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# THE IMPORTANCE OF SPATIAL POSITION OF ARCHAEOLOGICAL SITES FOR TOURISM DEVELOPMENT

### ZNAČAJ PROSTORNOG POLOŽAJA ARHEOLOŠKIH LOKALITETA ZA RAZVOJ TURIZMA

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#### Abstract:

The principal purpose of this paper is to determine the significance of the spatial position of archaeological sites for tourism development and examine the awareness of tourists as potential visitors to such sites. In order to attract a larger number of interested tourists, it is necessary to act towards increasing awareness, interpreting and promoting archaeological sites. Underestimation of the importance of archaeological sites can be overcome through diversification of tourism offer.

This research was designed to indicate the manner in which similarities or dissimilarities of distance occur between nine ancient cities dating from the Roman period to highlight the approximate observations or opinions of potential tourists. The research methodology used was Multidimensional scaling (MDS) processed in SPSS program. The research uses secondary sources and combines it with primary research in order to give recommendations for further improvements and enhancements of archaeological sites as tourism offer.

The research shows relatively fine fitting of the original cases of observation and connection between the indicators. It is of vital importance to be conversant with the cultural heritage through observation in order to increase the awareness of tourists.

### Key words:

cultural heritage, archaeological sites, tourist awareness, municipium.

#### INTRODUCTION

International tourism is the world's largest export earner and an important factor in the balance of payments in most nations (UNWTO, 2011). The primary focus of this sector is to attract visitors to cultural and heritage tourism. Europe is the world's top tourism destination and cultural and heritage tourism is the central dimension. In the last twenty years, tourism in Europe has more than doubled to 12% of the GDP from tourism and tourism-related activities. According to the European Commission, typical cultural tourism in Europe, among other product consumption, includes visiting historical and religious monuments or vernacular buildings and ruins.

Tourism heritage is defined as travelling to sites of historic or ethnic importance and it includes places such as parks, palaces, forts, and other historical sites. It also includes visiting heritage sites of different cultures crossing international boundaries. Heritage is often connected with national representation, symbolic foundation and sense of belongingness (Park, 2010). Heritage can be identified as the tangible indication of one's own cultural characteristics, which can be understood as activi-

#### 1 http://www.unwto.org/

#### Apstrakt:

Cilj ovog rada jeste da se ustanovi značaj prostornog položaja arheoloških lokaliteta za razvoj turizma, kao i da ispita svest turista kao potencijalnih posetilaca istih. U cilju privlačenja što većeg broja zainteresovanih turista, neophodno je raditi na tome da se podigne svest kao i da se promovišu arheološka nalazišta, što se može postići kroz raznolikost turističke ponude.

Istraživanje je osmišljeno kako bi se ukazalo na sličnosti ili razlike kada je reč o prostornoj udaljenosti između devet antičkih gradova koji datiraju iz rimskog perioda kako bi se istakla približna zapažanja ili stavovi potenicjalnih turista. Methodologija korišćena za potrebe ovog istraživanja jeste Multidimenzionalno skaliranje (MDS) obrađeno u SPSS programu. Istraživanje koristi sekundarne izvore kako bi se dale smernice za dalje unapređivanje arheoloških nalazišta kao elemenata turističke pounde.

Rezultati istraživanja ukazuju na fino poklapanje posmatranih slučajeva i vezu između pomenutih indikatora. Poznavanje i izučavanje elemenata kulturnog nasleđa od velikog je značaja za razvoj turizma i razvijanje svesti turista u vezi sa ovom temom.

#### Ključne reči:

kulturno nasleđe, arheološka nalazišta, svest turista, municipijum.

ties connected with continuity, persistence and substantiality of collective identity (Macdonald, 2006). Heritage tourism is often understood as a consumer driven phenomenon and hence its capitalist facets are quite evident in its marketing activities (Rowan & Baram, 2004). In order to satisfy their basic cultural needs (Witt & Wright, 1994), tourists visit heritage places (Poria, Butler & Airey, 2004b:21).

## 1. CULTURAL HERITAGE AND TOURISTS MOTIVATION

Cultural heritage tourism is currently the most prevalent type of tourism in the world. With over 37% of all world travel being culturally motivated, and with 52% of all tourists visiting cultural heritage sites regardless of motivation, there is no doubt that cultural heritage tourism currently dominates the global tourism scene (ATLAS, 2007:5).

Any tourist with any type of motivation can consume cultural heritage available at a destination deemed the centrality of cultural motivation not a sufficient criterion in distinguishing between the main types of cultural tourists (McKercher, 2002; McKercher & du Cros, 2002, 2003).



While in tourism discourse the relationship between needs, motivations, types of products consumed and the resultant tourist experiences is understood as straightforward, casual and well-defined cultural heritage tourism proved to be a surprising exception to this rule (Leiper, 1990:383). Within the framework of cultural heritage tourism, the fundamentals of this well researched casual chain can become dissonant and in many instances non-correlational (Richards, 2002:1054). Since cultural heritage consumption does not coincide with the purpose of tourism travel, any tourist with any type of motivation can become a consumer of cultural heritage products offered at a destination (Poria, Reichel & Biran, 2006b:163).

As motivation for consumption of culture and heritage can vary significantly to include anything from learning to entertainment, reliance on cultural motivation proved to be a very poor predictor of tourists' actual consumption of culture and heritage of a destination (McKercher & du Cross, 2002:144-147, 2003:46). Understanding of the fact that any tourist with any type of motivation can consume cultural heritage available at a destination warranted a distinction between genuine and accidental cultural tourists, also classified as general and specialized (Stebbins, 2007) serious and recreational (Hannabuss, 1999:299) or real and casual cultural tourist (Craik, 1997:129). While the former culture represents the main reason to travel to a destination, the latter consumes cultural heritage sites as part of the overall destination's experience.

## 2. SERBIA AS A CULTURAL INHERITOR OF ROMAN LEGACY

The fact that Serbia is rich in Roman heritage is confirmed by the fact that 17 Roman emperors was born and lived on our soil. The Emperor Constantine, one of the most important figures for Christianity, was born in Nis. The cities, temples and roads were built, and it is nowadays telling us about the greatness and importance of the Roman Empire. There is currently 2508 immovable cultural property in the Central Registry of Republic Institute for Protection of Cultural and Natural Heritage, of which 2171 cultural monuments, 74 cultural & historical sites, 188 archaeological sites and 75 famous places. Categorized immovable cultural property has 782, of which 200 of the 582 great importances.<sup>2</sup>

Out of total 44 archaeological sites, 25 originate from the Roman period. Serbia, the land where 17 Roman Emperors were born, presents the region of impressive tracks of glorious Roman Empire (27 B.C. – 476 A.D.), whose rulers, according to historical sources and archaeological examinations raised their native land till the highest point. One of the most famous rulers was Justinian or Petrus Sabbatius whose reign lasted almost 40 years (525 A.D – 565 A.D) and represented the dividing line of the Old and Middle Age. In his honor cities bear the name of this great ruler and codifier (Stanojevic, 2003:110).

Many authors and researchers wrote about the tracks of Roman Empire on the Danube coast, where the most interesting and unique cultural complex raised. The Danube River had a huge role in development and extension of the great Roman Empire, and was also the border of the Empire. That role of the Danube River and its confluents, affected the construction of big and small frontier fortresses and towns, whose remains testify about the magnificent Empire, with the architecture that presents the crown of the Roman architecture.

Municipium represents one of the largest and most important architectural achievements of ancient Rome. Municipium

2 http://www.heritage.gov.rs/

(lat. municipium, plural. municipia) is a term in the Roman Empire used for the cities whose status was below the colony (colonia). Municipium had its own government, but their citizens unlike the colony had Roman citizenship but also Latin law (ius LATI). Under the Roman Republic, the practical considerations of incorporating communities into the city-state of Rome forced the Romans to devise the concept of municipium, a distinct state under the jurisdiction of Rome. It was necessary to distinguish between various types of municipia and other settlements, such as the colony. In the final stage of development, all citizens of all cities and towns throughout the empire were equal citizens of Rome. The municipium then simply meant municipality, the lowest level of local government.

Citizens of municipium had the duties of a Roman citizen, which involved the payment of taxes and military service, but were not allowed to participate in political life, i.e. to elect and be elected to public office. The executive power of the municipium is usually conducted by four magistrates elected for a period of one year, while the advisory authority was exercised by the decurions gathered in the body like the Senate.

There were more than a dozen municipiums on the territory of present-day Serbia. For the purpose of research methodology, nine ancient cities were used that had a status of municipium, including: Justiniana Prima, Justiniana Secunda, Siparantum, Sirmium, Bassianae, Viminacium, Felix Romuliana, Diana and Mediana. One of the localities – Felix Romuliana was ranked on the list of the cultural heritage of UNESCO (Novaković-Kostić, 2010, str. 115-126).

#### 3. RESEARCH RESULTS AND FINDINGS

The research was designed to answer the Research question **RQ:** "Is there statistically significant difference in the level of tourist awareness towards the spatial position of archaeological sites?"

The research methodology designed to answer which opinion average tourist assign to distance between ancient cities of the Roman period in Serbia. The data was collected through Serbia Guest Survey 2011. The questionnaire was filled in by tourist themselves with the instruction and help of the interviews. The sample used in this research paper included 150 respondents divided into groups named after nine ancient cities of the Roman period in Serbia, and it is assumed that tourists are probably motivated to visit them. The respondents announced the distance between Viminacium and Justiniana Prima equal to 100. They gave their opinion on the distance between any pair of other ancient cities relative to the distance of Viminacium and Justiniana Prima.

In order to answer the research question, null and alternate hypothesis were created:

- H0: There is no statistically significant difference in the level of tourist awareness towards the spatial position of archaeological sites.
- HA: There is statistically significant difference in the level of tourist awareness towards the spatial position of archaeological sites.

Multidimensional scaling technique was performed to determine the similarity or dissimilarity set of nine ancient cities in Serbia. The herein presented analysis refers to a two-dimensional space. Table 1 (Case Processing Summary) shows that the analysis included nine ancient cities and one data source, i.e. a matrix consisting of 36 proximity measures.



Case Processing Summary					
Cases		9			
Sources		1			
Objects		9			
Proximities	Total Proximities	36ª			
	Missing Proximities	0			
	Active Proximities <sup>b</sup>	36			
a. Sum of all strictly le	ower-triangular proximities.				
b. Active proximities	include all non-missing proximiti	es.			

Table 1. Overall number of ancient cities and their proximities

Table 2 presents the normalized value of the indicator properly fitting the model to the matrix data. The value indicates how the input data (proximity matrix) is adequately represented with the distance in the final multidimensional space. Starting from pole position 0, programming option PROXSCAL iteratively moves the points in the way of continuous improvement between the original elements of proximity and the distance between them in the final multidimensional space. The process is stopped after iteration number 10 because convergence has achieved indicator value of stress 0.0001.

Iteration History				
Iteration	Normalized Raw Stress	Improvement		
0	.17692ª			
1	.00942	.16750		
2	.00697	.00246		
3	.00600	.00097		
4	.00549	.00051		
5	.00514	.00035		
6	.00489	.00025		
7	.00470	.00019		
8	.00455	.00014		
9	.00444	.00011		
10	.00436	.00009 <sup>b</sup>		

Table 2. Values of normalized raw stress

become less than the convergence criterion.

b. The iteration process has stopped because Improvement has

Table 3. Implicates stress and fit measures original proximity of ancient cities adequately represented as distances in multidimensional space. The value stress-I (Kruskal's stress) indicates better fitting through stress value lower than 0.10. The values of Dispersion Accounted For and Tucker's coefficient of congruence implicate that relatively fine fitting of the original cases of observation and final distances are achieved.

Stress and Fit Measures				
Normalized Raw Stress	.00436			
Stress-I	.06600ª			
Stress-II	.18327ª			
S-Stress	.01119 <sup>b</sup>			
Dispersion Accounted For (D.A.F.)	.99564			
Tucker's Coefficient of Congruence	.99782			
PROXSCAL minimizes Normalized Raw St	ress.			
a. Optimal scaling factor = 1.004.				
b. Optimal scaling factor = .997.				

Table 3. Stress and fit measures original proximity of ancient cities and final distances

Table 4 indicates the coordinates of each of the nine ancient cities (points) for the two-dimensional solution.

Final Coordinates				
	Dimension			
	1	2		
Justiniana Prima	.016	803		
Siparantum	416	269		
Sirmium	623	.018		
Bassianae	767	.149		
Viminacium	208	.326		
Felix Romuliana	.164	.419		
Diana	.639	.035		
Mediana	.532	.611		
Justiniana Secunda	.663	486		

Table 4. Final coordinates of the ancient cities Based on the Final Coordinates program a diagram of a

Common Space for all points is created. Figure 1 presents the results of final configuration of the elements and fitting of original proximity of points.



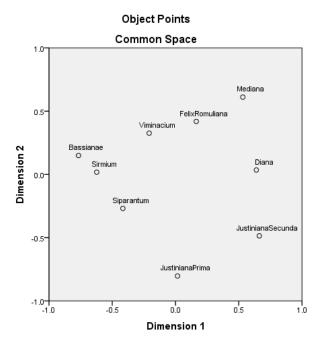


Figure 1. Common Space diagram of dispersion of the ancient

Figure 2 presents Shepard's diagram of transformed proximity points with derived distances of points. It is noticed the fine fitting and connection between the indicators which increasingly approaching approximately straight line with minimum dispersion.

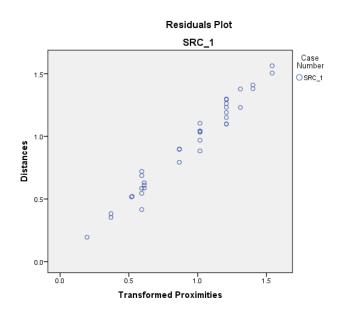


Figure 2. Shepard's diagram of dispersion of the ancient cities

According to the previously analyzed figures, it was concluded that the alternative hypothesis HA was thus rejected, and the null hypothesis H0 was accepted as true. There is no statistically significant difference in the level of tourist awareness towards the spatial position of archaeological sites.

Conclusions and recommendations

This research shows the non-entity of statistical significant difference in the level of tourist awareness towards the spatial position of archaeological sites and that should be integrated to effectively contribute to tourist improvement. As research shows, this may imply that the majority of respondents would probably become potential visitors to these archaeological sites. Therefore, promotional and marketing activities could be used as an assisting tool for making this potential tourist demand become a real improvement. Although this research contributes to the enrichment of knowledge of archaeological sites as a motivational factor for participation in such routes, it still has certain limitations. The research results are limited to the number of respondents, while the respondents were representative in national terms. Therefore, these results imply that the conclusions obtained cannot be generalized to potential visitors outside Serbia. The examination of a larger sample including potential foreign visitors would make the results more reliable and representative.

As tourists are becoming more sophisticated, their need to recapture the past has been increasing. Tourists have been visiting cultural heritage sites more frequently. Cultural heritage tourism offers several benefits to tourists and residents, as well as governments. People become involved in their community when they can relate to their personal, family, community, regional, or national heritage. This connection motivates residents to safeguard their shared resources and practice good stewardship. Further cultural heritage tourism educates residents and tourists about local or regional history and traditions. Through the research about and development of heritage and cultural destinations, residents will become more informed about history and traditions that can be shared with tourists. Knowledge of heritage provides continuity and context for communities, which instills respect in their residents, strengthens citizenship values, builds community pride, and improves the overall quality of life.

Cultural heritage tourism promotes economic and civil vitality of a community or a region. Although its architectural unit cannot be compared with European localities, Serbia has abundance of material heritage of archaeological sites. Cultural tourism represents an opportunity for development of underexplored potential of Serbian tourism sector. The existing cultural and historical heritage is not properly protected, insufficiently presented and as such is not included adequately in the tourism offer. Serbia as the rich cultural heritage provides a good basis for the development of quality tourism offer. Cultural heritage of archaeological sites is a useful source in developing and promoting local and regional community.

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