

Original article

Indicators and ratings for the compatibility assessment of conservation actions

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Abstract

The authors propose a way of tackling the difficulty to deal with compatibility, namely on what concerns the aspects linked with the multiplicity of components involved and the diversity of criteria that can be called to integrate an assessment procedure. The paper aims at providing a management instrument having the compatibility model as its central operative tool. The guiding concepts of this instrument are supported in criteria of technical, operational, environmental, social and cultural types.

The complex notion of compatibility is here decomposed into simpler and workable parameters called “compatibility indicators”, similarly to what other disciplines call as “performance indicators” or “environmental indicators” [European Environment Agency, Environmental benchmarking – from concept to practice, Environmental Issue report no. 20, 2001 Luxembourg, Expert group on Urban Environment, Towards a local sustainable profile: European common indicators, European Commission 2000, HQE2R – “INDI (INDicator Impact) model” – EU-project HQE2R contract EVK4-CT-2000-00025]. In order to make it possible to integrate the different parameters in the overall assessment of compatibility and to give each parameter the role that it effectively has in the final (in)compatibility, the paper proposes a system of translating the diverse quantifying units or descriptive terms into a uniform system, thus allowing the integration of components that are intrinsically inhomogeneous in nature. The translation tool is called the “rating system” and it consists of qualifying the position of a given action in a rational grading between 0 and 10, for each Compatibility Indicator, according to its potential as inducer of negative (harmful) effects for the conservation objectives.

With this rating system properly defined, it is possible to integrate the identified indicators into a quantifiable unified assessment designated as the “incompatibility degree”. Specific tables containing indicators and ratings are presented for illustrating the basic assumption of the proposed methodology.

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1. Introduction

Compatibility is certainly one of the most frequently used words in the conservation practice. Used with its current significance, “in harmony with...”, the term is applicable in an endless number of possible situations, but it has already acquired a kind of status that turns it into a key-concept in

many interpretations of some more or less complex concrete situations. In this assumption, it can be placed in parallel with other traditional concepts, such as, minimum intervention, reversibility, harmfulness, etc.

The term has been used in restrictive and in broad senses, for qualifying a product or process as well as for supporting or qualifying policies and strategies outside and inside the conservation field. In this sense, it has become a “big word”, a flag that may act with an important “leverage effect” in the process of “proposing—convincing—selling”.

By deepening the current significance “in harmony with...” the term may well qualify the objective of selecting a stone

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consolidant or a repair mortar, or of characterising a process of implementing a conservation intervention as a whole.

By accepting that the term can be applied to real situations, where things are not “black and white”, we have to admit that there is a need to find a way of scaling between the extremes of fully compatible/fully incompatible and to be able to use it in intermediate situations. Here and there we may find expressions of the type “...more compatible than...” but it is not easy to find concrete situations where such expressions are objectively justified and duly supported in scientific and technical data.

In the domain of conservation of archaeological sites, this topic is particularly relevant and very likely nobody questions the importance of the concept in this particular field. However, most archaeological sites suffer from incorrect intervention actions, poor selection of materials, wrong intervention practices and wrong policy decisions, or all of them together, and many items of cultural significance and historical documents have been definitively lost due to inadequate interventions.

On the other hand, there is an increasing awareness on the need to follow high quality standards in conservation actions and the importance of the analytical management activities and of their contribution to more effective planning is recognised. The difficulty that characterises management of the conservation process stays in the identification of the specific motivations that influence the decision-making on the strategy to follow and on the actions to be taken. The methodology underlying the present work aims at providing a management instrument having the compatibility model as its central operative tool. The guiding concepts of this instrument are supported on criteria of technical, operational, environmental, social and cultural types.

Principles of conservation of cultural heritage, in which compatibility can be included, can provide a framework of options that make an action acceptable or unacceptable, but they cannot be considered as having a universal value. In fact, the validity and boundaries of those principles may vary with the contexts in which one will have to operate, being them of historical and cultural or of social and environmental nature.

Incompatible (or low compatible) actions, interventions or policies are not uncommon; on the contrary, it is a fact of the daily experience that such interventions are frequently found worldwide. To expose an excavated site is a risky decision, but to leave it unprotected is a highly incompatible policy. To leave an archaeological excavation slope vertical, to let a saturated wall evaporating freely or to apply a strong cement mortar for repairing a weak Roman plaster are all highly incompatible actions. For their extreme character, these statements tend to be accepted without discussion, but it is an interesting challenge to find on what arguments they can be supported beyond any doubt.

Given the quite broad meaning usually ascribed to compatibility, it is important to delimit what qualifications can reasonably be included inside the concept. In the framework of conservation interventions, the concept compatibility/incompatibility can be translated by terms such as induced risks, harmfulness, negative side effects, etc. In this assumption,

the concept cannot ever be used “per se” as a justification for any intervention. In fact, the primary reason should always stay in the capacity to solve the “problem” and this is appropriately described with the concept of effectiveness. In a logic consequence of this statement, we shall say that compatibility/incompatibility assessment comes as a step downstream to effectiveness and it shall be introduced in the process only when the effectiveness of the given action can be guaranteed within acceptable limits. The present approach assumes that this sequence is always respected.

In this paper the authors propose a way of tackling the difficulty to deal with compatibility, namely on what concerns the aspects linked with the multiplicity of parameters involved and the diversity of criteria that can be called to integrate the necessary evaluations. The route towards a compatibility approach in heritage conservation is long and passes through the integration of new attitudes and by the exploration of methods and tools that might be instrumental to carry out compatibility assessments. It will require the support of appropriate methodologies (strategies) and operative tools (data bases, assessment procedures, integrating models, etc.) in order that this compatibility approach might be introduced as a normal component of the conservation process in the assessment of the incompatibility potential, or risks, as part of an integrated conservation planning.

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2. From compatibility to incompatibility

In principle, the concept of compatibility can be used in several dimensions, namely to qualify a certain product or material (e.g. a given plaster for a masonry wall), a certain product applied in a specific way (e.g. an acrylic resin applied by brush to consolidate a piece of stone), an action with several components (e.g. the excavation and re-exposure of a stretch of wall) or to a complete conservation intervention (e.g. the definition and implementation of actions in the remnants of a Roman temple).

In order to be useful within this wide amplitude, the concept has to be very versatile in order to keep its applicability. Eventually, this wide amplitude precludes that a precise definition is given to the concept.

It is not easy to find a simple and generic definition of the term **compatibility** and the consulted literature reflects this difficulty. Quoting from documents published elsewhere [2], “in spite of the fact that each one might have an idea of what are “proper and compatible” materials, it is felt that there is a need for a better definition of these concepts when historical structures are concerned, although bearing in mind that “absolute compatibility” is more a wishful thinking than an objective and feasible reality”.

Applying the concept to the overall performance of any given intervention or treatment, the EU-POINTING project

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