PRESERVATION AND PROMOTION OF MATERIAL CULTURAL HERITAGE: A COMPARATIVE ANALYSIS OF THE REPUBLIC OF SERBIA AND THE REPUBLIC OF NORTH MACEDONIA

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Abstract: This study aims to assess the state of material cultural heritage in the Republic of Serbia and the Republic of North Macedonia, focusing on identification and promotion at both national and international levels, with an emphasis on digitization and improving the register of cultural assets. The recommended approach, which supports sustainable development, not only enables the comprehensive protection of all cultural resources, adding new value, but also minimizes the risk of permanent loss. The authors stress the importance of ongoing efforts to identify previously undiscovered cultural heritage and protect it from damage, decay, neglect, and theft. Given that cultural heritage is continuously exposed to natural elements and human activities, policymakers are encouraged to further raise awareness of cultural values and recognize threats arising from the short-term interests of local communities, which might result in erosion and loss of protected cultural monuments and landscapes.

The research utilized an opportunistic, convenience sampling method, surveying residents of the Republic of Serbia and the Republic of North Macedonia across five or eight regions (n1=163, n2=96, n=259). The findings revealed that 77% of respondents believe the protection of material cultural heritage is inadequate. Citizens of the Republic of Serbia identified unsatisfactory maintenance and a lack of financial resources as the greatest threats, while respondents from the Republic of North Macedonia pointed to unsatisfactory maintenance and weak enforcement of management regulations as their primary concerns. The research also indicated that individuals with advanced degrees (Magister, Master, and Doctor of Science) have a better understanding of material cultural heritage. Overall, the primary cause cited for a good knowledge of material cultural heritage was an interest in customs and traditions, while the key reason for insufficient knowledge was the lack of media representation.

Keywords: cultural heritage, Serbia, North Macedonia, UNESCO, preservation, promotion

Field: Social Sciences, and Humanities

1. INTRODUCTION

Cultural heritage encompasses a collection of resources, both material and immaterial, inherited from the past. These resources are recognized as reflections and expressions of continuously evolving values, beliefs, knowledge, and traditions shaped by the interrelation across time, between humans and their surroundings. Material cultural heritage includes immovable cultural assets, movable cultural assets, assets with provisional protection, and those under preliminary protection (Law on Cultural Heritage, 2021).

In the 21st century, systematic efforts to protect, promote, scientifically study, and valorize cultural heritage are not just the responsibility of individual institutions but of the entire society. This collective responsibility ensures the long-term preservation of distinctive cultural, historical, and architectural values. By continuously conserving, restoring, revitalizing, presenting, and educating about national cultural heritage, conditions are established for greater public and institutional involvement of Serbian cultural heritage in European cultural exchange. (Sančanin & Penjišević, 2023)

UNESCO's World Cultural Heritage and Sustainable Development Program highlights the potential benefits of proper heritage management from the perspective of sustainable development. Well-preserved heritage can enhance the environment's richness for both the current and upcoming generations, and the conservation of natural resources is crucial for sustainable management of the environment. Additionally, heritage plays a significant role in economic development by attracting investment. It also contributes to the spiritual well-being of people, given its strong symbolic, aesthetic, and spiritual aspects. Moreover, well-maintained heritage is essential for mitigating risks related to natural and human-caused disasters (Xiao et al., 2018). In this context, Sančanin (2019) highlights that integrating cultural and historical

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heritage represents a significant qualitative advancement. This integration enriches the tourist experience by captivating feelings, improving engagements, and broadening the comprehension of spaces, folks, events, and artifacts from both past and present.

The UNESCO World Heritage List includes 1,223 properties: 952 cultural, 231 natural, and 40 mixed properties (UNESCO, 2024). From the Republic of Serbia, the following cultural sites are listed: Stari Ras and Sopoćani (1979), Studenica Monastery (1986), Medieval Monuments in Kosovo (2004, 2006), Gamzigrad – Romuliana, Palace of Galerius (2007), and Stećci Medieval Tombstone Graveyards (2016) (UNESCO, 2016). The Republic of North Macedonia has the following sites on the list: Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe – Natural (2007, 2011, 2017, 2021) and the Natural and Cultural Heritage of the Ohrid region – mixed (1979, 1980, 2019). (UNESCO, 2019)

Immovable cultural assets include cultural monuments, archaeological sites, notable landmarks, and spatial cultural-historical entities. The central register of the Republic of Serbia lists 2,645 immovable cultural assets: 2,272 cultural monuments, 96 spatial cultural-historical entities, 198 archaeological sites, and 79 notable landmarks (Institute for the Protection of Cultural Monuments of Serbia). In North Macedonia, as of February 2023, the Administration for the Protection of Cultural Heritage has registered 1,329 objects as cultural heritage. (Управа за заштита на културното наследство, 2023) The municipalities of Makedonska Kamenica, Aerodrom, Aračinovo, Ilinden, Sopište, Šuto Orizari, Krivogaštani, Bogdanci, Bosilovo, Češinovo/Obleševo, and Bogovinje do not have any protected cultural monuments (Spasevski, 2019).

The International Council on Monuments and Sites (ICOMOS, 2005) has identified major threats to cultural heritage, including deterioration, development, resource extraction, large-scale development projects, tourism, inadequacies in local governance, cultural changes or deficiencies, and socio-economic and national economic factors. A country's ability to create a positive impression is crucial not only for getting a site inscribed on the World Cultural Heritage List but also for converting its cultural wealth into economic and other advantages. (Schmutz & Elliott, 2016)

The UNESCO List of Intangible Cultural Heritage of Humanity includes 730 elements from 145 countries (UNESCO, 2023). The representative list from the Republic of Serbia features: Slava, the celebration of a family's patron saint's day (2014), Kolo, a traditional folk dance (2017), Singing to the accompaniment of the Gusle (2018), Zlakusa pottery making, traditional hand-wheel pottery making in the village of Zlakusa (2020), and Social practices and knowledge related to the preparation and use of the traditional plum spirit, šljivovica (2022) (UNESCO, 2022).

The Republic of North Macedonia has five features on UNESCO's representative list of intangible cultural heritage: the Feast of the Holy Forty Martyrs in Štip (2013), Kopachkata, a social dance from the village of Dramche, Pijanec (2014), Glasoechko, male two-part singing in Dolni Polog (2015), Cultural practices associated with the 1st of March (Bulgaria, North Macedonia, Republic of Moldova, Romania) (2017), and the Spring celebration, Hidrellez (North Macedonia, Turkey) (2017). (UNESCO, 2017)

2. MATERIALS AND METHODS

The primary survey was designed to assess how well the citizens of the Republic of Serbia and the Republic of North Macedonia are informed about material cultural heritage, including both immovable and movable heritage. It also aimed to determine whether cultural heritage is being managed properly and effectively, as well as to gather respondents' views on whether cultural heritage is at risk of destruction, disappearance, violation of integrity, or damage.

Q1. How familiar is the public in both countries with the material cultural heritage listed by UNESCO, and to what extent?

Q2. How effectively is cultural heritage being managed in these states?

Q3. What are the risks facing material cultural heritage, and to what extent is it endangered?

3. RESULTS AND DISCUSSION

Information was gathered by utilizing a questionnaire carried out via Google Forms. The research employed an opportunistic, convenience sampling method, surveying residents from the Republic of Serbia and the Republic of North Macedonia across five or eight regions. A pilot survey with 55 respondents was initially conducted to test the content validity of the research measures. Following this, the final survey was developed and administered to a new group of 259 respondents (n=259). Data collection occurred from January to June 2024.

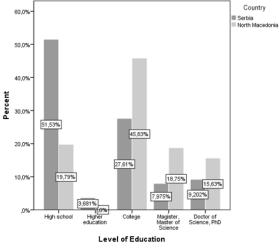
Penjišević, A. et al. (2024). Preservation and promotion of material cultural heritage: a comparative analy-sis of the Republic of Serbia and the Republic of North Macedonia, *SCIENCE International journal, 3*(3), 117-124. doi: 10.35120/sciencej0303117p UDK: 659.13/.16:930.85(497.1) 659.13/.16:930.85(497.7)

The survey was divided into two parts: the first part collected general demographic information, while the second part asked respondents to rate, on a scale, their knowledge of material cultural heritage, the management of cultural heritage, and the perceived threats and concerns regarding material cultural heritage.

Descriptive statistics, measures of dispersion, and measures of symmetry were computed to address the research inquiries. Non-parametric techniques, including the Chi-square Test, Mann-Whitney U test, and Kruskal-Wallis test, were used for hypothesis testing. The data were analyzed using the SPSS software package.

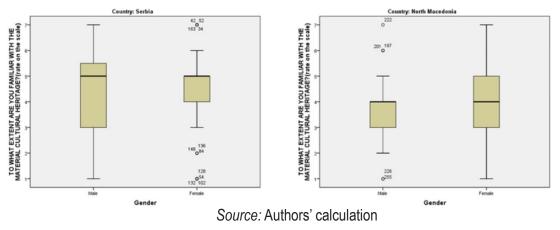
The study involved 259 respondents, with 62.9% from the Republic of Serbia and 37.1% from the Republic of North Macedonia. Of the respondents, 46.7% were male and 53.3% were female. The average age of participants was 36.24 years, with an average of 33.66 years for those from Serbia and 40.66 years for those from North Macedonia. The majority of respondents had a high school education (39.8%), followed by those with a college degree (34.4%). Additionally, 12.0% had a Magister/Master of Science degree, 11.6% had a Doctor of Science/PhD, and 2.3% had a vocational college education.





Source: Authors' calculation

Respondents assessed their knowledge of material cultural heritage with an average score of 4.22, a median of 4, and a mode of 5. The mean skewness is -0.313, indicating a negative asymmetry. Respondents from the Republic of Serbia gave an average score of 4.44, with both the median and mode at 5. In contrast, respondents from the Republic of North Macedonia rated their knowledge with an average score of 3.84, and both the median and mode at 4. Overall, both male and female respondents provided similar average ratings, a trend observed among respondents from Serbia. However, female respondents from North Macedonia gave a higher average rating compared to their male counterparts. For further details, see Graph 2.



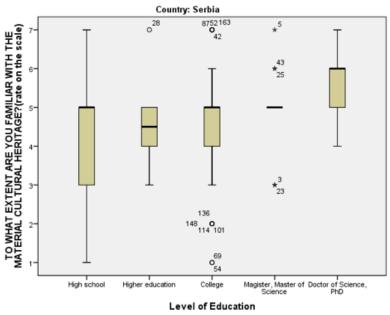
Graph 2. Knowledge of material cultural heritage in relation to the gender of the respondents

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When examining the average scores for knowledge of material cultural heritage based on education level, respondents with a doctoral degree rated their knowledge the highest, with an average score of 5.10. This is followed by Magister/Master of Science graduates with an average score of 4.71, those with higher education degrees at 4.67, and high school graduates at 3.95.

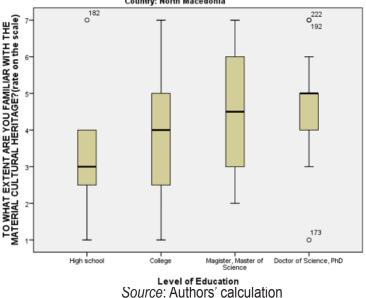
Looking at the results by country, respondents from the Republic of Serbia with a doctoral degree provided the highest average score of 5.33, while in the Republic of North Macedonia, Magister/Master of Science graduates provided the highest average score of 4.44. Graphs 2 and 3 illustrate that the 1.5 IQR interval for Doctor of Science respondents ranges from 4 to 7 for those from the Republic of Serbia and from 3 to 7 for respondents from the Republic of North Macedonia.

Graph 3. Knowledge of material cultural heritage in relation to the level of education - Republic of Serbia









The Kruskal-Wallis Test identified a statistically substantial difference in the valuation of knowledge of material cultural heritage between five groups of participants categorized by education level (Gp1,

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n=103: High school; Gp2, n=6: Higher education; Gp3, n=89: College; Gp4, n=31: Magister/Master of Science; Gp5, n=30: Doctor of Science), $\chi^2(4, n=259)=17.127$, p=0.002. Respondents with a doctoral degree had the highest Mean Rank, a trend that is consistent when viewed by country.

The chi-square test of independence revealed a important association between the reasons for insufficient knowledge of material cultural heritage (given by respondents who scored 4 or less) and their country of origin, $\chi^2(3, n=131)=12.118$, p=0.007. Cramer's V value of 0.304 indicates a large effect size (Gravetter & Wallnau, 2004, 2012). Respondents from the Republic of Serbia identified a lack of interest and deficient media exposure as the main causes for their restricted knowledge of material cultural heritage, each cited by 38.4% of respondents. In contrast, 46.2% of respondents from the Republic of North Macedonia cited insufficient media representation as their primary reason.

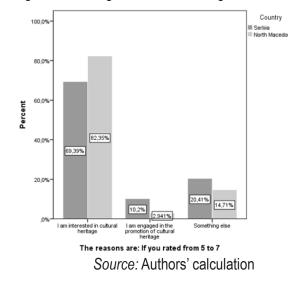
In the SPSS report, the Adjusted Residual value for the "I wasn't interested" reason among respondents from the Republic of Serbia is 2.8, indicating a significantly higher number of cases than expected. For respondents from the Republic of North Macedonia, the Adjusted Residual value is -2.8, showing a significantly lower number of cases than anticipated. For additional details, see Table 1.

			The				
			I wasn't interested	We didn't learn about cultural heritage in school	Not enough e-content	Insufficient media representation	Total
Country	Serbia	Count	23	16	4	23	66
		% within Country	34,8%	24,2%	6,1%	34,8%	100,0%
		Adjusted Residual	2,8	,6	-2,4	-1,3	
	North Macedonia	Count	9	13	13	30	65
		% within Country	13,8%	20,0%	20,0%	46,2%	100,0%
		Adjusted Residual	-2,8	-,6	2,4	1,3	
Total		Count	32	29	17	53	131
		% within Country	^{24,4%} Source: Auth		13,0% ON	40,5%	100,0%

Table 1. Country * The reasons are: If you rated from 1 to 4 Crosstabulation
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Respondents who rated their knowledge of material cultural heritage with a score of 5 or higher cited a strong interest in cultural heritage as the main reason, with 72.7% indicating this as the main factor. For a country-specific breakdown, refer to Graph 4.

Graph 5. Reasons for good knowledge of cultural heritage in relation to the respondent's country



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The chi-square test of independence revealed a substantial connection between the factors leading to a high understanding of material cultural heritage (among respondents who rated 5 or above) and their educational background, $\chi 2(8, n=132)=16.443$, p=0.036. However, when analyzed by country, this significant relationship is found only among respondents from the Republic of Serbia ($\chi 2(8, n=98)=17.243$, p=0.028).

For material cultural heritage listed by UNESCO, respondents from the Republic of Serbia most commonly rated it with a 5, with an average response of 16. In contrast, respondents from the Republic of Macedonia most commonly rated it with a 1, with an average response of 71.

Regarding the adequacy of cultural heritage management, the largest percentage of respondents (47.5%) answered "Not enough," while 29.3% said "No," suggesting that 77% of respondents believe the state inadequately manages material cultural heritage. When considering the responses by country, the chi-square test of independence indicated a vital link between attitudes toward cultural heritage management and the respondents' country, $\chi^2(3, n=259)=18.054$, p<0.001.

In the SPSS report, the Adjusted Residual value for respondents from the Republic of Serbia and the "Not enough" item is 4.0, indicating a significantly higher number of cases than expected. Conversely, for respondents from the Republic of Macedonia, the Adjusted Residual value for this item is -4.0, indicating a significantly lower number of cases than expected. The Adjusted Residual value for respondents from the Republic of Serbia and the "No" item is -3.3, indicating a significantly lower number of cases than expected, while for respondents from the Republic of Macedonia, the value is 3.3, indicating a significantly lower number of cases than expected. Refer to Table 2 for further information.

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			IS CUI				
			Yes	No	Not enough	I do not know	Total
Country S	Serbia	Count	4	36	93	30	163
		% within Country	2,5%	22,1%	57,1%	18,4%	100,0%
		Adjusted Residual	-1,2	-3,3	4,0	-,7	
N	North Macedonia	Count	5	40	30	21	96
		% within Country	5,2%	41,7%	31,3%	21,9%	100,0%
		Adjusted Residual	1,2	3,3	-4,0	,7	
Total		Count	9	76	123	51	259
		% within Country	3,5%	29,3%	47,5%	19,7%	100,0%

Table 2.	Management o	f cultural	heritage	Crosstab
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Source: Authors' calculation

For the effective management of cultural heritage, a smaller percentage of respondents with advanced degrees (Magister, Master of Science, and PhD) answered "I do not know"–about 10%, compared to around 22% of respondents with other educational levels.

The greatest threats to preserving material cultural heritage are identified as unsatisfactory maintenance and lack of financial resources, particularly by respondents from the Republic of Serbia. In the Republic of North Macedonia, the primary concerns are unsatisfactory maintenance and weak enforcement of management regulations. All variables contributing to these dangers—insufficient legal protection, unsatisfactory maintenance, weak enforcement of management regulations, lack of financial resources, and uncontrolled tourist exploitation—exhibit low variability, with a coefficient of variation (CV) around 31% and strong negative skewness, except for the variable of uncontrolled tourist exploitation, which shows no skewness (Skewness=-0.092).

Country			Insufficient of legal protection	Unsatisfactor y maintenance	Inapplicabilit y (weak application) of regulations related to management	Lack of financial resources	Uncontrolled tourist exploitation			
Serbia	Ν	Valid	163	163	163	163	163			
		Missing	0	0	0	0	0			
	Mean		4,75	5,14	4,62	5,04	4,21			
	Media	m	5,00	5,00	5,00	5,00	4,00			
	Mode		5	7	5	6	5			
	Std. Deviation		1,442	1,567	1,572	1,531	1,734			
North Macedonia	Ν	Valid	96	96	96	96	96			
		Missing	0	0	0	0	0			
	Mean		5,27	5,63	5,53	5,31	4,75			
	Median		5,50	6,00	6,00	6,00	5,00			
	Mode		7	7	7	7	7			
	Std. D	Deviation	1,726	1,611	1,589	1,713	1,824			
		Source: Authors' calculation								

Table 3. Descriptive measures of hazard assessment

The Mann-Whitney U test exposed a statistically important difference in the assessment of the danger of cultural heritage from: Insufficient of legal protection for respondents from the Republic of Serbia (Me=5.0, n=163) and North Macedonia (Me=5.5, n=96), U=6270.50, z=-2.726, p=0.006. The size of the impact, i.e. it can be said that the impact is small (Cohen, 1988). The variable has a higher Mean Rank for respondents from the Republic of North Macedonia.

Unsatisfactory maintenance from the Republic of Serbia (Me=5.0, n=163) and North Macedonia (Me=6.0, n=96), U=6266.50, z=-2.752, p=0.006. The size of the impact , i.e. it can be said that the impact is small (Cohen, 1988). The variable has a higer Mean rank for respondents from the Republic of North Macedonia.

Inapplicability (weak application) of regulations related to management from the Republic of Serbia (Me=5.0, n=163) and North Macedonia (Me=6.0, n=96), U=5169.00, z=-4.646, p<0.001. The size of the impact , i.e. it can be said that the influence is medium (Cohen, 1988). The variable has a higher Mean Rank for respondents from the Republic of North Macedonia.

Uncontrolled tourist exploitation management from the Republic of Serbia (Me=4.0, n=163) and North Macedonia (Me=5.0, n=96), U=6580.50, z= -2.168, p=0.030. The size of the impact , i.e. it can be said that the impact is small (Cohen, 1988). The variable has a higher Mean Rank for respondents from the Republic of North Macedonia.

4. CONCLUSION

Cultural heritage is recognized as a unique and irreplaceable historical, social, and anthropological asset, making it a significant development potential. The importance of identifying, protecting, preserving, and promoting cultural heritage and products in the Republic of Serbia and the Republic of North Macedonia should be viewed through the lens of sustainable tourism's multiplicative effects, which create jobs and strengthen national identity.

Research results highlight the importance of cultural heritage to respondents from both countries, with those having higher education levels showing greater interest. However, approximately 77% of respondents believe that cultural heritage is poorly and inadequately managed, putting unique and indigenous resources from the past at increased risk. The lack of comprehensive data and information on material cultural heritage, its significance, protection measures, and promotion beyond national

borders, as well as the identification of undiscovered heritage assets, should be prioritized by institutions responsible for restoring, preserving, and promoting cultural heritage.

The authors recommend improving the registry of material cultural heritage, creating an accessible virtual reality platform, and intensifying protection and promotion efforts. The perceived threats to material cultural heritage, which serve as irreplaceable testimonies of national identity and significant economic potential, are complex and multilayered. Addressing these challenges requires an interdisciplinary and multidisciplinary strategic approach to ensure proactive and adequate responses.

REFERENCES

Cohen, J. W. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd edn). Hillsdale, NJ: Lawrence Erlbaum Associates.

Gravetter, F. J., Wallnau, L. B. (2004, 2012). Statistics for the Behavioral Sciences (10th ed). Belmont, CA: Wadsworth. 2024 година)

Zakon o kulturnom nasleđu. (2021). Službeni list RS, br. 129/2021.

ICOMOS. (2005). Threats to world heritage sites 1994-2004: an analysis, international council on monuments and sites.

Institute for the Protection of Cultural Monuments of Serbia. Immovable cultural property – IMP. Available at: https://www. heritage.gov.rs/english/nepokretna_kulturna_dobra.php (Accessed date: August 10, 2024)

Sančanin, B. (2019). Historical Heritage in The Function of Developing Cultural Tourism. The Journal of Middle East and North Africa Sciences, 5(5), 6-12. Amman, Jordan. Available at:

file:///C:/Users/ADMINI~1/AppData/Local/Temp/Historical Heritage in The Function of D.pdf (Accessed date: August 5, 2024)

Sančanin, B. & Penjišević, A. (2023). Media promotion in the function of preserving cultural heritage from the UNESCO list: Statistical findings and analisis. In: (Sančanin, B. Ed.) Thematic proceedings: The Fourth International Scientific Conference "The of media interpretation for the promotion of cultural heritage" (11-34). https://doi.org/10.18485/ akademac_nsk.2023.4.ch1

Schmutz, V., & Elliott, M.A. (2016). Tourism and Sustainbility in the Evaluation of World Heritage Sites, 1980-2010. Sustainbility, 8(3), 261. https://doi.org/10.3390/su8030261

Спасевски, В. (2019). Заштитените споменици на културата во Делчево. Достапно на: https://delcevo365.mk/2019/10/26/ фото-заштитените-споменици-на-култур/ (Датум на пристап: 11. август UNESCO. (2016). Properties inscribed on the World Heritage List/Serbia. Available at:

https://whc.unesco.org/en/statesparties/rs (Accessed date: August 6, 2024)

UNESCO. (2017). Lists of Intangible Cultural Heritage - North Macedonia. Available at:

https://ich.unesco.org/en/lists?text=&country[]=00129&multinational=3#tabs (Accessed date: August 10, 2024) UNESCO. (2019). Properties inscribed on the World Heritage List – North Macedonia. Available at:

https://whc.unesco.org/en/statesparties/mk (Accessed date: August 9, 2024)

UNESCO. (2022). Lists of Intangible Cultural Heritage - Serbia. Available at:

- https://ich.unesco.org/en/lists?text=&country[]=00237&multinational=3#tabs (Accessed date: August 10, 2024)
- UNESCO. (2023). List of Intangible Cultural Heritage. Available at: https://ich.unesco.org/en/lists (Accessed date: August 10, 2024)

UNESCO. (2024). World Heritage List. Available at: https://whc.unesco.org/en/list/ (Accessed date: August 8, 2024) Управа за заштита на културното наследство (2023). Регистрирани недвижни добра по надлежност на националните установи. Достапно на: https://web.archive.org/web/20230407105431/http://uzkn.gov.mk/mk/wp-content/ uploads/2023/03/ registrirano-nedvizno-kulturno-nasledstvo.pdf (Датум на пристап: 4 август 2024 година) Xiao, W., Mills, J., Guidi, G., Rodriguez-Gonzalvez, P., Gonizzi Barsanti, S., Gonzalez-Aguilera, D. (2018). Geoinformatics for

the conservation and promotion of cultural heritage in support of the UN Sustainable Development Goals. Sensing, 142, 389-406 https://doi.org/10.1016/isprs.2018.01.001