

## **STREET SYSTEM AS DETERMINANT OF URBAN AND SOCIAL STRUCTURE OF CENTRAL AREAS OF NOVI SAD AND SOMBOR**

*UDC 711.73(497.113)*

**Darko Reba**

University of Novi Sad, Faculty of Technical Science,  
Department of Architecture and Urbanism, Novi Sad, Serbia

**Abstract.** *Paper Street system as determinant of urban and social structure of central areas of Novi Sad and Sombor is dedicated to study of complex relations of urban planning and architecture, relation which is key for every building of the city. In the first part is dealing with theoretical understanding of street systems and their relationships with all important elements of urban morphology. Elements of urban morphology is analysed through interaction with street systems, because is it part of the built environment which include social, economic, traffic, demographic, political and technological components of contemporary settlements, and forming the spaces especially for public functions, in the first socialisation and traffic. Theoretical basis from the first part of the work are used for establishment of criteria for analysis of urban spaces of central areas of two Vojvodinas towns. Fragments of the one square kilometre are analysed with following criteria: configuration of the land and influence on the street system, morphology of street system, socialisation places, elements of identity, presence of vegetation and water. Direction of analysis and studious critical valorisation is to the open – unbuilt – public – social urban spaces.*

**Key words:** *urban morphology, street system, open spaces, identity, socialisation.*

### 1. OPEN SPACES OF THE SETTLEMENTS

In theory of urbanism which are related to transformations of the cities existed many studies of elements and whole towns, which are directed to the processes and relations in it from different points of view. Investigation in this work is oriented to the study and analysis of urban morphology in the central areas of Vojvodina's towns, especially their

---

Received April 28, 2016 / Accepted June 27, 2016

**Corresponding author:** Darko Reba

University of Novi Sad, Faculty of Technical Science, Department of Architecture and Urbanism,

Trg Dositeja Obradovića 6, 21000 Novi Sad, Serbia

E-mail: rebad@uns.ac.rs

open spaces, with the goal of understanding, reading and defining the rules and logics of complex relations of many elements which form it, and in the same time make this "multidimensional dish" [1], as Luis Mumford name the city. Planimetries of central areas, their specific fragments and elements, will be analysed through interaction with street systems, to which is dedicated huge part of the paper, because they are one of the most significant parts of urban structure. This means that through analysis and studies of street system will be investigated their relations with other shapes and elements, which will led to understanding of their really anatomic characteristics. As strategy of investigation are establish standpoint that urban morphology will be studied not as finished spatial fact, but as tissue which is in continuous transformation, because of what it is most important to recognise and comprehend the processes and logics of their occurrence, at the same time cause which make conditions for changes of space relations.



**Fig. 1** Campidoglio in Rome, one of the most significant open spaces in the world.

Knowing that the city structure is expression of multilayered and complex spatial, physical, economic, social, cultural, political, technological and life processes, one of the basic goals is study of many different levels of the central areas of two Vojvodina's towns, is going in direction of adequate prediction and planning their futur transformations. Starting point is that the contemporary bulding and planning practice in Serbia, as well as in theory, and in the concrete spaces in towns and cities, do not give adequate attention to the relations, interactions, and connections of the elements of urban morphology, such as street system and streets as broader systems, with for example to architectural typology, urban design elements, and landscape and water treatment... in many cases questioning their identity, social integration and other aspects of Vojvodina's towns and cities. Investigation and study of this complex field going in direction of connection, coordination and integration of the elements of urban morphology, from the wholes to the details, and vice versa, which led to the natural, logical and stimulatory relations of urban morphology and architectural typology, relations which are the key for every knowledgeable, reasonable, human and organic building of the city.

Direction of study, careful critical valorisation and evaluation of specific areas of Vojvodina's towns is analysis of open – unbolt – public – social spaces, which can't be the rest space of architectural structures, but naturally and logically conceived and integrated wholes, which aloud human and healthy life, as well as to whole community, and at the same time to every individual. Open spaces of the cities in comparison with closed, in every sense are much more important for the social life of towns, which is fact that is in many cases in

our societies neglected. Because of that our attention is directed to investigation of the changes, transformations, organizations, articulation and regulation of urban morphology of central areas of two cities in Vojvodina, especially their public spaces, which prime role is, beside other important, to be the places for social integration. One of important strategies is manifested in study of new urban relationships in Vojvodina's towns in the way that they need to be places which will enable healthy, cultural, human and civilized life, and in which will all citizens together and equally have opportunity and hope in the freedom and choice.

## 2. STREET SYSTEM – DETERMINAT OF URBAN STRUCTURE

Great human creation, wonderwork of memory, between dreams and reality, utopia and pragmatism – city form is principal place as well as planning the cities, and the same time of building the house [2]. Street system is element of that form which influence in the form of the city is undeniably most important, because of that he in huge level is determinant of forms other urban elements. Established relations in that sense make the assignments of coordination's and adjustment, exiting and future street systems with character of future and existing town, as field of numerous combinations and variations of typologies and forms, which is basic property of urban morphology.

Road or path is the first element of urban system which occurs in unbuilt areas. He always led to the something, connect two points or areas, adjust organically or planned in he's way to the existing restrictions and obstacles, in the first place to the configuration and structure of the land, after that to the all other natural conditions. When more roads are existing in close proximity and contact, they form the system or web. That concept is influential to the other urban elements and forms which occur after it. Lines of roads are not unchangeable and finished, but with the sense that this system occur the first, it is most conservative above all urban elements. Other factors of urban milieu adjusting their form not only to the natural influences of the environment in which they occur, but at the same time to the existed and built elements which are established such as ways, roads, paths, directions, which in final stadium became the streets.

Anyway the form of the street system has significant influence on other urban elements, but this relation is always interdependent and recurrent. Shape of the urban blocks and squares is formed as consequence of the shape and concept of street system, or system can be adjusted to the forms and functions which elements of urban system make latter. Square can be formed in different ways, but one of the most common situation is that he occur in the intersection of numerous paths, because of what he form not only junction of the streets, but in many cases most important place or point in urban tissue – open space. With they scale, character and significance squares has huge influence to the functioning of the street system, because they are in most cases are intersection of the streets which channel pedestrian and vehicular traffic. It is clear that square areas has influence not only to the traffic system of nearest urban structure, but at the same time to the other urban processes in vicinity.

Biggest areas in urban structure normally take urban blocks. Between them street system occurs as structure through are channelled all urban processes. Shape of the blocks are adjusted to the established form of the street system, in relation with the position in urban tissue, typology of the streets, prevalent purpose of the area, traffic characteristics... However characteristic of the blocks such as scale, character and functions has influence to the

configuration and transformation of the streets which form it, and from those relations it is clear that influences of the block to the streets, and streets to the blocks are constant and interdependent.

Due to logical order of occurrence of urban morphology elements, it is clear that form of the street system often make shape of other urban things, which in later transformations has biggest influence to the character of the whole towns and cities. It is important to not forget fact that web of the streets are always adjusted to the purpose of the land, because urban morphology today mostly than ever before, is developed exactly with influence of the value of the space, price and position of every location, which prove that elements of urban tissue are in constant processes of transformation are interdependent and inter influenced.

### 3. STREET SYSTEM OF VOJVODINA'S TOWNS

Nature and land through history give very good conditions to the development of Vojvodina's villages much more horizontally then vertically. According to those conditions every town don't has many houses with floors, and they was very spacious. From the same concept are built cities of past times, which are in the first phases of occurrence has mostly spontaneous system of street web. Homogeneous natural conditions are influenced to the construction of the specific typology of settlements which in Vojvodina has basic characters in the moment of construction in XVIII century. Different urban tissue of towns from dose times can be classified in three basic types: ordered, irregular and star.

Street system is undeniably most constant element of urban morphology, which explicitly point development and transformations of it. Because of that the shape of street system is common spatial element in historical study of typology of towns. Factor which was most influential to the genesis of the Vojvodina's settlements is regulation. In the first phases of occurrence street system of those villages can be described as unplanned, but the beginning of the XIX century was starting point for planned urban structure [3]. Vojvodina's street systems can be calcified in some basic types, with the knowledge that every street structure is unique case and situation.

#### **3.1. Settlements with radial – centred street system**

Centred system of street layout is developed mostly in beginning of establishment of settlements, and remain in central areas even today. Basic characteristic of that system is that directions of the street began from one point. Position of those points from which settlements are occur was conditioned mostly by specific configuration of land, closeness or the best place for crossing the river, or some different natural circumstance.

#### **3.2. Settlements with concentric street system**

Basic characteristic of typology of concentric street system has in development from one or more centres, but very distinct irregularity. System is shaped by free widens of settlement to the land, and irregularity is conditioned mostly by configuration, and most influential factors was vicinity of the river, or some loftiness, which in Vojvodina is very rarely the case.

### **3.3. Settlements with orthogonal street system**

Street system of this typology is characterised by towns which are formed, or regulated, in periods when Vojvodina was part of Austria – Hungarian Empire. Today this street system can be found mostly in new parts of urban tissue, in them are deviation of that concept are very rear situation. Urban landscape which are developed form such street system often is without direction, monotonous, unarticulated and without intrinsic identity, which diminish qualities of such city spaces in many senses.

### **3.4. Linear type of settlement organisation**

Linear type street system in Vojvodina is characteristic mostly in villages. Basic characteristic of such system is existence of dominant street direction, or couple parallel, which form mostly transit or regional roads. Around those linear lines is developed urban tissue mostly by short streets in right angle.

## **4. DIRECTIONS FOR ANALYSIS OF STREET SYSTEM AND MORPHOLOGIES OF CENTRAL AREAS**

Central areas of Novi Sad and Sombor will be studied on areas of one square kilometre, which in Vojvodina's cities includes mostly all significant urban elements of this valuable spaces. Criteria for analysis of those ambiances are established in manner that need to describe in best way present urban values and potential, but at the same time weakness which is need to improve, all in direction of making better relations for socialisation of citizens in open spaces of central areas. Elements for analysis are not the recipes for design and planning of those areas, but they are facts which are need to be considered for thinking of future development and transformations of those ambients, which are need to be adequately combined and put them in appropriate relations.

### **4.1. Configuration of land and influence for street system**

Curtil influence for the urban structure, whatever the scale and level of the settlement is, has land in which is positioned, in the first line configuration and topography. Beside of them, important characteristics are slope of the terrain, high difference, geomorphologic and hydrological conditions, elevation...

### **4.2. Morphology of street system**

Shape – form of street system is in direct connection with above mentioned element of analysis – configuration of land in which settlement is positioned. In this part of study will be established basic type, or more of them, which make structure of analysed fragment, as well as interactions and relations of the elements of system. Beside of analysis of shape of street system, must be detected influence to typology of urban blocks, squares and other urban facts.

### **4.3. Places for social integration**

Most important urban open spaces of every city are places to which citizens gravitates, on which they spent their time, or come in it for specific programmes, whatever they are

organised or spontaneous. Those areas for social integration are in most cases open spaces of squares or streets, but they can be closed and built structures purposed for different kind of programmes and manifestations. Social environments are by the rule most visible elements of city identity, because of what they has important influence to the urban tissue in physical, visual, semantic and physiological sense.

#### **4.4. Elements of Identity**

On of the most significant layers of analysed fragments are elements of their identity, which can be expressed – built – composed from different urban forms and components. From some parts of the towns which can have special identity, different from the others parts of urban tissue, through squares with intrinsic configurations and recognition, streets or urban blocks as elements with unique identity and character, to the smallest urban components and details which can have specific things, everything in sense of identity is important.

#### **4.5. Vegetation and water – relations with natural elements**

Significance of natural elements for the quality of life in cities are unambiguous. Because of that analysis of two central areas of Vojvodina's cities and their natural elements is very important aspect, and valorisation of that component will be very serious. It will be recognised systems and forms in which natural elements occur in open spaces, and their influence on morphology and structure of numerous urban systems and processes.

#### **4.6. Conclusion of analysis of urban fragment**

After analysis of every urban fragment in synthetic form will be given conclusion of valorisation. In it will be defined basic weakness of analysed fragment, his existing urban condition, but at the same time potentials will be highline as direction of the future transformation of central areas.

### **5. CASE STUDY**

#### **5.1. Novi Sad**

##### *5.1.1. Configuration of land and influence of street system*

Land in which is positioned central area of Novi Sad is in real sense plain, which is normal for Vojvodina region, and elevation above the sea is from 78 to 80 meters. Basic characteristic of the land in which fragment, and whole city is, their unfavourable hydrological characteristics, because in the past this area was swamp, on which river Danube flooded all the time. Those processes of flooding and drying are conditioned unordered form of the street system, which was developed on the dry lines, so - called dry or golden beams. Even today are present consequences of swamp composition of the land, which is most expressed in high level of underground water.

### 5.1.2. Morphology of street system

Fragment of central area of Novi Sad in major part have truly irregular street structure. That situation is direct consequence of occurrence of the city along the river on the land with unfavourable hydrological property. In this part of urban tissue line of Mihajlo Pupin Boulevard is some kind of "spine" which start from the bridge Varadinska duga, and goes till the crossroad with Jevrejska and Uspenska streets. Small part of analysed fragment has orthogonal street system. Basic element of that system are parallel streets of Maksima Gorkog and Radnicka, as well as streets which are in right angle to them, Sonje Marinkovic, Stevana Musica and Strazilovska.



**Fig. 2** Morphology of street system and open public spaces of central area of Novi Sad

### 5.1.3. Places for social integration

Novi Sad as a whole city, especially central area, from the beginnings till the present day is space in the human scale, with numerous ambient on which public life occur. Contemporary open spaces which are purposed for social integration in the centre are connected in system, situation like that is happen especially in biggest Vojvodina towns.

System of social spaces began with Dunavski park as biggest oasis of nature, which is connected with the street which have same name. This street is crossing with Zmaj Jovina, busiest social space in the city, which on the other end is in contact with main square of Liberty, which is in contact with Modena street, Theatre square and Catholic port. On those open spaces are organised numerous public programmes. In Zmaj Jovina street are happening Street musician festival, Zmaj children play when she is one week full of youngest population, Honey festival, and many spontaneous but not less interesting and valuable manifestations.

Last couple of years are very active process of transformation of inner block spaces which are in contact with mentioned space, alluding with their functions, services and spaces for trade, completely new micro ambients with specific atmosphere, which gives to the central area new qualities as attractiveness, dynamics and vividness.

Beside basic system of social spaces fragment has couple very specific areas which are purposed to the active social life. In first line is Fish market which is in morning one of the spaces which is used most intensively, and just in close neighbourhood of market is Zmaj Jovina high school, maybe most significant educational institution in the city.

Square Mladenaca is beside usual dally using, on Saturday is purposed for the wedding parties, which is directly connected for the institution which is positioned on it. Open space which is still inadequately used in analysed fragment are spaces around Museum of Vojvodina, which in the future can be new places and points for culture programmes.

Square of Galleries and Trifkovic square today has purpose for parking, and in the future must be transformed in the places of social integration with the programmes of culture and other manifestations and happenings.



**Fig. 3** Morphology of street system and open spaces of central area of Novi Sad

#### *5.1.4. Elements of identity*

In fragment of central area of Novi Sad are integrated most important cultural values and urban layers of city, because of that this part has many ambient and places with unique identity. Most important of them is undoubtedly main Square of Liberty, on which is beside the monument of important citizen Svetozar Miletic, are most important visual architectural components of analysed area Town hall and Catholic cathedral. Other spaces with unique identity are Dunavska and Zmaj Jovina streets, linear urban centres, with saved and protected architectural character which dates back from second half of XIX century.

Building of Banovina which is designed by architect Dragisa Brasovan on Mihajlo Pupin Boulevard is identity not only of that street, but of the whole town and region of Vojvodina. Beside of those mentioned elements of identity, and at the same time for orientation, in fragment is important Dunavski park, and bank of the river Danube, Main Post office by same architect Brasovan, Tanurdzic palace which are designed by architect Djordje Tabakovic one of the most significant in Novi Sad, buildings of Museum of Vojvodina, and other which have significance in some micro locations.

#### *5.1.5. Vegetation and water – relation with natural elements*

Central area of Novi Sad which is subject of analysis has many natural elements. In first case is river Danube which make the border of this space from the east. In close vicinity of river is the Dunavski park, which has artificial lake and make unique oasis of nature in centre of the city, not only for vegetation, but at the same time for animals, swans and ducks which



are during the summer in the lake. It is significant to underline social value of park, because it is the place in which mostly children, with parents and grand parents spent most of their free time.

Vegetation beside the park are integrated in huge number of streets in which scale and character of their cross section aloud this, as well as on squares of this area, on Trifkovic and Galleries.

Water beside the river and artificial lake, is present in park through Fontanne on the beginning of Dunavska street, and drinking fountain in the centre of the park. Drinking fountains on the streets, of different shapes and typologies, are one of significant topics of identity of old Novi Sad, and other Vojvodina's towns. They always was places for communication and social integration. Today their existence on the open spaces are very rarely present in central areas, beside mentioned in park, there isn't any in centre of Novi Sad. Drinking fountains are interesting elements of squares and streets, beside of their function for drinking, they has very important significance and associations which are related to the culture and meetings of people in region of Vojvodina.

#### *5.1.6. Conclusion of analysis of urban fragment*

Analysed fragment of central area of Novi Sad of one square kilometre is layered ambient, rich of specific forms of urban morphology and culture. In irregular form of street web are present different typologies of streets, urban blocks and squares, and very interesting architectural buildings which make borders of open spaces. Information that in fragment are present nine squares speak about the possibilities for social integration. Elements of identity are present on many open spaces, and they make specific atmosphere of this oldest part of town. Beside the very high level of building ratio in centre, it has many and developed natural elements of vegetation and water. We can conclude that analysed area of Novi Sad make paradigmatic urban model of pluralistic layers and relations, which are built in long period of time, and today they are in good conditions and has very interesting connections with each other.

## **5.2 . Sombor**

### *5.2.1. Configuration of land and influence of street system*

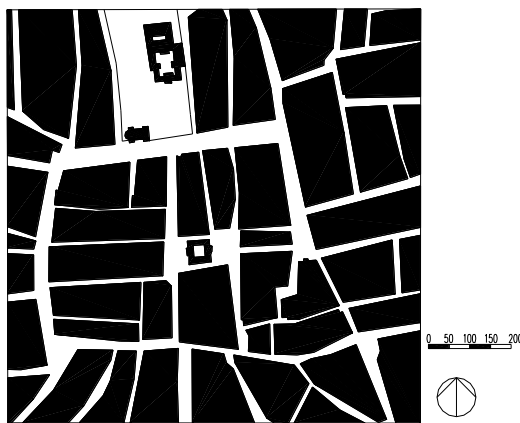
In the time of occurrence land in which Sombor is positioned was swamp, because it is mentioned in historical data that in close vicinity was around twenty lakes, because of what the most influential aspect to the form of street structure has hydrological conditions. For the contemporary structure of street system in the central area most influential factor is form of former Ottoman fortification, in the past times borders of town tissue, inside of which was established specific urban structure.

### *5.2.2. Morphology of street system*

Structure of street system which is established in one square kilometre of central area in Sombor is very unique and specific in compare to the other Vojvodina's towns. In analysed area it is possible to divide street structure to the two parts, first is urban tissue of central core inside the four Venac streets, and second is outside the mentioned streets, which is composed from transitional and periphery urban tissue of contemporary town.

Inside the space which is defined by Venac streets is orthogonal street structure. In context of other street systems of Vojvodina's towns this can be described as irregular orthogonal. In one part of space inside the Venacs streets, in vicinity of Kosta Trifkovic street, orthogonal street system is completely changed, this situation is developed because of irregularity of urban blocks, which don't have regular geometrical shapes.

Irregular orthogonal form of street system is developed in areas outside the central core. Street directions of transitional area most commonly are in right angle to the Venac streets, but in that area existed many street's which are not in right angle to the mentioned street system. This little irregularity in vicinity of centre, in areas which are far from it make distinctively irregular urban structure.

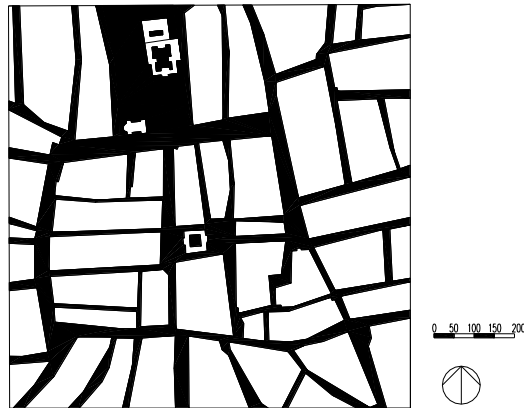


**Fig. 4** Morphology of street system and open spaces of central area of Sombor

### 5.2.3. Places for social integration

Space which has most intensive purpose for social integration is main Saint trinity Square, in citizens is common name for it is bold square, it is biggest open space of centre urban tissue. Huge empty space aloud integration of the big amount of people around different nature of public happenings and performances. Traditional which occur on every year regularly are Musical celebrations of Sombor which last two weeks, culinary encounters on which are cooked traditional meals, Children's market which occur every weekend when young inhabitants of Sombor exchange and sell their toys and Days of Theatre which last for one week.

In activities which are not regular, and occur periodically are concerts of different kind of music, political gatherings, as well as exhibitions of art's which are happen inside and in front of City hall. Street of King Peter I is most active space for social integration of Sombor, because people are present in it during the whole day, and especially in evening times when they use it as promenade. With wide cross section street offer the possibilities for different kinds of urban processes and programmes, because it has character of linear square.



**Fig. 5** Morphology of street system and open spaces of central area of Sombor

Market in chains, which is in close contact with City hall and main square, is space which is most occupied by people in morning times. In the afternoon, when market doesn't work, this space is unclean and dirty, because of what this dirt and unpleasant smells diminish qualities not only of this ambient, but at the same time to the spaces which are far from it.

Unique spaces for social integration are educational institutions, two elementary and one high schools. Their yards are spaces which are full of children's during whole day, this most vital social group gives the liveliness to the whole central area, especially on the way to and from this very important points of urban morphology. Little open space behind Sombor Theatre was used for chamber performances. Specific fact which is connected for theatre is existence of "Theatre marathon" which last for the past ten years on the end of the season, when in couple days are the plays from the whole repertoire of the year. This manifestation is very accepted from the side of inhabitants, and contribute to the urban culture of the town, and especially on this year when is square in front of the theatre is transformed and reconstructed.

Wide open space in front of Sombor's county in form of park is specific ecological area in central core, which is used by inhabitants during whole day as place for recreation and meditation. This space is adequately lighted, and very well maintained, during the evening times in park can be found many young citizens of Sombor, which used intimacy of it and favourable microclimatic conditions.

#### *5.2.4. Elements of identity*

Central area of Sombor has many elements which gives him special spirit and character. In first place this is building of Sombor county in architectural style of secession, with intrinsic elements of local details. Most visible element for orientation in the centre is City hall and entering portal with the tower, which dominate to the space of main square.

Street of King Peter I is typical milieu of central areas of Vojvodina's towns, with adequately defined partner arrangements and all necessary urban equipment. one of the most significant identity of Sombor is using of bicycles, which can be seen in all open spaces. In front of entering areas of buildings, offices or apartments, are existing the

parking places for bicycles which are always full, that is not common situation in other Vojvodina's towns. This specific situation talk not only about using of this traffic mean of past and future, but about developed urban culture of using, protecting and maintaining this elements of active transportation, recreation and sport.

Maybe one of the most important element of identity of Sombor, which is know in whole Vojvodina is carriage, which still drive in the streets of town. Albeit this layer of the past today don't has functional role, exist only for tourist function, pinpoint to the adequate way of protecting of tradition and identity of settlement. Aside from mentioned elements of identity, street structure which is composed by famous Venci is unique urban component in Vojvodina's towns. This organisation of the traffic is recognisable and remembered thing, together with lush vegetation which dominates in this linear spaces.

#### *5.2.5. Vegetation and water – relation with natural elements*

One of the most significant element of Sombor's central area is lush vegetation, because it is integral element of almost every open space. Beside from high trees which dominate the Venac streets as well as Square of King Lazar, most significant natural area of central core is park in front of Sombor county building.

Water as urban element can be found in centre of Sombor in form of fountain in beginning of main street, on the Square of Republic, and many drinking fountains in some micro ambient, and in the new square in front of the Theatre. This presence of water in central area of Sombor, in comparison with other Vojvodina's towns, is appropriate and advance urban situation.

#### *5.2.6. Conclusion of analysis of urban fragment*

Area of Sombor which is subject of analysis has huge number of distinctive urban values and identities, as potentials which can make new urban qualities in the future. Values of centre are above all grand open spaces which are purposed to pedestrians, which make continuous landscape. Numerous buildings which are oriented to those spaces has open ground floors which are purposed for market and hospitality, but even to the cultural function. From urban tissue separated are structures of Town hall and Sombor county as unique elements of identity, by which Sombor is known in Vojvodina's region.

One of important thing of analysed area is new traffic solution, by which all vehicles will need to be expelled from the streets and squares of the centre, that kind of transformation will connect and make continuation of all pedestrian spaces. Making of new bicycle lines is very important traffic transformation of future central core, which will contribute to the favour of this, already present, mean of transportation. Dislocation of Market in chains from present position will in many senses contribute to the better micro climatic conditions of central area, as well as to the formation of new open pedestrian space in close vicinity of the City hall and main square, which will increase the open public pedestrian spaces in important amount.

## 6. CONCLUSION

In morphology of towns system which is formed by streets makes the field by which are channelled highest number of urban processes. Form of this system make relations, overlapping and interweaving of the most important urban elements and shapes, in first line the streets, which makes the borders of urban blocks and squares as places for social integration. In conclusion we will use one sentence of famous architect Venturi: when we today make analysis and found again this and that aspect of previous building production, this is not with idea to copy their form, but in expectation to better satisfaction of new sensibilities which are completely product of nowadays [4]. This standpoint we accept as valid approach to process of study of urban present condition and transformation. Cities as architecture are complex and contradiction, because of what their planning is result of synthetic social, geographical, natural, cultural and political foundations, forces and powers. Grand deficiency of contemporary planning is based in fact that everybody insist to the future urban condition, without clear processes which need to led to it. L Halprin points that: planners need to start to understand, together with designers and architects, that their assignment is to guide the changes, not to develop static shapes or defined criteria, but to make the form which can evolve [5]. Knowing that basics of urban planning is to make form of many life situations through visions and predictions, work and study on analysis and critical valorisation of street systems of two Vojvodina's cities is based on understanding and comprehending of existing condition of their urban elements. Learning from existing landscape for architects can be the mean to be revolutionary. Not in obvious way, as destruction of Paris and starting again as proposed by Corbusier in the 1920, but in other, tolerant way, questioning our relation toward things [6]. Analysis and studies of urban and rural environments, their physical characteristics, logics and components is oriented toward founding's of possible directions and conceptions for their transformations, which goal can be described as diversiform city, place with all necessary attributes which aloud human and civilised life to society and individual, where they in harmony can make freedom and choice.

Human and diversified cities are one in which are on natural and logical way are synthetically, combined and coordinated numerous layers, in first place of culture and tradition, spirituality and identity, technology and politics, and all other elements which make urban and social landscape. Forces and influences, elements and aspects which make this landscape, will need to contribute in harmony to qualities and richness of social life of all citizens groups, which by their function are not jeopardise to itch other. In urban relations which are conceptualised like this, by urban revitalisation is need to aloud freedom of choice for everyone. Polifunctional urbanism, integrated urban functions, facilities and programmes are not just lesson, but real need of inhabitants for which planned transformations are.

Can be concluded that all professions which have role in construction of cities need to be active in level of connection and integration of parts and forces, social concerns and market orientation, pinpoint to the possibilities and contradictions' in urban environments for every option and decision [7]. In that sense conceptual lines of urbanism led toward one special mean of work, which is possibly most avanguard contemporary strategy in theory named as Topical planning. It is manifested in directed actions, means and incentives for treatment in some urban space or process, in direction of heightened of qualities. Themes of topical planning can be shores of the cities, children's in towns, urban parks and green spaces, or identity and systematisation of it. Basic principle is that

most complex urban issues, after detailed analysis of existing condition and planning of future relations, without hurry peacefully implement, on areas of small scale, which are always can be really and possibly realised.

**Acknowledgement.** *The paper is a part of the PhD thesis: Urban morphology and street system of Vojvodina's towns, which was defended in year 2005, in which is analysed significant and complex relation of architecture and urban planning.*

#### REFERENCES

1. Mumford Lewis, "Grad u historiji", ITRO Napred Zagreb, 1988.
2. Radović Ranko, "Fizička struktura grada", IAUS Beograd, 1972.
3. Lubinko Pušić, "Urbanistički razvoj gradova u Vojvodini u XIX i prvoj polovini XX veka", Matica srpska, Novi Sad, 1987.
4. Venturi Robert, "Složenosti i protivurečnosti u arhitekturi", GK Beograd, 1989.
5. Halprin Laurens, "Gradovi", GK. Beograd, 1974.
6. Venturi Robert, Skot – Braun Deniz i Ajzenur Stiven, "Pouke Las Vegasa", Građevinska knjiga, Beograd.
7. Radović Ranko, "On cities, planning & urban design", Helsinki University of Tehnology, Helsinki, 1996.
8. Nan Elin, "Postmoderni urbanizam", ORION ART, Beograd, 2002.
9. Norberg – Shulz Christian, "Egzistencija, prostor i arhitektura", G.K. Beograd, 1975.
10. Radović Ranko, "Moderna arhitektura i tradicija", Beograd, Vidici, No 154., 1972.
11. Rossi Aldo, "Arhitektura grada", GK Beograd, 1996.
12. Anderson Stanford, "On Streets", Institute for Architecture and Urban Studies the MIT Press, Cambridge Massachusetts, and London, England
13. Cliff Moughtin, "Urban design Street and Square", Architectural Press, Oxford, 2003
14. Gehl Jan, Gemzo Lars, "Public spaces – public life", The Danish architectural press, Copenhagen 1996.
15. Jacobs B. Allan, "Great Streets", MIT Press, Cambridge Mas. London, 1993.
16. Kostof Spiro, "The City Shaped", Thames and Hudson, London, 1999.
17. Kostof Spiro, "The City Assembled", Thames and Hudson, London, 1992.
18. Lynch Kevin, "Site Planning", The MIT Press, Cambridge Massachusetts, 1962.

## ULIČNA MREŽA KAO DETERMINANTA URBANE I SOCIJALNE STRUKTURE CENTARA NOVOG SADA I SOMBORA

*Rad pod naslovom Ulična mreža kao determinanta urbane strukture Novog Sada, Sombora posvećen je istraživanju kompleksnih odnosa urbanog planiranja i arhitekture, odnosa koji su ključ svakog gradograđenja. U prvom delu se bavi teorijskim proučavanjem uličnih sistema i njihovom odnosu sa svim važnim elementima urbane morfologije. Urbana morfologija se u prvom delu rada analizira kroz interakciju sa sistemom ulica, jer je ona deo građene sredine koja u sebe uključuje socijalne, ekonomske, saobraćajne, demografske, političke i tehnološke komponente savremenih naselja, a formira površine isključivo za javne funkcije, prvenstveno socijalizaciju i saobraćaj. Proučavanja iz prvog dela rada služe kao teorijska osnova za utvrđivanje kriterijuma za analzu konkretnih urbanih prostora vojvođanskih naselja. Fragmenti se istražuju u odnosu na sledeće kriterijume: konfiguracija terena i njen uticaju na ulični sistem, morfologija uličnog sistema, mesta socijalizacije, elemenati identiteta, prisustvo vegetacije i vode. Težište istraživanja, studiozne kritičke valorizacije, usmereno je ka analizi otvorenih – slobodnih – neizgrađenih – javnih – socijalnih prostora.*

Ključne reči: *urbana morfologija, ulični sistem, otvoreni prostori, identitet, socijalizacija.*