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# THE ROLE OF GEOGRAPHIC INFORMATION IN IMMOVABLE CULTURAL HERITAGE: CASE STUDY OF THE MEDIEVAL FORTIFICATIONS OF THE HENARES RIVER BASIN IN THE PROVINCE OF GUADALAJARA (SPAIN)

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#### I. INTRODUCTION

Geographic information origins are associated with the primary birth of cognition that constituted the human race and distinguished us from the rest of primates, about 40,000 years ago (Malcolm Lewis, 1987). This knowledge provided the prehistoric man with capacity to schematize in his mind the images he visually perceived from his surrounding environment and to materialize those insights through graphic language (Malcolm Lewis, 1987) sculpted on rocks (Rennie Short, 2003: 26-29). Hence the human being's need to know and control the territory is deduced (Fuson, 1969; Scott Keltie and Howarth, 1913: 1-7; Varela Agüí, 2002: 109-110), which is inherent in his survival nature (Malcolm Lewis, 1987; Rennie Short, 2003: 208-209; Swift, 2006: 8), and it has been and nowadays it continues being common to all generations distributed worldwide during the passing of time (Ehrenberg, 2006: 8-9; Rubiella Romañach, 2014: 29-30). Its objective is based on locating natural and cultural phenomena related to a specific place and establishing their mutual connections (Box, 1999: 205; Instituto Geográfico Nacional, 2008: 192-201; Swift, 2006: 11-16). This purpose has remained invariable throughout history independently of the context considered: political, commercial, military, cadastral, administrative, religious, etcetera (Harley and Woodward, 1987: 506-509). In that framework, Geography is established as the science that studies the above objective (Instituto Geográfico Nacional, 2008: 192-201) and Cartography that one which materializes it (Harley, 1987: 1-5). Therefore, Geography and Cartography converge on same aim with a characteristic feature: location (Instituto Geográfico Nacional, 2008: 192-201).

This human need of control and belonging to a place involves that different history civilizations settle in distinct geographic sites of the Earth, identifying those places as theirs (Velasco, 2009: 65-66) and consequently, these societies' products, either material or immaterial, also have a close link to the position where they are generated (Parcero-Oubiña et al., 2013: 464).

These products constitute cultural heritage, that is, the universal inheritance we receive from our forebears and which should be preserved to continue their transmission for future generations (Carrera Hernández, 2009: 135; Parcero-Oubiña et al., 2013: 446; United Nations Educational, Scientific and Cultural Organization, 1972a). This inheritance, consisted of a group of tangible (movable and immovable) and intangible properties corresponding to different civilizations who have existed along time, is a living testimony of those societies full of significance (Bosque González et al., 2014: 7; Velasco, 2009: 65). Owing to this fact, it acquires a unique and irreplaceable value (United Nations Educational, Scientific and Cultural Organization, 1972a; United Nations Educational, Scientific and Cultural Organization, 1972b), as it allows the knowledge of the history of world cultures related to distinct epochs (Gobierno de España, 2011: 80111), and therefore it serves as an instrument for the progress and development of human community (Dirección General de Bellas Artes, 1970: 21-22; Gobierno de Castilla-La Mancha, 2011: 7). Considering all the aforementioned, and particularizing for immovable cultural heritage, the following questions arise: How the current human being, in the exercise of her/his right to know and enjoy the immovable cultural properties that she/he inherits from the past and generates in the present, comprehends the relation between these properties and the geographic location where they are placed? What is the importance she/he attributes to that spatial component in her/his obligation to preserve and transfer that legacy?

The objective of this research is to answer these questions, that is, to analyze and to discuss the role that geographic information currently has in immovable cultural heritage. This purpose has been carried out under the consideration of the following agents: Society, the official bodies in charge of the conservation of this heritage, and real practice.

Due to the diversity and extension of world immovable cultural heritage, in order to accomplish the above aim, it is necessary to select a specific type of those properties and to delimit a geographic area of the Earth where they are located, as a case study of the present work. The immovable cultural properties chosen correspond to medieval fortifications of the Henares river basin in the province of Guadalajara (Spain).

## II. ANALYSIS OF THE GEOGRAPHIC INFORMATION ROLE IN IMMOVABLE CULTURAL HERITAGE FROM THE POINT OF VIEW OF SOCIETY

Immovable cultural heritage constitutes a valuable document of history (Cooper, 2005: 36; Layna Serrano, 1994: 11), whose knowledge and benefit is destined for present and future generations (Guichen, 1998: 55). From this perspective, if society is the receptor of this precious legacy, why not consider society to be the first factor to value what is the geographic information mission in the field of the previous heritage? For this purpose, a survey has been considered as the most appropriate instrument to obtain the desired evaluation. Between the different types of survey which may be contemplated, a specific

one has been advocated to analyze the response of society as a result of the stimulus of an immovable cultural property which does not suggest anything with respect to the element of study: geographic information. Therefore, each individual has plenty liberty to express her/ his reaction, and results will allow to provide whether geographic information has a place in immovable cultural heritage and what is its significance from human viewpoint.

The suggested survey has resided in the following procedure: a person has read a sentence and right after, she/he has had to write the first idea, thought or question which has emerged from her/his mind spontaneously.

The analysis of the answers has shown how for the majority of the participants this thought is related to the geographical location of the cultural property. However, the rest of respondents have given answers with a very high range of variability.

## III. ANALYSIS OF THE GEOGRAPHIC INFORMATION ROLE IN IMMOVABLE CULTURAL HERITAGE FROM THE POINT OF VIEW OF OFFICIAL ORGANISMS RESPONSIBLE FOR ITS CONSERVATION

Cultural heritage management aims to protect these properties through conservation and sustainable enjoyment, both for present and future generations (Box, 1999: 3). In order to accomplish this purpose, first of all, it is necessary to know what we want to protect (Ad hoc Group for Inventory and Documentation within the Technical Co-operation and Consultancy Programme, 2009: 17-20; Rísquez Cuenca, 1997: 243). Consquently, the starting point lies in the identification of cultural properties (Braemer, 2008: 30). It is at this point where the figure of "inventory" appears as the instrument to materialize that primary stage (Dirección General de Bellas Artes, 1970: 38-40). In consequence, inventory arises as a crucial part of the cultural heritage management process (Whalen, 2013), as the successive tasks that form this management will be based on it (Thornes and Bold, 1998). This importance attributes the conservation need to the inventory as the latter constitutes a cultural property in and of itself (Euromed Heritage 4, 2008: 153).

Recalling the introduction of this study, cultural properties have a significant spatial component, that is, they are linked to a geographic location that characterizes their meaning and which gives them a value not only perceptible in a material context, but also subjective (Bosque González et al., 2014: 37; Parcero-Oubiña et al., 2013: 464), as an identity of a territory (Braemer, 2008: 31). This geographic nature is inherent to cultural heritage and involves the necessity of its definition as a fundamental element for its documentation, and therefore for its protection, through the accurate expression of its location (Box, 1999: 4; Parcero-Oubiña et al., 2013: 464). Thus, geographic location is a basic datum to be included in a cultural heritage inventory. In the case of immovable properties, this attribute is clearly manifest (Fernández-Freire et al., 2013: 76). This is shown by diverse standards and recommendations related to the registration of this type of heritage, such as the ones corresponding to recognised international institutions that pursue the protection of these properties. Some examples, out of the total that exist worldwide, are the works belonging to the Council of the European Union (Bold, 1993: 12-13; Promotion of Cultural Diversity in Kosovo Team, 2012: 21-23), ICOMOS (International Council on Monuments and Sites, 1996: 51-52), and the J. Paul Getty Trust (Thornes and Bold, 1998). These documents

have the distinctive feature of not being normative. Therefore, the legislative mechanism is introduced as a requirement to carry out the objective of the cultural heritage management process (Fernández-Freire et al., 2013: 76).

According to all the aforementioned, the objective of the present phase consists in analyzing the legislative documents concerning cultural heritage currently in force in order to verify if geographic information is reflected on them as data to be considered in immovable cultural heritage inventories, and in affirmative case, how that information should be defined in those inventories.

Taking into account that the information requested legally for the documentation of these inventories is different in each country and it varies along the time (Ad hoc Group for Inventory and Documentation within the Technical Co-operation and Consultancy Programme, 2009: 31-33), and considering the case study of the present research, the legislative tool in this work is circumscribed to the corresponding one indicated by the *Ministerio de Educación, Cultura y Deporte* [Ministry of Education, Culture and Sport] of the Government of Spain. According to this Ministry (Gobierno de España, 2016), the legislation currently in force about immovable cultural heritage that acquires normative status of law or decree and which expresses the registration of these properties is classified attending to the following levels: Regional, National and International.

The analysis of these legislative texts concludes that there is an approximate percent parity between the legislative documents that contemplate this type of information and those that do not. This fact, together with an inappropriate and poor description of this information performed by the former, with ambiguities in its determination in all cases, reveals the neglected role given to geographic information from the legislative instrument in the management process of immovable cultural properties.

### IV. ANALYSIS OF THE GEOGRAPHIC INFORMATION ROLE IN IMMOVABLE CULTURAL HERITAGE FROM THE POINT OF VIEW OF REAL PRACTICE

At this last stage of the proposed methodology, geographic information has been analyzed considering whether it is included in the inventories of the selected immovable cultural heritage, made by official bodies as well as by researchers in the field, and how this information is defined.

The analysis of these inventories confirms alarming results: the geographic location of all the inventoried properties is unknown, either because this information is not provided or because it is incorrectly described as the used reference system is not specified.

#### V. CONCLUSIONS

Once results of the three methodological phases are presented, the following step establishes the debate on which this study is founded: Is geographic information important in immovable cultural heritage?

From the point of view of human subconscious, the answer to this question is affirmative since the majority of survey respondents create a relation between the cultural property and the geographic location where such property is placed, as a reaction to the stimulus raised.

This connection is evident and significant in accordance with the statement corresponding to most participants, while the rest of associations diverge towards other very varied themes. This highlights and corroborates what was enunciated at the beginning of this study, that is, irrespective of the place and time in which human being lives, there is a clear inherent relationship between immovable cultural properties and geographic information. Accordingly, these properties are deeply rooted in the place where they are located, both on the objective and subjective perspective: immovable cultural heritage and geographic location are indissoluble elements.

Notwithstanding, the dichotomy appears with the official organisms in charge of the conservation of immovable cultural heritage as well as with the real practice performed. These agents do not entirely agree about that perspective since they relegate geographic information to a secondary plane and in some cases, even to oblivion. This is expressed by the current legislation of the Government of Spain on immovable cultural heritage at regional, national and international level, which includes the registration of this type of heritage. This legislation shows notable deficiencies in the consideration of geographic location as required and basic data to inventory a property, as it is reflected in the results obtained in this research. An incorrect praxis developed by official organisms that protect these properties, as well as by experts that research about them, is added to this legislative deficiency.

After analyzing the roles of geographic information in immovable cultural heritage assigned by the different agents involved in their perception, the following discussion is established: If human subconscious claims the importance of the knowledge of geographic location of immovable cultural properties, why does the conscious nature of humans ignore it?

The open topic is interesting and may be controversial in a certain way, as responsibilities could be required to legislative authorities in charge of the protection of these properties, followed by a low estimation of the independent work performed by researchers. Notwithstanding, new questions arise: If geographic information experts (geographers, cartographers, land surveyors, etc.) become frightened of the results of this analysis and we criticize them rigorously, is not the moment to examine our profession retrospectively? Have we adequately transmitted the relevance of geographic information in immovable cultural heritage management? Have we defended our competencies in that respect in the national and international community? The responses to all these enquiries are crucial: If something is being done incorrectly is because the corresponding responsible are not controlling and explaining the appropriate way to proceed. However, the main responsibility does not devolve upon official entities or researchers but upon professional collectivity of geographic information (associations, institutes, regulatory bodies, etc.), since we are not protecting our experience and knowledge, both nationally and internationally, and therefore, we are not making them public.

Obviously, our isolated promotional action is not sufficient and should be complemented with legislation that instructs the effective achievement of protection of this type of heritage, through the consideration of geographic information at *de facto* and form level, as fundamental data to incorporate in the inventory exercise of these properties. Nevertheless, our intervention is critical and primary for that purpose.