

8TH ANNUAL CONFERENCE ON PLANNING RESEARCH

CITTA AESOP TG

PUBLIC SPACES & URBAN CULTURES ANNUAL MEETING

JOINT CONFERENCE

GENERATIVE PLACES SMART APPROACHES HAPPY PEOPLE



BOOK OF PROCEEDINGS

JOINT CONFERENCE CITTA 8TH ANNUAL CONFERENCE ON PLANNING RESEARCH AESOP TG / PUBLIC SPACES & URBAN CULTURES MEETING

GENERATIVE PLACES SMART APPROACHES HAPPY PEOPLE

Edited by Sara Santos Cruz, Fernando Brandão Alves, Paulo Pinho



Clássica - Artes Gráficas 1ª edição, 2015 Depósito legal Nº D/L: 417797/16 ISBN 978-972-752-195-1

- © Sara Santos Cruz, Fernando Brandão Alves, Paulo Pinho
- © Faculdade de Engenharia da Universidade do Porto Rua Dr. Roberto Frias, 4200-465 Porto

Todos os direitos reservados. Nenhuma parte deste livro pode ser reproduzida por processo mecânico, electrónico ou outro sem autorização escrita do editor.

The reproduction of this book is forbidden, without the written annuance from the editors

CONTENTS

CONTENTS	3
PREFACE	7
Paulo Pinho	7
THEME OF THE CONFERENCE	9
Sara Santos Cruz, Fernando Brandão Alves	9
1. PHYSICAL DIMENSION / REAL AND VIRTUAL BOUNDARIES	11
Public Spaces as Places of Informal Appropriation Rita Vaz, Sara Santos Cruz	13
The (in) formal city - Is there room for the informal in the formal city? Francisco Serdoura, João Marrana	29 29
Seeing, standing and sitting: the architecture of co-presence in small urban spaces	49
Maria Guerreiro ¹ , Israel Guarda ² , Valério Medeiros ³ , Vânia Loureiro ³	49
Connecting places. Smart pedestrian space: network potentials based on user experiences and activities Aleksandra Djukic ¹ , Milena Vukmirovic ¹ , Jugoslav Jokovic ³	63
Characteristics of the intensive places: Open public places in the towns of Vojvodina Province Aleksandra Djukic ¹ , Isidora Karan ²	81 81
Finding Accessibility Thresholds: exploring the perception of travel time Ana Amante, Cecília Silva, Paulo Pinho	95
Public space and mobility in historic centres Anabela Ribeiro, Nuno Cavaco	115
Land Use and Public Transport – The role of non-motorized accessibility instruments – Insights from a literature review Miguel Pimentel, Cecília Silva	133
Urban Fragmentation and Discontinuity: Paranhos Case Study Marcelo Altieri, Rodrigo Morales	151 151
Atelier da Rua: a participated street design process Pedro Mendes, Maria Pita, Ana Rodrigues	167

2. SOCIAL DIMENSION / (UN)SUCCESSFUL MEDIATION	183
Forms of "new" cultural and economic experience of Oporto city centre: the Urban Markets Célia Marisa Fonseca Ferreira ¹ , Paula Guerra ² , Teresa Sá Marques ¹	185 185
Promotion of "Generative Places" based on Municipal economic and financial sustainability Emília Malcata Rebelo	197 197
The role of local knowledge in spatial policies: contextualizing community engagement within existing discourses Isabel Coimbra	207 207
Overcoming distance in design and planning methodologies and thinking in order to support climate change adaptation strategies and projects to become local Jonna Majgaard Krarup	227 227
Becoming local at Parque das Nações: the urban political economy of a planned neighbourhood in Lisbon Patrícia Pereira	243 243
Becoming Local: the dynamic process of urban policy transfer of the "Land Regularisation Programme – Brazil" Tatiane Serrano, Isabel Breda-Vázquez	259 259
Improved and Extended Public Participation by City Information Systems: A Quasi-3D Example of Kayseri, Turkey Ebru KAMACI ¹ , Serkan KEMEC ²	269 269
Employing CAS Theory and New Digital Platforms to Promote Emergent Participatory Growth in Empty Urban Spaces Jeff Givens, Sharon Wohl	281 281
Contact-REACT: How the design of a new public space can be an urban answer to the social problems of Fontainhas's Neighbourhood Pedro Coutinho, Madalena Pinto da Silva	295 295
Digi-Tel – A Personalized, Interest and Location-based City for You Zvi Weinstein, Liora Shechter, Zohar Sharon	311 311
Intelligent cities and intelligent plans: how to foster self-organization? Jorge Batista e Silva, José Antunes Ferreira	323 323

3. CULTURAL DIMENSION / LOCAL IDENTITIES AND MEANINGS	341
Urban space and rural heritage: the case of Vila Franca de Xira Maria da Graça Moreira, José Luís Crespo	343 343
From the Philharmonics to a Cultural policy in an urban regeneration area Maria da Graça Moreira	353 353
The lost identity of the city: The case of Damascus Hasan Mansour	359 359
Theoretical Premises of Cityscape Identity Evaluation Ingrida Povilaitienė, Jūratė Kamičaitytė-Virbašienė	381 381
Affect and Intimacy in Generative Places Linus de Petris, Peter Giger, Paul Carlsson	403 403
Social reuse of Camorra confiscated properties: civic activation and collective goods Gabriella Esposito De Vita, Stefania Ragozino	411 411
Shared Worlds in Nicosia's Public Space Nadia Charalambous, Glykeria Anaxagorou	427 427
More than just a Cup of Tea - Coffeehouses as Alternative Institutions of Local Culture: Case study of Eastern Azerbaijan in Iran Reza Arjmand, Laleh Foroughanfar	439 439
Architecture for revitalization: The local wisdom and practice of a Swiss vernacular architect in the reconstruction of cultural and economic identity in Vrin Shiyu Wei	459 459
(Re)Introducing water to public spaces: The blue-green network of Lahijan, Iran Masoumeh Mirsafa, Alessandro Rogora, Claudia Poggi,	475 475
Social flows and multiculturalism in urban space-time interrelations and landscape identity transformations. Case study Mouraria district, Lisbon. Ana M. Moya Pellitero	487 487
The Core of Campanhã: Critical Analysis of Liveability Doroteia Ribeiro, Sandra Borges, Sofia Rozeira	503 503
Design and Ageing – more real life, less virtual spaces Lara Mendes; Fernando Brandão Alves	525 525
Metropolitan Areas as collective projects – methodological proposal to study Oporto and Lisbon Patrícia Ribeiro	539 539
The Cultural Dimension of Urban Space — Carnide as place of memory Jorge Nicolau, Carlos Ferreira, Manuela Mendes	555 555

Preface

Paulo Pinho

Director of CITTA

This book includes a representative sample of the most relevant papers (42 in total) presented at the 8th CITTA Annual Conference on Planning Research. The conference took place in Oporto in September 2015 and resulted from a joint venture between our research centre CITTA and the AESOP's Thematic Group on *Public Spaces and Urban Cultures*.

The main theme and title of the conference "Generative Places, Smart Approaches, Happy People" proposes a reflection on an ambitious and wide scoped triangle in which seems to converge timeless and contemporary edge cutting planning issues, such as planning for inspiring and friendly places, planning with people for better equipped and happier communities, and innovative approaches and methodologies to design and jointly implement locally based and socially responsive policies and initiatives.

The book is organized in three main chapters. The first one, gathering ten papers, deals with the physical dimension of planning and with the increasingly subtle and fuzzy boundaries between the real and the virtual world, and the corresponding challenges for thinking and planning the cities of the XXI century. The second chapter deals with the social dimension of urban planning and, in particular, with the factors, conditions and participatory methodologies to build successful mediation processes. This chapter includes eleven papers. Finally, the third chapter, the bulkiest one with 21 papers, is dedicated to the cultural dimension of planning, embracing a wide range of topics related to local identities and meanings. Surely not by chance, this cultural dimension gathers the largest number of research papers presented at the conference, illustrating the increasing importance of culture and culture related topics, in the way we currently see a new and far-reaching role for urban planning and management.

Finally, I would like to express my deep thanks to all my colleagues and researchers that some ten years ago decided to embark in this adventure called CITTA and, in particular, to Sara Santos Cruz and Fernando Brandão Alves for the organization of the conference and for the joined preparation of this book of proceedings. In addition, I would like to thank Sabine Knierbein and Gabriella Esposito de Vita from the AESOP Thematic Group involved, for all their fruitful and rewarding collaboration as well. A word of thanks is also due to Joana Bailão for all her dedicated and competent work in the final editing and paging of this bulky book of proceedings.

Theme of the conference

Sara Santos Cruz, Fernando Brandão Alves

University of Porto, Portugal

Along the decades, planning has been evolving from expert-led or top-down approaches to more community-led, interactive and participatory approaches, valuing the social capital of local communities and putting citizens at the centre of planning processes. Research has been emphasizing the importance of local contexts to set goals and establish priorities through adaptive learning processes. Additionally, it is relevant to identify places here understood as 'generative places', where the emergence of local initiatives based on knowledge-based creativity and interactive learning occur. In other words, places should demonstrate the capacity to flourish and reinvent themselves - hopefully revealing their true genius loci, meaning the location's unique character - most of the times through spontaneous processes based on community action and groups of individuals' initiatives.

BECOMING LOCAL means that the contemporary rationale should zoom in to 'local' spaces and places, policies and practices, and everyday life; this way, the human capital (citizens and their social and cultural background) play an important role as key agents of urban change and, in particular, of defining what is meaningful within the city. The understanding and the production of these meaningful places is, nowadays, increasingly confronted with diversified real (material) and virtual (immaterial) spheres of urban spaces, either private or public. Planning has to be prepared to embrace both these spheres of the city, as they both contribute to the construction of meaningful places.

Moreover, the idea that the use of technological or smart driven approaches in planning processes can, firstly, facilitate political discourse and participation by strengthening the link between citizens and governors, and secondly, better respond to people needs and improve the quality of life of citizens, has been around in different contexts and dimensions. Several projects, applications and approaches are making evident that we are forced to live and use technology in our daily activities and inevitably in the city arena. Technology affects our behaviours and the way we move and live in urban areas at various levels. However, regarding the access to (new) technologies (transports, communication/ICT networks, etc.), a certain asymmetry still exists due to the vulnerability of some communities and deprived families. Also, the operative structures of public institutions and private representative bodies of local people interests are often different. Additional, in some regions, physical distance is not yet counterbalanced with technological proximity. Thus, participatory planning processes may be less efficient and even threatened. Though, it is imperative to investigate and discuss how these technological tools can lead to the idea of what is usually designated as e-inclusion and most importantly how it can promote, ultimately, social cohesion and integration.

10 BOOK OF PROCEEDINGS

Intensifying the role of citizens, by either community-led, interactive, or participatory approaches, is consensually argued as responding more directly to people's needs and aspirations. Nonetheless, the level of quality of life, and even the level of happiness, is far from being truly and completely achieved. Urban planning has been concerned in creating better places, but nowadays is also focusing in increasing the levels of happiness, following the wider trend in discussing what makes people happier.

Characteristics of the intensive places: Open public places in the towns of Vojvodina Province

Aleksandra Djukic¹, Isidora Karan²

¹ University of Belgrade, ² University of Granada adjukic @afrodita.rcub.bg.ac.rs, isidora_karan @yahoo.com

Most of the towns in Vojvodina Province nowadays lack of "flourish" places or those where the public life is intensive. On the other hand, the place "intensity" that already exists in urban space can be spread around and new places of urban activity can be generated. As place intensity, here is not considered only the density of users, but urban spectacle related with cultural context and local characteristics of place. This paper aims to enhance the public life of Vojvodina town and to increase the "intensity" of their urban space. In order to achieve this, the circumstances and characteristics that make one place "intensive" and keep it "flourish" must be identified and analyzed. The relevance of this study is that the results of the analysis can serve as a base on which guidelines for the enhancement of public life and place identity can be established. The focus of this work is the places on open public space, which is a main carrier of urban life in Vojvodina towns. However, open public space can be considered as the locus of urbanity and town's identity in a broader sense. Bearing in mind these two attributes of open public space, the theoretical background dealing with its intensity is established. The methodology guiding this research is established, and it is formed from two parts. By comparing and overlapping all the data collected, the characteristics that make the open public space intensive, "lively" but also rooted in the "local" are identified.

Keywords: open public space, intensive places, Vojvodina towns.

1 Introduction

During the last two centuries the Vojvodina Province towns have suffered more transformation than ever before (Pusic, 1987). At the same time, this was the period in which the main characteristics of Vojvidina towns were created. In the first half of the XIX century some of the most important urban elements and carriers of urban life of towns were formed. The second part of XX century brought rapid development of the urban fabric. The level of transformation of inherited structure increased. affecting the way the city space is organized and used. Urban areas augmented significantly and the recognizable image of towns changed. Mentioned growth was criticized as a project of urbanization equalized to industrialization (Vujosevic, 2004). By realization of this project some new city spaces were created and were incorporating human scale and needs (Kulić and Mrdjuljas, 2012). Even though, the number of new open public spaces, which would stimulate the urban life and flows, was decreasing in respect to the build-up areas and new neighborhoods developed around the old urban cores. The Vojvodina towns started to lack in flourish places and places which make one town vibrant and intensive. On the other hand, city spaces created in the second half of XX century, often did not incorporated the elements of "local" (traditional, cultural, geographical, etc.) while transforming the town's identity. The regional and global trends and ideology were manifested through the built structure. This tendency is still present. While the density of urban space was increasing, its intensity was decreasing.

In that context, Vojvodina towns, which have had specific cultural and urban development, are facing two problems. First problem consists in the fact that everyday urban spectacle is reduced on only few open public spaces (mostly situated in the city center, e.g. main street or square). Second problem is that even if the new open public spaces have been created, they usually are not attractive enough to "invite people" (Gehl, 2010); their urban design often has not considered the

local characteristics and cultural context in which they have been constructed. That has influenced not just the urban identity of a town, but also the intensity of use of those open public spaces.

In order to overcome the problems recognized, this work stresses the importance of intensifying urban life in Vojvodina towns. The need to create and keep open public space flourish maintaining the place-identity created within specific cultural context is highlighted. This work has been developed around the initial position that only by understanding the places in which urban life is "intensive", the "intensity" can be generated and the new places of urban life can be created. The issue of urban intensity has been discussed in terms of the relationship with urban density and the main characteristics of urban space, which influence its genesis. The importance of cultural context and the process of town construction have been analyzed as well. Cultural context together with urban evolution were presented and observed as a factor that should always be considered when dealing with any urban process and phenomena, including the process of creation and enhancement of intensive places.

Open public space is a main carrier of urban life in Vojvodina towns. However, it could be considered as the locus of urbanity and town's identity (Djukic, 2011). From here derive the object of the analysis - open public space (streets and squares). The focus will be placed on the study of characteristics which open public space make intensive and maintain it flourish during time, despite the urban transformation that has suffered. The relevance of this study is that it attempts to connect the past and future of Vojvodina towns, and to discuss such an important and actual issue, as is the intensity of urban space. Also, the relevance of this paper relies in the possibility that the result obtained can serve as a base on which guidelines for the enhancement of public life and place identity can be established.

2 Intensity of Urban Space

2.1 Intensity versus Density

Intensity is a word used to describe a high degree of some quality. In urban planning and design, density is considered to be the amount of people or elements of urban form (e.g. dwelling units, floor area) per unit area of land. Indeed, when we speak of the city today, we inevitably gravitate to the question of density, but density alone can never fully qualify the city. On the other hand, the intensity of urban space recently has associated some new values, which go beyond the mere quantitative notion of urban density (Porqueddu, 2015). The relationship between density and intensity can be described, for example, by DeLanda that used to mark the difference between volume and temperature. For instance, the temperature of a body of water is intensive while the volume is extensive; to double the volume does not change the temperature. In other words, while a space may have physical dimensions, it is intensity that gives place its potency and its primacy (Dovey, 2008). By this illustrative example the complex relationship between density and intensity is signalized. Compared to the density, the intensity cannot be measured so precisely. Still, intensity of urban space can be studied and should be studied.

Nevertheless, it is the intensity, and not density, that is most strongly linked to the sense and affect of place, states Dovey - "the intensity of sunlight; the buzz of conversation; the whiteness of the walls; the vastness of the sea; the sound of birds; the smell of coffee" (2008: 26). The density of urban space (density of built structure, people or traffic), in that way, can be considered as one of the factors influencing the urban intensity closely related to the experience of space of everyday life. Many authors find the connection between the experiences of urban space and presence of people using urban space (Gehl, 2010; Jacobs, 2011; Lynch, 1974). It should be stressed that more than with numbers or density, the experience of urban space is related with the people's activities and depends on the way the people interact between each other. In that regard, intensity, and not density, is related to the meaning of place (Tuan, 2001). Whyte considers that it is not important only the number of people in urban space, but the time they spend in the place, in fact, if they come alone or in groups, etc. (1980). It is not the numbers, crowds and city size that matters, and according to Gehl "a few people in a narrow village street can easily present a lively, beckoning picture" (2010: 64). Still, density can certainly provoke intensity. Good space and critical mass are prerequisites for processes in which small events can blossom (Jacobs, 2011).

2.2 Characteristics of urban intensity

Although it has rarely been highlighted as such, ideas about urban intensity (which goes beyond the notion of urban density) have already been explored during the 60s and 70s. Above all, the origin of urban intensity can be sought in the work of Jane Jacobs.

In the light of Jacobs's ideas, intensity of urban space is understood as an emergent property of the relation between people and their physical environment. In that context, urban intensity is related to the urban flows and everyday rhythms (as children play, shopping, going to the work or school, etc). It is bond not only to the people's activities, but it is also generated by differences between the people and diversity of persons using and shaping urban space (to their different tastes, knowledge, needs, preferences, provisions, etc). Intensity is considered as a potential for endless random and unpredictable interaction between heterogeneous individuals and activities, which is recently re-proposed as one of the main conditions for emergent urban complexity (Porqueddu, 2015: 169).

Although explaining intensity as an outcome of social diversity, Jacobs highlighted four conditions related with the characteristics of urban space by which intensity is achieved. This condition served as a base on which many authors developed their theories on urban intensity and theories on flourish and lively city spaces. Even though Jacobs was criticized to give too much importance to the "physical" aspect (Zukin, 2010), her work influenced urban design in cities at the end of XX century.

According to Jacobs, all four conditions should be complied, while the absence of one can diminish the potential of one spatial unit, and these are:

- The neighborhood (it also can be referred to other spatial unit of that range) has to fulfill more than one primary function.
- Most blocks should be small, the streets and the chances to turn on the corners should be abundant.

- The neighborhood should be composed by buildings that belong to the different periods of urban evolution and that show different architectural and aesthetic qualities, including old houses, representing a great variety of their economic performance.
- It should exist proper density and concentration of people inhabiting the neighborhood or using certain urban space.

Mixed uses development and adequate distribution of activities and functions in space and time is what Jacobs considered to be the most important from the four conditions mentioned above. Diversity of uses is necessary for the creation of lively city spaces (Dobbins, 2009; Gehl, 2006). This is especially referred to the usage of ground floors. The capacity of ground floors - the immediate interface between outdoor public space and indoor space - is to accommodate a wide range of activities and to generate inviting entrances towards passers (Habraken, 1999). The ground floors directly influence the urban activity, but also set the approximate limits to what activities could come to occupy them in the future. The second condition is referred to the morphology of urban structure. It can be observed through the configuration of paths between buildings. Within these paths, direct and logical routes, modest space dimensions, and a clear hierarchy where decisions have been made about which spaces are the most important are crucial (Gehl, 2010). In a broader sense, streets and open public space determines the adjacency and proximity between the tenants of an area and its public spaces, setting them up to be encountered by many or to be hidden from movement and view (Hillier and Hanson, 1984). Although Jacobs did not stress the importance of monumental and historical buildings, the third condition still suggests the importance of historical references. Some recent research has showed that precisely traditional buildings, even if appear in small densities, mark the spatial units and make them recognizable (Muminovic, 2013). Fourth condition confirms that density is just one element participating in the genesis of intensity, while the proper density is always relative (Whyte, 1980; Gehl, 2010).

2.3 Cultural Context

Intensity, as it has already been stated, depends on everyday rhythms, function and design of urban environment (the proportion of space, connectivity, usage of the ground floor, commodity, etc.). However, the phenomenon of the city cannot be observed only through the functional relationship (Rossi, 1999), neither the morphology of urban space (Zukin, 2010). City is a complex cultural process, and everyday life of places and their inhabitants is an outcome of that process. Cultural context is referred to the meanings that persons, individuals or groups, associate to the place. Those meanings are outcomes of cultural, traditional, historical and particular experiences of a certain place (Djukic, 2011). Characteristics and process related to the construction and use of urban space must been observed by reading the records from the past and recognizing the cultural references. In that regard, intensity of urban space cannot be studied independently from cultural context within it has been generated. It has been proved that cultural context determines the patterns of use and the form of urban space (Bobic, 2004; Gehl, 2008). For instance, the Mediterranean culture is related with the intensive public life, although there are other regions with favorable climate. The urban space of Mediterranean's towns is composed from many squares, patios, etc. or the places that Whyte (1980) has described as "small public spaces". Even in the

time when the process of globalization is influencing architecture and cities worldwide, cultural background is still a very important factor that should be considered when transforming the urban space (Seamon, 2012; Zukin, 2010). Taking the example of plaza Jemaa el-Fna in Marrakesh, it can be noticed that the intensity and identity of plaza and its surroundings, derives from popular Moroccan cultural traditions performed through musical, religious and artistic expressions. On the other hand, the plaza, which is "locally rooted", is also famous on the global level.

Even the intensity of urban space, above all is related to the experience of urban space created through everyday rhythms - Colebrook observed intensities as directly desired effects or qualities rather than meanings - it is part of the collective memory which goes beyond the 'overcoded' experiences reduced to signified identities (Dovey, 2008; Boyer, 2001). Cultural context is constructed and incorporated by the signs of collective memory (Lewicka, 2008). Its construction is a never ending process related with different cycles through the territory reorganized and transformed. Each cycle is accumulating and storing its own wisdom, enhancing the knowledge of genetic rules and contributing to the preservation and reproduction of territorial identity through transformation (destructive and reconstructive) based on the cultural specificity (Magnagni, 2008). In order to analyze the cultural context within the urban intensity generated, the cycles of construction and constriction of urban space must be analyzed.

3 Methodology

The analysis of intensity of open public spaces in Vojvodina towns is performed on the case study of the town of Pancevo. The main street in Pancevo, Radomir Putnika Street, and the streets and open public spaces connected to the main street are studied. The main street is selected because of the importance that has for the urban life and urban identity of Pancevo.

The metodology guiding the analysis derives from the theoretical background, and it is formed from two parts. In the first part, it is analyzed the cultural context within the main street and town of Pancevo that has been created. The characteristics of the main street are explained through the different cycles of construction of urban fabric of Pancevo created within the urban space of town. In the second part, the main street is observed in regard the four conditions that Jacobs highlighted as a crucial in the creation of "urban ballet" and urban intensity. This condition serves as a base for the analysis of everyday urban flows, which was complemented with principles derived from urban practice. The pedestrian flows and concentration of users, uses of ground floors, proportion and scale of built structure are analyzed. In that order, the method of space syntax is used as one of the technics by which the relationship between functions, uses, flows and concentration of users is examined and checked.

Throughout the analysis three important approaches to urban research were used to a lesser or greater extent: the time-space system, the relation between process and consequence and the relation between global and local. By comparing and selecting all the data collected, the characteristics that make the open public space intensive, "lively" but also rooted in the "local" are identified.

4 Intensity of Main Street in town of Pancevo

4.1 Cultural and historical context

In the construction of the town of Pancevo five main periods can be distinguished: (1) period of the formation of organic urban tissue; (2) period of medieval fortress; (3) period after adoption of the settlement instructions in 1772: (4) period after adoption of the Regulation on Towns Construction second half of XIX century and the first half of XX century) and (5) period of second half of XX century.

- 1) First information and findings related to the urban evolution of Pancevo dated from the XII century. In that time, the town was described as lively trade settlement with the organic urban structure. The plans and maps showing the city of that period are not preserved. However, the dates indicated that the town had suffered demolitions and reconstruction in the period from XII century till the period of Ottoman rule (1552-1718). During the period of ottoman rule, Pancevo maintained the role that had before and was recognized as an important traffic node and center of economy. Otoman period in Panceyo did not leave important physical traces, but it certainly had influenced the cultural patterns of use of urban space.
- 2) In the middle age, the Hungarians constructed the fortress. Since the time of the construction, the fortress had been demolished and rebuilt several times. Still, its position remained the same. On the map describing the town of Pancevo in 1720 (Figure 1.), the position and the form of the fortress can be appreciated. The same map discerned the trace of the main street of Pancevo nowadays (in the village outside the wall, marked by letter "C" and perpendicular to the river flow). Also, the position of the Strosmaier Street (the second most important street in Pancevo) it is marked by the axis of the bridge on the eastern gate. On the base of this observation, it can be concluded that the position of the main street, as well as the position of the Strosmaier Street (now Street of Njegos), derives from the urban matrices of the middle age fortress (and it was traced in the zone inside the wall). The fortress was destructed in 1737 during the withdrawal of the Ottomans. On the same place the Austro-Hungarian monarchy built the new fortress, which spatial organization remained the urban elements and organization of the former one. The new fortress lost its military role quite soon after the construction, but has kept the role of the main urban nucleus of Pancevo.
- 3) The reconstruction of irregular urban matrix was done at the beginning of XIX century. However, the traces of the former fortress remained visible, as it can be perceived on the plan of Pancevo from 1820 (Figure 2). The Main Square is formed nearby the Main Street and the coherent urban core was intended to be created on the place of the old fortress. During this period, the industry was developed and the bourgeoisie class was formed.
- 4) On the plan of the town of Pancevo from 1890 (Figure 3), it can be noticed that the built structure increased significantly (comparing with the plan from 1820). The form of the Main

- Street (and square, now already formed) remained, but was showing the higher level of urbanity. The Main Street was pedestrian and used as a promenade *(corzo)*. The street had a commercial character and was a flourish place of the town.
- 5) In the second half of XX century the reconstruction of the Main Street was planned in order to increase the density of the built structure. The proposal was to transform the existing promenade into the boulevard. However, the proposal has never been completely realized. Some new/modern buildings were constructed, but the street kept its recognizable image. The street lost its pedestrian character. Figures 5,6 and 7 show the places, which defined the urban core of Pancevo nowadays.

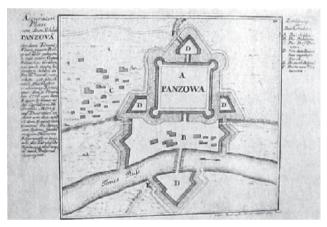


Figure 1. Gabriel Bodners' Map of Pancevo fortress from 1720 (source: Historical Archives of Pancevo)



Figure 2. Map of Pancevo from 1820 (source: Historical Archives of Pancevo - Map. I 5302-198)



Figure 3. Map of Pancevo from 1890 (source: Historical Archives of Pancevo)

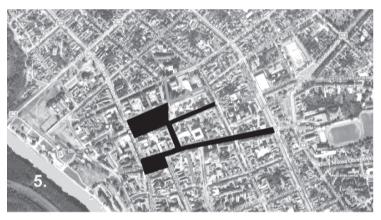


Figure 4. Intensive places - open public spaces of the urban core of Pancevo. 1. Main Street/Street of Radomir Putnik; 2. Street of Njegos; 3. Main Square; 4. Square; 5. River Tamis (source: elaborated by the authors)

4.2 Characteristics

Using the method of Space Syntax applied to the area of the urban center of Pancevo, it was demonstrated that the highest concentration of users is not in the Main Street. The highest value of users' concentrations, measured in the period from May to October, was found in the Street of Njegos (former Strosmajer Street), as well as in the town square (Figure 5 and Figure 6). Comparing the results from the space syntax with the results of analysis of usage of the ground floors (Figure 7 and Figure 5), it was showed that the directions of movement that users select are related to the activity of ground floors. Active ground floors attract more users (e.g. cafes, shops, galleries, etc.). Directions of user's movement are also determined by the continuity or rhythm in which active ground floors appear. Even though the major part of ground floors is active, it is

evidenced the uniformity of uses (commercial uses) in the Main Street. For a difference, the Street of Njegos is characterized by more diversity in the uses changing in a smaller distance (commercial, residence, office, culture). Main Street is a place where many residents of Pancevo spend their time (Figure 7).



Figure 5. Space syntax analysis of urban core of Pancevo: pedestrian flows (source: Djukic, A., 2011)



Figure 6. Space syntax analysis of urban core of Pancevo: concentration of users (source: Djukic, A., 2011)



Figure 7. Analysis of activities in the ground floors: types of activities (source: Djukic, 2011)

It was proved that the concentration of users depends on the accessibility of the street or on "the chances to turn on the corners". The Main Street can be accessed from different points and directions. The intensity of the connection is the strongest in the case of the path relating the Main Street with the Main Square. It is evidenced that small streets surrounding the Main Square and Main Street are quite lively because of the many spots offering potential action or rest. The accessibility and the "porosity" of urban tissue are increased by passages appear occasionally.

It can be concluded that the physical structure - dimensions and proportion of the Main Street and urban tissue of the immediate sounding- incorporate the human scale ("most blocks should be small"). The width of the main street varies from 21m to 30m. By changing the form and street profiles the micro-zones within the street are created. In that regard, the positive affect of the dynamic and intensity of experience is achieved. The length of the street is 424m, which is considered as an ideal length in the terms of the monotony-dynamic (Moughtin, 1995). The subtle curvature of the street, provoke the sensation of intimacy and safety to the users. Proportion of the main street or relationship with-elevation range from 1:1,2 to 1: 5,5 (the deviation from the optimum proportions is considerable). Although the Main Street is curved and mainly with buildings of not more than two floors, the juxtaposition of different visual plan is not achieved.

The beginning of the Main Street is defined by position of the square, while the end is not defined. Analyzing the character of physical structure and its transformation in regard to the street longitude, it could be noticed that: two-thirds of the street shows the continuity of the built structure (same volumes, same vertical regulation, similar materials, etc.); and one-third of the street shows discontinuity (different volumes and height of buildings, use of different materials, etc.). This has resulted in the different character of the street façade (Figure 8). While one is continuous and equilibrated, the other is characterized by continuous change of types of elements of the built structure. Different manners of creating "contrast" are used in order to avoid a monotony of the street; for instance, the relation between empty-full, built-un built, etc.



Figure 8. The Main Street in town of Pancevo

Main Street is composed by the buildings belonging to the different periods of urban space construction, which altogether formed the recognizable image of the street (Mayor part of buildings dated from the XIX century (period 3 and period 4). Although with similar volumes, these buildings are characterized by tined differences in architectural styles. The buildings constructed after the WWII, besides the architectural form and expression, can be recognized by the facades, which are setback. Differences in the street regulation do not only mark the periods of urban construction, but also have various positive effects. For instance, the confrontation between light and shadow, richness of views, creation of spots of users retention, etc.

According to the Space Syntax analysis, it could be concluded that in the Main Street exist proper density and concentration of users. Observations on the field showed that the types of users vary in respect to their edge, gender and social status. In that regard, it also varies the types of their activities (children play, elder people sitting on the bench, etc.). The spots of users concentration are related with the points of connection between Main Street and other open public spaces (as Street of Njegos, Main Square, etc.). Patterns of use of the street and open public space in a broader sense are closely related to the cultural context. These are influenced by the Mediterranean and by the North (Middle Europe). Main Street can be qualified as a lively city space.

4 Conclusions

The research described in this paper highlights the importance of continuous adjustments and upgrading of public spaces, especially those within the historical urban core of the towns. Their intensity and density were analyzed through different methods. Collected data were compared in order to provide the relevant characteristics that make the open public space intensive, "lively", but also rooted in the "local". Cultural context, which incorporated the signs of collective memory, was considered as the most important one. Three important approaches to urban research were used to a lesser or greater extent: the time-space system, the relation between process and consequence and the relation between global and local.

From the first part of the analysis derived that the Main Street was traced at the very beginning of the urban construction of Pancevo. It was traced at the strategic place in regard to the position of the river and former fortress. Despite the transformations of urban matrices, closely related with the different cultural influences and modes of space production, Main Street preserved the basic characteristics of the physical structure (curvature, dimensions, etc.). Those can be considered as elements of urban identity of the Voivodina towns (Diukic, 2011). Beside that has marked the image of Pancevo, Main Street has influenced the genesis of surrounding urban structure (e.g. it determined the position of the main square).

Although it is still an important place of urban activity and centrality, the street lost the significance that had at the end of XIX and beginning of XX century. This is related with the loss of its pedestrian character, which indicates that by pedestrianizing the street, urban intensity can be increased. It is noticed the lack of diversity of usage of the ground floors. Even though they are active, the uses of ground floors and the way they are complementing mutually are not always attractive. Therefore, the introduction of new uses, which could attract people, is recommended. These should consider the existing cultural patterns of use of open public space in Pancevo.

The different periods of urban space construction has resulted in the incoherent morphologic ensemble. There is no specific rule by which the relationship between rhythm, height, and image of street facade can be determined. This can lead to the confusion among the users while creating the mental images of the town. Hence, the legibility is not always related to the urban intensity. Within the Main Street, the substructure or sub-ensembles can be perceived and they are defined by different character of physical structure. The diversity these substructures create has contributed to the urban intensity; at the first place, in terms of intensity of experience of urban space. The form and the proportion of the street should be preserved. On the one hand, length and width of the street are adapted to the human scale. On the other hand, they reflect the urban identity of Pancevo and identity of Vojvodina towns in a broader sense. However, the vertical regulation should be corrected in some segments in order to improve the reaches of visual planes and create image of the street, which would be clearer.

From the analysis it is derived that the connectivity of the Main Street and the way it is related to the other open public spaces is very important for the urban intensity. Main Street, Main Square and Street of Njegos create the spatial ensemble. This ensemble is the main carrier of the urban life in the town. Even the connections between the mentioned spaces are qualified as satisfactory, their enchantment in the terms of their diversification is recommended. It is suggested the introduction of new passages and creation of new spots for users activity or retain along the existing paths. It is also suggested the stronger relationship with the river (nearby to the end of the Main Street; see Figure 4 and Figure 6). That would stress the favourable situation of the street and remain the relationship with the natural and urban soundings.

It can be concluded that the urban intensity of the Main Street in Pancevo has been constructed during the different cycles of space-time construction and incorporating different cultural influences. The relationship between the "past" and the "present" can be perceived in the physical structure, but also in the function that street has had. However, this relationship could be stronger. On the other hand, it has been demonstrated that the intensity of the Main Street relies on the accomplishment of four conditions defined by Jacobs which are registered in lesser or greater extent. Therefore, the characteristics of the Main Street in Pancevo (and its immediate surroundings) can be used in order to enhance the intensity of open public space of Pancevo or other towns with similar character.

References

Bobic, M. (2004) Between the Edges. TOTH Publishers, Bussum.

Dobbins, M. (2009) *Urban Design and People*, Palo Alto, Calif., accessed on 18 June, 2014,http://site.ebrary.com/lib/univgranada/Doc?id=10501384.

Dovey, K. (2010) Becoming Places, Routledge, Oxon.

Djukic, A. (2011) Ocuvanje identiteta glavne ulice vojvodjanskog grada u procesu urbane obnove (Keeping the Identity of the Main Street of Vojvodina Town - Towards Urban regeneration), Doctoral Dissertation (unpublished), Belgrade.

Gehl, J. (2010) Cities for People, Island Press, Washington.

Gehl, J. (2006) La humanización del espacio urbano: la vida social entre los edificios, Editorial Reverté, Barcelona.

Habraken, J.N. (1999) Supports, Urban Press.

Hillier, B., Hanson, J. (2005) The social logic of space, Cambridge University press, New York.

Jacobs, J. (2011) Muerte y vida de las grandes ciudades, Capitán Swing, Madrid .

Kulic, V., Mrdjuljas (2012) Unfinished Modernisations, UHA/CCA, Zagreb.

Lynch, K. (1974) Slika jednog grada (The Imagre of a city), Gradjevinska knjiga, Beograd.

Magnaghi, A. (2005) The urban village: a charter for democracy and local self-sustainable development, Zed Books. London.

Martín Ramos, A. (2008) Gipuzkoa urbana: nueve pautas. Diputación Foral de Gipuzkoa, San Sebastián.

Massey (2001) Space, Place, and Gender, University of Minnesota Press, Minneapolis.

Moughtin C. (1995) Urban Design - Street and Square, Architectural Press, Oxford.

Mumford, L. (2012) La ciudad en la historia: sus orígenes, transformaciones y perspectivas. Pepitas de Calabaza, Logroño.

Muminovic M, Radovic D., Almazan J. (2013) "On Innovative Practices Which Contribute to Preservation of the Place Identity: The Example of Yanesen, Tokyo", *Journal of Civil Engineering and Architecture* **7**(3) 328-340

Pusic, Lj. (1997) Urbanisticki razvoj gradova u Vojvodini u XIX veku i u prvoj polovini XX (Urban development of the towns in Vojvodina in 19 century and second half of 20 century). Matica srpska. Novi Sad.

Rossi, A. (1996) Arhitektura grada (Architecture of a city), Gradjevinska knjiga, Beograd.

Elena Porqueddu (2015) "Intensity without Density" Journal of Urban Design, 20(2): 169-192,

Seamon, D. (2012) "Place, Place Identity, and Phenomenology: A Triadic Interpretation Based on J.G.

Bennett's Systematics", in Casakin, H. y Bernardo, F.(eds.) *The Role of Place Identity in the Perception, Understanding, and Design of Built Environments*, Academia.edu, accessed 17 May 2014, https://www.academia.edu/763574/Place_Place_Identity_and_Phenomenology_2011_

Solà-Morales, M. (2008) De cosas urbanas, Gustavo Gili, Barcelona.

Tuan, Y. (2001) Space and Place: The Perspective of Experience, University of Minnesota Press, Minneapolis.

Vujosevic M. L. (2004) "The search for a new development planning/policy mode: Problems of expertise in the transition period", Spatium, (10): 12-18





