945 and 1946, p. 39 and p. 49 [10], Fig. 3.35, Fig. 3.36, Fig. 3.37

- The architect's role changes from the period of "socialist development" to "low level urbanism". (Fig. 3.17, Fig. 3.18, Fig. 3.19)
- The "high modernism" as understood by Scott⁶⁰ has ended in the 1990s.
- The urban planning practice is degraded through so called "legalisations" that are triggered by the governments in the region in a 25-year pace.

The struggle for political power included urban planning: the big question of the transition is "Is there anyone who will use political power to pursue city development or will the developers buy political power to pursue partial city development?"

The situation brings us to the question "Who has the power to decide?", described by Flyvbjerg.⁶¹ And the answer for most cities in the observed area is "Whoever has the money to invest."

3.2 Structural realizations of the three urban planning philosophies

As the political order in the region that we define as ex-Yugoslavia experienced four major changes with distinctive shifts in urban design and urban planning principles over the 20th century, it seems to be evident that these relatively short lives of the states brought with it a certain respect for their heritage. After the dissolution of the two empires, the Ottoman and the Habsburg, the first Yugoslav royal kingdom was founded. It pretty much followed the urban principles of the Habsburg Empire since the Ottoman principles were not very easy to follow due to their hidden, invisible nature. During World War II only some public buildings were built or finished, and after the liberation and political shift the newly founded country had problems other than urban planning. Roughly the first decade after the war was spent on economic recovery in multiple fields. When agricultural development was completed, the 1960s brought the powerful development of many different industries; this was planned and it was pursued throughout the country. A wave of industrialization triggered a new need for urbanization; as the new industrial facilities were usually developed or expanded in the towns and cities, population migrations became an issue that caused "planned urbanization"⁶². In towns and cities industrialization needed new space for development and new housing for the workforce. What would be more convenient for a city developer than the famous, and at that time not so very revolutionary anymore,

⁶⁰ Scott, p. 64 [5]

⁶¹ Flyvbjerg, p. 292 [24]

⁶² Mušič, Urbanizem v Komuni, p. 62 [11]

functionalist urban planning theory developed by Le Corbusier and the CIAM urban planning spirit? The old city structures could be left untouched and the city borders were expanded - on the one hand because of the industrial space consumption and on the other hand because of the building of the new workers' settlements. The famous practical paradigm in ex-Yugoslav cities was that the newcomers would be settled in the new parts of town. Inevitably new dualities and conflicts between the new and old structures occurred, but a possible exacerbation of this conflict was avoided by shifting the general focus to the preservation and revitalization of the city structures. Not to be misunderstood - these decisions now seem traceable through the architectural and the qualities of the urban structure, but they were not decisions made by a dictator's mind or by a uniform government and city management. On the contrary, the developments were usually defined as "the most sensible solution", "the less invasive redevelopment", or other "soft" urban practices. Developments were rarely large planned reordering invasions of the city structures: it seems that urban planning followed the respectful behavior of the empires' legacies.

It would be very unusual to practice urban planning without the power to change. Because of the lower educational level of the ruling party elite the urban planners and technical intelligence in general were a well-placed tool of the politicians. As Vitja Rode⁶³ stated: "We started the development of Maribor Jug ("South") with urban planners from Ljubljana as it would be easier to blame the "urbanists" from another city if anything went wrong rather than the local decision makers." (Fig. 3.20) The "technical intelligentsia", a category of independent professionals in the former Eastern bloc countries, were actually first mentioned and established by V. I. Lenin in Soviet Russia. Since the Ottoman and Habsburg cities followed the images of the imperial capital cities, the shift of socialist urban planning is obvious: it did not follow the image of a city, it followed the principles of the modernist/functionalist city developments, and the socialist political noninvasive philosophy through expanding the cities rather than restructuring and reorganizing them. This modus operandi was pursued and transformed in the "new order" after 1991 when the country collapsed and slid into a new war. The image of this "new order" cannot be distilled into a single definition as a simple "transition". It is no transition since it does not offer new urban practices that could be "transitioned" into. There are a few practices that include the following:

- the reorganization of cities that are transformed from mainly industrial into mainly administrative or service-oriented;
- the rebuilding of cities damaged in the last local war;

⁶³ Vitja Rode was the Mayor of Maribor at the time of the urban expansion "Maribor – Jug (South)"

- the “face-lifting” or “beautification” practices of cities that do not want to be “modernist cities” anymore⁶⁴;
- improvement of the “new capitals”; and
- building or renovating of state infrastructural objects⁶⁵.

The two questions that emerge and require answering are the following:

1. Have the imperial urban planning principles influenced city development in the socialist times⁶⁶?, and
2. Will the imperial urban development principles influence the city development in the transition period?

The answer to the first question is, remarkably, no.

The answer to the second question is, even more remarkably, yes.

What does this contradiction mean? It is very clear that most city developments of the socialist period were inserted into the city structure in a quite tolerant, less intrusive manner (Fig. 3.21). It is also very clear that the political constellation of socialist Yugoslavia was fond of the new but at the same time preserved the old urban structural features. Nevertheless, the socialist developments were bound to the urbanization and city growth processes that altered the images of the cities at its own pace and dynamics. They were new in senses of scale and aesthetics and could be distinguished from the old city design principles. On the other hand, the latest city developments of the turbo-urban period do not offer new urban structures and do not offer fresh urban design ideas; they only offer new architectures and new accents to the cities. Even more, many times they only offer new visions.

Regardless, a third question is raised:

3. Is the turbo-urban period an introduction to “imperial revival” and thus the dilution of the former common city model and development logic found in the region?

The question will of course be answered over the years to come. What is visible at this time is of high importance: the path of city development is not predictable at this moment;

⁶⁴ The best example of the “unmodernisation” can be seen in Skopje, Macedonia.

⁶⁵ Since 2010 there is a traceable influence of the Turkish state to build and operate airports and highways (airport Skopje and Ohrid in Macedonia and the airport of Prishtina, Kosovo are operated by turkish companies, the new highway Belgrade -Sarajevo is set up to be built by turkish companies

⁶⁶ Mušič is one of the active thinkers of the city center urbanisms; see *Urbanizem v mestnem središču*, p.288 [11]

it seems we are living in a time of standstill and city development will be revived in roughly a decade. No one knows if the common socialist period will remain just a period of the similar city development history. Finally, the most important fourth question is the following:

4. Will the cities in the former common region remain tolerant and will they recognize the socialist period as one of the closed chapters of urban history? Can tolerance towards the urban structural character be the common urban development strategy throughout the region?

3.3 The internal ambivalence of a Yugoslav city⁶⁷

The growth of the ex-Yugoslav city in the second half of the 20th century is defined by a multi-layered relationship between the “functional” and “classical” city.

The duality of the coexisting “classical” and the “functional”⁶⁸ city is best described by Perović.⁶⁹ The working model of Belgrade as “the” Yugoslav city reveals the urban planning modus of the 1970s and 1980s as a bright two-layered model: the simultaneous renovation of the old with preferably new public and residential buildings on one side⁷⁰ and building the “new Belgrade” colossus on the other side is everything but a coincidence. The role of urban planners is not the deciding factor in this process.⁷¹

As urban development was mainly designed by engineers and urban planners, we cannot forget the two foundations that made such a position possible. The first foundation is the CIAM movement led by the Le Corbusier takeover – it led to the role of the architect as the “urban development vision and decision maker”⁷². In a professional manner this could be a breakthrough and a fashion the architects wanted, but it would never be possible if politicians and state management had not let the engineers make the decisions in urban planning. This was only possible through including urban planning into the “science and technology” context and thus establishing architects and urban planners as “engineers”,

⁶⁷ If we take the illegal, permissive settlements as an entity, it would be perhaps more accurate to name it “trivalent”.

⁶⁸ The terms “classical” and “functional” are used exclusively in the sense of Perović in his book “Iskustva prošlosti”.

⁶⁹ Perović, p.95 [6]

⁷⁰ Perhaps best captured in the work “Beograd 1945-1975 Urbanizam Arhitektura” [15] or similarly for Maribor, “Izgradnja sodobnega Maribora” [20]

⁷¹ Mušič, p.133 [11]

⁷² Šmid, Vloga arhitekta in urbanista v 20. in 21. stoletju, p. 29 [7]

members of the so-called “technical intelligentsia” in the high modernism period as described by Scott⁷³, of course blessed by V. I. Lenin as the founder of the modern socialist state. Not to mention that Soviet “high modernism”⁷⁴ in urban planning got out of track, the important fact is that Yugoslav modernist urban development since the 1950s was undoubtedly realized through urban planning and city development. It is understandable that the politicians never handed the steering wheel position to the “engineers” – it was done in another manner: the politicians ruled the so-called planning socialism and one segment of the planning was the “urban” planning.

The reaction of the “new” inhabitants of the “new Belgrade” as quoted by Perović⁷⁵ was typically to search for a change: living in the “old town” was something completely different with respect to the quality of life, neighborhood charm and a pedestrian-friendly environment. From the activities in the cities all over ex- Yugoslavia, local governments were developing the cities in this dual manner: the empty zones on the borders of the cities were reorganized, urbanized and filled with massive modernist city developments,⁷⁶ but at the same time city core was being equipped with new public buildings. After the big development period of urbanization was successfully completed and the cities were thoroughly enhanced⁷⁷, the post-modernist period started with a switch of the theme: all eyes turned to the city cores, and their renovation and revitalization was “the” theme in the 1980s⁷⁸. Suddenly, the “classical city”, well known and described in various historical plans,⁷⁹ became the theme for the urban planners – not only in the practical, but also in the theoretical focus.⁸⁰

⁷³ Scott, p. 54 [5]

⁷⁴ “High modernism” as described by Scott [5]

⁷⁵ Perović, p. 34 [6]

⁷⁶ Public 1980s rock culture of Yugoslavia has some vivid captures of the new city developments, one of the best being the song by Riblja Čorba “Neću da živim u bloku 65” from their “Buvlja pijaca” album (1982), with verses “Čuvar gradilišta prolaznike tera, / klinci po ulazima bombice piju, / košava brije oko solitera, / bande došljaka svaku noć se biju, /.../ suviše asfalta da stignem do reke.”

⁷⁷ Perhaps the best example of this vast enhancement is Split, Croatia with the Split II project.

⁷⁸ Maribor, Slovenia was one of the first small cities to present a strategy and basic theoretical methods to trigger public and private interventions, Recer and Reichenberg [13].

⁷⁹ Belgrade development was beautifully shown in the 2008 publication “Belgrade: Maps and plans from the 18th – 21st century” [12].

⁸⁰ Architects Bogdan Reichenberg and Igor Recer created strategies to reinvent the city [13], urban planner Borislav Stojkov published a series of papers concerning methods of urban regeneration [14].

3.4 The Perović “duality” viewed retrospectively – a hole in the theory

As every theory is dealt with harshly by time, so is the duality theory of the “functional” and “classical” city outdated. The theory, which simply separated the two urban structure principles, has been shown to be inconsistent as the cities aged and the urban structure has been altered over the last three decades. These alterations have softened the main characters of both structures mentioned.

In recent decades the structures that Perović calls “classical” have been altered in a manner that does not understand, respect or recall their character: the changes are more irrational, and the relationship “square – street – urban block” remains the same only on the outside. The public character of this structural mode is almost intact, but the residential quality, the intimate inner side of the urban block is certainly losing its character: due to the enormous spread of non-residential content in the “classical” city structures, the residential character of the blocks is being diluted with the new “conversions” or “interpolations”. Since the charm of “living in a classical city” is a great magnet for other related content, such as offices, hotels and other non-residential intruders, which economically supersede the residential building ventures, the “classical” urban block structures are transformed into distorted, filled, extensively built blocks and inevitably lose the “intimate inner courtyard” character.⁸¹ It seems that the non-residential content that needs more space and exceeds the spatial needs of the original residential houses of the block is triggering the extinction of the inner courtyard. The Graz *Gründerzeit* city blocks that are traditionally made up of exclusively residential houses show unaltered inner city courtyards. Other, ex-Yugoslav city examples, such as Maribor, Osijek or Belgrade, show that the residential city blocks use the courtyard either to guard over the car parking spaces or to insert new service buildings like garages, workshops and similar into the closed block. It is obvious that the “closed city block”, one of the building blocks of the Perović “classical” city, is more or less a myth in the ex-Yugoslav city reality – it was very rarely used as a peaceful internal courtyard of the block’s residential buildings. The “classical” city according to Perović hence lost its idyllic component: now it consists of the squares, streets and outer block facades only, living in it is tough and unhygienic: there is not enough sunlight, car parking is limited, inner courtyards are fully built or extensively used by neighboring non-residential users. and there are very few urban green spaces or trees. (Fig.3.22, Fig. 3.23, Fig. 3.24)

Apart from the discovery that the closed urban block is irreversibly changed, another fact can undermine the “classical” city theory: namely, a very small part of the city fabric of the observed cities is built and preserved in the *Gründerzeit* manner. Perhaps three decades ago, traditional Belgrade was still a city with a strong preserved “classical” fabric. The

⁸¹ This urban block content transformation is seen in almost all cities with ongoing city changes, like Belgrade, Maribor, Ljubljana, even Graz or Barcelona.

urban structural transformations led to the dilution of the “duality” theory. Today, there are very few and relatively small urban parts of Belgrade, Sarajevo, Split or Maribor, and the other urban practices are too large to give the duality theory a continuous validity.

On the other hand, the “functional” city parts of the same Perović theory also continued their evolution and some new qualities emerged from the “brave new” urban entities of the socialist era. On the one hand the neighborhood units were restructured and on the other the population social hierarchy was changed. The restructuring of the whole city parts followed the rise of the commercial service facilities levels: new types of shopping malls were introduced into almost purely residential zones: the megamalls that attract shoppers from all parts of the city and the smaller shopping and entertainment facilities that serve the neighborhoods. The long-criticized “uniformity of functions” was successfully upgraded with non-residential content of all sizes that softly invaded the ground floors and filled former unused green areas or restructured gray zones of the urban structure. For public buildings the demographic changes, aging of the population and social hierarchy changes were reasons to close primary schools or convert them to similar (i.e. public) institutions.

As these changes affected the inhabitants of the neighborhoods, urban life in them changed irreversibly. One of the major reasons for not living in “the blocks” also changed: in three decades the green system that was carefully planned grew to a significant extent; the buildings that emerged and stood surrounded by a clean green surface decades ago are now sunk in the trees, like solitary buildings standing in a park. Block 45 of new Belgrade or the longitudinal residential buildings of Gosposvetska cesta in Maribor stand surrounded by trees and a mainly green street profile. (Fig. 3.25, Fig. 3.26, Fig. 3.27)

3.5 The paths of the ex–Yugoslav states: the end of imperial socialism

The Yugoslav socialist regime used urban planning as a tool for urbanization, a process which enlarged the cities, almost always as part of a planned industrialization⁸² or other planned expansions of the city⁸³. Urbanization and industrialization were state-planned and the process of planning was part of “mini-imperial” policies.

⁸² For example, in the 1970s expansion of industry in cities such as Pančevo (Serbia), Maribor (Slovenia), Zenica (Bosnia and Herzegovina) or Jesenice (Slovenia).

⁸³ For example, the expansion of the governing role of Priština or the counterpart role of Nova Gorica in Slovenia to neighboring Gorizia in Italy.

Although all of the former Yugoslav republics played their roles in the planning, the process was centralized and was doubtless one of the components of gluing the state together. As we can see from the city structures left from socialist development, the “functional city” was one of the identification points of the Yugoslav state. Proudly presented and built, the “new” city parts are similar in all the city structures of ex-Yugoslavia. The question poses itself: will these cities be developed in future in a manner similar to that before the dismantling of the common state? After over two decades one variant of the answer can be perceived in the case of Skopje, Macedonia.

The case of Skopje is immensely interesting: the city was developed under the Ottoman Empire. Due to a catastrophic earthquake in 1963 it was redesigned by Kenzo Tange in a massive functionalist city rebuilding process. (Fig. 3.28) After the transition period the city development was staged with the project “Skopje 2014”, started by the ruling national party in 2010 after winning the election. The project was partly going to reconstruct the buildings destroyed in the earthquake, but mainly “antiquicized” the city center with numerous public buildings, monuments, bridges and fountains, all of them in neoclassical and some of them in Baroque style. (Fig. 3.29) The city and state government deliberately created a new image of the city which has little in common with the socialist past. The development is not reconstructing the past, it is inventing a bad copy of it. The shift of urban planning into city center redesigning is not so catastrophic since the urban structure is merely rebuilt and the new buildings duly redefine squares and public buildings; the significance of the “Skopje 2014” project is in the fact that it is the state government that redesigns capitals (and not urban planners or architects). The Skopje 2014 project simulation clip was a part of the pre-election campaign of the now ruling party.

The shift of the decision-making elite shows a demotion of the urban planner to a servant of the government, which is often seen in other new countries that emerged from ex-Yugoslavia as well.

One of the best known projects in Serbia, the Belgrade Waterfront, is also an exclusive project led by the government, promoted and explained by the prime minister himself. It became common practice for big city development projects to be run by the mayor or his deputy.⁸⁴

Obviously urban planning has more than ever become a political issue – including all the tricks and methods of politics.

⁸⁴ For example, Mayor Franc Kangler in Maribor, Slovenia with the project European Capital of Culture 2012 or Deputy Mayor Janez Koželj in Ljubljana, Slovenia, with the project Urbanika, redesigning the railway station area of Ljubljana.

3.6 Irregular, nonlegal city structures

A tradition of “official”, “unofficial” and “nonlegal” urbanism can be observed throughout the last two periods of city growth.

Regarding city development that follows the functional city principle in the 1960s and 1970s and turning to city preservation in the 1970s and 1980s, it is interesting that the “official” paradigm includes almost exclusively these two activities: the growth of new neighborhoods on the one hand, and activities tied to the classical city in trying to redesign the city core on the other. As long as the latter is limited to a single architectural intervention, it cannot be presented as an urban planning activity, but if the urban reconstruction is larger in extent, it can very well be presented as an addition to important urban expansions.⁸⁵

Official urban planning includes all of the functional city expansions that are planned and built following the CIAM Athens Charter rules. These are best known in ex-Yugoslav cities as the “new” city parts or defined by the position in the city structure.⁸⁶

The second half of the 20th century was not a time conducive to presenting the urban planning achievements of the past – the “unofficial” urban planning included all the classical city structures, all the parts of the city that had been planned in the interwar period, and almost all city developments prior to the year 1918.

The duality of city development is a view valid only for “official” or “representative” city planning and management. The categories of the “self-made city” or “unplanned development” or “minimally regulated city structures” were never considered interesting for theoretical or representative urbanism, and were therefore completely neglected as categories. Due to turning a blind eye to this, popular and semi-illegally built city parts represented an error of the profession that manifested itself in enormously high costs of extending the municipal and energy infrastructure to these zones of very low density. The paradox of this urban structure phenomenon is simple: low density structures⁸⁷ imply a more luxurious architecture, but the Yugoslav examples of it are full of low-cost, spontaneously arranged and self-made houses. (Fig. 3.30, Fig. 3.32, Fig. 3.33, Fig. 3.34).

⁸⁵ As the examples of the Slovenian Maribor Lent Festival river bank reconstruction [13] or the Serbian Belgrade Slavija square reconstruction show [14], it is important to create a playground large enough for urban planners rather than architects only – such tasks and projects are very significant because of the urban design component.

⁸⁶ As the “Maribor Jug (South)”, “Zagreb Jug”, “Split II” and “Novi (New) Beograd” names suggest, the newly extended city parts are simply distinguished from the other parts by new names added to the city name as a whole.

⁸⁷ For example, the outskirts of Sarajevo (Bosnia and Hercegovina), the Belgrade Kaluđerica area (Serbia), Damiševo Naselje in Maribor (Slovenia), the central Tophane area of Priština (Kosovo), and the Šutka area of Skopje (Macedonia).

3.7 The transition period – “turbo-legal” and “turbo-illegal”

Similar problems in the 21st century and a closed turbo-urbanism chapter are raising new urban planning questions and demand a new urban planning modus operandi that could be fully generated by 2020.

The slow shift from the socialist planning system to the capitalist planning system in the ex-Yugoslav new countries brings with it not only a transition into an environment that is in conflict with itself⁸⁸, but also the creation of a system of transition that seems to be a flaw of planning procedures and methods.

The similarity of the problems is yet to be defined: the cases to be analyzed and understood are the following:

- Maribor 2012 European Capital of Culture project
- Belgrade 2012 - 18 “Beograd na vodi / Belgrade Waterfront”
- Skopje 2014 renewal of the urban core public places and buildings,⁸⁹ and
- Priština 2004 - 2018 turbo urban development.

There are distinctions to be acknowledged between “turbo legal urbanism” and “turbo illegal urbanism”. The first distinction is simple: turbo legal urbanism is powered by the political wind of change and turbo illegal urbanism is powered by the initiative of small landowners. The next distinction is considering the limits of the interventions into the city fabric: turbo legal urbanism is usually limited to a single project, i.e. to the location, to the structure, to the extent of the project, while turbo illegal urbanism (post-socialist spontaneous development) is not limited.⁹⁰

Turbo urbanism is defined by the unusual extent of power it is equipped with: the legal projects enjoy the full backing of the city and national politicians in power, and they are political in nature and not just urban development projects. The latter could also be said for the illegal projects – they too, enjoy tacit political support and are therefore also not just urban development projects.

⁸⁸ Richard E. Foglesong, Planning the Capitalist City [8]

⁸⁹ Hristova, 2012, p. 345 [22]

⁹⁰ As described by Vöckler [4] or Bajec and Maruna [17].

Figures to Chapter 3



Fig. 3.1 Karlovac, city core, the fortress wall is clearly traceable, Google Maps, ©2018 CNES/Airbus, Digital Globe



Fig. 3.2 Slavonki brod, the fortress is preserved as the city core, Google Maps, ©2018 CNES/Airbus



Fig. 3.3 Pecs, the medieval wall defines the city core, Google Maps, ©2018 Google



Fig. 3.4 Sarajevo, the Baščaršija as the market surrounded by the mahalas, Google Maps, ©2018 Google



Fig. 3.5 Skopje, Stara čaršija as the market surrounded by the mahalas, unfortunately divided by the highway, Google Maps, ©2018 Digital Globe



Fig. 3.6 Sarajevo, the Gründerzeit structure was attached to the Ottoman Čaršija at its western edge, Google Maps, ©2018 Digital Globe



Fig. 3.7 Zagreb, the Novi Zagreb southern extension, Google Maps, ©2018 Google



Fig. 3.8 Velenje, the consequent town genesis, Google Maps, ©2018 CNES / Airbus



Fig. 3.9 Novi Sad, the Liman settlement on the left Danube bank, Google Maps, ©2018 DigitalGlobe

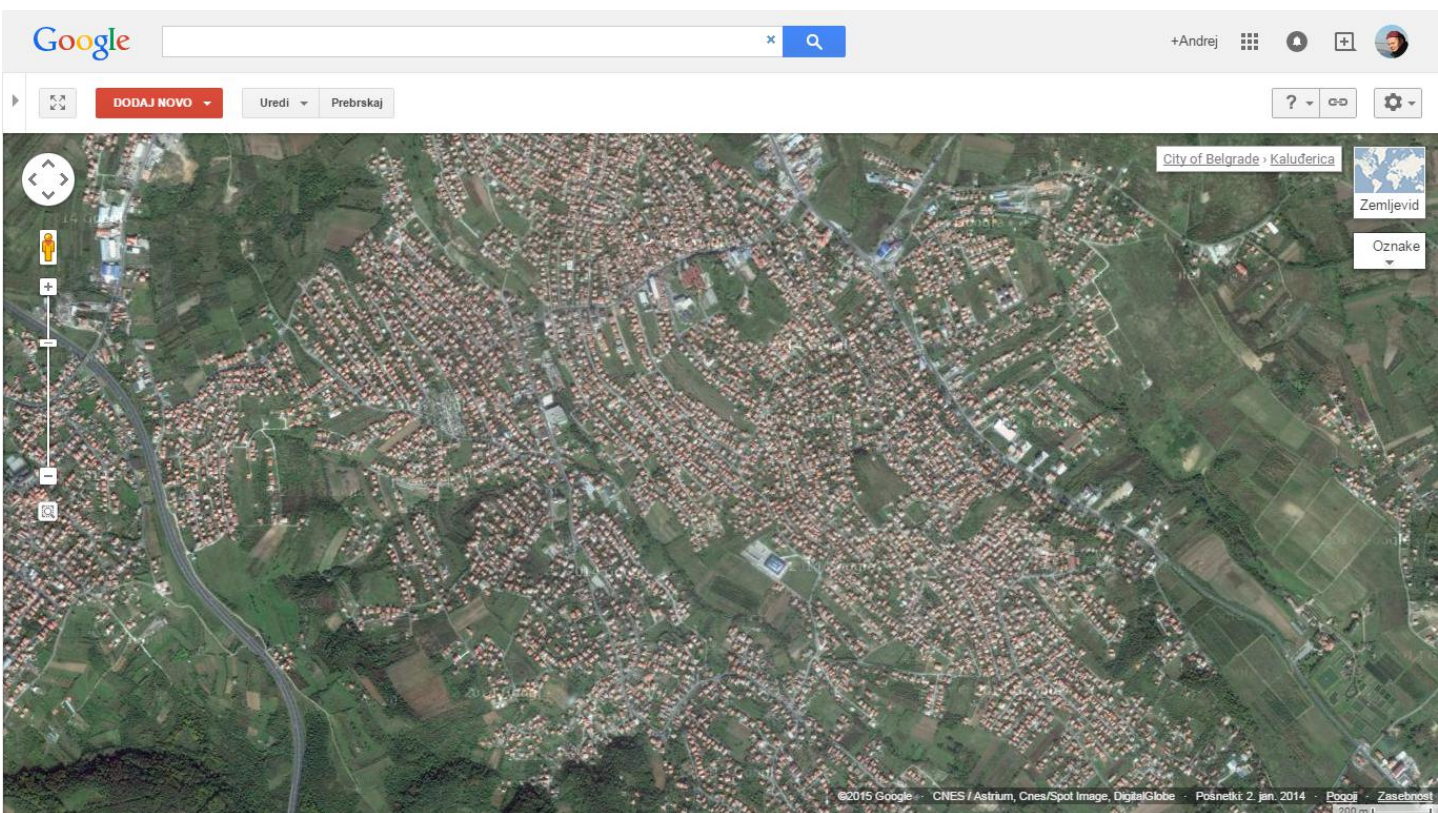


Fig. 3.10 Kaluđerica, the non-legal Belgrade quarter, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe



Fig. 3.11 Ljubljana, the medieval core and the Gründerzeit parts beautifully preserved and upgraded by the modernist intrusions, Google Maps, ©2018Google



Fig. 3.12 Belgrade, the Gründerzeit structure remains almost fully preserved, Google Maps, ©2018 DigitalGlobe

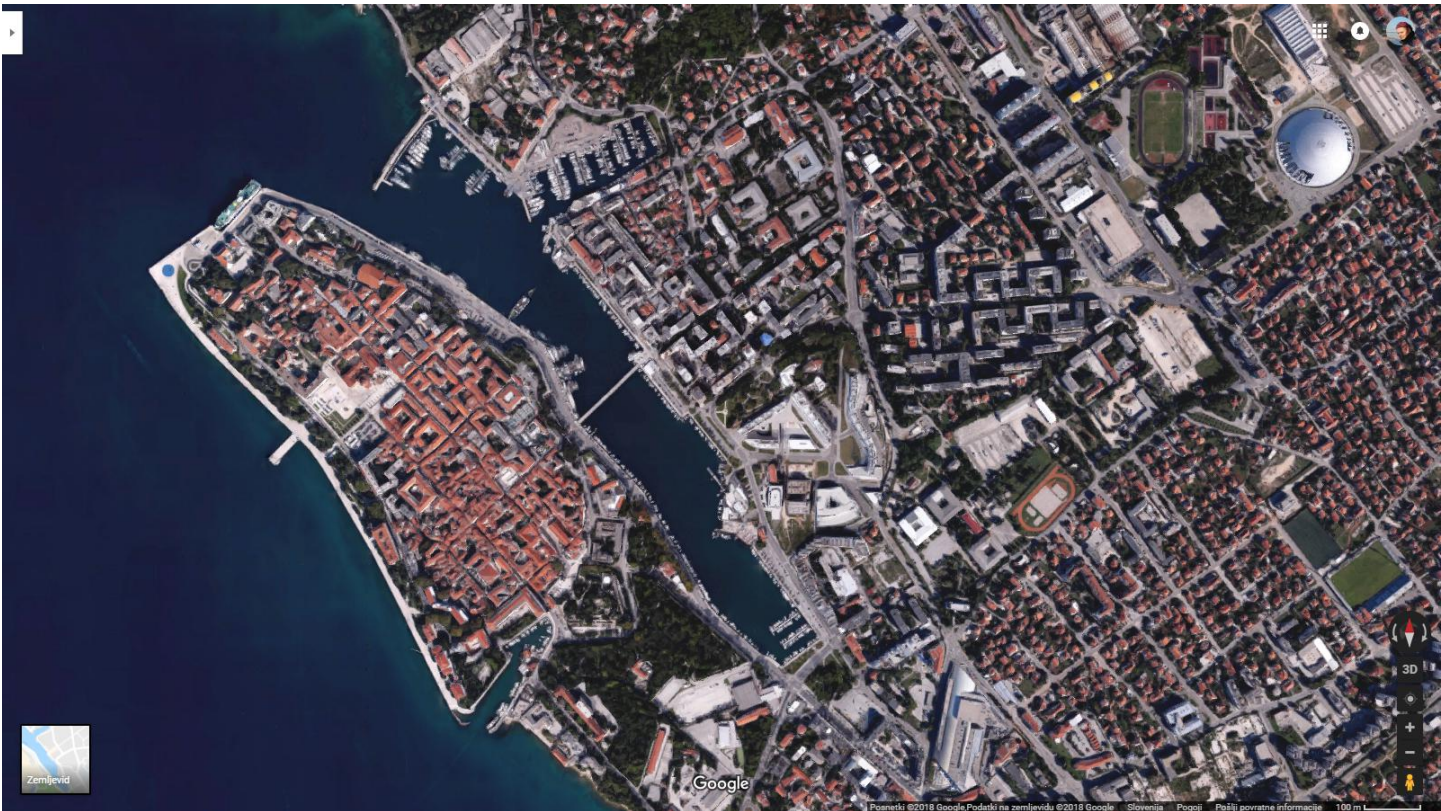


Fig. 3.13 Zadar, the core structure remains preserved, the modernist extensions are developed on the northwestern slope, Google Maps, ©2018 Google



Fig. 3.14 New Belgrad, northern neighbourhoods towards Zemun, the setup is fine adjusted according to the neighbourhood borders and natural elements, Google Maps, ©2018 DigitalGlobe



Fig. 3.15 Split structural eastern extension, the structure is vast, but not uniform in any way, the neighbourhoods are planned in most subtle manner, Google Maps, ©2018 Google



Fig. 3.16 Zenica city genesis, the neighbourhoods follow natural elements, Google Maps, ©2018 DigitalGlobe



Fig. 3.17 Prishtina to Fushe Kosove city road - low level urbanism, Google Maps, ©2018 Google, DigitalGlobe



Fig. 3.18 Ljubljana BTC Shopping conglomerate - low level urbanism, Google Maps, ©2018 Google



Fig. 3.19 Osijek to Čepin service zone extension - low level urbanism, Google Maps, ©2018 Google



Fig. 3.20 Maribor Jug extension - ambivalence of suburban and ordered organised structure, Google Maps, ©2018 DigitalGlobe, CNES/Airbus

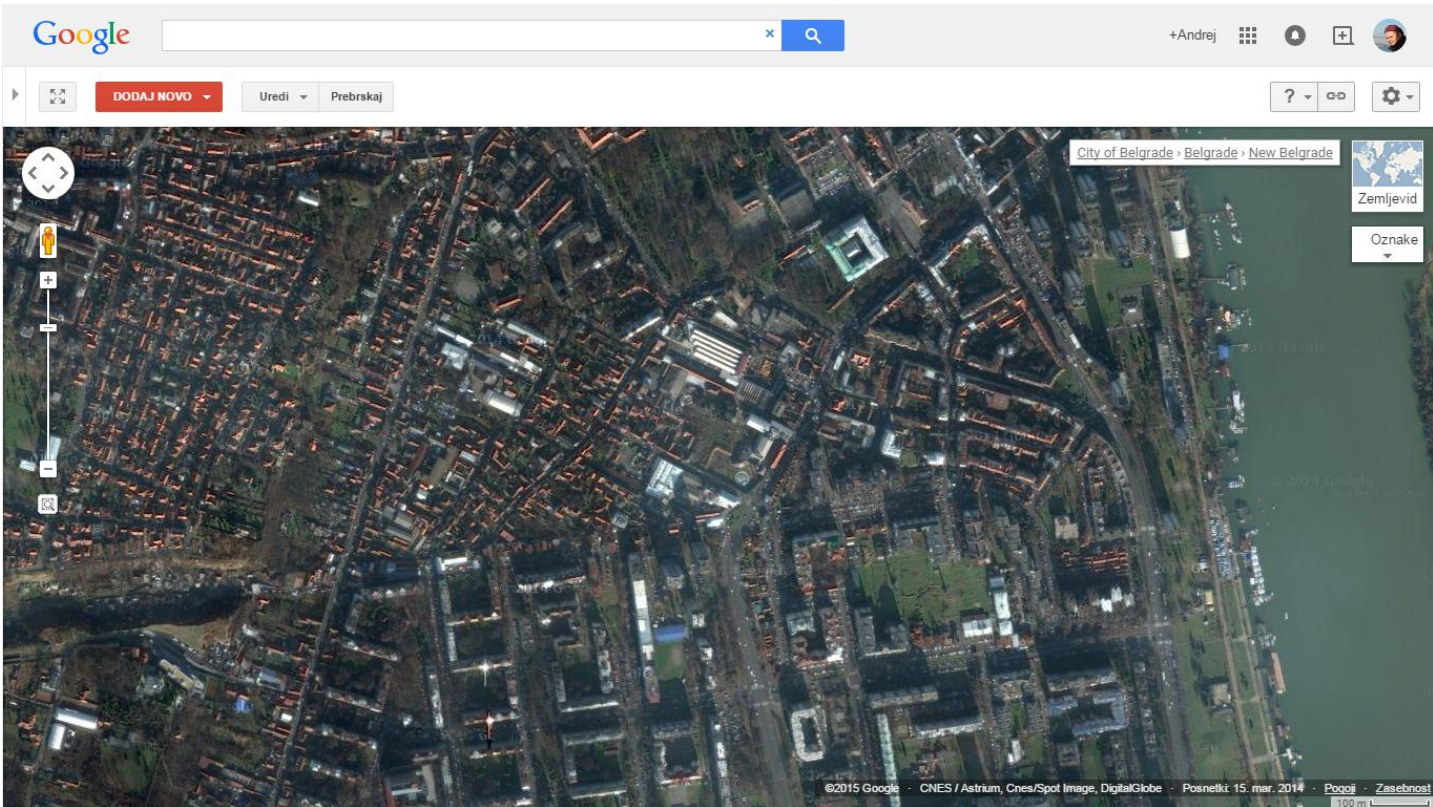


Fig. 3.21 City contact New Belgrade – Zemun, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe



Fig. 3.22 Maribor Gründerzeit city closed blocks - lost quality of the inner courtyards, Google Maps, ©2018 DigitalGlobe, CNES/Airbus



Fig. 3.23 Rijeka Gründerzeit city closed blocks - absent quality of the inner courtyards, Google Maps, ©2018 Google



Fig. 3.24 Osijek Gründerzeit city closed blocks - consequently defined city structure remains the quality of a provincial city due to mostly preserved inner courtyards, Google Maps, ©2018 Google



Fig. 3.25 Zagreb Dugave neighbourhood, today much changed through extensive green elements, Google Maps, ©2018 Google

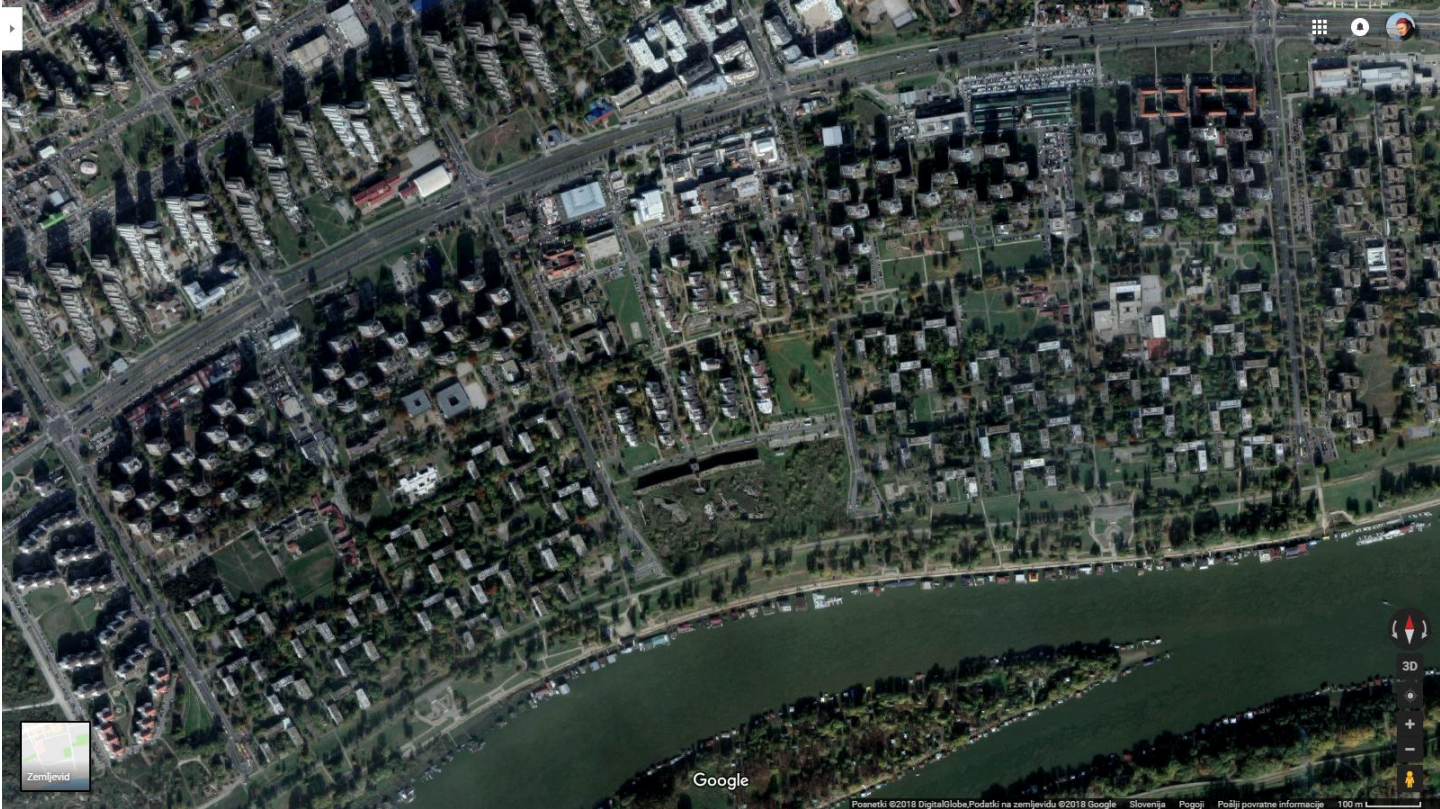


Fig. 3.26 Belgrade, "Novi Beograd, blok 45, blok 44, blok 70", 40 years after completion the buildings appear as "inserted into a forest", Google Maps, ©2018 DigitalGlobe



Fig. 3.27 Pančevo, “Tesla” neighbourhood, the buildings appear as “inserted into a park”, Google Maps, ©2018 DigitalGlobe



Fig. 3.28 Skopje, neighbourhoods “Jane Sandanski” and “Novo Lisiče”, the modernist southeastern extension, structurally complete the urban genesis, Google Maps, ©2018 DigitalGlobe



Fig. 3.29 Skopje, central “beautifications” are already recognisable in urban structural elements, Google Maps, ©2018 DigitalGlobe

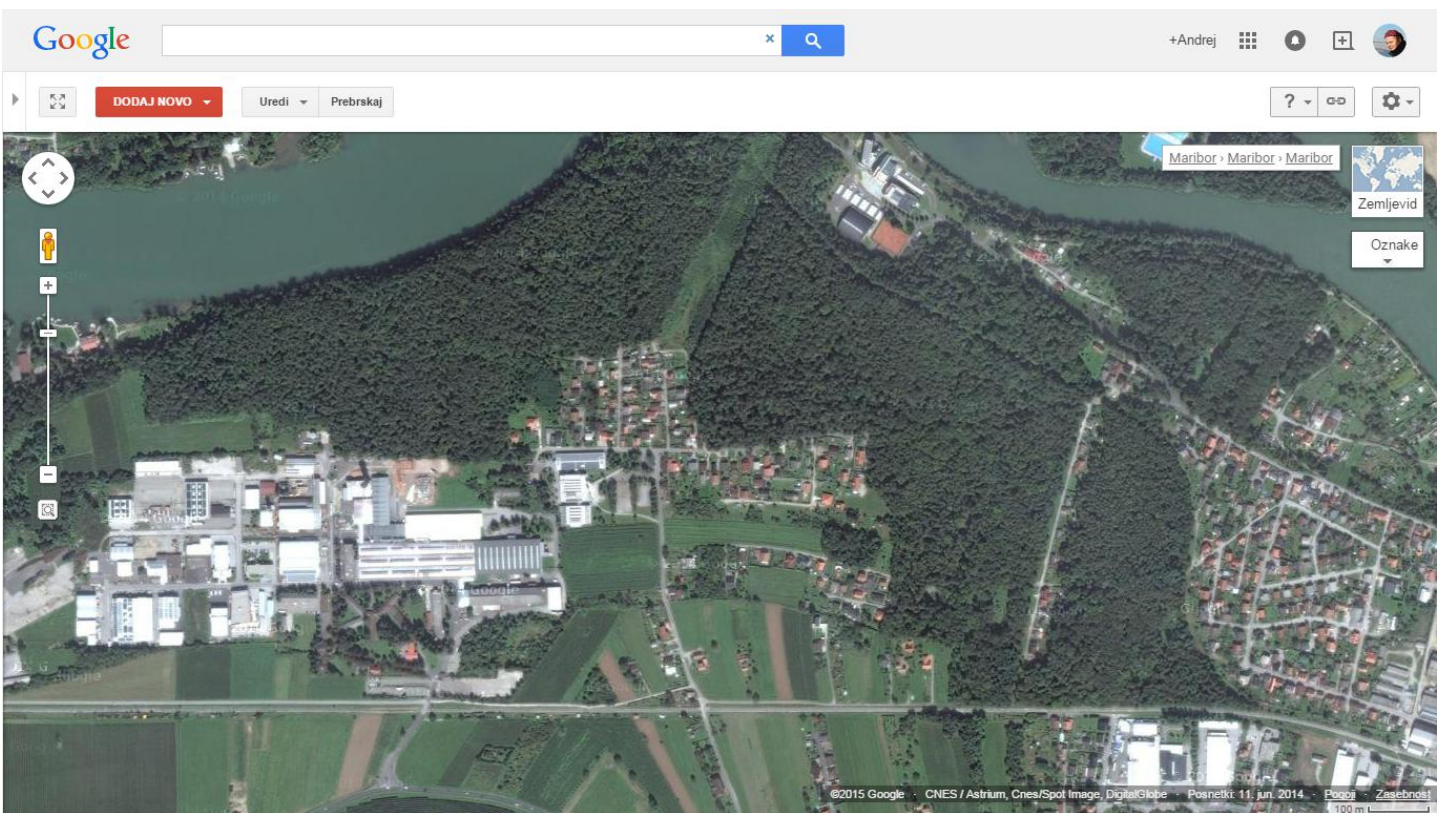


Fig. 3.30 Maribor, Damiševo naselje, Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe



Fig. 3.31 Smederevo, the fort on the Danube, Google Maps, ©2018Google, CNES/Airbus



Fig. 3.32 Shuta Orizari, a.k.a. "Shutka", a community in Skopje municipality, is a Roma settlement, was generated without regulation and is one of the largest non legally built settlements in the region, Google Maps, ©2018 DigitalGlobe



Fig. 3.33 Murgle (Northwest) and Rakova Jelša (Southeast), the two neighbourhoods on the southern border of Ljubljana - the first is considered one of the finest low density urban settlements and the second a low quality non regulated spontaneous city suburban extension. Google Maps, ©2018 Google



Fig. 3.34 Spodnja Polskava, a village south of Maribor - the southern extension is built spontaneously because the main village is preserved as “urban monument” with too strict design conditions. Google Maps, ©2018 DigitalGlobe, CNES/Airbus



Fig. 3.35 Regulation proposal for Cerknica, GRABRIJAN Dušan and DIDEK Zoran (ed.), *Urbanizem arhitektura konstrukcije*, Ljubljana, Projektivni zavod LRS Ministrstva za gradnje, 1948, p. 39

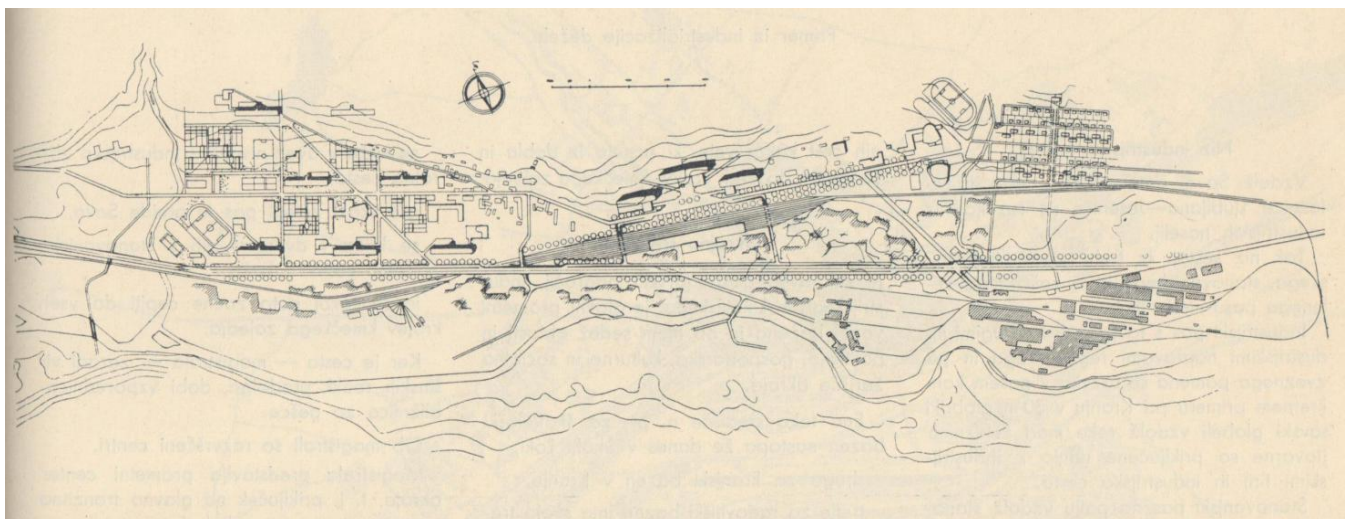


Fig. 3.36 Regulation proposal for Jesenice, GRABRIJAN Dušan and DIDEK Zoran (ed.), *Urbanizem arhitektura konstrukcije*, Ljubljana, Projektivni zavod LRS Ministrstva za gradnje, 1948, p. 43

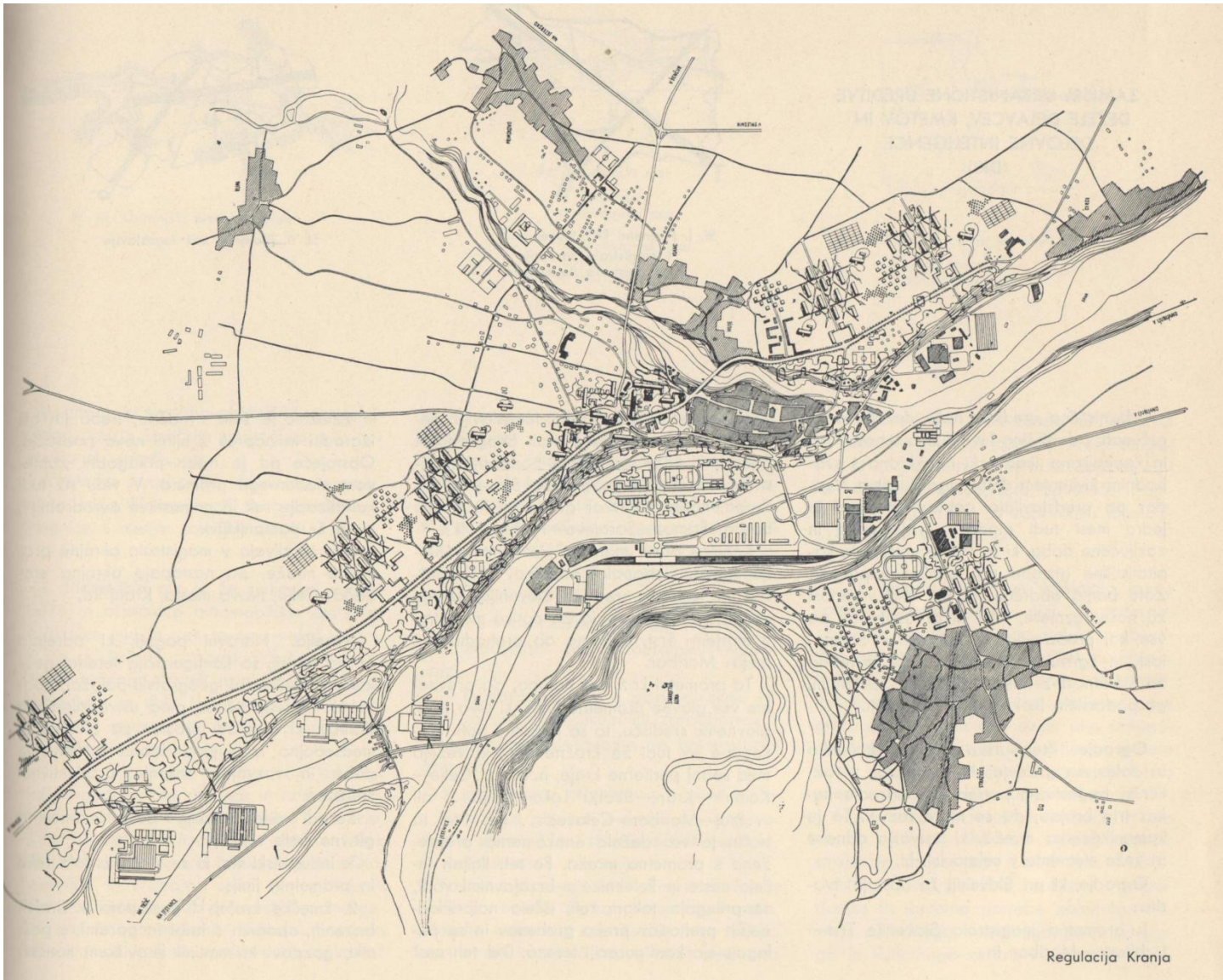


Fig. 3.37 Regulation proposal for Kranj, GRABRIJAN Dušan and DIDEK Zoran (ed.), *Urbanizem arhitektura konstrukcije*, Ljubljana, Projektivni zavod LRS Ministrstva za gradnje, 1948, p. 45

CHAPTER 4: CONCLUSIONS

Urban planning in the countries that were created following the dismantling of Yugoslavia left a legacy of five decades revealing undoubted ideological, aesthetic, functional and procedural similarities realized in the common architectural and urban heritage. The new countries and cities face almost identical problems, the greatest being one that caught the city governments without experience: cities are reorganized, redesigned, upgraded and renovated, but in most cases less inhabited: the demography indicates that almost no city expansion is really justified since population growth is usually weak and other needs for the city reorganization almost fulfilled and completed in the last two decades.

However, these similarities do not mean unified development. A simple graph showing the different time development periods of the cities and the strength of the city development period reveals unique development “city fingerprints”. The interesting result of this fingerprinting process is that when similar cities are compared their unique characters are expressed.

The first task of my research – to explore and define the similarities of ex-Yugoslav cities – led to a quite opposite conclusion: while the cities have similar development periods, at the same time they show their unique characters through the relative strengths of these periods.

The most interesting conclusion is that the cities face almost the same problems concerning a strong wish to develop: they fail to pursue sustainable, reasonable urban regeneration and development and fall prey to every developer who comes in search of a good land transaction opportunity. (Fig. 4.1, Fig. 4.2, Fig. 4.3, Fig. 4.4, Fig. 4.5, Fig. 4.6)

The most important question and the biggest surprise of the cities comparison is how to define the unofficial urban structures. Since they are parts of urban fabric in a surprisingly huge extent, they cannot be overseen. It seems the time to deal with the irregular city structures is right now.

The main conclusion is to check the decision whether the irregular city structure is a separate phenomenon of the city development or is it a structural type of the city fabric.

In this sense the hypothesis has to be checked on examples.

Figures to Chapter 4



Fig. 4.1 Ljubljana, Koseški bajej, neighbourhood addition to the south. Google Maps, ©2018 Google

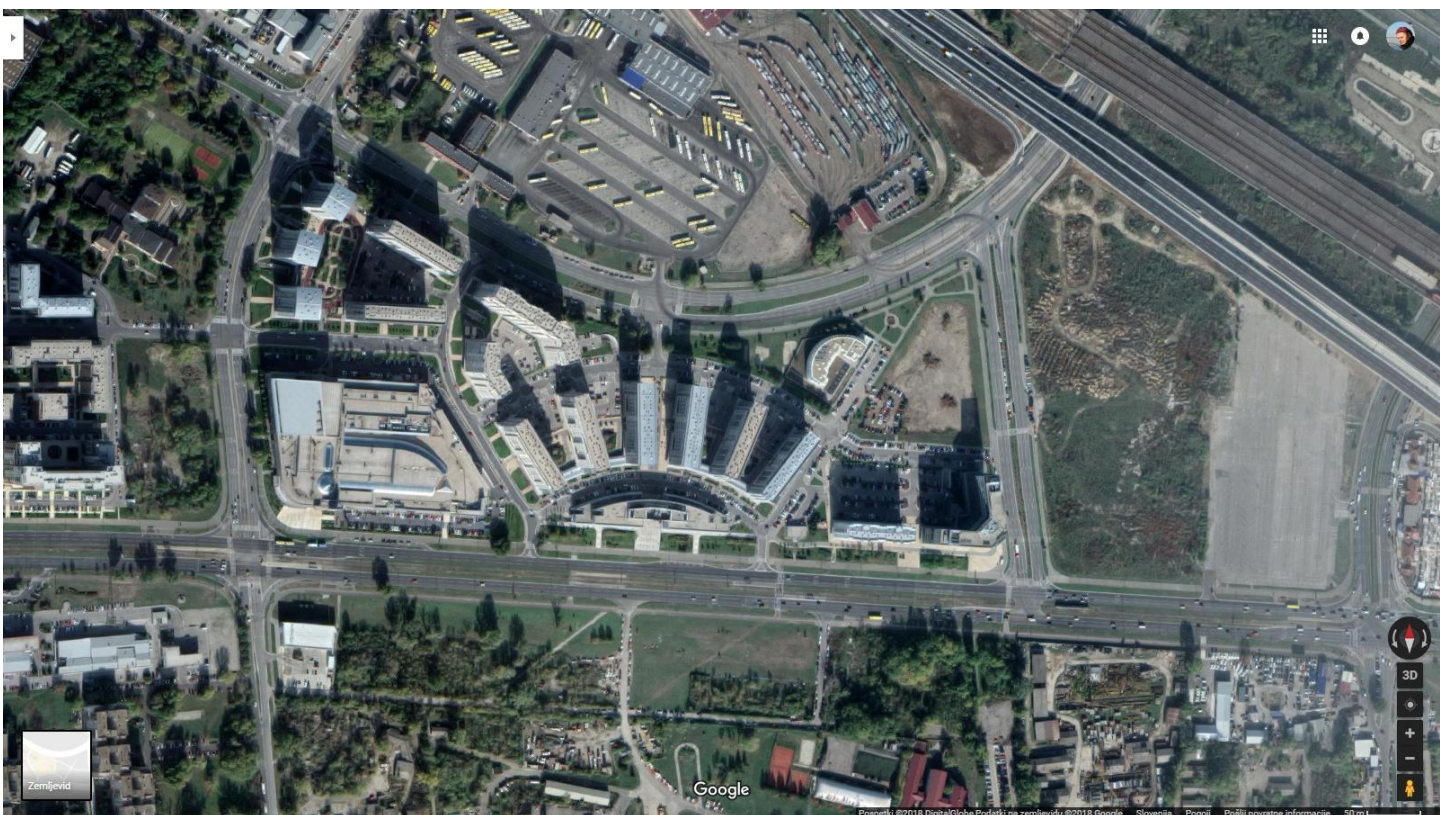


Fig. 4.2 Belgrade, Belville, Blok 67, one of the rare complex realisations of the 21st century in the region. Google Maps, ©2018 DigitalGlobe



Fig. 4.3 Pristine, neighbourhood Kalabria, one of the most expanding areas south of the city centre. Google Maps, ©2018 Google



Fig. 4.4 Vir, island in Croatia, extensively built up coastal area, irregular structure, almost exclusively individual residential holiday homes. Google Maps, ©2018 CNES/Airbus



Fig. 4.5 Neum, the only coastal town of Bosnia and Herzegovina on the Adriatic, is overbuilt by similar apartment holiday houses that are using the coast belt at the highest density possible. Google Maps, ©2018 DigitalGlobe



Fig. 4.6 Maribor, the Radvanje central development, an insertion of various residential and central buildings into a suburban irregular neighbourhood to improve its urban identity. Google Maps, ©2018 Google

CHAPTER 5 : TESTING THE HYPOTHESIS

Testing the four-step hypothesis through examples

The four steps of urban development were tested in all the cities observed and on three pairs of nearby cities: Maribor – Graz, Osijek – Pecs, and Subotica – Szeged.⁹¹

The first, second and third urban development steps showed similarities; these are traceable and comparable. However, this is not the case with the fourth step of urban development, the turbo-urban phase. This phase cannot be compared with the first three due to the following inconsistencies:

- The turbo-urban phase is either non-regulated, permissive or a phase that is too small to be compared to the former three phases.
- The turbo-urban phase is not similar in all the cities observed with respect to the time frame: permissive developments have a history of three or four decades, while urban congestion in fast-growing cities has been present for ten years only.
- The fourth step of development has not been completed and is not in any way traceable as a separate urban development phase; it is a mistake, an unplanned reality.

Therefore, a new definition of the urban development shape and appearance of permissive, nonlegal structures needs to be created. It seems that urban distortions, upgrades, congestion problems and unplanned development are a part of all the former city development phases and not a separate urban structural unit. This observation leads to the conclusion that the first three phases must be re-evaluated regarding their emergence.

As for the turbo-urban phase, it is visible in a lot of projects that have been started and the majority of them then abandoned. All of them were initiated based on a “beautification” principle, which completely replaced the “political representation” principle of the socialist periods.

The most important conclusion of the hypothesis evaluation is that the cities have two faces:

- representative urban development, which is regulated and conclusively formed with the built extensions of the city structure; and

⁹¹ A paper on these comparisons of Osijek - Pecs, Subotica - Szeged and Maribor – Graz was presented and published in Subotica [26].

- non-representative urban development, which is self-made, unplanned, irregular, not legal and represents unformed city sprawl.

The most interesting city development would be dealing with the non-representative urban developments⁹². Because of the architects' and urban planners' role change, they are the ones to be examined, and their structural, functional and design features improved, resolved and upgraded. The characteristics of these urban developments, whether in Šutka of Skopje, Kaluđerica of Belgrade, Rakova Jelša of Ljubljana or the northern and southern slopes of Sarajevo, are so significant that they have to be defined as a common urban entity:

- the irregular city parts are almost purely residential
- the irregular city parts lack almost all public buildings
- the irregular city parts do not have any organized systems of common green spaces, and the street spaces are minimal and at the lowest service level
- the irregular city parts very rarely have organized sewer systems
- the irregular city parts are still always untreated by urban planners since they grow without planning or urban procedures
- urban planners do not deal with the irregular city parts since they have neither the political support to evaluate and organize them nor the urban planning theoretical knowledge and professional and supporting instruments (fiscal, political) to solve the congested state of these parts
- the irregular city parts are operative and in many senses function as neighborhoods – even with all the lacks and faults mentioned above. (Fig. 5.1, Fig. 5.2, Fig. 5.3, Fig. 5.4)

⁹² Perhaps the most interesting structural trinity is to be observed in the city of Szeged, Hungary. As I compared the cities of Subotica and Szeged it occurred that the Szeged regular city structure was either *Gründerzeit* or socialist - for the official city center. But on the eastern outskirts the city was neatly equipped with an irregular small house structure that seems almost invisible. Talking about irregularities clearly shows the modus operandi of the ex-Yugoslav city governments: the non-regulated areas were never even organized or appended to the cities, but were some kind of "under the carpet" organisms and were never bordered or otherwise organized. And this is the difference between the ex-Yugoslav and other Central European practices: the ex-Yugoslav irregular city parts are obviously never brought even to a simple professional discussion. It shows that the professional discussion somehow equals governmental and political conformity.

Figures to Chapter 5



Fig. 5.1 Szeged, Hungary - a perfect example of regulating a city in three units - the Gründerzeit (west), socialist development (middle), irregular spontaneous (east). Such a division is very rare in the area of ex Yugoslavia. Google Maps, ©2018 Google



Fig. 5.2 Nikšić, Montenegro - perhaps the most neatly organised city structure in the observed region. Google Maps, ©2018 CNES/Airbus, DigitalGlobe



Fig. 5.3 Prilep, Macedonia, apart from the central modernist intrusion and some well designed border structures, the city has almost no regular structure. Google Maps, ©2018 CNES/Airbus, DigitalGlobe



Fig. 5.4 Užice, Serbia, apart from the central modernist intrusion and industrial zone to the southeast, the city has almost no regular structure due to topographic setup. Google Maps, ©2018 CNES/Airbus, DigitalGlobe



Fig. 5.5 Vranje, Serbia, apart from the central modernist intrusion and industrial zone to the southeast, the city has almost no regular structure. Google Maps, ©2018 CNES/Airbus, DigitalGlobe



Fig. 5.6 Kranj, Slovenia, the city is structured in readable structural units, almost half of the structure is suburban low level urbanism. Google Maps, ©2018 DigitalGlobe



Fig. 5.7 Zagreb, Croatia, Dubrava city part. Almost half of the urban structure is irregular, with low level of urban design and structural planning. Google Maps, ©2018 Google



Fig. 5.8 Sombor, Serbia. Apart from the Gründerzeit city core and some socialist extensions to the south, the town structure is irregular. Google Maps, ©2018 CNES/Airbus

Appendix 1 to Chapter 5

Paper “The border city and its urban development: Maribor / Osijek / Subotica”

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THE BORDER CITY AND ITS URBAN DEVELOPMENT: MARIBOR / OSIJEK / SUBOTICA

Andrej Šmid⁹³

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Summary: *This research concerns the comparison of the urban structure of three provincial towns of the former Yugoslavia; Osijek, Subotica and Maribor. The method of analysis of aerophotographic shots of city urban structure leads to conclusions about the intensity of urban development on the character of urban management and the method of construction.*

Keywords: *Urbanization, urban structure, provincial city.*

1. INTRODUCTION

1.1. The research method

For the last couple of years I was involved in a comparison research that has occupied me in various patterns. In 2011 a study of urban structure of more than fifty cities in central and eastern Europe with focus on former Yugoslav cities was conducted to specify the basic distinction of the ex – Yugoslav cities from similar central and east european cities. The research focused on the city structure and based on the available aerial photograph digital data cities of medium and large size (from approximately 100.000 to 2.000.000 inhabitants) were taken into consideration. A procedure to approach and trace the urban fabric was invented and the urban structure was connected to the research of the city urban development history and observation of entities and elements of specific urban structures in comparison to the urban development facts. According to the gathered data structural similarities in former Yugoslav cities were recognized and defined, and a phenomena of “ex – yugoslav city” started to reveal itself. The spatial data and aerial / satellite photographs became publicly accessible for the region since 2009 and the structural studies can be conducted on data that corresponds to at least 1:5000 scale. The cities are covered in local aerial photographs and the region is covered in various satellite photographic materials.

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For my doctoral dissertation a thorough study is in the phase of completion and it deals with the five chosen cities of the region, but the invented tracing procedure was used in various researches conducted in the last years⁹⁴.

The tracing method was used for the chosen cities of the dissertation, Sarajevo, Belgrade, Split, Maribor and Priština. The chosen cities were thoroughly studied in all their urban territory, i.e. throughout the urban fabric and suburbia, including the green system of the city borders, the surrounded rivers or sea. The procedure included three levels:

- *City view: a structural study of the relationship built / non built environment,*
- *Urban structure view: a structural study of different city parts according to the readable and recognizable structural entities and*
- *Detailed view: detailed reading of the urban fabric up to the urban block size.*

The tracing procedure was captured in screenshot digital photographs that are representing the basic findings, these were later used to compare the city attributes. The research continued in a second wave of detailed view studies that were based on more thorough observation and additional check-up of the recognized phenomena.

Basically, the city development traceable periods show four distinctive city fabric shapes / periods that were defined by its main characteristics: the “core” period reveals the city founding principles; the “gründerzeit” city flourishing period of the Austro – Hungarian rule shows the stage of civil society expansion; the “socialist” period witnessed the power of the dictated development; and the “turbo - urban” period leaves us with what the postmodern and contemporary urban management principles (or the absence of them) have done to the city fabric.

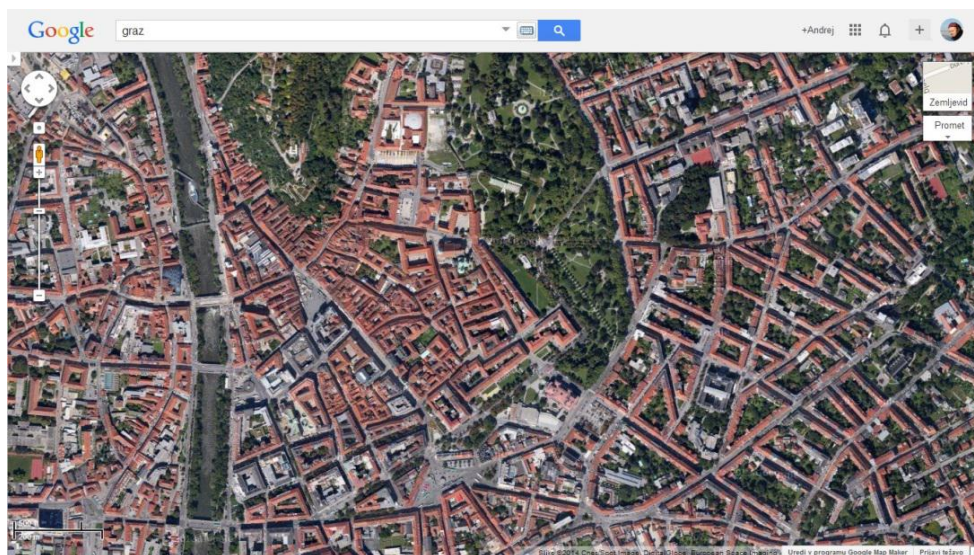


Photo 1. Graz, medieval core and „Gründerzeit”urban structures aerial view (Google Maps, ©2014 Cnes / Spot image, Digital Globe, European Space imaging)

⁹⁴ Similar contributions were prepared for the Maribor City edge 2013 conference and publication and the Belgrade Architecture and Ideology 2012 conference.

1.2. The research frame

The tracing procedure was applied to the three border cities in order to possibly discover similarities of their “urban development character” in various development periods: along with Subotica, two other cities were chosen because of the same size and the position on the northern ex-Yugoslav border: Maribor and Osijek. At studying the city development a side effect was discovered: all of the cities have experienced similar situation after the WW2: due to the border settings they were mirrored by twin cities of great resemblance in only about 100 km distance: Subotica by Szeged, Hungary, Osijek by Pecs, Hungary and Maribor by Graz, Austria. The similarity continues in the fact that the “twin” northern cities are developed up to twice bigger in the post WW2 period. Although the setup for the comparison seemed plain and dull, the results of the trace procedure exceeded the expectations.

2. THE BORDER CITY AND THE URBAN DEVELOPMENT TRACES

A method of comparison the chosen cities seems to be appropriate, the urban structure of them was looked at, traced and the conclusions derived from the observations; the three chosen cities seem to be united in the “imperfection”. Although today similar in size, their urban development is quite different; even more – perhaps the size is the only binding element of them. Approaching them, the looked at cities do not reveal its urban development easily, but in tracing parts of urban fabric the developments become more clear.

2.1 Osijek and its urban fabric development

The “core” period shows that the preserved basic unit is the old fortress Tvrdjava, neatly situated at the bending of the Drava river. The position in the actual 21st century city is showing that the preserved core is the representative in urban image – the city core sits almost in the middle of it. The structural image of the city also shows that this core is still defining the city structure – not only the “gründerzeit” developments are respecting it, but also later structural decisions like the bridges position, the green system design and the main city traffic system. The core period in Osijek has its meaning and its influence throughout the whole development.

The “gründerzeit” city flourishing period of the Austro – Hungarian rule is the motor of the city structure in Osijek “downtown”. A very distinct border of this city development is preserved and the block structure is maintained just as the core.⁹⁵ Although the city expansion is not the most powerful, the regulated order represents

⁹⁵ The similar city extension is known in many Austro Hungarian cities – perhaps the most distinguished example is the development of Sarajevo, where the čaršija was left as the city core and the “gründerzeit” city grew to the west of it with a clean cut line.

itself in still preserved urban blocks and very appropriate design of city streets. In this period Osijek shows the difference between center and the suburbs, the one is regulated with closed blocks with relatively clean green semi – private or common courtyards and the others with the clean regulated street line and facade and totally intimate individual backyards.

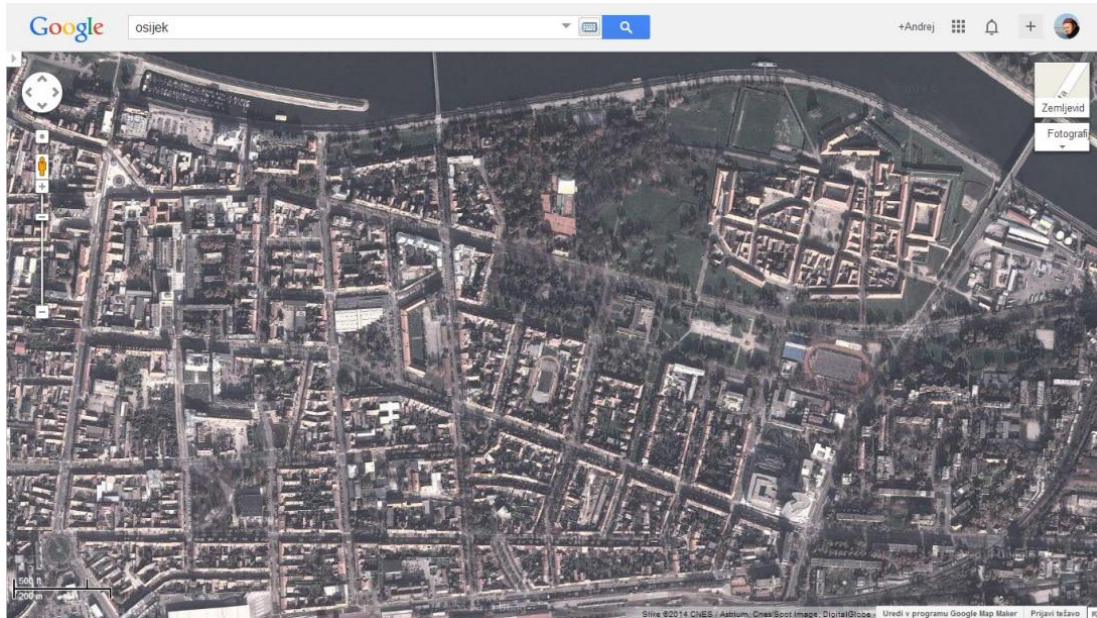


Photo 2. Osijek „core”and the „Gründerzeit” developments (Google Maps, ©2014 CNES / Astrium, Cnes / Spot image, Digital Globe)

The “socialist” period witnessed the power of the dictated development – in Osijek the developments of this period were obviously “greenfield” designs. Their undoubted quality is connected to the urban fabric; in Osijek the socialist city developments show a great understanding of connecting, filling the gaps or ending the city. This tradition is not often seen, especially not in larger city developments. Osijek has examples of a decent, clean city border, and also neighbourhoods that are of sensible urban design and fit into the surrounding city fabric with more consideration than elsewhere in former Yugoslav cities.

Apparently, the “turbo - urban” period in Osijek deals with some very contemporary issues in urban planning: be it conversions of the existing enclaves or designing the city southern borders, some structural order is continued and extended, there is hardly any massive irregularities in city structure and the city builds itself with public or semi – public interventions. Not turbo – urban at all.

2.2 Subotica and its urban fabric development

The “core” period of Subotica reveals the city urban design principles; Subotica in the urban development matter is a “Gründerzeit city”. The core is really established and included in the urban structure in the city flourishing period of the Austro –

Hungarian rule. Surprisingly, the principle of building closed blocks was not accepted and pursued in the city centre – the design principle is rather oriented to the street and open space – it gives the city centre an unique and vivid image. The similar principle of urban fabric can be understood at observing the pre WW2 city parts also – a great value is set to the street façade front appearance and it seems that the backyards have a totally closed intimate character.

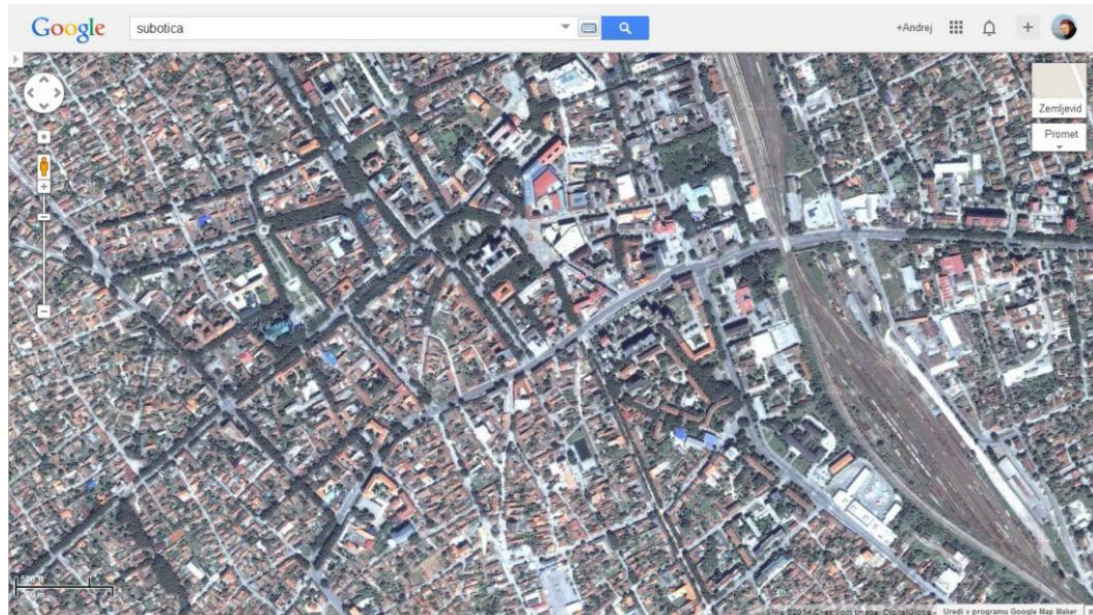


Photo 3. Subotica city core; street and open space design rather than „classical” block structure (Google Maps, ©2014 Cnes / Spot image, Digital Globe)

Such an approach to the clear distinction of intimate and public had a very harsh time in the “socialist” city developments of Subotica. It can be read from the observation of just a few developments of the “brave new urbanism” that the “solitaires floating in the semi public greenery” was not the cup of tea in this city. Although consequently and neatly planned in the strictly defined areas, these developments are perhaps only a proof for someone in the central government that Subotica is not different from any other city of that socialist state. It seems that the “socialist urbanism” was never really accepted in Subotica, perhaps due to the strong small scale street urbanism that created beautifully secret and intimate city parts hidden from the street views.

The “turbo - urban” period is not very distinctive in Subotica – it is perhaps the majority of the city fabric is designed in an “user friendly” manner already – in most cases illegal or half legal city developments⁹⁶ are an anarchic answer to the “official” city developments. Looking for them, you can find “official” city developments in Subotica – but they are strongly outnumbered.

⁹⁶ Be it Kaluđerica in Belgrade, Tophane in Priština, the slopes around Sarajevo or Damiševo naselje in Maribor, all half legal, permissive or illegal settlements within city borders.

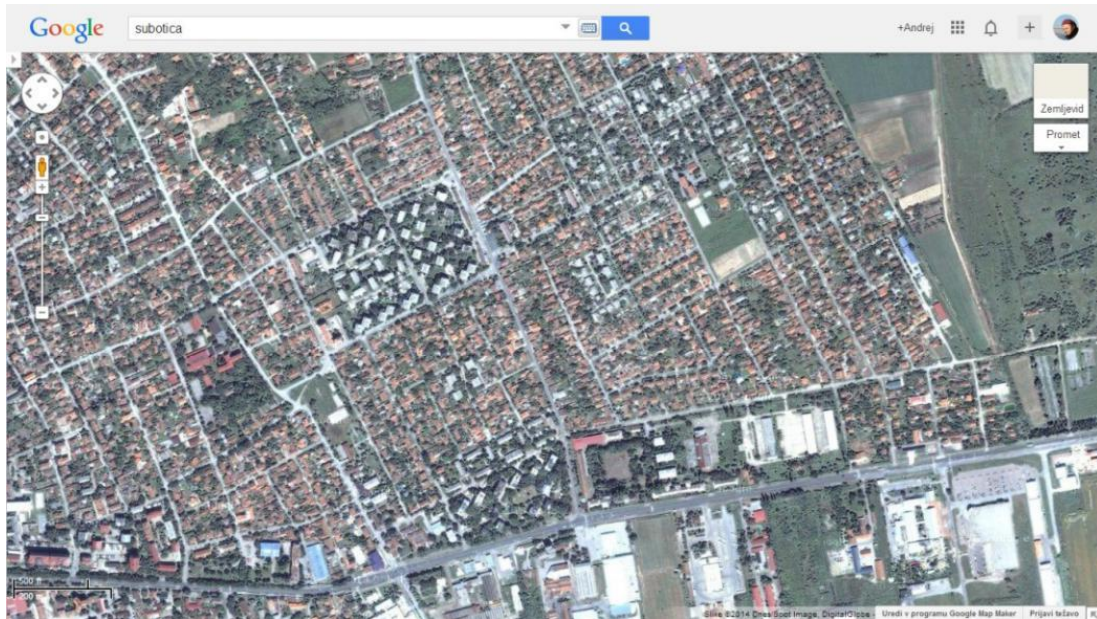


Photo 4. Subotica fabric; the "socialist" development is „consumed" by the neighbourhood (Google Maps, ©2014 Cnes / Spot image, Digital Globe)

2.3 Maribor and its urban fabric development

The city "core" is medieval and very typical; like the cities of the southern german tradition the urban core is a walled city of relatively distinct quadratic structure. The interesting on the open space development are the contents of the city squares; their characters define the city extensions of the "gründerzeit" period.

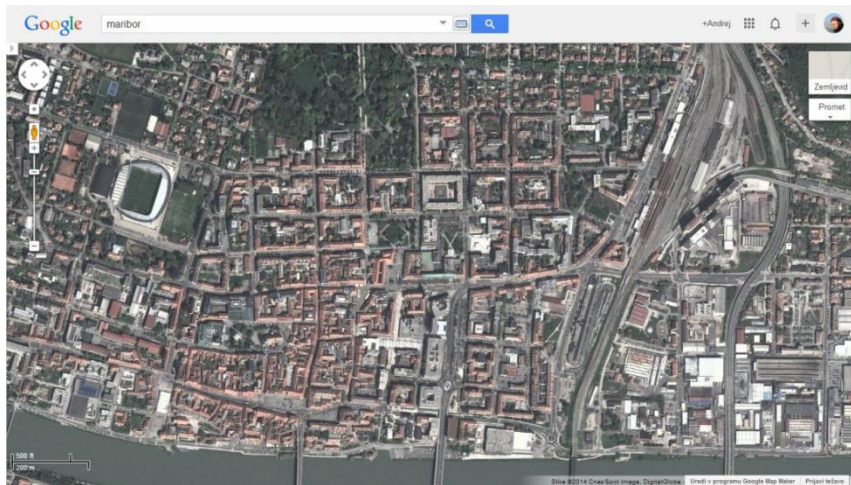


Photo 5. Maribor medieval core and the blocks of the „gründerzeit" period (Google Maps, ©2014 Cnes / Spot image, Digital Globe)

The "gründerzeit" city period is moderate in Maribor – the city extensions to the northeast of the medieval core are regulated and consequently pursued. However, the post WWI development went into other directions – regulations were smaller – scaled and insignificant due to diluted expansions.

The “socialist” period witnessed two currents; the more interesting is the city renewal movement - as Maribor was heavily bombed the WW2 it was an essential approach to city development – the less felicitous the “Maribor Jug” expansion project, a 70ties “modernist neighbourhood experiment”. It shows that Maribor has a tradition of “uncompleted projects” – all of the periods show a great deal of improvisation and some 70% of completion in average. The three “big developments”, on southwest, southeast and east, are not very well bound into the city fabric.

The “turbo - urban” period rises the standards, converts the city from industrial to a service city and converts many areas to new functionis, dilutes the industrial areas and keeps the city in its borders. The small scale developments are often in conflict with the surroundings, but the city keeps the green surrounding areas as a valued and preserved quality.

3. THE RELATIONSHIP BORDER CITY / NEIGHBOUR CITY

A significant moment in the city development is the competition. All of the considered cities of ex Yugoslavia have been always compared to their neighbours and this relationship is very specific.

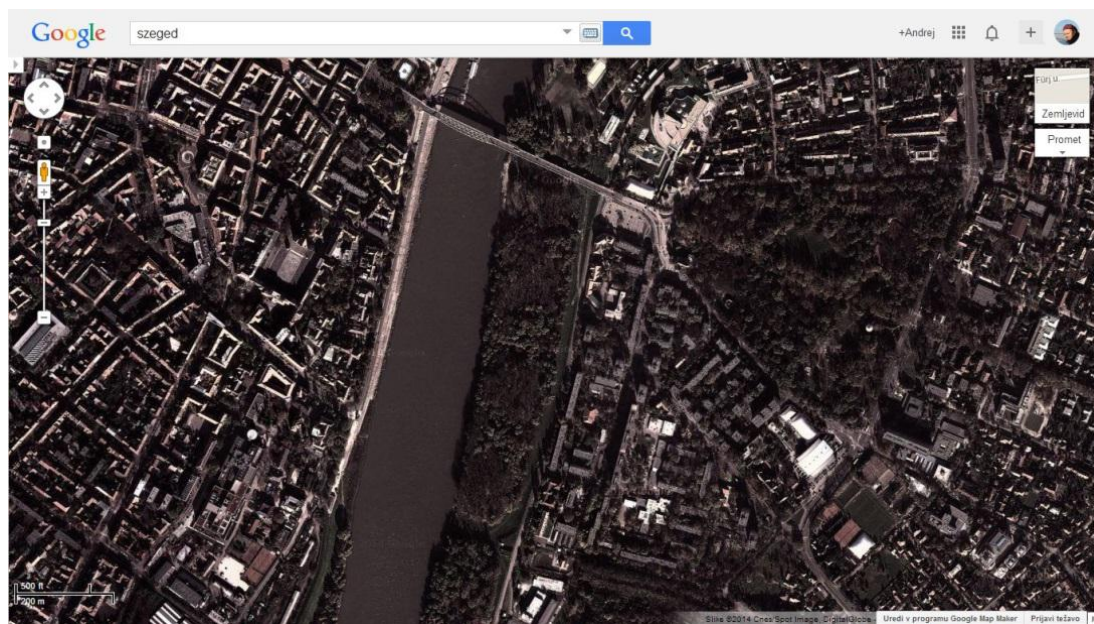


Photo 6. Szeged, „gründerzeit” on the west bank, and „socialist” on the east bank (Google Maps, ©2014 Cnes / Spot image, Digital Globe)

The three neighbouring cities, Graz, Pecs and Szeged are larger, more important and have some more urban structure qualities. Pecs has a very exclusive city core and consequent socialist urban developments, Szeged has a strict „gründerzeit” city form

in the historic city and a vast, almost perfectly arranged „socialist” developments on the southern Tisa side and to the east, Graz has a beautifully preserved medieval city core and imaginative „gründerzeit” developments with a great tradition of the city living qualities, on top of it the architectural expressive school of the contemporary urban planning period.

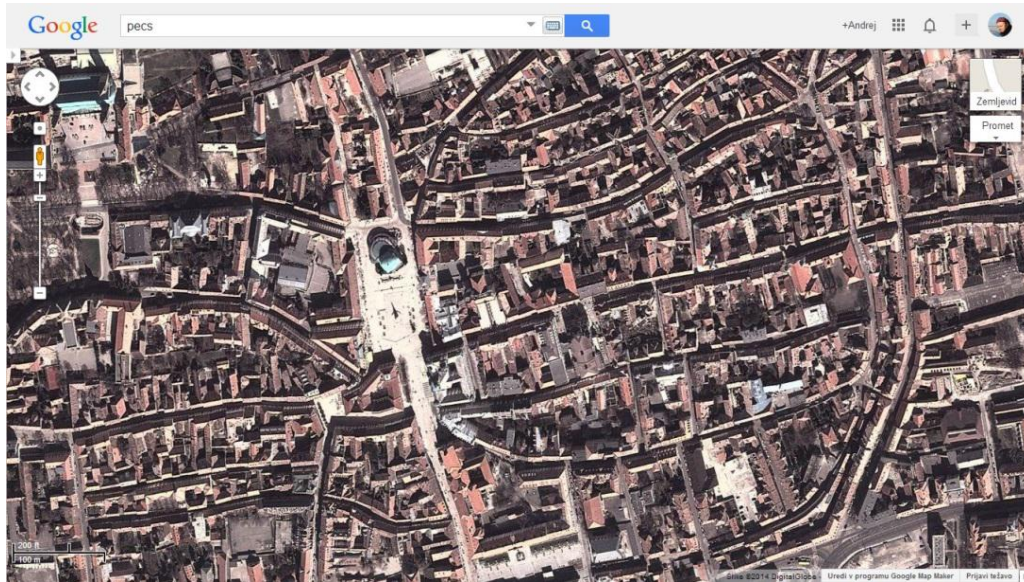


Photo 7. Pecs, medieval city core (Google Maps, ©2014 Digital Globe)

But there seems to be a charm in the mistakes, the specifics, the local imperfect flavours – neighbouring cities may have more power and more inhabitants and more development possibilities, but the readability of the city character is weak. The more regulated, the less characterised? This question needs to be researched yet.

4. CONCLUSION

The cities and its urban development can be studied and researched in a tracing procedure – the city fabric studied reveals not only how the structure is bound together, but also, which are the space and urban design qualities cherished throughout the history and the which are the beloved distinctive urban development periods of the city inhabitants. Apart from unfolding the illusion that the urban planners are the real builders of the city, the observation of the city structure is obligatory when trying to understand the priorities, the character and the flavour of every city, be it young or old.

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<https://maps.google.com/>, downloads in march and april 2014.

CHAPTER 6: THE THESIS OF THE “THREE STEPS, REGULARITIES AND TWO WAYS OF SOCIALIST EXTENSION”

Three conclusions regarding the ex-Yugoslav city

Based on the test of the four-step hypothesis a conclusive new thesis evolved from the observation of city development and the “as is” city fabric.

All three conclusions suppose that cities in the area of the former Yugoslavia show the same history, experience the same problems and are solving them in similar ways.

The main conclusions are as follows:

1. The ex-Yugoslav city was formed in **three main steps of development** that are traceable in the urban structures; these urban development units are ordered and often represent a legacy of **regulation, representation and beautification** of the city.
2. The ex-Yugoslav city was formed by **two distinct urban ordering principles**: the first is the **beautification and regulation principle** and is used in the most important city areas, and the second is the **irregular city development principle**, which covers only residential one-family housing and is represented in the irregular expansion which covers considerable city areas that cannot be ignored.
3. The **socialist development altered the cities in two different manners**: if the cities were designed in an imperial/royal/*Gründerzeit* manner⁹⁷, the socialist extensions would be minor in the developed urban pattern of these structural parts and the socialist development would take place from the city borders outwards. On the other hand, if the cities in the beginning of the socialist period were found to be “underdeveloped”, i.e. lacking a “modernization” of the city core⁹⁸ or if the city core lacked urban design with developed public spaces and public buildings, the socialist extensions would penetrate the centers of city structures and “modernize” the city centres with relatively vast “beautification” upgrades⁹⁹.

⁹⁷ Mainly cities of Slovenia, Croatia, Bosnia, Vojvodina, Montenegro - and Belgrade - cities that were extended or developed in the years 1890 - 1945

⁹⁸ Mainly cities of southern Serbia, Macedonia, Kosovo

⁹⁹ See Priština, Kosovo (it was made the Kosovo province capital since the city of Prizren was too close to the Albanian border) - socialist development is a “beautification” right in the center of the amphitheatrical topographic setup: from the historical market on the north to the city borders of the south a bold linear extension was planned and built (see Stojkov, Fig. 2.13).

The first conclusion is fully in conformance with the “official” or “valid” version of urban planning history. The explanation of the first conclusion lies in evaluating the range of the city developments and shows the common characters of the vast majority of cities with the ex-Yugoslav history.

THE URBAN DEVELOPMENT PERIODS

The development periods still need to be refined since the model of three urban growth steps is insufficiently delimited. To solve this inconsistency in the urban structure models, new refinements for each of the three urban structural units have been added:

- 1 The CORE structural unit
 - 1a The core unit
 - 1b Core unit distortions
- 2 The IMPERIAL / *GRÜNDERZEIT* / ROYAL structural unit
 - 2a The imperial/*Gründerzeit*/royal unit
 - 2b Imperial unit congestions
 - 2c Imperial unit upgrades and extensions
- 3 The SOCIALIST structural unit
 - 3a The socialist unit appearance
 - 3b Socialist extensions
 - 3c Socialist upgrades

THE URBAN STRUCTURAL REGULARITY MODES

Apart from the “official structural observation”, the ex-Yugoslav cities can also be validated through a focus that reveals regularity of city development and growth: thus we can say that **two city structural modes** are revealed and can be traced in structural studies of all the ex-Yugoslav cities:

- I. regular city structure
- II. irregular city structure

THE SOCIALIST DEVELOPMENT PATTERNS

Apart from the city historic development structural units and the city regularity modes defined above there is another ex-Yugoslav city principle to be found.

Since the two principles of city development around the year 1900 resulted in uneven city structural developments and city shapes that were a basis for socialist developments - the ex-Yugoslav cities that were under Ottoman rule were not developed in a similar way and to the same extent as the cities under Austro - Hungarian rule - the two basic traditional socialist modus operandi patterns are pinpointed:

1. intrusion of socialist developments into central Otoman urban structure
2. addition of socialist developments to the imperial/*Gründerzeit*/royal urban structure.

6.1 THE URBAN DEVELOPMENT PERIODS

The urban development periods define the following three structural units:

1 The CORE structural unit

- 1a The core unit
- 1b Core unit distortions

2 The IMPERIAL/*GRÜNDERZEIT*/ROYAL structural unit

- 2a The imperial/*Gründerzeit*/royal unit
- 2b Imperial unit congestions
- 2c Imperial unit upgrades and extensions

3 The SOCIALIST structural unit

- 3a The socialist unit appearance
- 3b Socialist upgrades and extensions

6.1.1 THE CORE STRUCTURAL UNIT

1a The core unit

The structural core of the city dates mostly to medieval times, though in some cases to Roman urban design (for example, Split and parts of Ljubljana), and is defined by a genuine urban fabric, street layout and urban block design that has remained intact throughout. The core unit reveals the oldest principles of urban design (or the lack of them) and is limited to smaller city areas. The value of the core urban structure is historical, typically they remained untouched by the city developments if later redesigns are applied to nearby parts of the city structures. (Fig. 6.1, Fig. 6.2, Fig. 6.3, Fig. 6.4)

1b Core unit distortions

Some of the core unit borders are distorted by inevitable city expansions that preceded later structural developments; mostly the distortions are applied to the core urban blocks and not to the core unit urban structure (i.e. the street network, and the relationship to

rivers or the sea). The distortions redefined single or multiple urban block structures or redefined parts of the city walls (in the case of walled cities) or parts of the urban fabric around squares without ruining the relationships of built blocks and empty urban spaces of the cities. (Fig. 6.5, Fig. 6.6, Fig. 6.7, Fig. 6.8)

6.1.2 THE IMPERIAL/*GRÜNDERZEIT*/ROYAL STRUCTURAL UNIT

2a The imperial unit

The imperial unit is well defined in the development of the urban structure in the late 19th century and early 20th century, and is composed in such a way as to define closed urban blocks as a unifying city grid. The city ordering principle in the region comes from Vienna and is adopted in all of the observed cities in a manner that deeply respects the city core structural unit - the imperial structural unit continues the urban development and grows the city fabric alongside the old structure in an elegant and noninvasive manner. Two major structural interventions occur in this development period: the deconstruction of city walls and the connection of cities to the railway network. Besides the vast and strictly ordered city expansion, which seems almost too unifying, the best result is that the new city parts are based on the city core characteristics - their content and roles are known, respected and judiciously enhanced. (Fig. 6.9, Fig. 6.10, Fig. 6.11, Fig. 6.12)

2b Imperial unit congestion

A separate unit of the city structure is the congested imperial fabric. Since the closed urban blocks are not an appropriate urban pattern for the late 20th century, they are filled with intrusions of buildings inside the originally walled green area. Just as inner courtyard congestion can be observed in the case of Barcelona, where some original closed urban blocks courtyards are fully built, similar cases in ex-Yugoslav cities congest the imperial closed urban block structure. The appealing “building in the courtyard area” ruins the charm of this urban block structural type. The fine relationship between the street on the outer facade and the inner courtyard is ruined through eliminating the inner void. The congested structure limits to fully built urban blocks and represents a new structural type with a lower quality of urban ambience. (Fig. 6.13, Fig 6.14, Fig. 6.15, Fig. 6.16)

2c Imperial unit upgrades and extensions

In some cities the imperial grid blocks unit was upgraded and transformed in a way that made sense¹⁰⁰ - the urban blocks were redesigned with corner redesigns or conversions into micro-squares, and some of them were extended through sensible divisions of bigger

¹⁰⁰ For example in Maribor, Slovenia, the urban blocks were damaged by bombing in World War II and renovated in the 1960s and 1970s.

blocks or similar. Be it because of the disliked pre-socialist urban appearance or due to the unfinished closed block imperial grid, some of the extensions and upgrades offer a unique insight into the 1950 and 1960s.¹⁰¹ (Fig. 6.17, Fig. 6.18, Fig. 6.19, Fig. 6.20)

6.1.3 THE SOCIALIST STRUCTURAL UNIT

3a The socialist unit

The socialist structural unit is an Athens Charter urban development - the city extensions of the 1960s and 1970s are designed and built respecting the principles of the pan-European movement, where the buildings “float” in the greenery, the neighborhood design contains self-sufficient structural areas and the city expansion is governed by a central planning process that covers much more than just the planning of urban extensions. Socialist structural units occur in three forms or aspects: the smallest consists of the small neighborhood at the outskirts of the *Gründerzeit* structure. It is the most interesting since these areas are often sensibly attached to the closed block structure and they mainly date to the 1960s. The medium-sized form is the medium-sized neighborhood at the city outer border, which is the cornerstone for the city expansion. These structural units, dating mainly from the 1970s, are self-sufficient and do not fit in with the surrounding city fabric since they were set up in the previously unbuilt space of the city borders. The third development is the big city expansion project,¹⁰² which is a vast city development built mostly in the southern direction of the city borders and is actually the built face of the urbanization plan that includes the expansion of the city population, industrial and economic growth and massive inflow of new inhabitants. (Fig. 6.21, Fig. 6.22, Fig. 6.23, Fig 6.24)

3b Socialist unit upgrades and extensions

Despite the careful design of the socialist structural units, the transition of the social and economic system after the dismantling of the common state of Yugoslavia caused a need for upgrading the cities with new content and functions: shopping malls, entertainment arenas, sports and leisure facilities, additional educational facilities, various religious buildings and similar were introduced to the existing city structures. The socialist structural units were mainly upgraded and extended with new shopping, educational and religious facilities and these extensions mostly followed the neighborhood patterns and content. The units were upgraded with non-residential content that was neither planned nor envisioned in the original neighborhood designs, so great skill and wisdom were required to ensure the

¹⁰¹ See Belgrade, interventions in the traditional fabric in the Figures and the examples in [15]

¹⁰² Such as “Split II”, “Maribor Jug”, Pančevo “Kotež”, “Novo Sarajevo”, and “Novi Beograd”.

quality of the upgrade. Sadly, this was not the main concern of the city governments. (Fig. 6.25, Fig. 6.26, Fig. 6.27, Fig. 6.28)

6.2 THE URBAN STRUCTURAL REGULARITY MODES

For a better understanding of a socialist city a clear distinction must be introduced: in observing the city structure one has to recognize the two structural modes:

- **regular city structure**

- **irregular city structure**

The regularity mode is often mistaken for the “planned” and “unplanned” urban structure. The regularity mode here is defined by the structural definition in the previous chapter: if we can define the “regular” core, imperial and socialist units in a city fabric, then the rest of the area has been irregular and vice versa. As long as one can observe and define the “official” or “regular” urban areas, the rest can be defined as irregular. And as long as one can detect the structural irregularities in the city fabric, the principle of distinction between regular and irregular structure is proven.¹⁰³ (Fig. 6.29, Fig. 6.30, Fig. 6.31, Fig. 6.32, Fig. 6.33, Fig. 6.34)

6.2.1 REGULAR CITY STRUCTURE

The **regular city structure** has been described and understood quite well throughout urban development history. (Fig.6.35, Fig. 6.36, Fig. 6.37, Fig. 6.38)

In this thesis it is defined as:

- **The core structural unit**

- **The imperial/*Gründerzeit*/royal structural unit**

- **The socialist structural unit**

All of the above-mentioned units are defined in Chapter 6.1.

¹⁰³ As proof that this principle is already in use, many urban development plans still use zoning as the main urban ordering approach: the regular zones are defined easily and the irregular zones are merely defined by their borders. The regulation mechanisms in regular structure are clear and traceable, but the regulation mechanisms in irregular structures are basic, open and mostly nonexistent.

6.2.2 IRREGULAR CITY STRUCTURE

In contrast, the **irregular city structure** has been neglected and unrecognized until today. Such a structure can be found in all the ex-Yugoslav cities in the following forms and occurs in the following phenomena:

- **Undeveloped city space**
- **The insignificant, anonymous, irregular city space**
- **Abandoned and converted city zones**
- **Socialist permissive unplanned irregular developments**

The distinction between the above mentioned is in the structure and the land use of the areas or zones described:

6.2.2.1 Undeveloped city space

The areas in this category are not even irregular. The space is simply undeveloped. One of the famous examples include the Sarajevo northern bypass street (Fig. 6.39), the Maribor railway triangle (Fig. 6.40), and the Belgrade Sava waterfront until conversion in 2017 (Fig. 6.41). Why are parts of the city undeveloped, why do undeveloped city zones occur? Is it connected to the railway ownership? Could one expect a new triggering moment in reforming the railway system in the 21st century?

6.2.2.2 The insignificant, anonymous, irregular city space

This space is partially regulated, but does not contain any characteristic forms and does not enhance the identity of the city. It could be set up in any city, anywhere. The irregular city fabric is tightly connected to the formal beautification of socialist city development; it is the result of permissive planning.¹⁰⁴ (Fig. 6.42, Fig. 6.43, Fig. 6.44)

6.2.2.3 Abandoned and converted city zones

Abandoned, converted and “to be converted” zones are mostly the remnants of two types of facilities that are forgotten and no longer contemporary: the industrial areas in parts of the urban fabric, and the military barracks areas that were developed at the outskirts of the imperial city fabric, but the cities were subsequently extended beyond them. Sometimes

¹⁰⁴ Permissive planning occurred in the 1970s and remains alive through retroactive legalizations illegally built structures that are introduced every 25 years. Almost nothing that was built without permission has been demolished by urban and building inspection, since all of the buildings built without permits are simply waiting for the next legalization to occur.

the abandoned areas are connected to some other large areas of outdated facilities.¹⁰⁵ (Fig. 6.45, Fig. 6.46, Fig. 6.47)

Of particular note is that the city and state governments of the observed region always offer “brave new city extensions” in the converted areas and then are never able to pursue the brave new city extension plans¹⁰⁶.

6.2.2.4 Socialist permissive unplanned irregular developments

Apart from the major urbanization plans and large-scale developments of the socialist city, formal city development history as of today neglects and hides the unplanned city expansions. Every ex-Yugoslav city has permissive, irregular structural parts, and these cover various areas of the city¹⁰⁷. This dark side of urban development is almost never considered an important city part since these structures are invariably residential. The urban planning tradition in the region has not invented methods for improving its urban qualities since public spaces and public functions are underdeveloped or not even included in these structural units. Small structured units are of low density and often cover areas that are not suitable for building according to the planning standards (areas that are not sufficiently insulated, flood risk areas, poorly accessible areas, rural non-regulated areas with inadequate municipal infrastructure, sloping areas, areas near or under high-voltage power lines and near waste dumps, and similar). (Fig. 6.48, Fig. 6.49, Fig. 6.50, Fig. 6.51)

6.2.3 CONTROVERSY BETWEEN OFFICIAL / REGULAR AND UNOFFICIAL / IRREGULAR

The second conclusion is quite a heresy in the history of official urban planning: postwar urban planning specialists were not able to identify, regulate, or even understand the irregular, non-regulated, self-developed individual housing urban fabric extensions. On the other hand, a tolerance for the irregular, nonlegal, yet tacitly permitted urban extension process was from time to time found in the attitude of politicians: out of a desire to calm political tensions since the 1980s, the various governments of different new nation-states invented ways to retroactively legalize spontaneous residential neighborhood city extensions over approximately 20-25-year time periods. Slovenia legalized the vast majority of the nonlegally built residential structures in 1993, Croatia commenced a legalization wave in 2013, and Serbia in 2015. Other countries with Yugoslav roots have

¹⁰⁵ This could happen to the vast area of SIV (Savezno izvršno vijeće) in Belgrade - the building cannot be used for its original purpose (the governmental building of the former federation) since the federation no longer exists.

¹⁰⁶ Compare the projects Belgrade waterfront, Maribor Manhattan, Ljubljana railway station hub, Priština centre.

¹⁰⁷ In Maribor “Damiševo naselje” is a small and insignificant city part, in Belgrade “Kaludžerica” is a major irregular development, in Sarajevo the southern and northern slopes are covered with irregular structure, in Priština the city outskirts are covered in never regulated building structures, and Skopje has the “Šutka part”, where irregularity is the “joie de vivre”, while Ljubljana has the “Rakova jelša” neighborhood where city development principles end.

the same problem with nonlegal building structures and will sooner or later find a unique way and time frame to legalize them. An interesting approval of this principle comes from Priština, Kosovo: the unspoken message of the city government since 2001 is “build as you wish, since only some 15% of the buildings obtain a building permit”¹⁰⁸.

The legalization process shows that a cohabitation of official or regulated urban planning and spontaneous and retroactively legalized urban planning is possible. The latter is not followed by urban planners, but governments ignore legal principles and buy social peace through sending a subtle message to the public: “the building process in our country is permissive and as long you build a shelter for yourself – it can sooner or later be legalized”.

Roughly, the division of the legally and nonlegally built structures shows a clear borderline between the “regulated” and the “irregular” building process: as soon as one builds a house for himself and creates no profit since he will not sell it, it can be tolerated and the house will be legalized sooner or later. But if someone builds a profitable housing development, where most of the housing units will be sold to new residents, this cannot be done without obtaining a building permit. In this way the irregularly built city fabric resembles the slums of the metropolis; although not at the bottom of the social hierarchy, the residents of irregular neighborhoods are from the lower social classes.

Sarajevo urbanism is the most significant example of the above: almost all the representative socialist, *Gründerzeit* and Ottoman city fabric is shown and published but there is very little known and shown from the vast southern and northern city slope outskirts. Perhaps the best homage to living in irregular neighborhoods is shown by film director Pjer Žalica.¹⁰⁹

In Slovenia, a new legalization process has been included in the legislative renewal of 2018¹¹⁰ and it shows that urban planning is a farce and that irregular building practices are officially granted recognition sooner or later. How could an urban planner explain legalization as a legitimate process? It defies all established planning practices. So far we have seen two types of legalization, which could be labeled “transitional” and “election-winning”, respectively. The first is the relief from the former urban planning system for the benefit of those who fought against the old rigid system. The second is just a promise of a power-hungry political party to legalize all the problems of the former governments and

¹⁰⁸ The 2015 conference in Priština at AAB University revealed that a scholar detected some 15,000 new buildings in the period 2012 - 2015 and that only around 900 building permits were issued in the same period. The problem is not only that the permit-issuing process is too long, but also that the vast majority of builders do not even apply for one.

¹⁰⁹ The movie “Kod amidže Idriza” (2004) shows family relations in an irregular neighborhood in the middle of a self-regulated southeastern part of Sarajevo.

¹¹⁰ The “Legalisation” of the buildings obviously comes in 25 years period in Slovenia, the Gradbeni zakon (Building law) of 2018 has precise definitions of various procedures considering illegally built structures prior to 1998.

start to set up things again from the beginning. Neither has anything to do with normal, decent, rational urban planning but are rather merely political maneuvers.

The remaining questions dealt with in this thesis are the following:

- Do the residents of ex-Yugoslav cities share similar problems caused by the dual regulated/irregular city appearance since they live in similar cities?

The answer is yes: there are very few cities that aren't congested with irregular city developments, caused by a permissive attitude by the governing and city managing actors.

- Are the city and state governments aware that the cities they govern are communicating a message of a constant duel between regulated and irregular state or city affairs?

The answer is not important; obviously the city and state governments do not care about the state of the cities and spatial regulations.¹¹¹

- Are the city and state governments aware that the irregular city parts also have to be treated in a professional manner?

The answer is no: the city governments treat the irregular parts only when necessary.¹¹²

- Does the location of residents in either regulated or irregular city parts affect their actions, their occupations, and their lives?

The irregular city parts have special characters and are regarded by other city residents as less worthy, but they are fully functional.

¹¹¹ Obviously enough, a study by the EPC (European policy centre) and another by the UNODC (United nations office on drugs and crime) in 2011 shows that the real problem of state governments is staying in power, see http://www.epc.eu/documents/uploads/pub_1363_the_democratic_transformation_of_the_balkans.pdf https://www.unodc.org/documents/data-and-analysis/statistics/corruption/Western_balkans_corruption_report_2011_web.pdf

¹¹² For example, the Kaluđerica sewer system failure in 2017, as published in <http://www.novosti.rs/vesti/beograd.74.html:685444-Kaludjerica-Kanalizacija-tece-i-glavnom-ulicom>. City officials admitted they had no data on the sewer system when it failed. Miraculously, the system was fixed and upgraded only a couple of weeks after the information was published in the media.

6.3 SOCIALIST DEVELOPMENT PATTERNS

The two principles of city development around the year 1900 resulted in uneven city structural developments when the socialist city development took place:

- the cities of the *Gründerzeit* urban development tradition (that were developed under the Austro-Hungarian empire in the years up to 1918 and the Kingdom of Yugoslavia (or Kingdom of Montenegro) until 1941) have been shaped in the form of a “classical” city¹¹³, designed by the trinity city “closed block/street/square”
- the cities of the Ottoman urban design tradition (that were developed under the Ottoman empire in the years to 1913 and the Kingdom of Yugoslavia until 1941). have been shaped in an organic form that showed only segments of “classical” city developments.¹¹⁴

Since the socialist urban development found different state of the cities at the beginning of the “urbanization” period in the 1950s, and since the global city development mechanisms were closer to understanding the “classical” city organization principles rather than “organic” city developments, it is obvious that the socialist development treated the former Ottoman heritage as unimportant.¹¹⁵

The socialist *modus operandi* could be defined as having two patterns:

1. intrusion of socialist developments into central Ottoman urban structure
2. addition of socialist developments to the imperial/*Gründerzeit*/royal urban structure.

Both of these patterns were revealed in studying the additional cities of the southeastern area of ex-Yugoslavia.

6.3.1 INTRUSION OF SOCIALIST DEVELOPMENTS INTO THE CENTRAL OTTOMAN URBAN STRUCTURE

In a close observation of the structure of the cities Smederevo, Kruševac (Fig. 6.52), Kraljevo, Gnjilane, Bitola (Fig. 6.53), Prilep, Štip (Fig. 6.54), Strumica, Novi Pazar (Fig. 6.55), Priština and other cities that belonged to the Ottoman empire until 1913, clear similarities are found: in all of these cities the same approach was pursued: the central urban structure was altered through an intrusion of socialist (modernist) architectural gestures that were built after 1950. Such “socialist beautifications” were mainly focused

¹¹³ As understood by Perović.

¹¹⁴ The “classical” developments of the main public functional buildings without planned structural units.

¹¹⁵ Actually, the Ottoman urban structural heritage is still understood as less important in the city development principles and practices - just see the examples of Skopje or Priština.

on the city centers, allowing the urban structures to be altered in a way beyond recognition of the original historic urban structure - it was simply removed and a new, mostly linear urban structural gesture was introduced to the city center. Such an approach almost immediately created a boost of irregular developments - since the development power was used on the city center and later on a couple of residential developments in the outskirts, almost all of the other city areas were understood as a playground for permissive building ventures.

The socialist development in the cities of the Ottoman urban structural background mainly occurs in a bold city core gesture that is almost monumental, and in more limited residential neighborhood developments that are normally covering one neighborhood at a time. The neighborhood developments are not connected, and they can be attached to the linear main monumental gesture or not.¹¹⁶

6.3.2 ADDITION OF SOCIALIST DEVELOPMENTS TO THE IMPERIAL / *GRÜNDERZEIT* / ROYAL URBAN STRUCTURE.

On the other hand, the socialist developments after 1950 to the cities of another urban structural tradition were distinctively different. The cities that belonged to the Austro-Hungarian empire until 1918 had already formed city center developments. One part was typically built in the *Gründerzeit* developments and it was typically upgraded in the Kingdom of Yugoslavia from 1918 until 1945. It is not the political system that defined the socialist modus operandi in city extensions after 1950, rather, the main criterion was the extent of the “classical”¹¹⁷ city central structure.¹¹⁸

The main three development modes of the socialist extensions were the following:

A. the reconstructions or completions of the gaps in the “classical” structural units or closed blocks¹¹⁹ (Fig. 6.56, Fig. 6.57, Fig. 6.58, Fig. 6.59)

B. the reconstructions of devastated areas or areas of low density or low quality of built structures¹²⁰ (Fig. 6.60, Fig. 6.61, Fig. 6.62)

¹¹⁶ See Bitola, Strumica, Prilep, even Subotica, neighbourhoods spread on the periphery.

¹¹⁷ Again as understood by Perović.

¹¹⁸ A good example is the city of Nikšić, which was developed under the rule of the Kingdom of Montenegro in a classical manner - the socialist extensions fully respected the urban pattern designed in the 1930s and the further development in 1960s and 1970s was extended in the same pattern.

¹¹⁹ In many cases removal of the buildings destroyed during World War II, but also completion of unfinished structures (for example, Maribor).

¹²⁰ Borisav Stojkov researched and invented a method and described the operational apparatus for the appropriate treatment of these structural interventions [14]

C. the building of the new neighborhoods or even new city parts on the outskirts of the “classical city”¹²¹ (Fig. 6.63, Fig. 6.64, Fig. 6.65, Fig. 6.66, Fig. 6.67)

All of the above-mentioned developments were prepared by urban planners and architects, the only difference is that mainly the architects were the decision-makers in the first type of developments (A.) and the urban planners prepared the second (B.) and third type of developments (C.) and the architects were on the move as soon as the zones or neighbourhoods were defined by the planners.

6.4 TESTING THE THESIS ON THE URBAN FABRIC

The application of the urban fabric distinction cannot be validated until applied and tested on the urban fabric of at least the five closely observed cities of this study. In the observations only the urban built structure was taken into consideration - no green or water areas were included. The areas that contain industrial plants, municipal facilities, traffic infrastructural areas and similar were treated as regular socialist structures as long as it shows a vital state.

The test was performed in the framework of structural analysis in the following steps:

6.4.1 The structural units are defined as follows:

A. REGULAR STRUCTURAL UNITS

- A.1 The CORE structural unit
- A.2 The IMPERIAL structural unit
- A.3 The SOCIALIST structural unit

B. IRREGULAR STRUCTURAL UNITS

- B.1 Undeveloped city space
- B.2 Insignificant city space
- B.3 Abandoned city zones
- B.4 Socialist permissive unplanned irregular

6.4.2 The structural zones were defined by different colors as follows:

A. REGULAR STRUCTURAL UNITS

- A.1 The CORE structural unit Color: Brown

¹²¹ The most famous were vast developments on the outskirts of the cities: the new Belgrade, the new Zagreb, Split 2, Novi Travnik, Novo Sarajevo and similar.

A.2 The IMPERIAL structural unit	Color: Yellow
A.3 The SOCIALIST structural unit	Color: Red
B. IRREGULAR STRUCTURAL UNITS (all)	Color: Magenta

6.4.3 The cities were chosen for observation

The first set were the cities that were originally chosen to be observed based on their structure. Plans for the cities are observed as follows:

- I. Maribor, Slovenia
- II. Sarajevo, Bosnia and Herzegovina
- III. Priština, Kosovo
- IV. Split, Croatia
- V. Belgrade, Serbia

The following cities are additionally included in the graphic observation:

- VI. Osijek, Croatia
- VII. Subotica, Serbia
- VIII. Skopje, Macedonia
- IX. Podgorica, Montenegro
- X. Zenica, Bosnia and Herzegovina

For an additional test, the following cities were tested:

- XI. Niš, Serbia
- XII. Tetovo, Macedonia
- XIII. Novi Sad, Serbia
- XIV. Zagreb, Croatia
- XV. Ljubljana, Slovenia

And finally, the socialism “special cases” were included:

- Novi Travnik (Fig. 6.68)
- Kidričevo (Fig. 6.69)
- Nova Gorica (Fig. 6.70)

The graphic observation of the structural units lead to some conclusions that are interesting in a quantitative respect. If we trace the areas that are covered by the different structural categories, the result is very different from that expected: the areas of the “regulated” historical structural units are smaller than the “irregular” areas. This could be evidence of the hypocrisy of the official urban planning history. The majority of urban space is non-regulated.

6.4.4 Conclusions

In general, the cities in the area of the former Yugoslavia reveal the city building traditions of two empires: the Habsburg and the Ottoman. The Habsburg imperial style introduced city center developments that structured the cities in a particular way, and the socialist period simply completed them. The Ottoman imperial city building tradition treated the centers as traditional organic “laissez faire” structures. The socialist tradition had the task of densifying and beautifying the city centers. So the core zones implied the city center design in the socialist period.

There is a basic rule for socialist period city design that occurs in studying the cities of the two imperial traditions:

- city centers of the imperial Habsburg tradition are fully preserved and the socialist development is focused on merely adding accents to the city center, while creating vast new developments on the outskirts.¹²²**
- city centers of the Ottoman tradition are altered in a way that the new socialist developments enter the city cores.**

The Ottoman-style fine organic central structures were obviously not recognized as a quality in the sense of the urban tradition.

6.4.4.1 Socialist impact on city structures

For research on the Ottoman structures, southern Serbia, Kosovo and Macedonia are much more interesting than Bosnia and Herzegovina. Therein lies the truth about the principles of Habsburg and socialist Yugoslav city development: the imperial Habsburg city developments touched Bosnian cities and rarely had an impact on south Serbian cities, and never on Macedonian or Kosovo cities. So the socialist influence on Ottoman structures is pure and uninfluenced by the Habsburg imperial structures.

Socialist city building has a general principle of intruding into the city cores, but it is applied in different ways to the city cores of Habsburg imperial tradition and to city cores of Ottoman imperial tradition. The cause of this is to be found in the way the city centers are designed based on two different urban structural principles.

¹²² For example, the extensions proposed for the city of Kranj [31]

6.4.4.2 Socialist city building efficiency

In order to define a possible border of the socialist intrusions into Ottoman city structures without basing the socialist city extensions on imperial structural patterns, some additional cities and their structures were selected and closely observed in order to test the statement that the socialist developments in city cores occur only when the city core is designed as small, fine, organic, almost non-urban and not central (which applies to all the cities in the observed region with no Habsburg imperial or Yugoslav royal city modernizations).

The following cities were chosen and studied in an attempt to define the borders of Habsburg imperial city center extension influence: Priboj (Serbia), Tuzla (Bosna and Herzegovina), Pančevo (Serbia), Smederevo (Serbia), Kruševac (Serbia), Kraljevo (Serbia), Priština (Kosovo), Prizren (Kosovo), Gnjilane (Kosovo), Kosovska Mitrovica (Kosovo), Kumanovo (Macedonia), Bitola (Macedonia), Prilep (Macedonia), Ohrid (Macedonia), Struga (Macedonia), Štip (Macedonia), Strumica (Macedonia), Kragujevac (Serbia), Požarevac (Serbia), Obrenovac (Serbia), Šabac (Serbia), Sremska Mitrovica (Serbia), Slavonski Brod (Croatia), Karlovac (Croatia), Vršac (Serbia), Mostar (Bosnia and Herzegovina), Novi Pazar (Serbia), Užice (Serbia), Cetinje (Montenegro), and Nikšić (Montenegro).

From the city structural observation of additional city examples it became obvious that socialist urban planning has some significant approaches towards building cities:

- There are **two intrusion types**: one is city center modernization and the other is city urbanization. The first means that the city centers with non-imperial (or non-royal¹²³) urban center development were treated as minor by socialist planners and governments so the city developments reached into the very cores of the cities. The other cities, those who had imperial Habsburg or royal developments, which established city centers in the classical or *Gründerzeit* manner, were merely urbanized - i.e. equipped with new neighborhoods mostly located at the imperial center outskirts or in a suburban area.
- The **borderline of the two intrusion types** occurrence is quite clear: it covers the area of the southeastern part of former socialist Yugoslavia, which today covers Serbia (without Vojvodina), Kosovo and Macedonia. That means that the old borders of the Military Krajina (Fig. 6.71), annexed Bosnia and Herzegovina, and the Kingdom of Montenegro follow the tradition of the well-established city centers prior to the socialist intrusions, and the areas south of the Danube and east of the

¹²³ For example, the Kingdom of Yugoslavia and the Kingdom of Montenegro: the royal city developments have clearly followed the imperial Habsburg city modernizations.

Drina follow the tradition of Ottoman fine organic small-scale centers that were destroyed by the socialist intrusions. So the socialist city center developments can be traced in Macedonia, Serbia and Kosovo only.

- A **development scale question** obviously occurs when observing the socialist intrusions. There are small-scale and medium-scale city intrusions as well as the capital socialist developments. Since the capital intrusions are only present in larger cities, which have more developed historic city cores and city centers¹²⁴, the fine art of city center developments in socialist times can be quite significant in small and medium-sized cities.¹²⁵
- Cities of the whole area remain defined by **two imperial traditions**: the cities in the Habsburg tradition have socialist city building intrusions that are different from the cities in the Ottoman tradition. Although neither empire has existed for a century, the socialist urban planning continued the difference since the urban intrusions were focused and implemented on different urban structural units.
- **Socialist urban planning did not understand the organic, grown, small-scale patterns of the cities in the Ottoman tradition.** Socialist urban planning also did not understand and was not capable of managing the soft and intertwined urban development in cities in the Ottoman tradition.

6.5 GENERAL CONCLUSIONS OF THE FINAL OBSERVATION

- A. **The observed cities of ex-Yugoslavia mainly follow two traditions since they belonged to two empires: the Habsburg Empire and the Ottoman Empire. Some of the cities follow other royal or similar free city traditions.**
- B. **The two traditions are not treated equally by the socialist urban development period: in general, the cities with well-formed Habsburg imperial city centers were developed through an additive principle, while the cities with a small-scale organic Ottoman imperial tradition were not understood and socialist development intruded into the city centers trying to modernize them.**¹²⁶

¹²⁴ Compare Skopje, Podgorica, Nikšić

¹²⁵ Compare Prilep, Štip, Kruševac, Tetovo

¹²⁶ This applies especially to smaller towns without a range of functions and poorly developed city structures. If a town like Prizren has had a rich urban development history and shows a respectfully built city center, the modernist intrusions do not apply and the modernist period planners did not dare enter the city center. But if a town has a relatively poor urban history and lacks traces of modernization traces in the period up to 1940, the modernist intrusions will be

- C. Socialist developments in medium-sized cities introduced a smart range of new developments that beautified the city; the high efficiency of all the developments resulted in the Impression that a large part of the city had been renovated, modernized, built anew – but this was only an impression. In fact, the percentage or range of the developments implemented relative to the entire city area is very small.**
- D. If we observe the city area and define different city structures according to the selected periodical typologies (core, imperial, socialist, regular/irregular), the area of regulated city structural units area is smaller than that of the irregular units. Since socialist city beautification has an immensely strong image, this result is at the very least astonishing.**
- E. Since the irregular structures are the ones that cause many functional and structural problems to the city parts, it is not clear or rationally explicable why the cities do not deal with them. It seems to be obvious only if one knows that only the regular structural units are treated as existing. Irregular structures are not treated by any urban planning professional since there are no professional tools developed and no theoretical methods invented to deal with these units.**
- F. The urban planning in the area is tied to complex and long-lasting procedures that give an appearance of utmost professional caution and knowledge and full coverage by multiple laws. The truth is that the procedural complexity and long-lasting procedures of urban planning document alterations completely hide the very poor developments of urban professional knowledge and good practice. The procedures and the apparatus of urban planning in all the successor states of socialist Yugoslavia are long outdated, but still function four decades after their their installation. The urban planner of the region is a person that in almost all cases gives more attention to proper procedure than to appropriate urban concepts or structural decisions. The creation of urban planning documents has come to a standstill, where not even urban planners can explain the methods and tools and professional courses of action they follow: they only know which procedures they have to follow to get the urban plans approved. Urban planners moralize, and this is their only professional capability.**
- G. With the observation of cities in the southeastern part of the former Yugoslavia, in southern Serbia, Kosovo and Macedonia, the urban pattern becomes clearer: the absence of city-forming principles and development power at the end of the**

harsher. Compare Priština (Kosovo), with a relatively poor urban history before 1940, and Nikšić (Montenegro) with royal development plans in 1910 and hence well-developed and congruent modernist encroachments into a well-formed center.

19th and the beginning of the 20th century caused structural changes in the socialist period. The structural distortions and intrusions in the city centers that were never finished and city centers never modernized are the distinct cause that can divide the city characters in the observed area as of today: despite the dissolution of the Habsburg and Ottoman empires, the cities are defined by the imperial periods of city development. Since the *Gründerzeit* city developments were fueled by the development of civil society, the cause for the standstill of the Ottoman provincial cities is revealed.

- H. In urban planning a structural analysis should be enhanced with a knowledge of historical patterns, and the structural units developed in this work could be helpful.**
- I. The bizarre fact is that both imperial urban ordering principles, the Habsburg *Gründerzeit* and the Ottoman spontaneous, are emerging after a period of modernist city developments. Ordering the cities and achieving a designed city structure are always present in all the strategic city planning documents, although the reality of building spontaneously remains a goal of every individual single house builder. Society and municipal urban planning departments are promoting outdated scenarios of high density residence, but most individual builders long for an individual house in a decent neighborhood. In this sense the modernist functionalist experiment has failed.**
- J. Almost all the societies in the region are experiencing two contradictory trends: the demographic figures are negative¹²⁷ but the capitals are centralized and due to the inflow of new inhabitants there is a lack of available residential units. There is a discrepancy in the needs: the peripheral cities and towns are losing their inhabitants and offering available residential units but the capitals build new residential areas in order to fill the need for housing.**
- K. According to a recent study on the state of governing the countries in the region of former Yugoslavia and the Balkans¹²⁸, the problems of the region lie in political corruption and the usurpation of government by a kleptocracy, i.e. an apparatus of fully corrupted thieves, calling themselves “politicians” and “high state officials”.**

¹²⁷ Except for Kosovo, the demographic projections are slightly negative, and UN predictions for 2050 anticipate a 10-20% population decline, (source quoted in the reference 128 below)

¹²⁸ See the report “World Population Prospects”, “Probabilistic projections based on world population prospects: The 2017 revision”, UN, <https://esa.un.org/unpd/wpp/Download/Probabilistic/Population/>, accessed 3 August 2017.

- L. The region in 2018 is characterized by four historical borders: a. the historical border between the Ottoman and Habsburg empires; b. the historical Iron Curtain; c. the border of NATO member countries; d. the borders of the European Union and the Schengen borders. Taken together they have created a unique environment of urban management and urban planning background where nothing is unseen and nothing is accepted as an example of excellent city management and planning since the 1980s. With very few exceptions,¹²⁹ the region is currently in a neutral position or period of calm.**
- M. It is obvious that the governments and the public are caught in a sensibly set professional trap: on the one hand the city governments are continuously ordering and producing new plans, but at the same time the plans are never fully realized since they have been overinflated by visions. So the cities do not operate based on real, down-to-earth plans, but rather on a palette of visions.**
- N. The border between the two historic empires also defines the design in modernist times; the cities that belong to the Habsburg group have a neatly designed central development and the modernist expansions are tied to their borders, while the cities that belong to the Ottoman group do not have extensively developed city centers and the modernist intrusions are designed and built right in the historical city cores.**
- O. The procedures in the countries with the same tradition (Slovenia, Serbia, Croatia) regarding the retroactive legalization of buildings that were erected without permits show that the distinction between “regular” and “irregular” is a political distinction. Legalization is not a professional decision, it is purely political. This also holds true is for the permissive attitude towards building over decades of city development.**
- P. Future work for an urban planner in the ex-Yugoslav region should focus on irregular city structures.**

¹²⁹ See Kosovo boost, see partial developments following major events in the UN “World population prospects”, as quoted in reference 128

Figures to Chapter 6



Fig. 6.1 Niš, Serbia. Medieval city core structure is regular and bivalent. Google Maps, ©2018 DigitalGlobe

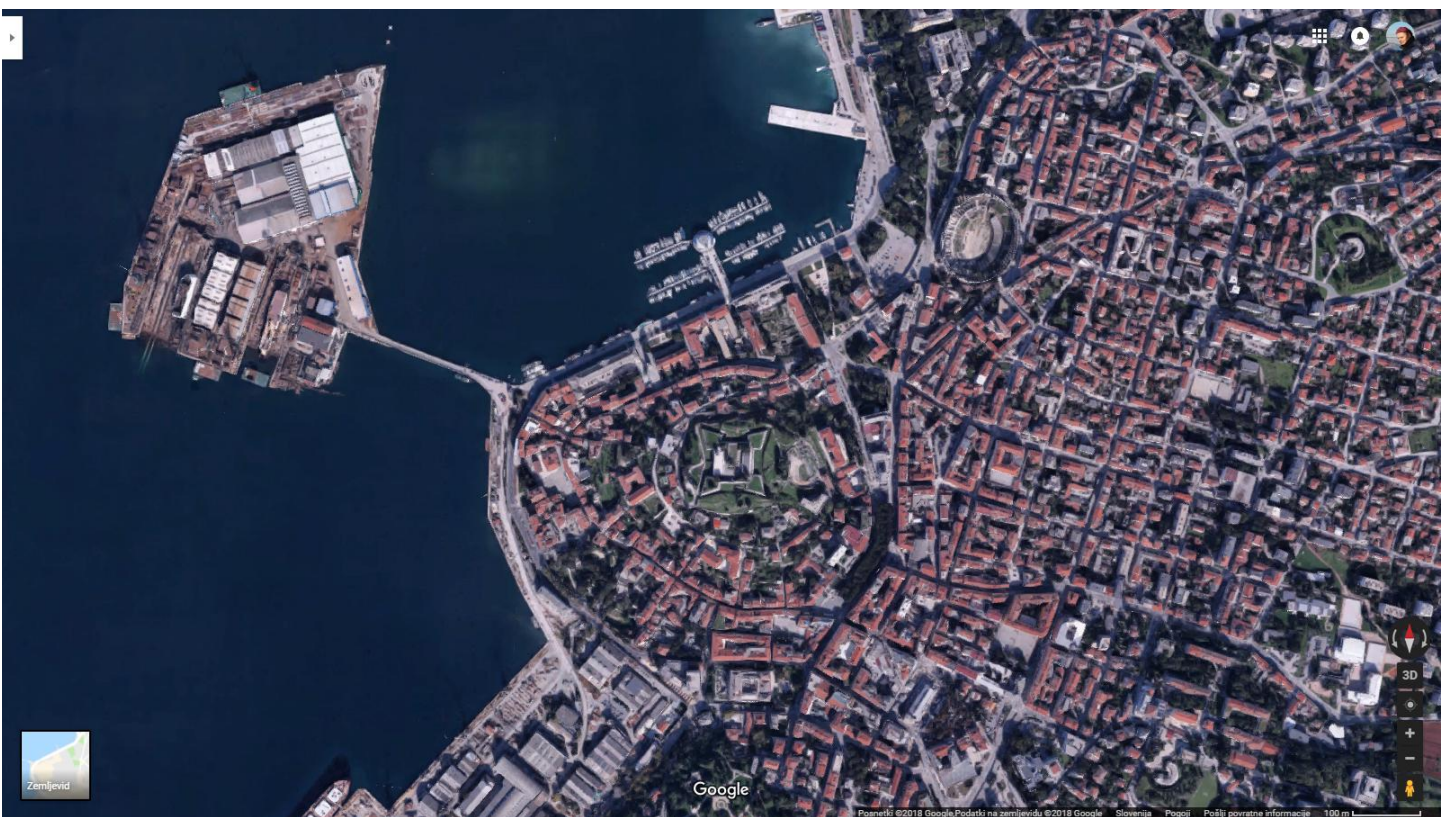


Fig. 6.2 Pula, Croatia. Roman and medieval city core structure is readable and present. Google Maps, ©2018 Google



Fig. 6.3 Bitola, Macedonia. Ottoman city core, almost fully preserved setup. Google Maps, ©2018 DigitalGlobe



Fig. 6.4 Škofja loka, Slovenia. Medieval central European city core, fully preserved setup. Google Maps, ©2018 CNES/Airbus

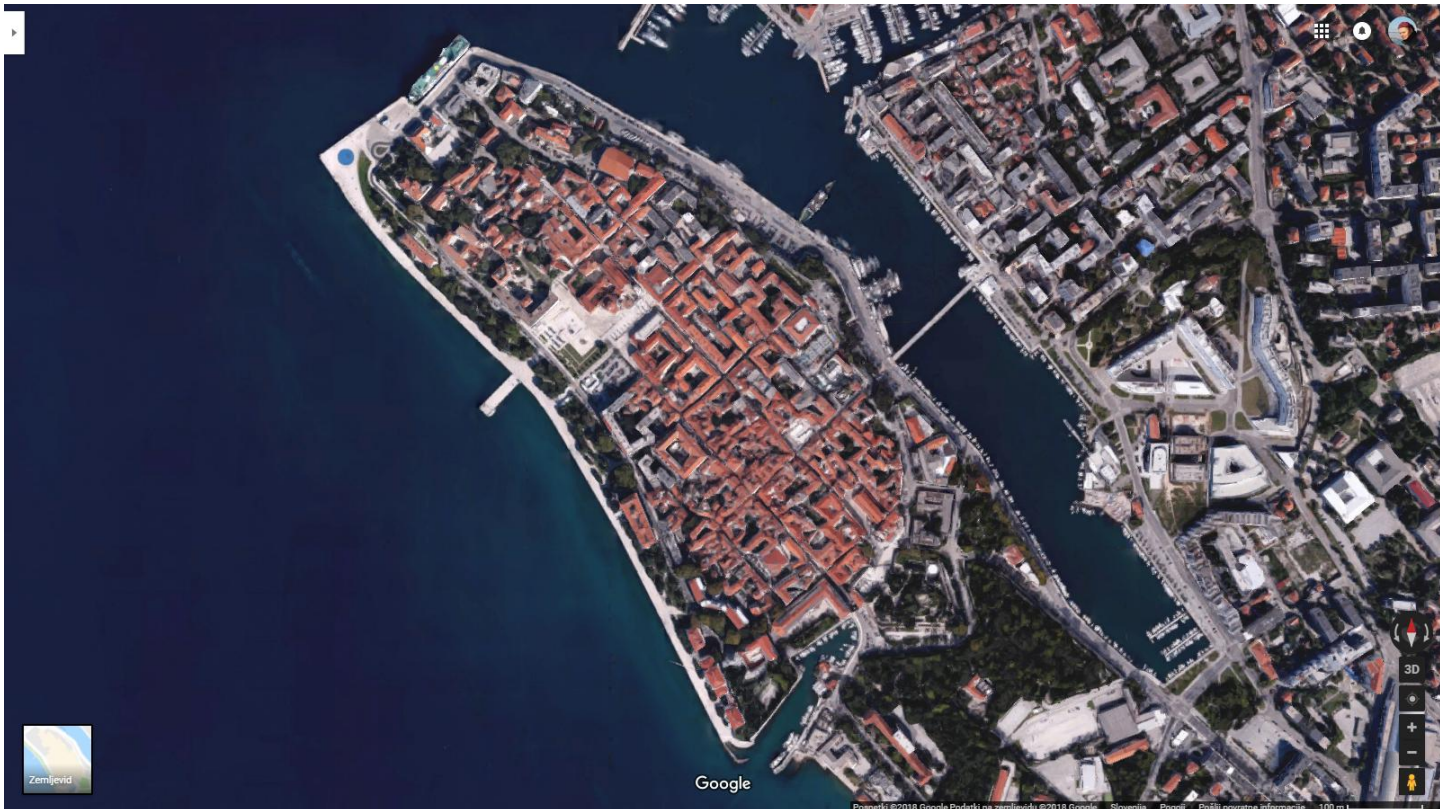


Fig. 6.5 Zadar, Croatia. Medieval core is distorted due to post WW2 developments. Google Maps, ©2018 Google



Fig. 6.6 Kumanovo, Macedonia. Medieval core with massive distortions dated in socialist development period. Google Maps, ©2018 Google

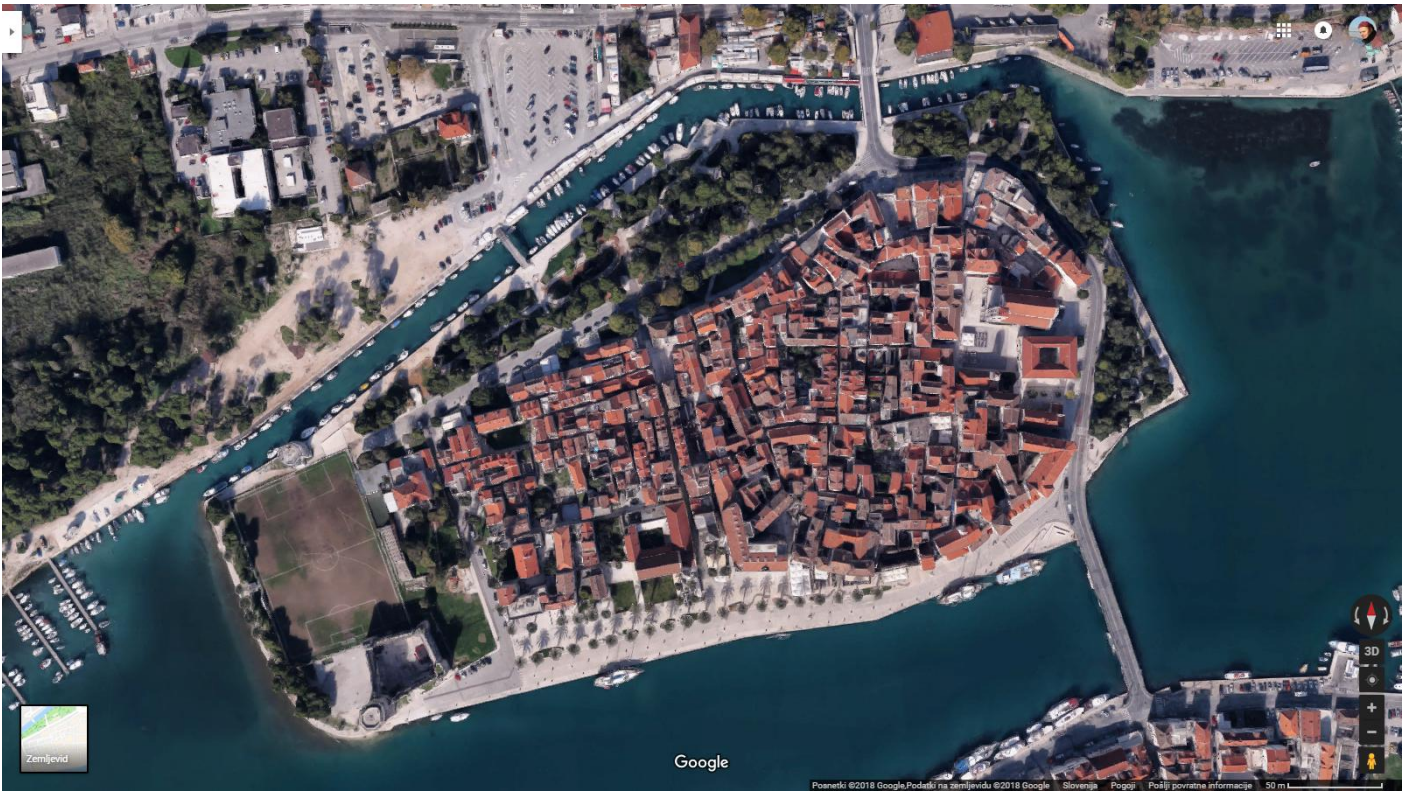


Fig. 6.7 Trogir, Croatia. City core is distorted in gründerzeit period, especially with public buildings. Two structural development steps are clearly readable. Google Maps, ©2018 Google

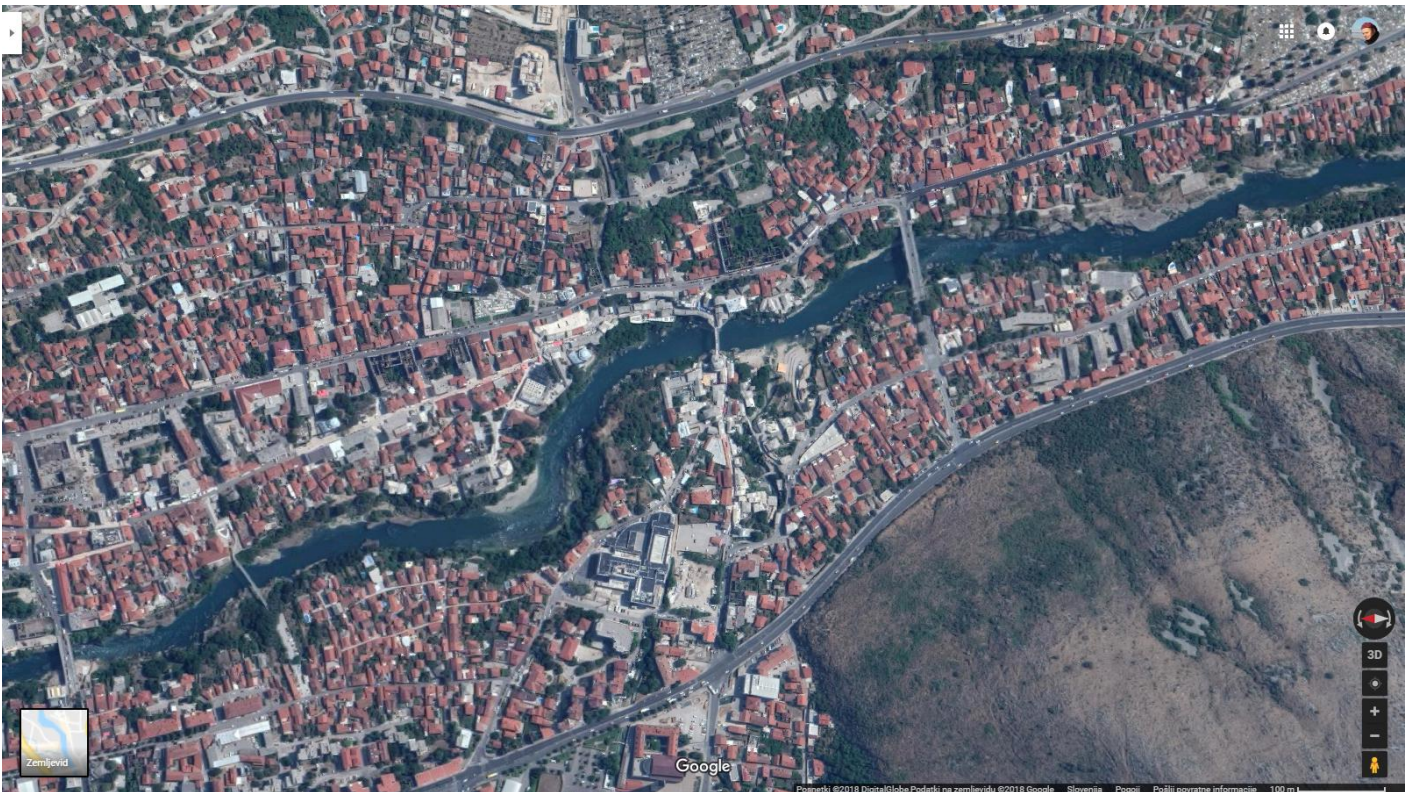


Fig. 6.8 Mostar, Bosnia and Herzegovina. The inner core distortions date to the Gründerzeit and socialist development period and are caused by not understanding the Ottoman order principles. The North is rotated for 90 degrees counterclockwise on this aerial view. Google Maps, ©2018 DigitalGlobe



Fig. 6.9 Maribor, Slovenia. The Gründerzeit city extension is attached to the northeastern corner of the medieval structure and consists of closed urban blocks, regulated by the main streets, developed from the core structural principles. Google Maps, ©2018 CNES / Airbus, DigitalGlobe



Fig. 6.10 Nikšić, Montenegro. The Royal city design remains unaltered - the later structures are developed from the radial structural grid. Google Maps, ©2018 DigitalGlobe



Fig. 6.11 Pula, Croatia. The Gründerzeit city development is neatly attached to the roman and medieval structure. Google Maps, ©2018 Google



Fig. 6.12 Sarajevo, Bosnia and Herzegovina. The Gründerzeit city development is added to the ottoman city core, the famous part stretches to the west and is called Marijin dvor. Google Maps, ©2018 DigitalGlobe



Fig. 6.13 Beograd, Serbia. The Gründerzeit city structure to the southeast of the Slavija square is congested, but the structure to the southwest remains well preserved. Google Maps, ©2018 DigitalGlobe



Fig. 6.14 Novi sad, Serbia. The Gründerzeit urban structure of Stari grad city quarter is clearly readable, but mainly congested in the inner block spaces. Google Maps, ©2018 DigitalGlobe



Fig. 6.15 Niš, Serbia. The royal urban structure, attached to the south of the city core is readable and consistent, but mostly congested in the inner block spaces. Google Maps, ©2018 DigitalGlobe



Fig. 6.16 Ljubljana, Slovenia. The Gründerzeit urban structure, attached to the north of the medieval city core is readable and mostly preserved, but congested in the inner block spaces. Google Maps, ©2018 Google



Fig. 6.17 Beograd, Serbia. The Gründerzeit city structure to the north of Tašmajdan park is smartly upgraded by socialist period developments. Google Maps, ©2018 DigitalGlobe



Fig. 6.18 Maribor, Slovenia. The Gründerzeit city blocks that were heavily damaged in the WW2, were sensibly redesigned in the socialist period. Google Maps, ©2018 CNES / Airbus



Fig. 6.19 Zagreb, Croatia. The Gründerzeit city structure is finished with the socialist structure to the southwest. Google Maps, ©2018 Google



Fig. 6.20 Osijek, Croatia. The Gründerzeit city structure is completed with a block structure, accented with a skyscraper and clearly divided from the eastern socialist development. Google Maps, ©2018 Google



Fig. 6.21 Kragujevac, Serbia. The irregular core structure was left mostly intact and the socialist developments were pursued at the outskirts. The socialist developments rarely touched the Gründerzeit / imperial city structure. Google Maps, ©2018 DigitalGlobe



Fig. 6.22 Beograd, Serbia. The “Novi Beograd” project succeeded: the socialist city is a rival of the classical city. Google Maps, ©2018 DigitalGlobe



Fig. 6.23 Split, Croatia. The Split II and III socialist extensions completed the city image and structure and considerably improved the inhabitants' spatial standards. Google Maps, ©2018 Google



Fig. 6.24 Kranj, Slovenia. The picturesque medieval city was extended at the outskirts. Google Maps, ©2018 DigitalGlobe



Fig. 6.25 Beograd, Serbia. The post socialist extension includes the activation of the Blok 25 (with the Belgrade Arena multifunctional hall) and Blok 26 (with office and residential buildings). Both blocks were left unbuilt in the socialist times to ensure an open space to the southwest of the Blok 13 - which is fully designated to the SIV (government) building. The picture also shows the modus operandi of completing the other Blok structures - see Blok 22 to the southeast of the Arena with the new radial structure. Google Maps, ©2018 DigitalGlobe

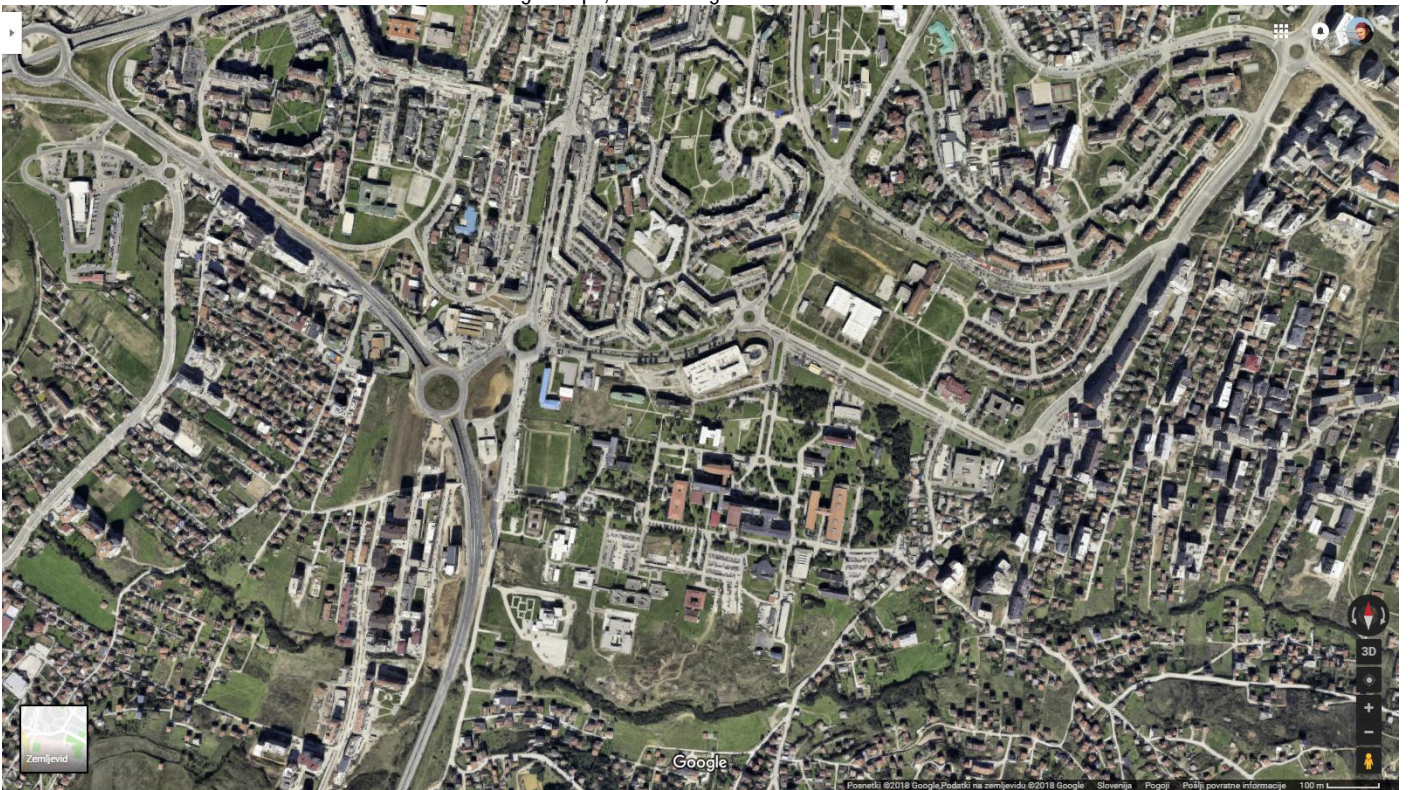


Fig. 6.26 Priština, Kosovo. The post socialist extensions include the southern and southwestern developments. Google Maps, ©2018 Google



Fig. 6.27 Ljubljana, Slovenia. The post socialist extension to the north of the city railway station respected the Gründerzeit grid and improved the urban structure. Google Maps, ©2018 Google



Fig. 6.28 Zagreb, Croatia. The post socialist extensions are pursued and realized at the city entrance areas: the Arena area at the Jadranska avenija is one of them. Google Maps, ©2018 Google



Fig. 6.29 Dubrovnik, Croatia. The renaissance core structure is surrounded by irregular unordered low level urban tissue. Google Maps, ©2018 DigitalGlobe



Fig. 6.30 Maribor, Slovenia. The vast Maribor Jug urban development is inserted into irregular tissue. Irregular never became regular with this insertion. Google Maps, ©2018 DigitalGlobe



Fig. 6.31 Zagreb, Croatia. Northern urban areas of the city are developed irregularly into the vales and slopes. Google Maps, ©2018 Google



Fig. 6.32 Tetovo, Macedonia. The regulated areas are developed in the socialist period. They are but a small area of the urban irregular tissue. Google Maps, ©2018 CNES / Airbus



Fig. 6.33 Sarajevo, Bosnia and Herzegovina. The regulated strip in the Miljacka valley is guarded by the irregular structures of the southern and northern slopes. Google Maps, ©2018 DigitalGlobe



Fig. 6.34 Subotica, Serbia. The city is an amalgamation of five former villages and is joined by the Grünzerzeit development in the centre. Some islands of socialist projects are inserted into irregular tissue at the outskirts. Google Maps, ©2018 CNES / Airbus



Fig. 6.35 Koper, Slovenia. The core regular structure and the socialist industrial extensions are regular and clearly readable. Google Maps, ©2018 DigitalGlobe.



Fig. 6.36 Sombor, Serbia. The core regular structure lies in the middle of irregular urban fabric. Google Maps, ©2018 CNES / Airbus.



Fig. 6.37 Kumanovo, Macedonia. The city centre structure has a readable ottoman structure with socialist gestures inserted into the main road grid. Apart from the readable regular structure, all other city extensions are irregular. Google Maps, ©2018 DigitalGlobe.



Fig. 6.38 Ptuj, Slovenia. Highly regulated city structure, from medieval to socialist period, with minor areas of irregular structures. Google Maps, ©2018 Google.



Fig. 6.39 Sarajevo, Bosnia and Herzegovina. Area to the north of the Railway station was reserved for the northern city bypass road. It was never built, the area remained undeveloped. Google Maps, ©2018 DigitalGlobe.



Fig. 6.40 Maribor, Slovenia. The "railway triangle" in the geographical centre of the city remains undeveloped due to the state railways ownership. Google Maps, ©2018 DigitalGlobe, CNES / Airbus.



Fig. 6.41 Beograd, Serbia. The “Sava waterfront” was long time undeveloped. The area was activated with the “Belgrade waterfront” project and the developed was triggered by moving the Gründerzeit railway station to the new location, a kilometer to the south. The moving of the central station to the “Prokop” station took four decades from planning to realisation. Google Maps, ©2018 DigitalGlobe.



Fig. 6.42 Pančevo, Serbia. The Gornji grad area, between Kotež socialist neighbourhood and the Tamiš river. Basic street grid regulation. Low level urbanism, irregular structure. Google Maps, ©2018 DigitalGlobe.



Fig. 6.43 Zadar, Croatia. Northern city parts, low level urbanism, irregular structure. Google Maps, ©2018 Google.



Fig. 6.44 Murska Sobotla, Slovenia. Northern city parts, irregular structures, some socialist developments are readable and create clear gestures. Google Maps, ©2018 Google.



Fig. 6.45 Osijek, Croatia. Former Military barracks, founded in the Gründerzeit period, are being smartly converted to University campus and will eventually form a unity with the neighbouring hospital. Google Maps, ©2018 Google.

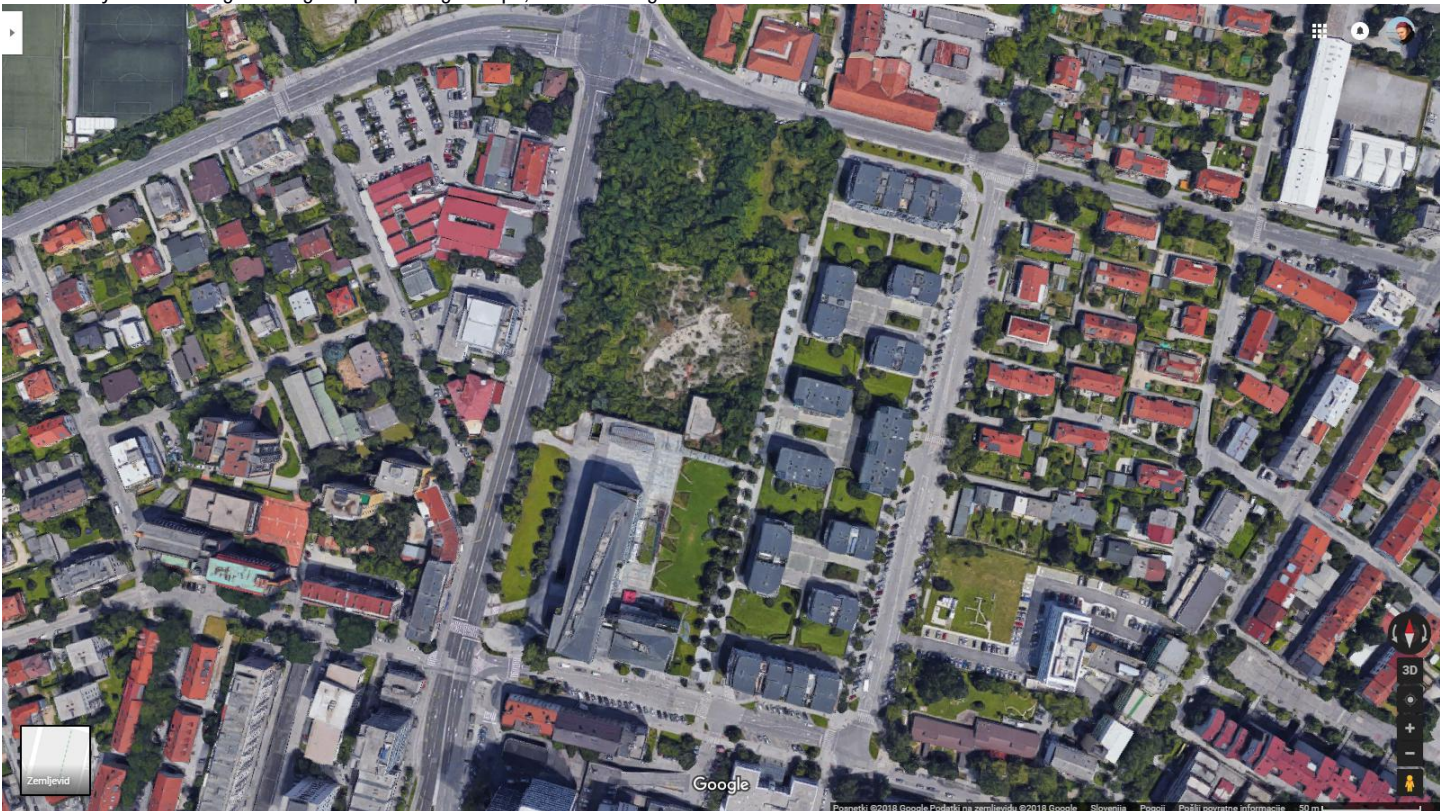


Fig. 6.46 Ljubljana, Slovenia. Former military barracks were converted into a zone of government building to the southwest and a residential development to the east. The zone is not fully converted to the present day, two decades after removing the barracks entirely. Google Maps, ©2018 Google.



Fig. 6.47 Niš, Serbia. Former industrial complex at the southeastern city outskirts is being converted into central area including education, various services and commercial buildings. Google Maps, ©2018 DigitalGlobe.



Fig. 6.48 Beograd, Serbia. The "Staro sajmište" area is located between the most representative Novi Beograd area and the Sava river and faces the "Belgrade waterfront" on the other Sava bank. It is astonishing how the permissive structure survived the Novi Beograd complex development. Google Maps, ©2018 DigitalGlobe.



Fig. 6.49 Zagreb, Croatia. The “Kozari” neighbourhood is surrounded by industrial and commercial centres and accessible through major city roads. It is unique by its own shape, density, design principles and structural irregularity. Google Maps, ©2018 DigitalGlobe.

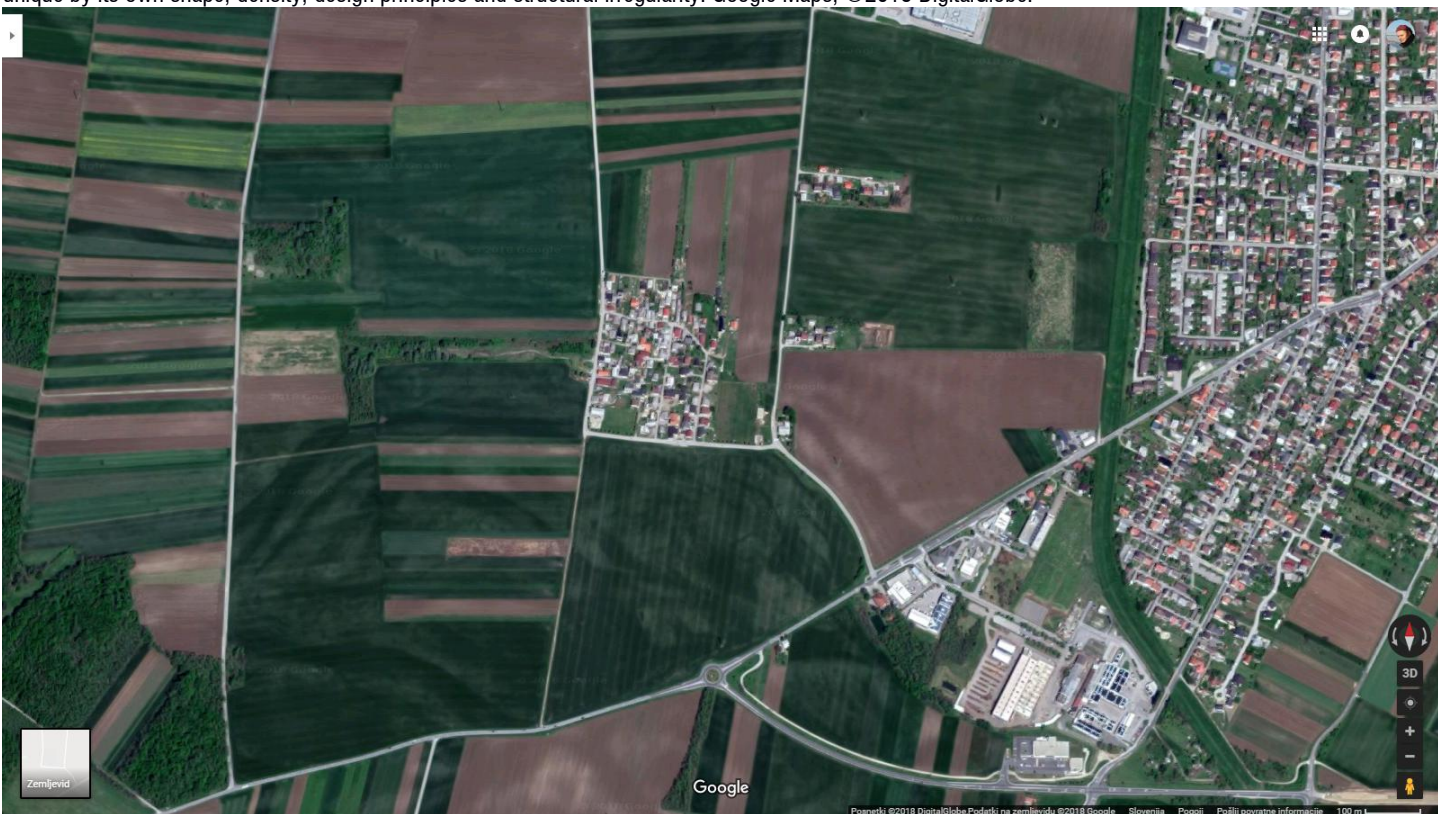


Fig. 6.50 Pušča, Murska Sobota, Slovenia. The “Pušča” residential settlement is setup at a clear distance from the Murska Sobota city. The settlement is fully inhabited by Roma (Gypsy) population. Google Maps, ©2018 DigitalGlobe.



Fig. 6.51 Loznica, Serbia. The area between the city and the river Sava to the north is built with low level urbanism, without ordering principles, almost fully permissive. Google Maps, ©2018 DigitalGlobe.



Fig. 6.52 Kruševac, Serbia. The central structure is "beautified" by the socialist development. The core structure is "ordered" and hardly traceable anymore. Google Maps, ©2018 DigitalGlobe.



Fig. 6.53 Bitola, Macedonia. Massive socialist period intrusions redefined the city core. Google Maps, ©2018 DigitalGlobe.



Fig. 6.54 Štip, Macedonia. Massive socialist period intrusions redefined the city core. Google Maps, ©2018 DigitalGlobe.



Fig. 6.55 Novi Pazar, Serbia. Massive socialist period intrusions redefined the city core. Google Maps, ©2018 DigitalGlobe.



Fig. 6.56 Beograd, Serbia. The Dorćol structure is completed, redesigned, renovated in the Gründerzeit and the socialist period. Google Maps, ©2018 DigitalGlobe.



Fig. 6.57 Nikšić, Montenegro. The royal radial structure is continued by the socialist developments. Google Maps, ©2018 DigitalGlobe.



Fig. 6.58 Ljubljana, Slovenia. The Gründerzeit blocks are upgraded, included and refined in the city development of the socialist renovation. Google Maps, ©2018 Google.



Fig. 6.59 Zagreb, Croatia. The Gründerzeit blocks are upgraded, altered or completed in the socialist period. Google Maps, ©2018 Google.



Fig. 6.60 Zagreb, Croatia. The Gründerzeit structure is completed at the eastern border of the classical city: at the Maksimir stadium. Google Maps, ©2018 Google.



Fig. 6.61 Beograd, Serbia. The Gründerzeit structure of the Bulevar kralja Aleksandra is extended to the southeast with socialist structures; they are merely the facade to hide the permissive low density structure beyond. Google Maps, ©2018 DigitalGlobe.



Fig. 6.62 Maribor, Slovenia. The Gründerzeit structure is redesigned west of the railway station area. The structure is improved and altered. Google Maps, ©2018 CNES / Airbus.



Fig. 6.63 Bitola, Macedonia. The socialist development “Nova Bitola” at the southwestern city outskirts. Google Maps, ©2018 DigitalGlobe.



Fig. 6.64 Kragujevac, Serbia. The socialist developments at the western city outskirts. Google Maps, ©2018 DigitalGlobe.

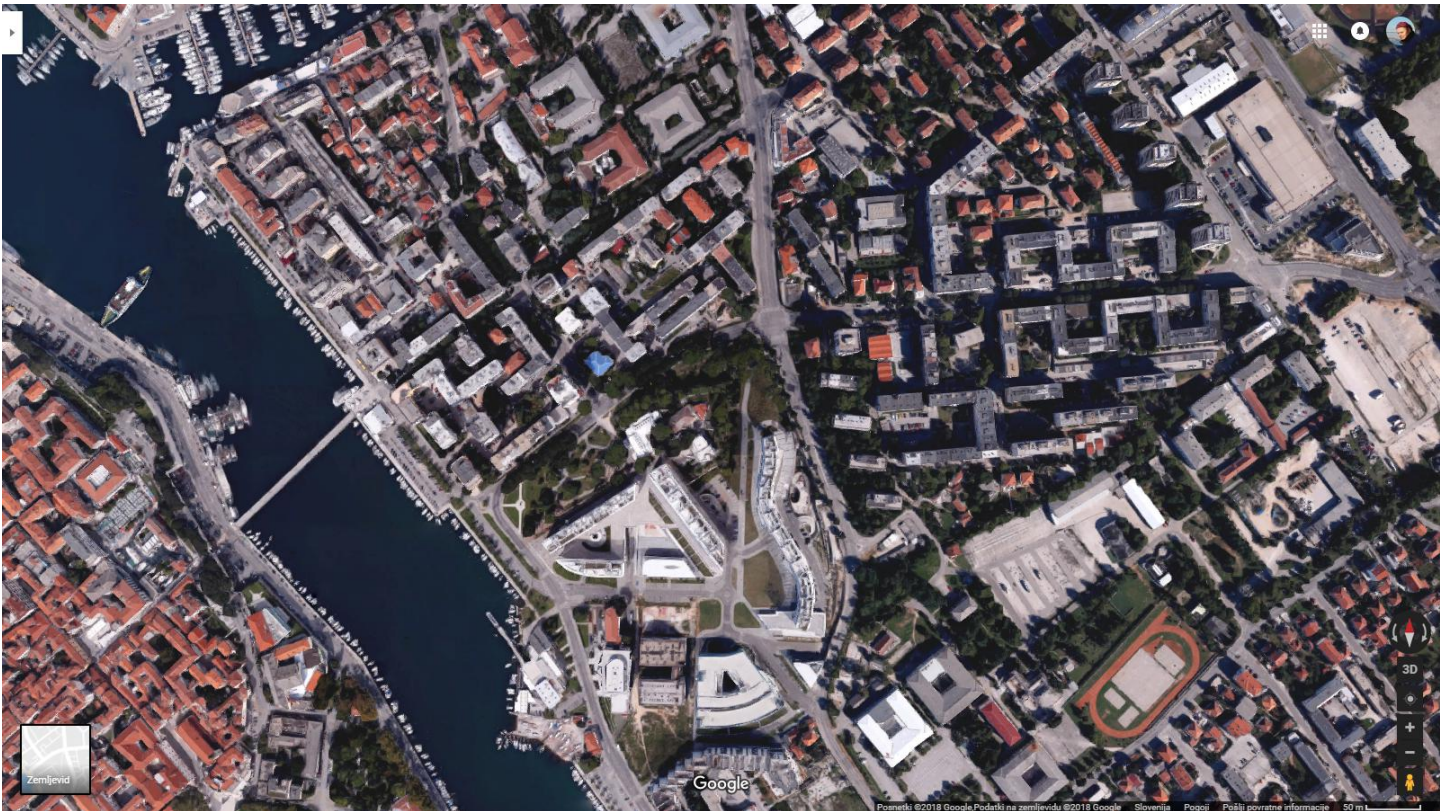


Fig. 6.65 Zadar, Croatia. The socialist development as a pendant to the old city. Google Maps, ©2018 Google.



Fig. 6.66 Subotica, Serbia. Even in most conservative traditionally unordered structures, relatively small developments were added to the urban fabric. Google Maps, ©2018 CNES / Airbus.



Fig. 6.67 Podgorica, Montenegro. Bold socialist development as the western city extension in the picturesque natural setup. Google Maps, ©2018 Google.



Fig. 6.68 Novi Travnik, Bosnia and Herzegovina. A socialist city, specially planned and build as a separate unit. Google Maps, ©2018 CNES / Airbus.

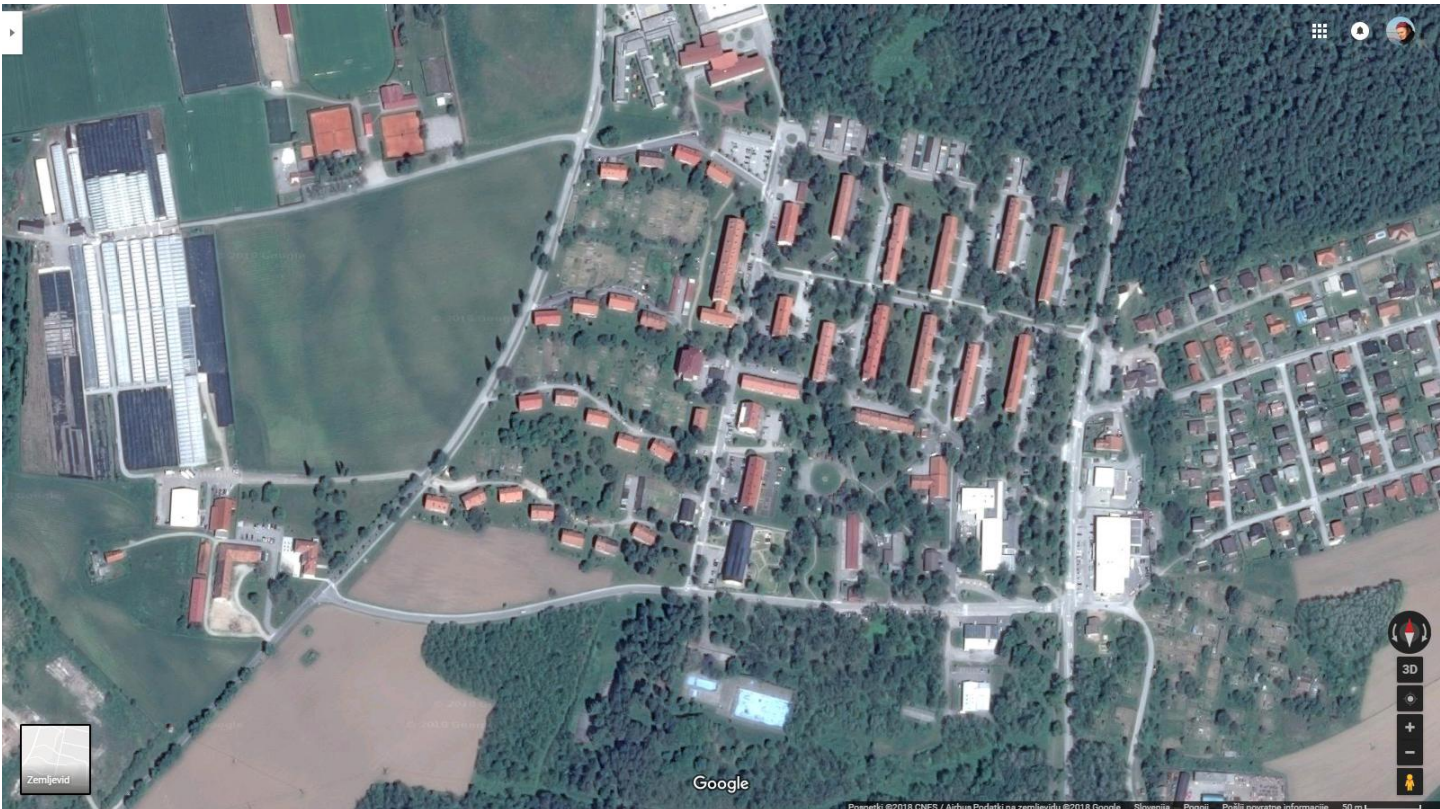


Fig. 6.69 Kidričevo, Slovenia. A socialist city, specially planned and built as a separate unit, connected to the industrial complex. Google Maps, ©2018 CNES / Airbus.



Fig. 6.70 Nova Gorica, Slovenia. A socialist city, planned as the competitor to the Gorizia, the border city of Italy. Google Maps, ©2018 DigitalGlobe.

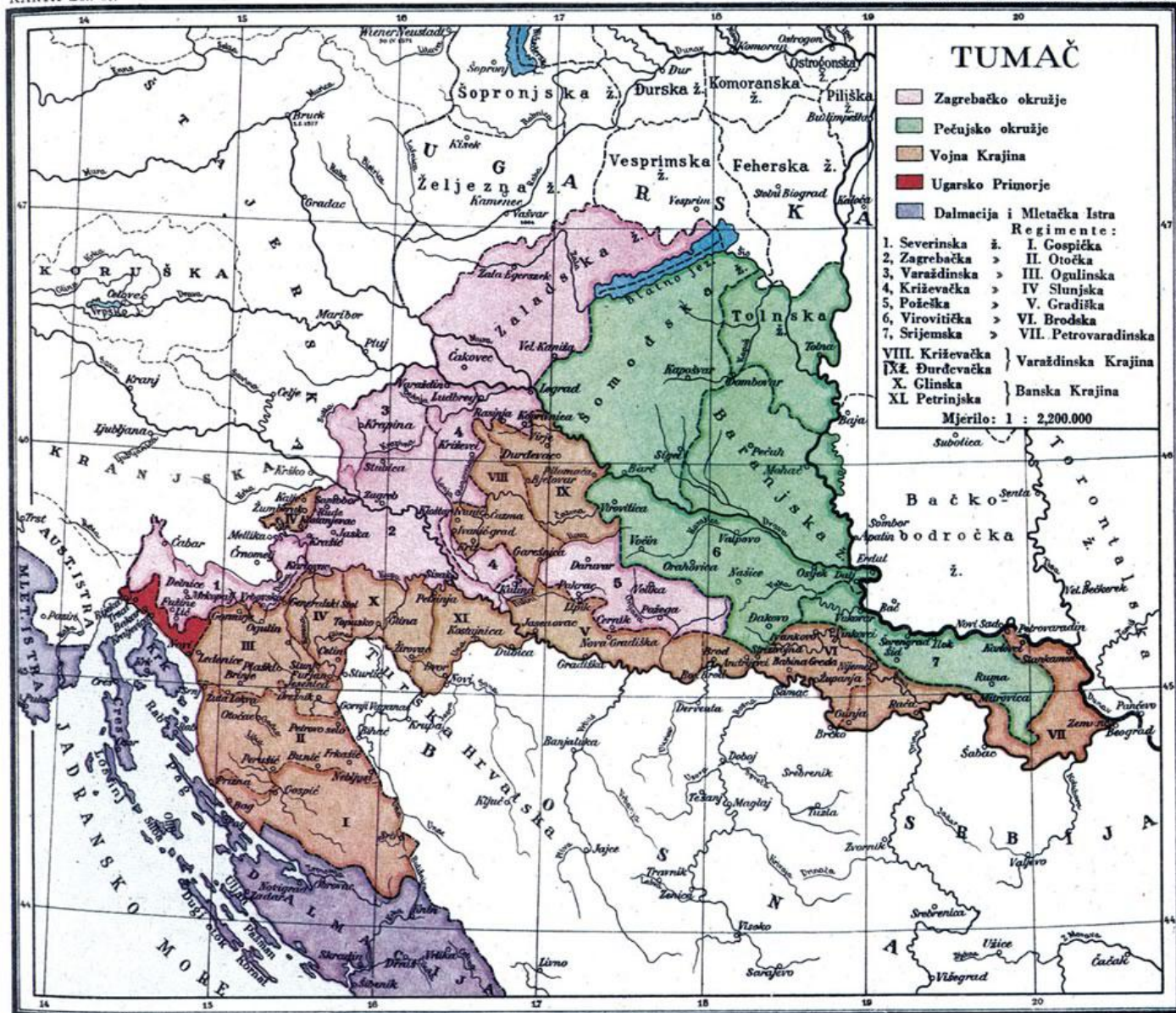


Fig. 6.71 The Military border of the Habsburg empire (brown), the map "Parcelacija Hrvatske za Josipa II. god. 1785, from Stjepan Srkulj, Hrvatska povijest u devetnaest karata, Zagreb 1937, published in <https://marinknezovic.files.wordpress.com/2016/10/josip2.jpg> as seen on 9.10.2018

Appendix 1 to Chapter 6

Paper “Historic and political traces in the urban structure of ex-Yugoslav cities”

Presented at the 1st international forum on architecture and urbanism IFAU’17 Cities in transition, December 14-16, 2017, Tirana, Albania, (submitted for publishing in february 2018, in printing in september 2018)

HISTORIC AND POLITICAL TRACES IN URBAN STRUCTURE OF EX YUGOSLAV CITIES

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ABSTRACT

In the history of ex Yugoslav cities there are only three different structural units that can be observed as regular and designed urban tissue entities and there are other, irregular urban structural forms. The regular structural forms are remains of planned city history and the irregular structural forms are remains of political permissive attitude towards city planning in late 20th century. The paper is based on my doctoral thesis “Similarities of ex Yugoslav cities” that is being finished. The observation of around 100 cities in the ex Yugoslav area has been conducted in order to define if the socialist state of Yugoslavia, founded on the borders of two european empires (the habsburg and the ottoman) has affected the cities in a way that could result in similarities of their urban structure. The basis of this comparative study was observation of satellite images of cities. Main result of the study is that similarities exist, but they have to be interpreted “cum grano salis”. Main cities that have been thoroughly observed: Split (CRO), Belgrade (SRB), Sarajevo (BIH), Priština (KOS), Maribor (SLO).

Keywords: *ex Yugoslavia, urban structure, urban development, urban history, formal and informal settlements.*

INTRODUCTION

Tracing the official urban planning achievements in the former Yugoslavia and all the states that emerged from this dissolved state, one could easily conclude that massive urban developments changed the ex Yugoslav cities in a way that the history is not traceable anymore.

Two observations apply here: the first is that the new developments rarely took more than a fourth of the existing urban tissue. The second is, alas, much more disturbing: the official urban planning developments occupied a minority of the urban developments that took place in the ex- Yugoslav cities: the majority of space

consumations were irregular, non official, organic, spontaneous, individual developments. The official and the unofficial reached their goals: they both changed the city images for an eternity.

THE EX-YUGOSLAV CITY - OFFICIAL HISTORY

The ex Yugoslav city is an urban form, developed through centuries of history but forged in the 20th century - the socialist city, designed and build in 1960es, 70es and 80es, has an unique official history. The official history shows the socialist city as the planned urban mechanism that follows the rules of the CIAM paradigma and until the 21st century everyone followed this official history.

The city of Sarajevo could be the best example of the “urban planning dogma” since all the official sources follow the same explication pattern: the city is linear and was formed in an amphitheatrical setup in ottoman times, then carefully expanded by the austrians in the late 19th century and again even more carefully extended after the WWII in the sensible socialist city expansion that was ingenious in architecture and even more successful in urban planning. All the city developments are well planned and the city in the socialist period was developed and expanded by numerous public buildings on one hand and by the new well planned neighbourhoods on the other hand.

Such urban planning history is made up. The existing city fabric as studied and observed in an attempt to find ex Yugoslav city similarities is recognised in much more vivid state than through corny “official urban history” optics.

The socialist official urban planning fed itself on superstitious beliefs that the urban planning covers all the citizens needs on one hand and the enormous drive of the rural inhabitants to the cities in the 1960es and 1970es. The socialist state of Yugoslavia created an almost self sufficient industrial production and the industrial workplaces were mostly connected to towns and cities. The quite ever-expanding industrial facilities powered a mighty residential development of almost any ex Yugoslav city and town and the rising cities expanded the local and state government apparatus. As the state became a very decent working and living environment, and was fully transformed from mostly rural to mostly urban in only five or six decades (from 1920 to 1970), the city expansions were easily realised as residential developments. The official history of any ex Yugoslav city - be it Koper on Slovenian Adriatic coast or Osijek near to the Hungarian border, even of Prizren or Mostar or Ohrid urban developments - is defined by the “beautification”: the city development official history shows outstanding monuments of medieval times, of austrian “fluchtlinien” planning or italian pallazo and piazza design, of ottoman square and open space design jewels, in some cases even whole city parts built in enlightened city

planning periods (like Dubrovnik renaissance city core or Nikšić royal extension). This paper and my research of the cities mentioned in the ex Yugoslav region does not deny any of the “official” urban qualities and values in any way. The intention of my research is only to label the “official” urban history as the sincere “beautification” and “promotion” of the cities and of the “urban planning” apparatus.

Alas! The “official urban planning” and the “official urban history” is far from covering all of the city fabric in almost any ex Yugoslav urban entity. Even today, some two decades after the complete dissolution of the state that created an unifying credo of official city planning, the urban planners are stuck right to the former “official” city understanding. It was inevitable that this official vision of an official city was broken. Observing and evaluating the city shape and urban tissue on more than 50 ex Yugoslav cities, the comparison between them lead to numerous statements. Perhaps the most shocking observation is that in majority of the observed cities the “official” or “regulated” city structures cover less than half of the city built areas. Majority of observed cities are up to 50% unplanned, some of them are up to 90% unplanned or “irregular” - these show only one or two major urban gestures of planned beautifications and some planned neighbourhoods and not much more.¹³⁰

The “official city” structural periods

The observation of the city similarities in the region of ex Yugoslavia was started in studying the “official” city structural periods.

The most interesting result of these observations was the fact that the cities rarely have more than three big development structural units: they could be called

a. the city core urban structural unit;

b. the “imperial” or “royal” urban structural unit and

c. the “socialist” urban structural unit.

The city core urban structural unit

The city core structural units are normally structures that date to roman or medieval urban city foundations. There are roughly three core design principles in the observed region: the roman provincial core, the western walled medieval core and the ottoman market town core. All of them are still traceable and the structures are readable in city fabric, although much more in the ex Yugoslav areas that were ruled by the austrian and austro hungarian empire.

¹³⁰ The most irregular are some cities in Macedonia since the ottoman urban planning principles were not recognised in the socialist period, but even whole cities like Subotica or vaste parts of Belgrade or Sarajevo reveal urban tissue that is completely irregular

The core period is the beginning of the city development. It does not matter if the background is initiated by the Romans (Split, Belgrade), Ottoman reign (Sarajevo, Priština), southern Austrian provincial border government (Maribor) - the core is fully formed and developed at the end of the medieval age.

The “imperial” or “royal” urban structural unit

The “imperial” or “royal” urban structural unit is clearly readable in the western part of the ex Yugoslav state region. As before mentioned, the area was quite clearly divided by two neighbouring empires:

A. the Austrian and later Austro - Hungarian on the western side, including the republics or states of Slovenia, Croatia (and after 1878 Bosnia and Hercegovina), and also region of Vojvodina in Serbia and

B. The Ottoman empire on the southeastern side, that included the republics or states of Serbia, Macedonia nad Montenegro.

The “imperial” or “royal” urban tradition also covers the city developments of the Kingdom of Montenegro and some developments of the Kingdom of the Serbs, Croats and Slovenes, later renowned as the Kingdom of Yugoslavia. The “imperial” urban structural units are recognised by the “classical”¹³¹. Sometimes this period is called the “Gründerzeit” – the emerging of the civil society and the reforms that triggered the building of the public city facilities form the “classical city”, distinguished by three city elements: the urban block, the square and the city street. It is presented in the “dense” urban block form and the “garden” regulated suburban villa urban typology.

The “socialist” urban structural unit

The “socialist” urban structural unit is distinctively recognised by the urban developments designed and build in the period from 1945 to roughly 1995. They are bound to the architectural global movement of modern architecture, specifically defined by the famous CIAM Athens Charter. The socialist urban developments were pursued especially in the field of residential and public buildings and covered a coherent architectural and urban planning movement in all of the state of the socialist Yugoslavia. The vaste city developments were first started in Belgrade by building the New Belgrade (Novi Beograd) old city counterpart, that was almost immediately followed by all the other cities throughout the socialist state.

¹³¹ As understood and described by Perović [1]

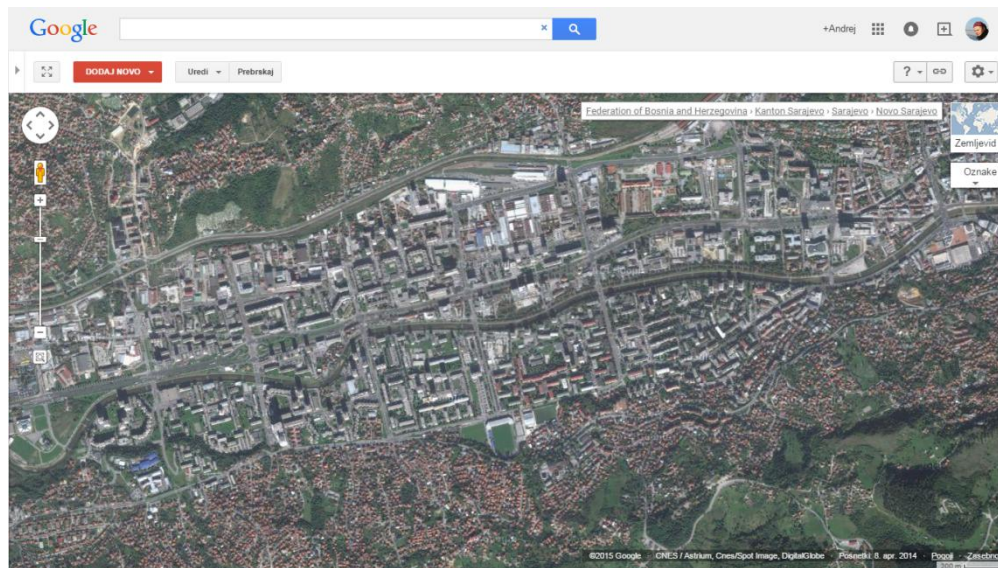


Figure 1: Sarajevo, socialist expansion and irregular/permisive outskirts residential structure on the slopes, Copyright Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe

The conclusions that are triggered by the observation of the official, regular urban structures

The first distinctive attribute of a typical ex Yugoslav city is a clear respect of the historic urban fabric and the preservation of the readable historic layers. City developments are performed in a way that at least affects the existing recognizable structure and in a way performed similar to the central European principles of city renewal and revitalisation.

Following the historic layers means that the cities of former Yugoslavia have preserved an exquisite readability of the urban fabric.

The proof for the unity of the “preservation of historic layers principle” lies in the fact that it does not matter what the historic layers are – be the ancient Turkish structure of the Tophane city part of Priština or the central European city core of Maribor, the remains of the roman Diocletian palace of Split or the Sarajevo’s Baščaršija Turkish city business core with the mahala structures around it, be the Austrian “Gründerzeit” closed city blocks in Belgrade, Sarajevo or Maribor .

In this way a sensible balance between old and new is achieved and it distinguishes the ex Yugoslav cities from the most cities in the eastern Europe neighbourhood.

Perhaps it lies in the fact (or represents it) that the inhabitants of the former state never took any government or ideology for granted. Apart from the glorious days of

the urban modernist developments of the post 2nd world war urbanization it is impossible to overlook the two principles of city understanding. As Miloš R. Perović confronts the two city principles, the “classical” city and the “functional” city in a harsh critical way, the reality shows that the city development and renewal have been done simultaneously.

Almost all the city developments in the former state oscillate from “functionalist” to “classical” right one after another or even simultaneously. The important fact is not the nature of development, but the understanding of both principles at the same time: on one hand the “brave new functionalist city” in the sense of the Athens Charter was built and right across the river the old classical city core was renovated.

Such a cohabitation of two procedures in urban planning was not possible in Sofia or Kiev and on the other hand large modernist urbanisations that created a duality between the new and the old city were out of the question in Graz, Vienna or Basel.

THE EX-YUGOSLAV CITY - THE OTHER, UNOFFICIAL HISTORY

“Takva ti je u nas gradnja”¹³²

Sincerity of the users is best shown in the urban areas that have been growing since the functional city developments “in the shade” of the big functional city extensions. As the urban planners of the 20th century turned the blind eye to it, it grew to a status that was causing professional panic and was revealing the modus operandi of the planners on one and inhabitants on the other side.

The non-regulated urban developments are a fact that cannot be ignored: they show the other side of the society mechanisms, the built “dark side” of city planning and managing. It cannot be solved in the framework of the theoretic apparatus of the 20th century.

Apart from the shiny beautiful “official” city developments, every ex Yugoslav city has its irregular, spontaneous, unofficial city parts. They are well hidden from the glamour of the “official” city, but ever existing as “problematic” urban structures: they are connected to insufficient or inappropriate communal resources, do not have appropriate cultural, educational, social and health infrastructure and are “ugly by

¹³² Explanation, could be translated as “This is the way it is built in our neighbourhood” by Emir, the neighbour why the irregular urban structure inhabitants know everything about their neighbours, from the movie “Kod amidže Idriza”, director Pjer Žalica, Bosna and Hercegovina, 2004, Academy award nominated in 2004

architectural design” since the urban design rules do not apply or are strictly not respected.

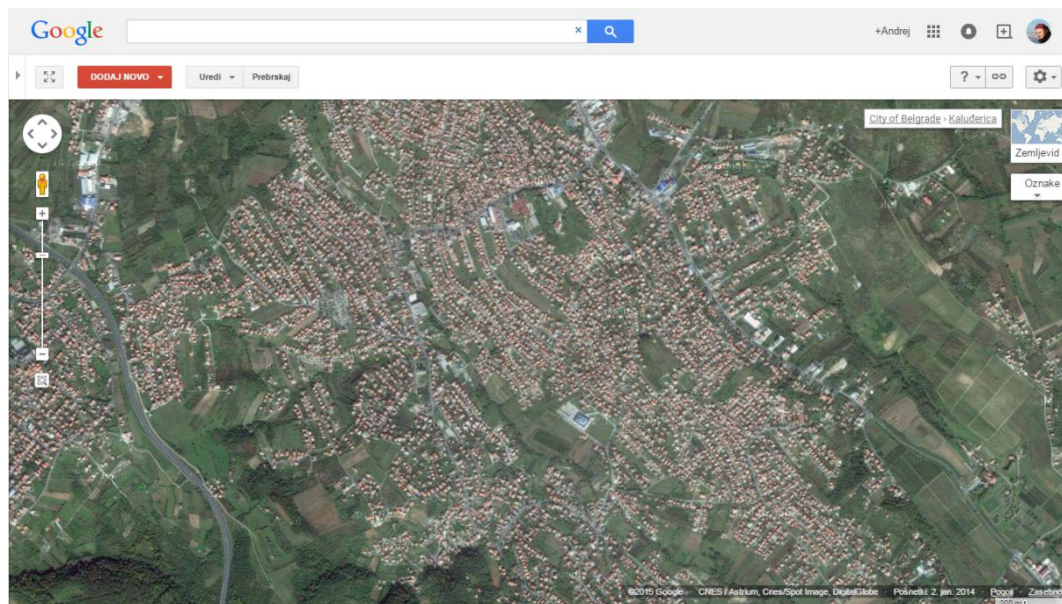


Figure 2: KaludERICA, the irregular unplanned Belgrade quarter, Copyright Google Maps, ©2015Google, CNES/Astrium, Cnes/Spot image, Digital Globe

The appearance of vast irregular city parts reveal that the “self-made” residential buildings were in fact “turning the blind eye” political gestures that allowed the lower social classes or the third class citizens to easily acquire cheap land plots (mostly planned as agricultural areas) and build whatever they wanted in unplanned areas - mostly without obtaining building permits (and normally not even asking for them). The unplanned unofficial areas were mainly never admitted bastard children of the city governments - the political leaders either knew that there has to be some kind of quiet agreement in order to keep social peace of the most radical lower classes or showed that the urban planning issues are much less important than the issues of national security, national existence, national pride or national appearance. The importance of city planning is also revealed as two sided: on one hand the politics is keeping the setup of “official urban planning” in power through legislative mechanisms (laws, plans, rules, obligations, building permit mechanisms, urban planning practices and city/state urban planning apparatus) and on the other hand the politics of all the states that root in ex Yugoslavia grant the citizens so called “legalisations” i.e. abolitions in an almost regular period of approximately every two decades: the irregular illegally built residential buildings can be “legalised” although build wrong and without respect of any urban planning document. It is very clear that these actions are not professional procedures triggered by the urban

planners - the “legalisations” are actions taken by the governments, mostly to reach for new votes in the coming election.¹³³

Legalisation is not an urban planning issue - it is clearly a political issue on the local and state government level. The bizarre fact is, that the legalisation is the only connecting point of the “official” and the “unofficial” urban planning, although the “legalisation” of the “unofficially” built structures does not make them “official”. The buildings get building permits, but that is the endpoint of the attention the unofficial city structures are getting from the governments.¹³⁴ It is like giving birth certificates to orphans but at the same time denying them the right to education.

The failure of the urban planning system and the urban management apparatus is the fact that the “legalisation” does not improve the living standards of a neighbourhood in any way. The unofficial irregular city parts remain the unplanned areas and the legalisations are pointless.

Lijepa sela lijepo gore - a ružna ostaju ružna čak i kad gore¹³⁵

CONCLUSIONS: FIRST PHASE CONCLUSIONS

The urban planning in the states that followed the deconstruction of Yugoslavia left a legacy of five decades which shows undoubted ideologic, aesthetic, functional and procedural similarities realized in common architectural and urban heritage, but faces the new states and cities with almost identical problems. The largest of them is the one that caught the city governments without experience: cities are being reorganized, redesigned, upgraded and renovated, but in most cases less and less inhabited: the demography shows that almost no new city extension is really justified since the population growth is very poor and other needs for the city reorganization almost fulfilled and completed in the last two decades of so called transition.

¹³³ The actual Slovenian government has inserted the “legalisation” into the urban planning law change in december 2017, the law is valid from 1.6.2018 and the parliamentary election was held between 31.5. and 17.7.2018. The last “legalisation” has taken place in 1993, in the spirit of the “fresh independence”. Serbia, Croatia, Macedonia and Kosovo have also implemented “legalisation” procedures in everyday life since the last decade.

¹³⁴ The most sophisticated institution to help legalisations is invented by the Croatian government: the “Agency for legalising the illegally built buildings” (Agencija za ozakonjenje nezakonito izgrađenih zgrada, <https://mgjpu.gov.hr/istaknute-teme/legalizacija-nezakonito-izgradjenih-zgrada/8314>, accessed on 27.12.2018) is a governmental agency, that helps the local governmental units to “legalise” buildings in an unified timespan throughout the state of Croatia. The agency is founded by the ministry of spatial planning of Republic of Croatia in order to finish the “legalisation” of 2013 in time. The Croatian legalisation law was passed in 2012 but the legalisation was not finished until 2017 so a new legalisation law was passed in 2017. In Serbia, a separate “Building object legalisation law” was last passed in 2017 allowing almost every residential building to be legalised. All the legalisation laws are presented by the Ministries of spatial planning.

¹³⁵ https://bs.wikiquote.org/wiki/Lijepa_sela_lijepo_gore, 11.2.2018

City development was a first class political promotion. The results of city development were filtered and carefully used. City life and hidden development has been much larger than the promoted development.

Traditionally the Yugoslav cities emerged from two urban planning traditions: the Austrian and the Ottoman empire nofficial reached their goals: they both changed the city images for an eternity.

The role of the architects has changed from 20th to 21st century. The „planning“ and „engineering“ of the city development is no longer a creative activity. It is merely a service activity.

City developments can be first class political promotions. The results of city developments can be filtered and carefully used. City life and hidden development are much larger than the promoted developments.

CONCLUSIONS: SECOND PHASE CONCLUSIONS

Additional check up:

For clearing the principle of city core development, additional cities were taken into consideration. The results of the additional city check up show that there are two principles of “entering” the city structure by the new “socialist” developments.

There are two traditions of city building in the ex Yugoslav region. They are connected to two urban planning traditions of the two empires that were ruling the region around year 1900. The socialist city extension developments treated the Austrian imperial structures differently as the Ottoman imperial developments.

Additional, more coherent conclusions were stated:

After an additional check up the similarities of the ex-Yugoslav cities can be derived to three observation levels and the next conclusions can be stated:

The city development tradition in ex Yugoslav cities reveals

- three development periods:

a. core period

b. imperial period

c. socialist period

- two city structural modes are revealed:

I. regular city structure

II. irregular city structure

- two basic traditional intrusion mechanisms are pinpointed:

1. intrusion of socialist developments into ottoman structure

2. addition of socialist developments to the imperial structure.

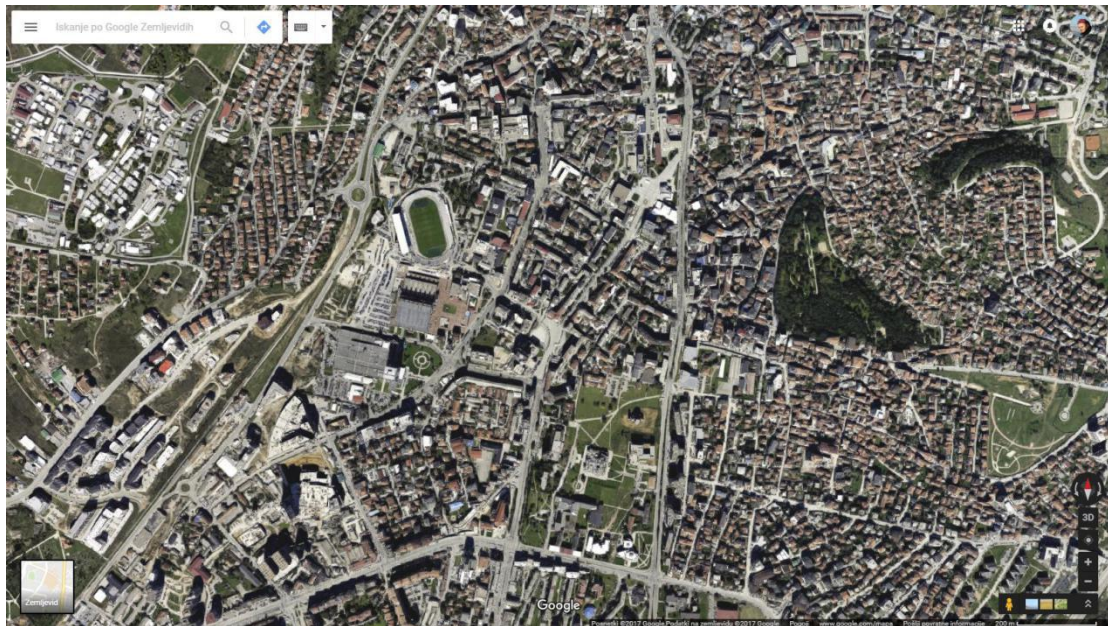


Figure 3: Priština, city centre, the modernist intrusion into an old ottoman organic structure, Copyright Google Maps, ©2017Google

CONCLUSIONS: TASKS FOR THE FUTURE RESEARCH

The 21st century offers multiple ways to access the solving of this popular, so contemporary, so infinitely appealing and politically rewarding phenomena. The 20th century qualified it as “illegal” homebuilding, but the altered position of the architect and urban planner in the society presents it as a new challenge - to research, analyse, decide and design to create dense, irregular, vivid built areas as separate parallel urban realities aside of the big city stories. Since urban planning lost its role and lacks the triggering power for new development periods, new strategy of urban management will be invented.

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SUMMARY

The cities of ex Yugoslavia are observed in this thesis using a structural comparison method, based on aerial photos, accessible on GoogleMaps platform.

As the cities belong to different city planning traditions, the main three basic structural units are defined and explained: the core city structures, the imperial/Gründerzeit/royal city structures and the socialist period city structures.

During thorough observation two new phenomena were revealed: the most interesting is the fact that the observed cities reveal major structural parts of urban tissue that are irregular. The observation would be incomplete if only regular, representative city entities would be pursued and explained, especially since they can cover more than a half of the city built area.

The last most interesting observation is found at observing the principles of the socialist city development. Since the state of Yugoslavia covered parts of two competing empires, the austro-hungarian on the west and the ottoman in the east, the cities were founded on quite different structural principles. This difference was amplified in the socialist period, that cherished the “classical” city structure of austro-hungarian period much more - the observation of the present state urban tissue shows that the socialist city development in former austro-hungarian cities continued the growth at the outskirts and in the former ottoman cities intruded the structure in the city centres.

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- Fig. 6.46** Ljubljana, Slovenia. Former military barracks were converted into a zone of government building to the southwest and a residential development to the east. The zone is not fully converted to the present day, two decades after removing the barracks entirely. Google Maps, ©2018 Google.
- Fig. 6.47** Niš, Serbia. Former industrial complex at the southeastern city outskirts is being converted into central area including education, various services and commercial buildings. Google Maps, ©2018 DigitalGlobe.

Fig. 6.48 Beograd, Serbia. The “Staro sajmište” area is located between the most representative Novi Beograd area and the Sava river and faces the “Belgrade waterfront” on the other Sava bank. It is astonishing how the permissive structure survived the Novi Beograd complex development. Google Maps, ©2018 DigitalGlobe.

Fig. 6.49 Zagreb, Croatia. The “Kozari” neighbourhood is surrounded by industrial and commercial centres and accessible through major city roads. It is unique by its own shape, density, design principles and structural irregularity. Google Maps, ©2018 DigitalGlobe.

Fig. 6.50 Pušča, Murska Sobota, Slovenia. The “Pušča” residential settlement is setup at a clear distance from the Murska Sobota city. The settlement is fully inhabited by Roma (Gipsy) population. Google Maps, ©2018 DigitalGlobe.

Fig. 6.51 Loznica, Serbia. The area between the city and the river Sava to the north is built with low level urbanism, without ordering principles, almost fully permissive. Google Maps, ©2018 DigitalGlobe.

Fig. 6.52 Kruševac, Serbia. The central structure is “beautified” by the socialist development. The core structure is “ordered” and hardly traceable anymore. Google Maps, ©2018 DigitalGlobe.

Fig. 6.53 Bitola, Macedonia. Massive socialist period intrusions redefined the city core. Google Maps, ©2018 DigitalGlobe.

Fig. 6.54 Štip, Macedonia. Massive socialist period intrusions redefined the city core. Google Maps, ©2018 DigitalGlobe.

Fig. 6.55 Novi Pazar, Serbia. Massive socialist period intrusions redefined the city core. Google Maps, ©2018 DigitalGlobe.

Fig. 6.56 Beograd, Serbia. The Dorćol structure is completed, redesigned, renovated in the Gründerzeit and the socialist period. Google Maps, ©2018 DigitalGlobe.

Fig. 6.57 Nikšić, Montenegro. The royal radial structure is continued by the socialist developments. Google Maps, ©2018 DigitalGlobe.

Fig. 6.58 Ljubljana, Slovenia. The Gründerzeit blocks are upgraded, included and refined in the city development of the socialist renovation. Google Maps, ©2018 Google.

Fig. 6.59 Zagreb, Croatia. The Gründerzeit blocks are upgraded, altered or completed in the socialist period. Google Maps, ©2018 Google.

Fig. 6.60 Zagreb, Croatia. The Gründerzeit structure is completed at the eastern border of the classical city: at the Maksimir stadium. Google Maps, ©2018 Google.

Fig. 6.61 Beograd, Serbia. The Gründerzeit structure of the Bulevar kralja Aleksandra is extended to the southeast with socialist structures; they are merely the facade to hide the permissive low density structure beyond. Google Maps, ©2018 DigitalGlobe.

Fig. 6.62 Maribor, Slovenia. The Gründerzeit structure is redesigned west of the railway station area. The structure is improved and altered. Google Maps, ©2018 CNES / Airbus.

Fig. 6.63 Bitola, Macedonia. The socialist development “Nova Bitola” at the southwestern city outskirts. Google Maps, ©2018 DigitalGlobe.

Fig. 6.64 Kragujevac, Serbia. The socialist developments at the western city outskirts. Google Maps, ©2018 DigitalGlobe.

Fig. 6.65 Zadar, Croatia. The socialist development as a pendant to the old city. Google Maps, ©2018 Google.

Fig. 6.66 Subotica, Serbia. Even in most conservative traditionally unordered structures, relatively small developments were added to the urban fabric. Google Maps, ©2018 CNES / Airbus.

Fig. 6.67 Podgorica, Montenegro. Bold socialist development as the western city extension in the picturesque natural setup. Google Maps, ©2018 Google.

Fig. 6.68 Novi Travnik, Bosnia and Herzegovina. A socialist city, specially planned and build as a separate unit. Google Maps, ©2018 CNES / Airbus.

Fig. 6.69 Kidričevo, Slovenia. A socialist city, specially planned and build as a separate unit, connected to the industrial complex. Google Maps, ©2018 CNES / Airbus.

Fig. 6.70 Nova Gorica, Slovenia. A socialist city, planned as the competitor to the Gorizia, the border city of Italy. Google Maps, ©2018 DigitalGlobe.

Fig. 6.71 The Military border of the Habsburg empire (brown), the map "Parcelacija Hrvatske za Josipa II. god. 1785, from Stjepan Srkulj, Hrvatska povijest u devetnaest karata, Zagreb 1937, published in <https://marinknezovic.files.wordpress.com/2016/10/josip2.jpg> as seen on 9.10.2018