# 6thSDS2016 SUSTAINABLE DEVELOPMENT SYMPOSIUM

6th annual european posgraduate symposium

### 1-3 JUNIO 2016 GRANADA

ESCUELA TÉCNICA SUPERIOR DE ARQUITECTURA DE GRANADA (ETSAG)

El Simposio de Desarrollo Sostenible, SDS 2016, se inscribe en el marco de una serie de eventos de carácter anual, a través del cual se pretende reunir a investigadores europeos de diversas disciplinas (arquitectura, urbanismo, tecnologías, ciencias sociales, etc.), interesados en los principales retos que plantea hoy día el Desarrollo Sostenible.

El Trinity College, de la Universidad de Dublín (Irlanda), fue responsable de la primera convocatoria(2011); en los años siguientes se ha llevado a cabo en el Instituto de Ingeniería de Procesos y de particulas de la Universidad Tecnológica de Graz (Austria, 2012); en la Universidad "Parthenope" de Nápoles (Italia, 2013), y en la Facultad de Ciencias Económicas y Empresariales de la Universidad Pan Europea en Bratislava (Eslovaquia, 2014). El último SDS (2015) se celebró en la Facultad de Arquitectura y el Instituto de Ciencias Políticas y Sociales de la Universidad de Lisboa (Portugal).

#### **TÓPICOS**

**BLOQUE 1** 

ARQUITECTURA DISEÑO

TÉCNICAS DE (RE) UTILIZACIÓN Y RECICLAJE MATERIALES INTELIGENTES Y SOSTENIBLES

**BLOQUE 2** 

CONTEXTO GEOPOLÍTICO Y ESPECIFICIDAD

INFRAESTRUCTURAS

PRÁCTICAS Y POLÍTICAS DE PLANIFICACIÓN Y ORDENACIÓN TERRITORIAL
TRANSPORTE

TRANSPORT

URBANISMO

BLOQUE 3
ENERGÍA

INDICADORES Y MODELIZACIÓN DE LA SOSTENIBILIDAD

POLITICAS MEDIOAMBIENTALES: ADAPTACIÓN Y MITIGACIÓN DEL CAMBIO CLIMÁTICO

HC

POLÍTICAS Y PRÁCTICAS EN GESTIÓN DE RECURSOS NATURALES

GESTIÓN DE RESIDUOS

**BLOQUE 4** 

ACTIVIDADES ECONÓMICAS Y EMPRESARIALES
CULTURA DE LA SOSTENIBILIDAD Y EDUCACIÓN

SALUD Y CALIDAD DE VIDA

NORMAS Y REGULACIONES

SOCIEDAD GOBERNANZA ESPACIAL

TURISMO 2

#### **KEYNOTE SPEAKERS**

JOSE MARIA EZQUIAGA DOMINGUEZ, MADRID JOE RAVETZ, MANCHESTER FRANK NEHER, BERLIN CLIMADAPT.LOCAL



PHOTESURADO/ GRUPUS DE INVESTIGACION/ ESTUDIANTES

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**ACTIVIDADES** 

PONENCIAS / WORKSHOPS / TALKING CIRCLES / PROGRAMAS Y PROYECTOS EUROPEOS / DESARROLLO LOCAL Y REGIONAL

	1st	t June
8,30-9,30	Arrival and Registration	
9,30-10,30	Opening session: UGR / DIPUTACIÓN / ETSAG / ETSICCP / DUOT / Coord. 6th SDS	
10,30-11,40 11,40-12,00 12,00-12,35	FRAN JOSE M <sup>a</sup> Coffe	Speakers:  K NEHER  PEZQUIAGA  Ree Break  Neher / Jose Ma Ezquiaga  Session 2 / TRANSPORT AND SUSTAINABLE MOBILITY (I)  Moderator: Carles Crosas Aula Seminario  GOVERNANCE MODELS IN URBAN MOBILITY STRATEGIES AGAINST CLIMATE CHANGE: A REVIEW OF CASE STUDIES. Miguel Lorenzo Navarro-Ligero, Luis Miguel Valenzuela-Montes  SUSTAINABLE POLYNUCLEAR SYSTEM (SPS) NEW WAYS TO SUSTAINABLE MOBILITY. Enrique Mínguez Martínez, María Vera Moure, Diego Meseguer García  MEASURING THE SOCIAL NEED OF PUBLIC TRANSPORT AND BUS SERVICE PROVISION IN TBILISI (GEORGIA). Giorgi Kankia  INFRASTRUCTURES OF HOPE. DESIGNING NEW MOBILITIES AND OPPORTUNITIES IN LATIN AMERICAN CITIES. Giovanni Vecchio
13,50-15,10		unch
15,10-16,10	Workshop: SUSTAINABILITY FROM A MULTILINGUAL PERSPECTIVE CLAUDIA T. SCHMITT	
16,10-16,30	Coffee Break	
16,30-18,00	Session 3 / ARCHITECTURE & SUSTAINABLE CONSTRUCTION (I)	Session 4 / ECONOMIC ACTIVITIES & POLICIES FOR A SUSTAINABLE DEVELOPMENT
	Moderator: José María Ezquiaga  **ACTIVE PRESERVATION OF INDUSTRIAL BUILDINGS: KEEPING THE IDENTITY THROUGH THE CHANGE OF USE. Milan Šijaković, Ana Perić  THE APPLICATION OF OPEN-SOURCE TECHNOLOGIES TO CLIMATICALLY RESPONSIVE FACADES. Sean Cullen, Greg Keeffe, Oliver Kinnane  **ASSESSMENT OF GROSS ALPHA AND GROSS BETA INDEX IN BUILDING MATERIAL.**F. Piñero-García, E. Chham, M.A. Ferro-García  LANDSCAPE PROJECT IN THE DOLMENS OF ANTEQUERA ARCHAEOLOGICAL SITE. Mathieu Lèbre  **POLICIES & PRACTICES ON LAND PLANNING (I)**  **NATURAL HAZARDS AND MASTER PLANS IN SPAIN.** Jesús Garrido, Alejandro L. Grindlay, Estanislao Arana, Ignacio Jiménez, Asensio Navarro	Moderator: Martin Dolinsky  ENTREPRENEURIAL FORECASTING IN GREEN ECONOMY. Martin Dolinsky  CHARACTERIZATION AND SPATIAL IDENTIFICATION OF HOLIDAY TOURIST  ASSESSMENTS IN THE CITY OF VALENCIA. Rafael R. Temes Cordovez, Moisés R. Simancas Cruz, María Pilar Peñarrubia Zaragoza, Alfonso Moya Fuero, Alicia M. García Amaya  POLITICAL COMMITMENT TOWARDS THE OBJECTIVES OF SUSTAINABLE DEVELOPMENT. José Aureliano Martín-Segura, José Luis Navarro-Espigares, César Pérez-López, Guillermo Maraver-Tarifa  TOURISM DEVELOPMENT AND HERITAGE: TOWARDS AN INTEGRATED APPROACH FOR SUSTAINABLE URBAN RENEWAL IN HERITAGE SETTINGS OF GRANADA. C. Curiel Sanz' G. Ruiz Zafra

20,30-22,00	Welcome Cocktail. Corrala de Santiago
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## URBAN TRANSFORMATION OF HISTORICAL CITY CENTRE: CASE STUDY SREMSKA MITROVICA, SERBIA

Branislav Antonić<sup>1</sup> Aleksandra Đukić<sup>2</sup>

#### **A**BSTRACT

The period after the Second World War in Serbia was, characterized by the denial of the value of the historical city centre. The new Master plans for the cities in Serbia clearly expressed this attitude, proposing a radical reconstruction of the town centre and the main street [12]. Despite the fact that the Venice Charter of 1964 [7] practically just continued Athens Charter of 1931 [3], which stressed the importance of preserving the physiognomy of the city, in many countries marked a turning point in the perception of spatial protection of cultural and ambient unitizes well as in Serbia. After 1966, a dozens of studies for protection and evaluation of historical urban centres in Serbia has been done, and was followed by the new Master and Detailed plans that contained postulates the protection of the historical town centre, on the basis of the studies. However, during 1980s, more attention was done to the regeneration of historical centre [4].

Sremska Mitrovica is one of the towns with long and rich urban history and preserved city centre. Urban history of the city spans ancient Roman times, Ottoman and Habsburg epochs, Serbian and Yugoslavian kingdom, socialist and post-socialist period [9]. Every period has been reflected in urban fabric of its old centre, making it as a "specific urban amalgam".

Post-socialist transformations in Sremska Mitrovica are evident now. All of them are under the slogan of city revitalization and renewal [2], but their implementation has raised questions and dilemmas regarding sustainability. The aim of the research is to find out the validity of these transformations in the historical centre of Sremska Mitrovica. This will be done through the short description of urban history of the city, with special accent to post-socialist period. The last urban transformations will be compared with historical conditionality, with the intention to form a set of guidelines for their further sustainable improvement.

**Keywords**: historical centre, urban transformation, urban pattern, Serbia

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#### HISTORICAL CITY CENTRE IN SOCIALIST EUROPE

The "development" of city centres in socialist Europe can be described as the most conservative model during the second half of the 20<sup>th</sup> century. Despite the Athens Charter for the Restoration of Historical Monuments was proclaimed in 1931, i.e. before socialist period in the most of those countries, it had small influence to the development and the preservation of historical centres in socialist countries in Europe. Here, historical centres had the negative mark of "former bourgeois hubs" due to their link with the past. The protection and the restoration of old buildings and historical ambient, proposed as crucial by the charter [3], were usually omitted. In contrast, many historical centres in post-socialist cities were undervalued and suffered from general negligence or even planned destruction in some cities [4].

Nevertheless, some regional differences played the significant role in the perception of historical centres in socialist Europe. This was noticeable in the example of former Yugoslavia and Serbia, as one of its republics. Yugoslav model of "self-management", introduced gradually in the 1960s, was a bit special in socialist space [5]. It gave more freedom and independency to local self-governments, which consequently made more positive stance towards the local uniqueness of historical heritage and prevented radical actions in historical centres in many Serbian cities. Self-management model also enabled the introduction of some elements of market economy and consumer-linked development, which contribute to higher living standard thereof [11]. This situation was an important support for the development of retail sector in historical centres.

Further, the difference in the treatment of historical centres changed during the decades of socialist dominance. The negative attitude towards historical centres was more visible in the first two decades of this period. In the case of Serbia and former Yugoslavia, the turning point in the perception of spatial protection of cultural and ambient heritage in post-socialist countries was the enactment and the promotion of Venice Charter for the conservation and restoration of monuments and sites in 1964 [7]. In fact, Venice Charter generally promoted the same values about the importance of preserving the physiognomy of the city as the previous Athens Charter [3]. However, the new document has big influence to related practice. This influence was seen firstly in new interest to explore and to study historical urban centres — a dozens of studies for protection and evaluation of these areas were done. They were followed by new generation of Master and Detailed plans, which contained principles and regulation for the protection of the historical city centre. However, during the 1980s, more attention was done to the regeneration of historical centre [4].

#### HISTORICAL CITY CENTRE IN POST-SOCIALIST EUROPE

Post-socialist transition is defined in brief as sudden and unexpected multiple changes which have shaken up profoundly all former socialist societies in Central and Eastern Europe. Similarly, the cities in this region have been "caught" in rapid transformations, towards to achieve the image of global cities [5]. As a result, post-socialist cities have changed radically in the relatively short period of 25 years.

One of the new attributes of post-socialist cities is certainly observable commercialization of urban space [13]. As traditional commercial zones, old city centres in these cities were the first



places for emerging retail sector, which have lead to their functional differentiation soon and the strengthening of their importance in urban structure [10]. Functional transformation has sparked the projects of physical transformation of historical centres through different projects, which have enabled better pedestrianization, new urban design and the introduction of public art [4]. Side by side with these positive actions, some disadvantages have also appeared: the pressure to historical heritage, traffic congestions, and the decline of residential function [5].

Similarly to general model, historical centres in Serbian cities and towns have also seen radical transformation during post-socialist transition. Due to more difficult transition, caused by the Yugoslavian crisis in the 1990s, some negative phenomena have occurred. Informal economy and illegal construction in Serbia have not bypassed historical centres [13]. Then, the development with less control and with strong orientation to private incentive, which is characteristic for South-eastern Europe, has caused very weak urban-planning system [6]. Consequences are visible in historical centres. For example, many new private projects in historical centres have been estimated as negative examples due to the maximization of built capacities and little care to preserved surrounding.

However, some positive actions have been also done in Serbian historical centres. The historical centres have become attractive places for retail and small enterprises. Many cities and towns have got pedestrian streets and zones. Local authorities have early recognized the importance of historical centre and pedestrian street/square for the general image of local community [4]. Related actions have even been exaggerated in some instances, causing the problems with traffic in city centres and making pressure to surrounding urban zones.

#### SHORT HISTORY OF THE DEVELOPMENT OF THE HISTORICAL CITY CENTRE OF SREMSKA MITROVICA

Sremska Mitrovica is a city in the northern Serbian province of Vojvodina, which is generally known in the country by well-preserved historical city centres. It is also one of the oldest cities in Serbia, spanning all historical periods in this part of Europe. During ancient Roman era, the city was known as Sirmium. It has a zenith in the last centuries of this period, when it was on the main cities in the empire [8]. The city played important role in early Christian, Byzantine and Medieval period. Then, Ottoman and Habsburg epochs were very important for the development of modern city [9]. All these epochs left infallible imprint in the current urban matrix of Sremska Mitrovica.

This overview is especially visible in the structure of historical city centre. Actually, some of the main streets are traced in the ancient Roman time. Then, Ottoman influence is better preserved here than in the other cities in Vojvodina. The most evident representation is former "Serbian quarter" of the city, with the centre in triangle-shaped Žitni trg (eng. *Cereal Square*) in typical oriental manner, which is surrounded with the matrix of narrow and wriggly streets and mews. Hapsburg period gave the most of preserved heritage. The new part of the centre was added far away from the Sava River as a border. This part, Vojnograničarski kvart (eng. *Military-Frontier Quarter*), was formed in "Western" manner, with wide and straight streets and representative government buildings for "new" inhabitants (Germans, Hungarians, Ruthenians, etc). Thus, Sremska Mitrovica became the only significant city in present-day Vojvodina with so-called "bipolar-centre" structure [13].



The 20<sup>th</sup> century was characterized by the planned intentions to connect these two centres. The connecting corridor between the centres was developed with the addition of new buildings and open spaces. However, the most of historical centre was preserved. Some minor interventions were implemented, but they have not brought significant changes in the urban image of the centre, which thereby has preserved its values. The volumes and the dimensions of old buildings and open spaces were usually used in these new "implantations" in the centre.

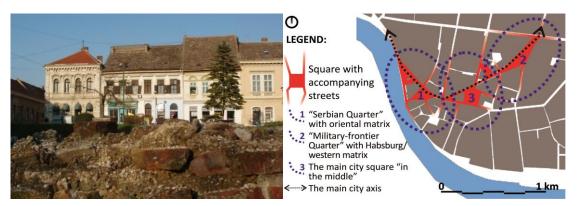


Figure 1: Žitni trg/Cereal Square with preserved ruins of ancient Roman Sirmium (Source: Branislav Antonić)
Figure 2: The map of the genesis of urban matrix in the centre of Sremska Mitrovica (Source: Branislav Antonić)

#### CURRENT DEVELOPMENT CHALLENGES FOR THE HISTORICAL CITY CENTRE OF SREMSKA MITROVICA

The mass-industrialization and the formation of huge state enterprises of Sremska Mitrovica during socialist period have been proven as very problematic during post-socialist transition [9]. The city has lost the most of its economic background from the previous period. In contrast, new period has brought new impulse in the case of historical centre of Sremska Mitrovica. The centre has witnessed emerging private incentive and retail expansion. Several features have marked this development in the last 25 years of the transition.

The major urban transformation was the creation of pedestrian zone in the historical centre [4]. Thus, it has become a major place for socialization in the city again. This transformation has attracted the commercialization of the whole area and the increase of its value. But, there are also indicators that this major city project was forced too much; problems have appeared thereof. City image have not been appropriately represented by the design of pedestrian zone. For instance, the symbols of sails and seagulls are used for the design of the lightening in the zone even though the nearest sea is hundreds kilometres far away. Other problems have been noticed in the nearby areas, where traffic congestion has become everyday obstacle.

The formation of pedestrian zone has had a positive economic influence to outer part of the centre, where the preservation of old heritage and general regulation has not been very strict. However, the problem with physical aspect of new retail and residential buildings has occurred. Very liberal market and the tendency to maximize building-plot capacities have caused noticeable problems regarding to the deterioration of cityscape, parking congestion, overbuilt plot, and the disrespect of neighbourhood by volume of new structure [1].

One of key reasons for such situation is perhaps the postponed enactment and the pure implementation of the new generation of urban plans, which hereby have missed their



essence to adequately regulate urban space. To illustrate, the general urban plan of Sremska Mitrovica was enacted in 2009, i.e. almost two decades after the beginning of transition. Still, one of the aims in the plan is dedicated to the affirmation of urban ambient, historical heritage, and city skyline [2]. Moreover, the protection and the preservation of historical heritage are elaborated in the separated chapter. Thus, the plan can be evaluated as a weak starting-point, but which enables the improvements and innovations in future.

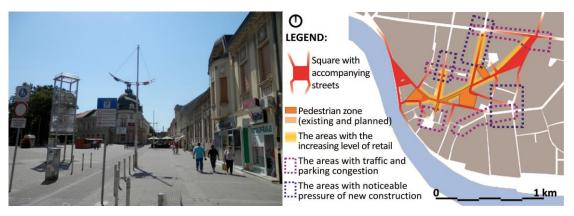


Figure 3: Pedestrian zone with inappropriate urban design (Source: Branislav Antonić)
Figure 4: The map of the post-socialist transformation of the historical centre (Source: Branislav Antonić)

#### **C**ONCLUSIONS

Considering theoretical foundations, the main conclusion is that historical centres in Serbia as well as in other post-socialist countries pasted through at least three development phases:

- The first phase is the clear negation of the values of historical centres as a link with the past. Similar tendencies existed in the western countries, but without political connotation. Nevertheless, it seems that historical centres in socialist countries "survived" this phase in the better state than western counterparts. Actually, the reason is that socialist countries had quite limited resources to replace old buildings with new ones, which prevented planned radical actions in many historical centres.
- The second phase covers the last decades of socialist period. In the case of Serbia, it began after Venice Charter in 1964. This document clearly demonstrated the importance of historical centres and buildings, which enabled their preservation. These efforts were especially undertaken in the end of socialist period, in the 1980s.
- The third phase is concurred with post-socialist transformation. The main characteristic of the phase is new relations with market economy and private incentive, which had firmly suppressed during socialist period. New times have brought both opportunities and challenges with different regional specificities. However, it is generally observable that competent local authorities and experts have not been prepared to profound transitional conditions and that their response has been weak and/or postponed in many cases.

The last remark is very true for the historical centre of Sremska Mitrovica as an analysed case study. The explained problems with new pedestrian zone and their surrounding present the significance of appropriate comprehensive and detailed studies for qualitative urban planning and design. The project of pedestrian zone without these previous studies has proved to be incomplete and short-term approach, i.e. far from full sustainability.



The case of Sremska Mitrovica also proves how the inclusion the postulates of sustainable development in a plan or similar document are not enough to achieve sustainable development in reality, through concrete actions. To avoid the mentioned problems, any plan or project should be created with the inclusion of all responsible actors from different sectors and competence. Finally, all solutions and actions in this valuable space should be thoughtfully deliberated, adapted to local conditions and attached to the values of their prospective users.

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