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MULTICRITERIAL VALORIZATION OF A MONUMENT BASED ON NATIONAL REGISTRY DATA

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ABSTRACT: Value analysis in cultural heritage has already a long tradition based on a classic work of A. Riegel [1]. Since that time the awareness of its importance and usefulness constitutes an element of past decades education, practise and legal framework of cultural heritage conservation. Theoretical analysis and attempts of its practical application have brought about the need for re-orientation and changes in theory of the 20th and 21st centuries [2]. Since the beginning of the 21st century numerous compilations of various works have been published. They put forward an interpretation of "sustainable conservation" and introduce the role of various stakeholders in valorisation procedure. Contemporary assessment of values takes into account that some of the values from one point of view can be drawbacks form the other perspective. Discussions of value judgements in relation to cultural heritage and authenticity in the context of cultural differences have included some new issues including intangible heritage, technological heritage, nature heritage, spatial planning, globalization, cultural tourism etc. [3].

KEYWORDS: multiple criteria decision making, valorisation, monument, monument's register, MCDA

THEME 1.4

1 INTRODUCTION

The concept of 'values' is a living idea. Value has the relative status of a thing and the message of artwork, or the esteem in which it is held, according to its real or supposed worth, significance or function [2]. Such an understanding clearly shows that there is a great need for development and use of the valorisation tools, which are not susceptible, or at least less susceptible to subjectivity of personal judgements. One should try to replace existing valorisation schemes by more objective multicriteria analysis of values keeping in sight their mutual interactions. An adequate tool for this purpose is Multiple Criteria Decision Analysis (MCDA).

2 MULTIPLE CRITERIA DECISION ANALYSIS (MCDA)

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The main idea is to present how MCDA can be used at operational level in valorisation processes to support conservator administrative decision of the extend of legal protection based on adopted value criteria. Hence, we do not discuss the possible sets of monuments value attributes. Such a discussion is still vivid in conservation society and sets of value criteria are redeveloped and redefined in numerous publications. In Poland itself at least six various sets of values have been suggested. Analysis of valorisation criteria pros and cons shall not be considered here as MCDA methods can be universally used with any preferred or legally defined set of attributes. For the demonstration purpose we adopt the following structure of monuments values, which is based

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mainly on the paper of R. Mason [3] published in The Getty Conservation Institute Research Report.

A. Intrinsic

A.1. authenticity

A.1.a. material A.1.b. ancientness

B. Extrinsic Values

B.1. Sociocultural Values

B.1.a. historical

B.1.b. cultural/symbolic

B.1.c. social

B.1.d. spiritual/religious

B.1.e. aesthetic

B.2. Economic Values

B.2.a. use (market) value

B.2.b. non-use (non-market) value

B.2.c. existence

B.2.d. option

B.2.e. bequest

C. Externally generated

C.1. economic externalities

C.2. social externalities

Nowadays value structures include also parameters describing risk management and structural and material assessment aspects.

Another formal element of our MCDA example is a monument's documentation stored in official archives of National Heritage Board of Poland. This documentation is also commonly known as the "White Card". It contains 27 fields including diverse information. The card is a legal document [4] therefore it is assumed as a primary information source about a monument. In this way we assume that every expert has the same information, collected and organized according to the legally defined rules identical for every monument. The card comprises indispensable data source for evaluation of monuments. The white card of Visitations Church located in Warsaw is a well known example for the EU-CHIC project participants and is used as the data source in our work.

Diversity of monument features results in a need for application of special approaches for reliable monument evaluation. Application of adequate evaluation measures is also needed for a successful expression of diversified monument features. There are several multi-criteria decision analysis approaches available which include such measures. They are capable of including both tangible and intangible attributes.

Specific approach should be selected taking also into account its suitability. Although existing mathematical methods belong to different classes of tools they seem to be capable of delivering similar results adequate to analysed problems [5]. Utility criteria e.g. familiarity to a user and simplicity of use play therefore important role during approach selection process.

3 CONCLUSIONS

Availability of numerous MCDA approaches is advantageous and should encourage future research on

MCDA application for evaluation of monuments. Research results confirm that appropriate combination of methods makes reliable evaluation of complex objects and phenomena possible and more reliable [6].

Considerable number of the results of monuments valorisation is a need for justification of decision tools, which are suitable for evaluation of numerous heritage objects. Such tools are already available and widely used to solve multi-criteria decision problems in other fields [7].

Sample MCDA evaluations of historical monuments will be presented in the paper to illustrate theoretical considerations.

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REFERENCES

- [1] A. Riegl, Der moderne Denkmalkultus. Sein Wesen und seine Entstehung, Wien 1903 (Polish translation published in: *Alois Riegl, Georg Dehio i kult zabytków,* pages. 27-87, Warszawa 2002).
- [2] I. Szmelter, A New Conceptual Framework for the Preservation of the Heritage of Modern Art, Postprints of International Symposium Hoernemann Institute, In *Theory and Practice in the Conservation of Modern Art: Reflections on the Roots and the Perspectives, ARCHETYPE*, pp. 33-50, London, 2010,
- [3] R. Mason, Assessing Values in Conservation Planning: Methodological Issues and Choices. In: Marta de la Torre editor, Assessing the Values of Cultural Heritage. Research Report, pages 5–30. The Getty Conservation Institute, Los Angeles 2002
- [4] Regulation of the Minister of Culture and National Heritage of May 26, 2011, on the keeping of the monuments register and national, voivodeship and communal records of monuments and national list of monuments stolen or exported abroad illegally. Journal of Laws of the Republic of Poland Nr 113.
- [5] Dytczak M. (2010) Selected methods for multicriteria decision analysis in civil engineering, Opole Univ. of Technology, Opole, 2003 (in Polish).
- [6] Dytczak M., Ginda G. (2010) Common input data structure for multiple MADA methods application for objects evaluation in civil engineering. In: Vaianiūnas P., Zavadskas E.V. editors. The 10th International Conference "Modern Building Materials, Structures and Techniques". Selected Papers, pages 399-402, Lithuania 19-21.05.2010.
- [7] Dytczak M., Ginda G. (2011) Pair-wise comparison MCDA approach for large DMU sets (ISAHP_0151), In De Felice F., Esposito E., Petrillo A., Saaty T.L. editors. *ISAHP 2011*, Sorrento, Naples, Italy, 15-18 June 2011. Internet: http://204.202.238.22/isahp2011/dati/pdf/50_0151_Dytczak.pdf