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TRANSITION OF RURAL INTO URBAN SPACE ON THE EXAMPLE OF VIŠNJEVAC

TRANZICIJA RURALNOG PROSTORA U URBANI NA PRIMJERU NASELJA VIŠNJEVAC

ABSTRACT

Distinction between urban and rural space is closely related to historical heritage, administrative division and subjective perception. The authors of this study would like to set up the basic framework for the assessment of urban and rural elements in the perception of space. Evaluation of the space and traffic was made using the selected parameters on the example of Ban Josip Jelačić Street in the settlement of Višnjevac. This paper is based on the analysis of the cartographic material, the existing literature and a pilot study that includes a survey of various target groups and different age structures. According to the administrative division, Višnjevac belongs to Osijek's urban environment, though it is, according to its typology and space structure, more rural than urban settlement. The main goal is to analyse the urban elements present in the perception of space and the degree of the transition process in the analyzed area. These results are indicative, but they should be taken with a certain caution, because they include analysis and synthesis of just one main street of the settlement. For a more realistic picture, it is necessary to include the entire area of the settlement, analyze the social and economic activities, observe distribution of function and communication networks, as well as to increase the number of respondents in a survey of subjective perception.

Keywords: *elements of space, perception of space, rural, urban*

SAŽETAK

Distinkcija između urbanog i ruralnog prostora usko je povezana s povijesnim nasljeđem, administrativnom podjelom i subjektivnom percepcijom. Cilj autora ovog rada bio je postavljenje osnovnog okvira za ocjenu urbanih i ruralnih elemenata u percepciji prostora. Pomoću odabranih parametara izvršeno je prostorno i prometno vrednovanje Ulice bana Josipa Jelačića u prigradskom naselju Višnjevac. Rad se zasniva na analizi kartografskih materijala, postojeće literature i pilot istraživanja koje obuhvaća anketiranje različitih ciljnih skupina, različite dobne strukture. Prema administrativnoj podjeli Višnjevac pripada urbanoj cjelini, kao šire tkivo Grada Osijeka, iako je tipologijom i strukturom naselje bliže ruralnom izgledu. Namjera autora je analizirati urbane elemente prisutne u percepciji prostora i stupanj procesa tranzicije u promatranoj sredini. Dobiveni rezultati su indikativni, ali treba ih uzeti s rezervom, jer obuhvaćaju analizu i sintezu jedne, glavne ulice, naselja. Za realniju sliku potrebno je uključiti cijelo područje naselja, analizirati društvene i ekonomske aktivnosti, rasprostranjenost funkcija i mreže komunikacija, ali i uključivanje većeg broja ispitanika u analizu subjektivne percepcije prostora.

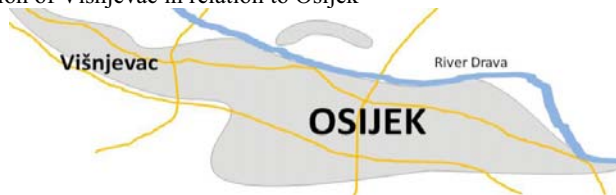
Ključne riječi: *elementi prostora, percepcija prostora, ruralno, urbano*

1. Introduction

We are witnessing a transition process that implements the urban elements and deletes a clear boundary between urban and rural areas in space and consciousness of people. Traffic demand is very often the initiator and accelerator of transition processes that, once typical, rural environments undergo.

The basic idea of this study is to determine differences between urban and rural space and indicate the need for experiencing the space through perception⁵⁴, and not only through visual observation. This research articulates the wish to set up the basic framework for the assessment of urban and rural elements in the perception of space. The main objective of this paper is to examine the evaluation of the space in which the physical elements of urban and rural life overlap from the perspective of an individual.

Picture 1: Position of Višnjevac in relation to Osijek



Ban Josip Jelačić Street in the suburb of Višnjevac is experimental framework for examination of perception of traffic and space and of urban and rural characteristics. The Višnjevac is located west from the City of Osijek, at the main city road, which connects the centre of the city with its suburbs and other cities. Field research analyzed some independent elements present in perception of space and experience of the space as the whole made of

⁵⁴ **Perception** (lat.), insight, noticing, awareness, acuity. A psychological function by which the human spirit represents items and acts to itself; a complete experience encompassing the reflection of subject (object) world through an individuals' senses; sensory information combined in a complete form. SINobservation; according to Croatian Lexicon (HrvatskiLeksikon, <http://www.hrleksikon.info/definicija/percepcija.html>, last entry: 03.02.2014.)

those elements. Gathered data were broken down into individual elements and served as a basis for the survey which was used to assess individual opinions in the wider area of the city of Osijek. Authors of this paper presume that Višnjevac is a border area where urban and rural overlap and perception depends on individual experience of the environment and the space.

2. What is urban and what is rural?

Urban areas, according to the research of SERG⁵⁵ (Socio-Economic Research Group), from 2007, refer to a city or a town that is independent and densely populated with developed markets and services, where the culture of impersonal and anonymous relationships takes place among the urban population. For determination of urban areas three following approaches are used:

1. Monitoring the size of construction area,
2. Classification of population density level,
3. Planning functional areas of the city, which include not only the construction areas within, but also those outside the city.

Definition of rural areas is more complex and multidimensional. Rural areas refer to the areas of small settlements situated on the outskirts of large towns and cities, but also to remote villages and hamlets, which are mainly oriented to crop production and farming. Whether it is the rural areas close to cities with stronger relationships with the urban communities or the rural areas with mainly agricultural activities, their common feature is a culture of close personal and intimate social relationships among the population. For determination of rural area the following characteristics are used:

1. Rural areas are the ones that are not urban,
2. Low population density,
3. Basic economic activities and self-employment,
4. Community cohesion and governance.

Researches of interrelations between urban and rural areas show that the connections between urban centres and rural areas play a significant role in the process of rural-to-urban transitions. Rural areas that are in constant interactions with urban centres have experienced social and economic changes, rapid decline of agricultural employment and a significant change in the form of settlements. Changes in the form of settlements are very specific at the outskirts of urban centres, in so called suburbs. These are the zones where urban and rural areas overlap and with regard to their interactions, practices and interpersonal relationships it is often difficult to determine the boundary between them and whether the area is of urban or rural character. This appearance is characteristic for Višnjevac, where the overlapping raises a question of the perception of space. At the Višnjevac changes that are visible are the ones of physical nature, which means that the elements of rural design are replaced by urban ones, but the question is how an individual experiences the space as a whole. A survey among residents of wider area of the City of Osijek served as an instrument for measuring the perception of space.

3. Elements of the survey

The survey was used for better understanding of perception of space present among inhabitants and visitors of the Ban Josip Jelačić Street in Višnjevac. It is based on opposites, by which it explores how people perceive the space where the physical elements of urban and rural life overlap. The first group of questions in the survey demands a respondents' opinion

⁵⁵ Alistair Scott, Alana Gilbert, Ayele Gelan

on belonging of certain elements to a rural or an urban area. Spatial elements that were estimated are the elements present in the current picture of Ban Josip Jelačić Street in Višnjevac, and are predominantly urban. The next group of questions relates to the overall perception of the street (rural/urban) and it demands that, beside the external elements which create the space, the emotional experience of the space as a whole, and social characteristics of the settlement which are highly influential when it comes to views about it, are also included. The research covers the period between January and March of 2014.

4. Results of the survey

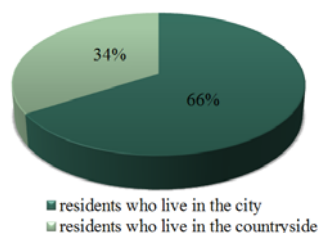
4.1. Demographic results

The age of respondents was between 7 and 90 years and the majority (77%) was aged between 20 and 60 years. Some respondents are residents of the city or villages who work in Višnjevac while the majority of respondents were born in Višnjevac or live there for a long time (Figure 1). The question about the place of residents offered two answers: city and village. We got a very interesting response to this question from the residents of Višnjevac (Figure 2). 34% of respondents living in Višnjevac believe to live in the country, while 66% of them think that they live in the city. This result shows that the residents of Višnjevac themselves do not agree on whether Višnjevac is urban or rural environment.

Figure 1 Place of residence



Figure 1 Place of residence of inhabitants of Višnjevac



Source: Authors' calculation

4.2. Perception of spatial elements

Our research is based on the definition of rural as non-urban area (Scott, Gilbert, Gelan, 2007). In the survey to the existing urban elements of Višnjevac, elements of channel and tree alley were added.

Spatial elements listed in the survey are: pedestrian crossing, traffic light, channel, roundabout, curb, sidewalk, tram, detached house, semidetached house⁵⁶, row house⁵⁷, apartment building, tree alley, street lights, benches, and trash cans. The majority of respondents, more than 80% of them, consider most of the listed spatial elements as urban. Except channel and detached house, which are perceived as rural elements, by more than 80% of respondents. The only spatial element that divided the opinions is tree alley (see the Addendum 1). Authors of this study believe that this is due the vicinity of Osijek which is one

⁵⁶Double family home, double home

⁵⁷Family home in a row

of the few cities in area with tree alleys, so it influences the perception of tree alleys as an urban⁵⁸ spatial element.

It is interesting to notice the different positions of elements belonging to a typology of family housing, where a higher percentage of respondents classified semidetached houses and row houses as urban and a detached house as rural (Addendum 1).

By analysis of the first group of question we come to a conclusion that the Ban Josip Jelačić Street in Višnjevac creates an urban area image with its spatial elements. These results are independent of the place of residence of the respondents (Addendum 1).

4.3. Perception of space

Perception is a comprehensive experience connected by data gathered through senses into its complete form. The second group of questions demanded the information about respondents' perception of street space, which includes an emotional component and social features of the settlement which significantly affect attitudes.

The survey offered two photographs of the Ban Josip Jelačić Street. Picture 2 shows the street in 2011, when there were a tree alley and channels in the street, and the Picture 3 was photographed in 2014 and it shows the street after the reconstruction where you can see the elements which were characterized as urban in the first part of the survey: tramways, roundabout and curb.

Pictures 2 and 3: Ban Josip Jelačić Street before and after the reconstruction



Street view in Figure 2 is characterized as a rural area by 73% of respondents, and the street view in Figure 3, 80% of respondents defined as urban. The results indicate that the reconstruction of the street changed the perception of respondents. The street, considered to be rural by the majority of respondents before the reconstruction, is perceived as urban today. Introduction of urban elements into rural environment changes the image of the village and erases clearly defined boundaries between city and countryside.

In order to include social and traditional components in the evaluation of the space, the last question in the survey requested an answer about respondents' view of Višnjevac, as they perceive it today. Regardless of the clear distinction between urban and rural elements and the opinion that the reconstruction turned rural area into urban, the overall perception of Višnjevac is divided. 50.5% of respondents consider Višnjevac to be urban area, while 49.5% perceive it as rural.

⁵⁸Trees are very rarely seen in the streets (of a town). And when there are, they are surrounded by bars. According to: Perec, G. (2005): *Vrste prostora (Types of Space)*, Bilblioteka Psefizma, Zagreb

5. Final observations

Transition process appears in areas close to traffic infrastructural facilities and relativizes a boundary between urban and rural areas. The distinction between urban and rural is closely related to real elements in space, as well as to historical heritage and subjective and emotional perception of space. The survey was used as an instrument for exploring the subjective perception of individual spatial elements and the perception of space as a whole. The survey covered 111 respondents between 7 and 90 years of age. Respondents belonging to lower and upper age limits have a clear perception of the urban and rural elements, and the mean age group of respondents showed greater dissipation in the assessment of individual elements. There is an interesting difference in the perception of residents of Višnjevac regarding the area in which they live, so that 66% of them said that they live in an urban environment. The only elements, among independent spatial ones, assessed as typical rural are the channel and detached house. The tree alley caused the biggest ambiguities among respondents, so only slightly over one half of them assessed it as rural spatial element, which points to a long park tradition of Osijek as a green city full of alleys in the urban area. The remaining independent elements were assessed as predominantly urban (Addendum 1). What is particularly interesting is the perception of the space as a whole, because it largely involves the emotional component, hence the present appearance, after the reconstruction, of Ban Josip Jelačić Street is assessed as urban, and the photograph taken three years ago reminds the respondents of rural area. The question that aims the most influence is whether Višnjevac is urban or rural (without any photo attached). There is a strong division in opinions of respondents for that question and 49.5% of them still perceive Višnjevac as rural area.

It would be interesting to analyse emotional and cognitive perception of space and consequences of traffic reconstruction of the examined street in a few years from now, when the transition process continues, in order to see trends in perception of space by people who gravitate towards it.

| urban/rural elements | all respondents (111) 100% | | urban respondents (42) 37,8% | | rural respondents (16) 14,5% | | respondents from Višnjevac (53) 47,7% | |
|------------------------|----------------------------------|--------------|------------------------------------|-------------|------------------------------------|--------------|--|--------------|
| | urban | rural | urban | rural | urban | rural | urban | rural |
| 1. pedestrian crossing | 104 93,7% | 7 6,3% | 40 95,2% | 2 4,8% | 12 75,0% | 4 25,0% | 52 98,1% | 1 1,9% |
| 2. traffic light | 108 97,3% | 3 2,7% | 42 100,0% | 0 0,0% | 14 87,5% | 2 13% | 52 98,1% | 1 1,9% |
| 3. channel | 1 0,9% | 110 99,1% | 1 2,4% | 41 97,6% | 0 0,0% | 16 100,0% | 0 0,0% | 53 100,0% |
| 4. roundabout | 109 98,2% | 2 1,8% | 41 97,6% | 1 2,4% | 15 93,8% | 1 6,3% | 53 100,0% | 0 0,0% |
| 5. curb | 95 85,6% | 16 14,4% | 30 71,4% | 12 28,6% | 14 87,5% | 2 12,5% | 51 96,2% | 2 3,8% |
| 6. sidewalk | 96 86,5% | 15 13,5% | 38 90,5% | 4 9,5% | 12 75,0% | 4 25,0% | 46 86,8% | 7 13,2% |
| 7. tramway | 111 100,0% | 0 0,0% | 42 100,0% | 0 0,0% | 16 100,0% | 0 0,0% | 53 100,0% | 0 0,0% |
| 8. detached house | 27 24,3% | 84 75,7% | 7 16,7% | 35 83,3% | 4 25,0% | 12 75,0% | 16 30,2% | 37 69,8% |
| 9. semidetached house | 80 72,1% | 31 27,9% | 36 85,7% | 6 14,3% | 10 62,5% | 6 37,2% | 34 64,2% | 19 35,8% |
| 10. row house | 90 81,1% | 21 18,9% | 38 90,5% | 4 9,5% | 12 75,0% | 4 25,0% | 40 75,5% | 13 24,5% |
| 11. apartment building | 111 100,0% | 0 0,0% | 42 100,0% | 0 0,0% | 16 100,0% | 0 0,0% | 53 100,0% | 0 0,0% |
| 12. tree alley | 50 45,0% | 61 55,0% | 20 47,6% | 22 52,4% | 7 43,8% | 9 56,2% | 23 43,4% | 30 56,6% |
| 13. street lights | 98 88,3% | 13 11,7% | 41 97,6% | 1 2,38% | 9 56,3% | 7 43,8% | 48 90,6% | 5 9,4% |
| 14. benches | 98 88,3% | 13 11,7% | 40 95,2% | 2 4,76% | 13 81,3% | 3 18,8% | 45 84,9% | 8 15,1% |
| 15. trash cans | 106 96,5% | 5 4,5% | 42 100,0% | 0 0,0% | 15 93,8% | 1 6,3% | 49 92,5% | 4 7,5% |

| urban/rural elements | all respondents from Višnjevac (53) 100% | | respondents from 'city' Višnjevac (42) 66,0% | | respondents from 'village' Višnjevac (18) 34% | |
|------------------------|---|--------------|---|--------------|--|--------------|
| | urban | rural | urban | rural | urban | rural |
| 1. pedestrian crossing | 52 98,1% | 1 1,9% | 34 97,1% | 1 2,9% | 18 100,0% | 0 0,0% |
| 2. traffic light | 52 98,1% | 1 1,9% | 34 97,1% | 1 2,9% | 18 100,0% | 0 0,0% |
| 3. channel | 0 0,0% | 53 100,0% | 0 0,0% | 35 100,0% | 0 0,0% | 18 100,0% |
| 4. roundabout | 53 100,0% | 0 0,0% | 35 100,0% | 0 0,0% | 18 100,0% | 0 0,0% |
| 5. curb | 51 96,2% | 2 3,8% | 35 100,0% | 0 0,0% | 16 88,9% | 2 11,1% |
| 6. sidewalk | 46 86,8% | 7 13,2% | 33 94,3% | 2 5,71% | 13 72,2% | 5 27,8% |
| 7. tramway | 53 100,0% | 0 0,0% | 35 100,0% | 0 0,0% | 18 100,0% | 0 0,0% |
| 8. detached house | 16 30,2% | 37 69,8% | 11 31,4% | 24 68,6% | 5 27,8% | 13 72,2% |
| 9. semidetached house | 34 64,2% | 19 35,8% | 27 77,1% | 8 22,9% | 7 38,9% | 11 61,1% |
| 10. row house | 40 75,5% | 13 24,5% | 27 77,1% | 8 22,9% | 13 72,2% | 5 27,8% |
| 11. apartment building | 53 100,0% | 0 0,0% | 35 100,0% | 0 0,0% | 18 100,0% | 0 0,0% |
| 12. tree alley | 23 43,4% | 30 56,6% | 18 51,4% | 17 48,6% | 5 28,0% | 13 72,0% |
| 13. street lights | 48 90,6% | 5 9,4% | 31 88,6% | 4 11,4% | 17 94,4% | 1 5,6% |
| 14. benches | 45 84,9% | 8 15,1% | 31 88,6% | 4 11,4% | 14 77,8% | 4 22,2% |
| 15. trash cans | 49 92,5% | 4 7,5% | 32 91,4% | 3 8,6% | 17 94,4% | 1 5,6% |

Addendum 1: Survey results for all respondents / Survey results for respondents from Višnjevac

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