41 година грађевинског факултета суботица

Међународна конференција

Савремена достигнућа у грађевинарству 24. април 2015. Суботица, СРБИЈА

### **REVITALIZATION POTENTIAL OF PUBLIC SPACES IN THE CENTRAL PEDESTRIAN ZONE OF NOVI SAD**

Stefan Škorić<sup>1</sup> Milena Krklješ<sup>2</sup>

УДК: 711.61(497.113Novi Sad) DOI:10.14415/konferencijaGFS 2015.087

**Summary:** During the last decades, Novi Sad had experienced numerous changes, which have reflected in the urban matrix, resulting in a lack of public spaces. The squares are a complex urban spaces used for socialization, gatherings and other activities that are gradually losing their prior importance due to the emerging traffic demands. This paper explores open public spaces - Trifković Square and Republic Square, which represent a key fragments of the central pedestrian zone of Novi Sad, an important ambient entity of the city that have not so far reached its full potential. The aim of the research is to define parameters that affect the identification of public space as a square, in order to better understand the historical change and the existing prominence of the urban form of squares, as well as the impact of determined parameters on their revitalization potential. Consequently, this paper proposes possible directions for functional revitalization and complete incorporation of analyzed squares in the central pedestrian zone of Novi Sad.

Keywords: Public space, revitalization, Trifković Square, Republic Square

### 1. INTRODUCTION

Urban matrix is an apparent indicator of settlement development, progress and changes, which are manifested into the public space of the city. Contrasting to the streets, which are the linear routes of movement through the city, squares are specific stationary elements. As a place of exchange and encounter, square is important functional and social element of an urban structure. They are highly contested public spaces that are constantly undergoing various changes. For centuries, the squares were the basis for urban life and the creation of urban cultural scene of the city. Even today, the essence of the square is it to be regulated as a pedestrian zone and a place where people can gather. Historically, the prevailing features of squares in Vojvodina were the numerous forms of socialization and currency exchange. Squares as marketplaces were the most common typological group in Vojvodina, but over the time due to economic, social and historical changes, they received another functions and meanings [1]. During XX century, a new type of public space was developed, focusing on multi-functionality of squares. On the

<sup>1</sup> Stefan Škorić, M.Arch., research assistant, University of Novi Sad, Faculty of Technical Sciences, Trg

Dositeja Obradovića 6, Novi Sad, Serbia, 021 485 2462, e - mail: skoricstefan@yahoo.com

<sup>&</sup>lt;sup>2</sup> Milena Krklješ, Ph.D., assistant professor, University of Novi Sad, Faculty of Technical Sciences, Trg Dositeja Obradovića 6, Novi Sad, Serbia, 021 485 2462, e – mail: <u>milenakrkljes@gmail.com</u>

## $41^{th}_{\rm ANNIVERSARY\,FACULTY\,OF\,CIVIL\,ENGINEERING\,SUBOTICA}$

International conference

Contemporary achievements in civil engineering 24. April 2015. Subotica, SERBIA

other hand, some of the central town squares were modified in order to respond to the emerging traffic demands. Most of the squares were transformed into the traffic roads, bus stations, roundabouts and parking lots, by incorporating road and rail traffic as its integral components. This transformation has occurred on many squares in Novi Sad, including Trifković and Republic Square as parts of the old pedestrian zone of the city.

Pedestrian zone of Novi Sad is an ambient with numerous and diverse historical and cultural monuments, as well as with network of public spaces fragmented into many minor urban 'islands' exposed to traffic. The expansion of the pedestrian zone to other parts of the old city center is a longstanding idea, made three decades ago when authorities of Novi Sad decided to expel vehicles from city center.

Revitalization of public spaces in the central pedestrian zone would offer an articulated network of ambiences, by interconnecting squares with pedestrian streets. Nowadays, squares are losing their former importance in the social and urban life of its citizens, and public life of the city is slowly abandoning squares. Squares in Novi Sad were not able to cope as the social space of the city that would built the image of its authenticity [2]. On the other hand, public spaces often lack coherence and identity, and need to be restructured to meet certain parameters that enable its clear perception as a square.

### 2. CRITERION OF SQUARE PARAMETERS ANALYSIS

There are two aspects of the analysis of selected squares in Novi Sad. The first deals with the reassessment of the physical parameters that describe primarily the disposition, geometry of space, street inflowing, relations between private and public spaces, etc. Another aspect of the analysis interprets the relations within the physical structure of the square. These aspects allow consideration of the square through parameters that define its essential characteristics, and points out a set of parameters for its future development. Urban disposition of squares involves their position in relation to a comprehensive settlement and can be expressed in two ways: (1) in relation to the geometric center of settlement, and (2) in relation to an important position (city center, main street, etc.). Geometry of the squares is one of the most important determinants of the square, derived from the shape of the urban matrix and by the morphological characteristics of the terrain. According to Rob Krier, shape of every square can be deducted to one of three basic regular shapes in geometry such as square, circle and triangle, which can further produce more complex shapes by applying processes of refraction, division, addition, penetration, overlap, interference and distortion [3].

The geometry of the square is closely related to analysis of proportions. Camillo Sitte points out that an important aspect in finding an optimal size of the square is its proportion to the dominant building, suggesting that a single building height is a minimum rate for the corresponding dimension of the square [4]. Shape and openness of a square is influenced with surrounding street network, their intersections and interflows into a square. Rob Krier defined the different arrangements of the interflow of streets into square as (1) centric and perpendicular to the square length, (2) eccentric and perpendicular to the square, and (4) at a random angle to sides of a square [3].

# 41 година грађевинског факултета суботица

Међународна конференција

Савремена достигнућа у грађевинарству 24. април 2015. Суботица, СРБИЈА

In physical terms, the square consists of open space and buildings around it, and it is the place from which we perceive immediate environment of the square. An environmental image may be devided into three components: identity, structure, and meaning. It requires the identification of a building, as its distinction from other things and its recognition as a separable entity, which is called identity. Secondly, the image must include the spatial or pattern relation of the building to the observer and to other buildings. And finally, the building must have some meaning for the observer, whether practical or emotional [5]. A frame composed of architectural structures is needed to identify an open public space of the city as a square, and to categorize it as opened or closed one. Closeness of the square is the only way in which the free space in the middle of the city can truly become a square [4]. Therefore, surrounding buildings, their position, shape, size and function, make a relation with main functions of the square.

The presence of traffic in the square conditions developing of business contents in the surrounding buildings, and a regulated green or paved surface of the square, intended for gatherings of people, promotes the introduction of commercial, trade and cultural contents. Another group of parameters such as historical and cultural importance of a square, use of urban furniture, adequate lighting, paving arrangement, green areas and presence of ambient values of the square, represent an important points in the existence of the square. The analysis of basic parameters such as (1) urban disposition, (2) urban morphology, (3) street interflow, (4) physical structure, (5) manner of functioning, (6) programs in the ground floors, (7) elements of identity, (8) urban furniture, (9) vegetation, and (10) ambient value, have to indicate which components of the public spaces are perspective and should be retained and used as starting points for their revitalization into pedestrian zone of Novi Sad.

### 3. CASE STUDY: TRIFKOVIĆ SQUARE AND REPUBLIC SQUARE

This paper is based on an analysis of the Trifković Square and Republic Square, important focal points in the urban matrix of Novi Sad. As extended parts of pedestrian zone, these squares were altered into parking lots and traffic nods and do not meet the general criteria to be classified as squares. Take-over of pedestrian zone by vehicle traffic is in contradiction with Detailed Regulation Plan of Protected Old Urban Core of Novi Sad passed in 2011, which clearly stated that the pedestrian zone should be retained in the existing borders [6]. Lack of parking spaces, with the enhanced processes of the urban core transformation, led to the conversion of these potentially valuable places of socialization to the space primarily reserved for the vehicular traffic.

Triangular Trifković Square is currently organized as a traffic roundabout and parking lot accessed by car through the Njegoševa Street on southwestern corner, with two routes of vehicles departure via Svetozara Miletića Street on the north side of square. Main routes of pedestrian access are Njegoševa Street and Laze Telečkog Street, which are connecting the central pedestrian zone of the city with the square. In 1793, a route was breached through Njegoševa Street, merging a connection between Trifković Square and the central city square - Liberty Square, containing Town Hall and one of the most significant vertical landmarks of the city - The Name of Mary Church.

# $41^{th}_{\rm ANNIVERSARY\,FACULTY\,OF\,CIVIL\,ENGINEERING\,SUBOTICA}$

International conference

Contemporary achievements in civil engineering 24. April 2015. Subotica, SERBIA

During its history, Trifković Square had experienced several functional transformations, resulting in complete reshaping of its physical image. There once existed a very important public institution - theatre building *Theatrum publicum*, with the surrounding area of the *Platea theatralis*, nowadays recognized as Trifković Square. The theatre was demolished in late XIX century, nevertheless, the old perspective of the square had generated ambient for pedestrians as the main users of the space. In the second half of the XX century, Trifković Square became a bus stop and turntable for city traffic. Nowadays, the square has lost its role as an urban space dedicated to the social life of the city, due to prioritization of motor vehicles instead of pedestrians.

Physical frame of the square consists of diverse buildings, different in architectural styles, number of floors, functions, etc. The upper floors of the buildings surrounding the square are mostly dedicated to private housing, whereas the programs in the ground floors are dominantly commercial. Most of buildings were built at the turn of the XIX and XX centuries, with the exception of contemporary 'Levi 9' building on the corner of Svetozara Miletića and Laze Telečkog Streets. The most important historical building located on Trifković Square is the house of Kosta Trifković, an eminent writer, dramaturge, and a notable citizen of Novi Sad according to whom the square was named after. Music school Isidor Bajić and angular three-story building enclose southwestern side of the square. Popular old inn 'Bela laða', which existed from the mid-nineteenth until mid-twentieth century in the house on the south corner of the square, was abandoned although it was placed under protection as a historic monument. There are indications that it had an important part in history of Novi Sad, due to the fact that it was meeting place of important names in Serbian politics and culture, such as Svetozar Miletić, Jovan Jovanović Zmaj, Laza Kostić, Đura Jaksić, Miloš Crnjanski and others.

Despite its urban and historical potential, the Trifković Square lacks of appropriate function, urban and landscape design. It is enriched with deciduous tree species and lawn in central part, and equipped with traffic infrastructure, indicating that the square is oriented primarily to vehicular traffic, and not to the pedestrians. During the analysis of the existing traffic conditions, it was observed that there is significant overlapping between pedestrian and vehicular traffic. Construction of a public garage near the Trifković Square and Serbian National Theatre has not completely solved the lack of parking spaces, and this issue seems even more problematic nowadays.



Figure 1. Urban position of Trifković Square (left), Existing prominence of the square (middle), House of Kosta Trifković (right)

Republic Square is one of the oldest parts of the city, positioned near the Zmaj Jovina and Dunavska Street. It has rectangular shape enclosed on all sides with buildings, with

# 41 година грађевинског факултета суботица

Међународна конференција

Савремена достигнућа у грађевинарству 24. април 2015. Суботица, СРБИЈА

aspect ratio 1:4. Square is physically divided into two parts, resulting that this fragmented public area is not recognized as a square. The western part was for a long time a bus station. It was relocated in 2006, and the square is currently organized as a public parking lot. Square plateau is extremely devastated with inadequate urban furniture, and it lacks in landscaping and greenery. The whole area is nowadays facing reconstruction and revitalization in order to become a decent public space.

The eastern part of the square, recognized as Fish Market, is functioning as market place with a temporary structures and market stalls. It is one of symbols of Novi Sad that used to supply citizens with fresh fish in the mid-nineteenth century, and eventually evolved into the common market place. It is a very distinctive part of the city and depiction of local culture, as well as a potential tourist attraction. Ljubinko Pušić suggests that market places are social spaces after which the Novi Sad is actually known for [2].

The traffic infrastructure surrounding the Square is in very poor condition. The eastern part of the square is enclosed with Žarko Vasiljević Street, which is a one-way traffic road connecting the square with Dunavski Park. The northern part of the square is extension of Miloša Bajića Street, which is linking Danube quay with the Republic Square. It can be accessed from the north through two-way Kosovska Street, and departed through one-way Šumadijska Street on the north and one-way Daničićeva Street on the western comer. On the western part, square is interconnected with the pedestrian zone of the city through Gimnazijska Street.

Square frame is assembled with the Gymnasium Jovan Jovanović Zmaj building on the western edge, located near Congregational Church and Bishop's Palace, which can altogether be perceived from the square. On the southwestern corner of the square, there is City library branch Anica Savić-Rebac. Fish Market is enclosed with dominant Military Headquarters building in the southeastern corner and Archives of Vojvodina building in the eastern part of the square. On the other hand, perception of the square as a whole is prevented, due to the elongated shape of the square and great number of market stalls, facilities and various temporary structures.



Figure 2. Urban position of Republic Square (left), Existing prominence of the square (middle), Fish Market (right)

### 4. CONCLUSION

It is apparent that the observed two squares have not reached full potential as identifiable public spaces, as they were not primarily designed for pedestrians. Absence of wideranging usage of potentially progressive elements of analyzed squares has to be resolved, in order to reach full potential of this space and to provide visitors' identification with

# 41<sup>th</sup> ANNIVERSARY FACULTY OF CIVIL ENGINEERING SUBOTICA

#### International conference

Contemporary achievements in civil engineering 24. April 2015. Subotica, SERBIA

this space. Lack of urban furniture, thoughtfully organized paving and landscaping is issue in both of the analyzed squares. As a spaces of socialization and gathering, they must undertake some alterations in order to meet the needs of the present-day way of life in Novi Sad. In this sense, defined parameters of the examined squares could be starting points in their revitalization and incorporation in central pedestrian zone of the city.

Any further revitalization of these squares should clearly define their function, resolve the traffic issues, open ground floors to public context, and revive interaction between visitors and public space in order to have a pronounced role in the social life of the city. Traffic issues need to be resolved in order to restore the original function of the both squares as open public spaces dedicated to pedestrians. Prospective directions for solution of traffic issues can be traffic reduction or calming and the construction of the new public underground garages. Future transformations need to preserve valuable historical buildings and reminiscence of important events and individuals in the history of Novi Sad. Their distinctive identity, historical importance and position in the central city core represent fundamental parameters of their revitalization potential. Transformation of Trifković Square and Republic Square into multifunctional spaces would highlight their ambient values and make them recognizable as places of socialization that would change the character of the whole fragment of the city.

### ACKNOWLEDGMENT

The paper was done within the project 'Optimization of architectural and urban planning and design in function of sustainable development in Serbia' (TR36042), funded by the Ministry of Education, Science and Technological Development, Republic of Serbia.

#### REFERENCES

- [1] Tepavčević, B.: *Trgovi u Vojvodini: morfogeneza, fizička struktura i funkcije*, Fakultet tehničkih nauka, Novi Sad, **2008**.
- [2] Pušić, Lj.: Grad bez lica, Mediterran Publishing, Novi Sad, 2009.
- [3] Krier, R.: Gradski prostor u teoriji i praksi: na primerima gradskog jezgra Štutgarta, Građevinska knjiga, Beograd, 2007.
- [4] Zite, K.: Umetničko oblikovanje gradova, Građevinska knjiga, Beograd, 2006.
- [5] Lynch, K.: The Image of the City, MIT Press, Cambridge, 1960.
- [6] <u>http://www.skupstinans.rs/cirilica/sluzbeni-list/file/170-sluzbeni-list-grada-novog-sada-godina-xxx-broj-17-novi-sad-09052011</u> download 20.01.2015.

Међународна конференција

Савремена достигнућа у грађевинарству 24. април 2015. Суботица, СРБИЈА

### ПОТЕНЦИЈАЛ РЕВИТАЛИЗАЦИЈЕ ЈАВНИХ ПРОСТОРА ЦЕНТРАЛНЕ ПЕШАЧКЕ ЗОНЕ У НОВОМ САДУ

**Резиме:** Током последњих деценија Нови Сад доживљава бројне промене које се огледају у урбаној матрици, што је довело до недостатка јавних простора. Тргови су сложени урбани простори који се користе за социјализацију, окупљања грађана и друге активности, а постепено губе значај због све већих саобраћајних захтева. Рад истражује јавне просторе - Трифковићев трг и Трг Републике, који представљају кључне фрагменте централне пешачке зоне Новог Сада као важног амбијенталног ентитета града који до сада није достигао свој пуни потенцијал. Циљ истраживања је да се дефинишу параметри који утичу на идентификацију јавног простора као трга ради разумевања историјских промена, али и постојећег значаја, као и утицај дефинисаних параметара на њихов ревитализациони потенцијал. У раду је предложена могућа функционална ревитализација и инкорпорација анализираних тргова у централну пешачку зону Новог Сада.

Кључне речи: Јавни простор, ревитализација, Трифковићев трг, Трг Републике