CULTURAL HERITAGE MANAGEMENT AND HERITAGE (IMPACT) ASSESSMENTS

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Cultural heritage management is going through a process of change, where the focus is no longer the management of monuments, groups of buildings or sites, but the cultural significance they convey, such as the values and attributes, either tangible or intangible, which motivated these assets to be considered outstanding and designated as cultural heritage. Cultural heritage managers need to ensure that the management practices and methods they follow remain adequate and when they don’t, to revise them in order to succeed in protecting the cultural heritage assets under their safeguard. This article aims to provide a brief background and state-of-the-art on heritage (impact) assessments. Further, it introduces a method to assist heritage (impact) assessments, which can either be applied to identify or monitor evolution in time and/or help determining the impact of various agents of change, such as climate, natural catastrophes or development, on the cultural significance conveyed on cultural heritage assets. An illustration on the progress and outcomes of its application on World Heritage properties located in Guimarães (Portugal), Willemstad (Curacao), Galle (Sri Lanka) and Zanzibar (Tanzania) will be presented and sustain the discussion on the contribution of such method to cultural heritage management, while exploring its strengths, weaknesses, opportunities and threats (SWOT analysis). Last, conclusions are presented, as well as, recommendations for further research. The method, application and validation presented in this article are very useful to facility managers whose assets happen to be cultural heritage, policy makers who regulate cultural heritage protection and planning processes, and technical experts performing heritage (impact) assessments. Besides raising awareness for heritage (impact) assessments, this method also expects to contribute to the increase of cultural heritage management practices that enhance cultural heritage and in turn enable the contribution of cultural heritage to the sustainable development of present and future generations.

Keywords: cultural heritage management, cultural significance, heritage impact assessment, sustainable development

INTRODUCTION

Cultural heritage management is going through a process of change, where the focus is no longer the management of the integrity of the cultural heritage assets, but the cultural significance they convey, such as the values and attributes, either tangible or intangible, which motivated these same assets to be considered outstanding and designated as cultural heritage. Cultural heritage managers need to ensure that the management practices and methods they follow remain adequate and when they don’t, to revise them in order to succeed in protecting the cultural heritage assets under their safeguard. The Burra Charter (ICOMOS Australia 1999) came to fill the gap left by the Charter of Venice (ICOM et al 1964), recognizing the “conservation as a dynamic process of change management” that should be conducted through a value-based approach; in which the “Statement of Significance” becomes the key document of the entire process. Even if national-oriented, the Burra Charter had a strong impact in the international community involved with the field of cultural heritage management. This same Statement of Significance became mandatory for States Parties to include in new nominations of properties to the UNESCO World Heritage List (UNESCO 2005). Nowadays, it is best known as the Statement of Outstanding Universal Value (UNESCO 2008).

The value-based management process described by Burra Charter entails three stages: significance assessment, policy-making and management (ICOMOS Australia 1999). Further revisions introduced a fourth stage for assessing vulnerability into the process in order to explicitly identify threats to cultural significance (Kerr 2000; Clark 1999, 2001), or for purposely change cultural heritage, through means of implementing development projects (Pereira Roders & Hudson 2011). This value-based management process has been extensively applied in countries such as Australia and United Kingdom, either by changing the legislation or drafting new conservation guidelines (English Heritage 2008). Other research has been found focused in developing, improving and/or verifying this process, among which are the important reports produced at The Getty Conservation Institute (Avrami 2000; Mason 2002; Torre 2003).

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ii. The Australia ICOMOS charter for the conservation of places of cultural significance was adopted by Australia ICOMOS in 1974 at Burra, Australia. The charter has since been revised and updated, and the sole version now in force was approved in 1999 (Torre, 2003).
The next challenge proposed to facility managers involved in cultural heritage management regards measuring the impact that specific development proposals may have on the significance of cultural heritage assets, facility managers are responsible to manage and protect for present and future generations. Even when included in Environmental Impact Assessments (EIA), cultural significance remained limited and presented lacks in relation to the attributes and values conveying cultural significance. Such shortage is dangerous and risk jeopardizing the cultural heritage assets (Teller and Bond 2002; Bond et al. 2004; Dupagne et al. 2004, Jones and Slinn 2008). Nonetheless, the scenery is slowly changing and tools such as the SUIT method started being created and implemented, aiming to create guidelines for managing change within historic areas including cultural heritage assets, and “contribute to their long-term sustainability” (Dupagne et al. 2004).

This paper aims to provide the background and state-of-the-art of heritage impact assessments, as well as, to propose and discuss a new method to assess the significance of cultural heritage assets. Initially developed by Pereira Roders (2007) as part of a design process model to guide designers involved in rehabilitation interventions, this method kept on evolving while being implemented by a group of MSc. students graduating in Architecture under the Graduate Studio “Cultural heritage and Sustainability: World Heritage cities as case study”, at the Department of the Built Environment, Eindhoven University of Technology, the Netherlands. Briefly, this group of students cooperates directly with the local governments and/or institutions involved with the management of the World Heritage assets taken as case study. They work during the whole academic year on their thesis, and for the data collection they undertake a period of three months abroad for fieldwork. Moreover, their results are used to validate the results of a broader and international-oriented research program aiming to survey the relationship between heritage (impact) assessments and the sustainable development of urban settlements that include cultural heritage assets listed as World Heritage within their urban areas.

This research has started in 2009 and aims to be completed by 2014, with the target to develop, test and verify a web-based tool which can assist local governments performing heritage (impact) assessments on World Heritage assets located in urban contexts. Eindhoven University of Technology is cooperating with UNESCO World Heritage Centre, the Organization of World Heritage Cities, various local governments and Universities worldwide who expressed interested to join and contribute to this challenging research program.

CULTURAL SIGNIFICANCE

The concept of cultural significance is used by the conservation community when addressing the range of values ascribed to a cultural heritage asset and justifying its designated status (Avrami et al 2000). Furthermore, cultural significance can be present in the place itself, its fabric and setting, as well as, on its use, associations, meanings, records, related places and objects (Australia ICOMOS 1999). Cultural values are subjective and extrinsic (Hodder 2000); though, they would change over time but not in time. Different groups (of generations, professionals, etc) and even individuals may simply attach different weight to the cultural values, and different levels of relevance to the same cultural heritage asset, but still, the cultural values remain the same (Pereira Roders & Hudson 2011).

Since Riegl distinction between memorial and present-day values (Riegl 1903) several typologies of cultural values have followed (Mason 2002; Riganti and Nijkamp 2005; COE 1976), including in national and international heritage conservation guidelines (English Heritage 2008; EC 2005 in Battaini-Dragoni, 2005). In 2007, Pereira Roders has defined eight primary values: social, economic, political, historic, aesthetical, scientific, age and ecological values; and varied secondary values. This typology of primary values was proposed to complement the four cultural values – historic, aesthetical/artistic, scientific and social values – recognized at UNESCO’s World Heritage Convention (1972, 2008); with the three pillars of sustainable development – ecological, social and economic values, the political values (Riganti and Nijkamp 2005) and the age values (Riegl 1903) as the primary values conveyed in cultural heritage assets.

The aim was to verify Mason’s (2002) assumptions on; first, the regency of traditional values e.g. historic for assessing cultural significance; second, the existence of a broader nature of values conveyed in cultural heritage assets, and third, the contribution of a typology of values to mitigate manifoldness, by providing an effective and neutral guide to be used by those involved with cultural heritage assets. Forty international documents were surveyed, such as the recommendations prepared by UNESCO, ICOMOS and Council of Europe to evidence that the variety of values being used to describe the significance of cultural heritage assets was much broader than expected, when arguing why these assets should be protected, as well as, the rankings of these values in referenced frequency.
CULTURAL VALUES

For a better understanding, follows the definition of the eight primary values. The social value of heritage assets is often expressed by concepts such as "spirit of the place" or genius loci (Mason 2002). They associate the place with feelings of identity, distinctiveness, social interaction and coherence (English Heritage 2008), enabling the establishment of spiritual links between people and buildings, objects and places. According to Mason (2002), the economic values are distinct from the other primary values as their interpretation is fundamentally different. Embodied within economic theories, the economic value is understood through the logic of market and profit, in which the potential function and the income obtained from its use is what is valued.

The values ascribed to cultural heritage assets can also be part or symbolize power struggles and exertions that determine the fate of cultural heritage (Mason 2002); on the same way the nomination might have resulted from a political decision. However, those facts cannot be assumed as attributes of political value, as they might be not related or symbol of power, pride, distinctiveness and ideological approaches. The historic values take present generations to the past, being the roots of the very notion of heritage assets (Mason 2002). Beyond the historical feature, which in fact entails the age value (Pereira Roders 2007), the historic values could be accruing from "its association with people or events, from its rarity, from its technological qualities, or from its archival/documentary potential" (Mason 2002). Therefore the spiritual links established diverge from the ones created by social values, by the fact that they must be connected with the past, and are limited by the survival of the physical fabric, meaning the preservation of its authenticity (English Heritage 2008).

The aesthetical values, as the historic, are traditionally used to labelling objects and places as heritage (Mason 2002). However, they are probably the most subjective and individualistic of the sociocultural values (Mason 2002), traditionally resulting from the way that people draw sensory and intellectual stimulation from a place (English Heritage 2008). There are some aspects of aesthetical values that can be objectively measured, not regarding to beauty or sublime, but regarding to creativity, conceptualization and preservation of the related attributes (Pereira Roders 2007).

According to the Burra Charter (1999), the scientific values of a place depends "on the importance of the data involved, its rarity, quality or representativeness, and on the degree to which the place may contribute" to future knowledge. Indeed, the scientific values are focused on the design process and conceptualization of the cultural heritage asset (Pereira Roders 2007), as a masterpiece of technology and engineering.

Traditionally connected to historic values, the age values are distinguished from for their relation to the life cycle of the cultural heritage assets, its survival and evolution throughout a period of time (Riegl in Pereira Roders 2007). The maturation and the several changes introduced over the time, building up evidences from the passage of varied generations, constitutes the age value of heritage assets (Pereira Roders 2007).

Firstly mentioned on the Declaration of Amsterdam (COE 1976), the ecological values refers to the relation that heritage assets play with the natural environment. Moreover, the ecological values regards to the continuity of the asset, the capacity to regenerate and survive in a sustainable conscious manner (Pereira Roders 2007).
### Table 1: The cultural values (ICOMOS Australia, 1999; Manson, 2002; Pereira Roders, 2007; English Heritage, 2008)

<table>
<thead>
<tr>
<th>PRIMARY VALUES</th>
<th>SECONDARY VALUES</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Spiritual</td>
<td>beliefs, myths, religions (organized or not), legends, stories, testimonial of past generations;</td>
</tr>
<tr>
<td></td>
<td>Emotional, individual</td>
<td>memory and personal life experiences;</td>
</tr>
<tr>
<td></td>
<td>Emotional, collective</td>
<td>notions related with cultural identity, motivation and pride, sense of “place attachment” and communal value.</td>
</tr>
<tr>
<td></td>
<td>Allegorical</td>
<td>objects/places representative of some social hierarchy/status;</td>
</tr>
<tr>
<td>Economic</td>
<td>Use</td>
<td>the function and utility of the asset, original or attributed;</td>
</tr>
<tr>
<td></td>
<td>Non-use</td>
<td>the asset’s expired function, which has its value on the past, and should be remained by its (material) existence, option (to make some use of it or not) and bequest value (for future generations);</td>
</tr>
<tr>
<td></td>
<td>Entertainment</td>
<td>the role that might be have for contemporaneous market, mainly for tourism industry;</td>
</tr>
<tr>
<td></td>
<td>Allegorical</td>
<td>oriented to publicizing financially property;</td>
</tr>
<tr>
<td>Political</td>
<td>Educational</td>
<td>the education role that heritage assets may play, using it for political targets (e.g. birth-nations myths, glorification of political leaders, etc.);</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>made part of strategies and policies (past or present);</td>
</tr>
<tr>
<td></td>
<td>Entertainment</td>
<td>part of strategies for dissemination of cultural awareness, explored for political targets;</td>
</tr>
<tr>
<td></td>
<td>Symbolic</td>
<td>emblematic, power, authority and prosperous perceptions stem from the heritage asset;</td>
</tr>
<tr>
<td>Historic</td>
<td>Educational</td>
<td>heritage asset as a potential to gain knowledge about the past in the future;</td>
</tr>
<tr>
<td></td>
<td>Historic-artistic</td>
<td>quality of an object to be part of a few or unique testimonial of historic stylistic or artistic movements, which are now part of the history;</td>
</tr>
<tr>
<td></td>
<td>Historic-conceptual</td>
<td>quality of an object to be part of a few or unique testimonial that retains conceptual signs (architectural, urban planning, etc.), which are now part of history;</td>
</tr>
<tr>
<td></td>
<td>Symbolic</td>
<td>fact that the object has been part/related with an important event in the past;</td>
</tr>
<tr>
<td></td>
<td>Archaeological</td>
<td>connected with Ancient civilizations;</td>
</tr>
<tr>
<td>Aesthetic</td>
<td>Artistic</td>
<td>original product of creativity and imagination;</td>
</tr>
<tr>
<td></td>
<td>Notable</td>
<td>product of a creator, holding his signature;</td>
</tr>
<tr>
<td></td>
<td>Conceptual</td>
<td>integral materialization of conceptual intentions (imply a conceptual background);</td>
</tr>
<tr>
<td></td>
<td>Evidential</td>
<td>authentic exemplar of a decade, part of the History of Art or Architecture;</td>
</tr>
<tr>
<td>Scientific</td>
<td>Workmanship</td>
<td>original result of human labour, craftsmanship;</td>
</tr>
<tr>
<td></td>
<td>Technological</td>
<td>skillfulness on techniques and materials, representing an outstanding quality of work;</td>
</tr>
<tr>
<td></td>
<td>Conceptual</td>
<td>integral materialization of conceptual intentions (imply a conceptual background);</td>
</tr>
<tr>
<td>Age</td>
<td>Workmanship</td>
<td>craftsmanship value oriented towards the production period;</td>
</tr>
<tr>
<td></td>
<td>Maturity</td>
<td>piece of memory, reflecting the passage/lives of past generations;</td>
</tr>
<tr>
<td></td>
<td>Existential</td>
<td>marks of the time passage (patine) presents on the forms, components and materials;</td>
</tr>
<tr>
<td>Ecological</td>
<td>Spiritual</td>
<td>harmony between the building and its environment (natural and artificial);</td>
</tr>
<tr>
<td></td>
<td>Essential</td>
<td>identification of ecological ideologies on its design and construction;</td>
</tr>
<tr>
<td></td>
<td>Existential</td>
<td>manufactured resources which can either be reused, reprocessed or recycled;</td>
</tr>
</tbody>
</table>

### METHOD TO ASSIST HERITAGE (IMPACT) ASSESSMENTS

The method described in this article progresses from the explained surveys on the international documents to identify the values reflected in the arguments to sustain the protection and conservation of cultural heritage assets, as well as, on the design process for rehabilitation projects, where through the comparison between the results from the pre-design and design stages, one could systematically determine the impact of such project on the significance of such assets (Pereira Roders, 2007).
So far, this assessment has had three distinctive stages of evolution, towards broadening on the sources of data, objectivity and role of the surveyor on the heritage impact assessment process. In general terms, all three stages of evolution included the highlighting and categorizing of arguments used to justify the significance of the cultural heritage assets or their protection and conservation. The list of cultural values and their description (table 1) was prepared to guide the identification of the eight primary values (Tarrafa Silva & Pereira Roders 2010).

**Stage 1: Relation between documents**
The data sources from stage 1 were mainly documentary. Meaning that the eight primary values have been identified by following a process of content analysis and subsequent coding on the most relevant documentation produced during the nomination and protection stages of the OUV-based management process (Pereira Roders and Van Oers 2010), such as the decision reports resulting from the annual UNESCO Sessions of the World Heritage Committee, the Nomination files, the Advisory Body evaluation reports, the periodic and reactive monitoring reports, as well as, the national and local policies.

A comparison was made with the results achieved when surveying the selection criteria from the results achieved in each one of the documents in order to understand how far the documents would reflect an understanding of the values reflected on the selection criteria chosen to justify the nomination of these particular assets. Concerning data analysis, two different approaches were undertaken – direct and indirect – distinguished by method, but making use of the same primary values.

The method used for the direct approach consisted in establishing a correlation between the primary values and the WH criteria proposed by SP, recommended by ICOMOS as Advisory body, or inscribed by WH Committee for the three Portuguese WH cities. As the cultural values were previously identified by Pereira Roders & Oers (2010b) for each selection criterion (UNESCO 2005), this approach merely concerned the direct identification of the cultural values identified for each city.

![Figure 1: Indirect approach (Tarrafa da Silva and Pereira Roders, 2010)](image)

The method used for the indirect approach revealed more complexity, once the identification of cultural values had to be done through the identification of the variables (primary values) in a wide random of documentation. Following the process of coding, all similar passages of text extracted from the documents have been marked and organized per primary values. Besides allowing “further comparison and analysis” (Gibbs and Taylor, 2005), this method also allowed to identify the broadness of primary values being mentioned and their rankings. Thus, in methodological terms the primary values were assumed as the “themes”, the secondary values as the “sub-themes”, and the quotations as the “indicators”.

**Stage 2: Relation between documents and stakeholders**
The data sources for stage 2 were mainly documentary and oral. The purpose was to verify the relation between what was being written (policy strategy), to the real practices and experiences of the involved stakeholders (policy implementation). Also, to cope with the difficulties on gaining access to all the relevant documentation, the surveyors would be integrated in the local conservation and/or planning team for a period of three months.

A comparison would also be made between the direct and indirect approach, as well as within the indirect approach. For a better illustration and faster perception of the results a specific colour was attributed to the primary values (Speckens et al. 2011). Respectively, social is orange, economic is purple, political is yellow, historic is pink, aesthetical is blue, scientific is red, age is dark green and ecological is light green. Moreover, such coding method has also allowed the identification of the attributes which would evidence the identified values. Figure 2 illustrates the resulting charts for two stakeholder interviews, in Willemstad, Curacao.
Stage 3: Relation between documents, stakeholders and the asset
The data sources for this stage were mostly documentary and physical. The surveyors have undertaken a similar research than the previous ones. Yet, there are few relevant changes which disable the direct comparison of results; but enable a more throughout understanding on the relations between the attributes, the values they convey and their nature – tangible and intangible.

Therefore, instead of counting how often the values would be mentioned, the survey has focused on understanding which exactly the “official” attributes identified were and check if those would or not be mentioned in the following documents. Those values would also reflect the values, and consequently, similar charters to the previous stages could be created. One of the advantages from this evolution, when comparing documents, is the immediate distinction between three sets of attributes: the “official” attributes in common, the attributes missing and the other attributes.

Such level of detail allows surveyors to get a general overview of the attributes and values conveyed in the cultural heritage asset. Though, it also enables further surveys to determine the authenticity and integrity of each one of the “official” attributes, based on mapping their location and evolution in time. Figure 3 illustrates the resulting charts from the comparison between the Advisory Body Evaluation report (ICOMOS 1988) and Development plan for Galle urban development area 2008-2025, Sri Lanka (UDA 2008).

RESULTS AND DISCUSSION
The case-studies and its results have been used to draft a preliminary SWOT analysis, allowing future improvements to be implemented on following stages. The advantages of these method lay on the fact that the primary values are perfectly defined
and described (without losing its dynamic nature, as they can always be improved and added). That enables different users, even without familiarized with the context (outsiders) to be able to execute cultural significance assessments. Moreover, this list can increase the awareness of the site managers regarding to the variety of cultural values that can be conveyed by the cultural heritage assets they are entitled to manage, determine the adequacy of their current strategies and help them define further strategies towards a better protection. Also, the coding process would assist the cultural managers into synthesizing information and make it countable, opening possibilities for comparative analysis (Gibbs and Taylor 2005) between different documents or assets.

Nonetheless, several weaknesses were also identified, mainly regarding to the permanence of the subjectivity, which limits yet, for instance, the comparison between the results obtained by different surveyors, and consequently its validation. Therefore the inexistence of an original terminology can result into the misunderstanding of the results.

As opportunities, this method has been proven so far to work as a key tool to support facility management on their tasks related to monitoring and assessing the impact of potential changes on the cultural heritage assets under their safeguard. By assisting them into the cultural significance assessment practices, by resuming and converting extensive data into more useful, reliable and adequate information, this method will help them to faster opt for evidenced-based decision making and improve the conservation and urban management plans accordingly, such as the EIAs.

Simultaneously, the tendentious obsession for quantitative data, mostly economic-oriented, by facility managers and the consequent lack of understanding for the need to merge both quantitative and qualitative data, as well as, considering a broader nature of values and their indicators might weaken both method and cultural significance of the cultural heritage assets, as the practice to assess the impact of strategies and decisions on these assets is still underdeveloped when compared with other assessments. Also, cultural significance will always remain naturally subjective (Hodder 2000) and interpretative, as regards no more than what assets society values as significant to be protected for future generations. It will keep on varying in time and per individual.

CONCLUSIONS AND RECOMMENDATIONS

As explained along the article, this method to assist heritage (impact) assessments has had three distinctive stages of evolution, towards broadening on the sources of data, objectivity and role of the surveyor on the heritage impact assessment process. Such evolution has been proven useful and beneficial to the outcome of the surveys.

The method, application and validation presented in this article can be very useful to facility managers dedicated to cultural heritage management, policy makers who regulate cultural heritage protection and planning processes, and technical experts performing heritage (impact) assessments. Besides raising awareness for heritage (impact) assessments, this method also expects to contribute to the increase of cultural heritage management practices that enhance cultural heritage and in turn enable the contribution of cultural heritage assets to the sustainable development of present and future generations.

Still, there is still much to improve. One recommendation would be to distinguish referenced from the assumed values, as well as, to identify values and attributes apart. This will result into a better understanding on the relation between attributes and values; e.g. the relation between attributes conveying varied values, as well as, values of similar natures conveyed in varied attributes. Moreover, by dethatching the attributes from the values; the attributes may raise on objectivity as no other than referenced attributes shall be considered in the survey. Thus, that would mitigate the bias of reaching different results by surveyors performing the same method.

REFERENCES


