

## **EVALUATION METHODOLOGIES FOR A LANDSCAPE SUSTAINABLE PLANNING**

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### **Abstract**

*It is common knowledge nowadays how difficult it is to provide the evaluation of projects with objectiveness in the specific branch of the landscape. Landscape in fact is a complex category founded on a multitude of different elements which all contribute to its definition: strictly scientific factors pertaining to a vast range of established disciplines, and so-called cultural factors combining the historical, cultural and aesthetic aspects which contribute to knowledge of territory. The study of a strict methodology of research into the landscape able to offer criteria as much as possible objective and elements of evaluation of the qualities of the projects is an innovative instrument that contributes to support the application of the European Convention. For that reason, it can become an innovative model of fulfilment and a directive to extend into the international panorama within the politics of protection, management and planning of the landscape.*

Keywords: landscape, sustainability, evaluation methodology

### **1. INTRODUCTION**

Since more than fifteen years from Rio de Janeiro Conference on Environment and Development (1992) and more than ten years from the European Landscape Convention (2000), it is already possible to take stock among the joining countries of the impact and the implications on the provisions and the territorial policies. It is nevertheless difficult to measure the theoretical and practical progresses of the single disciplines taking part in the landscape planning, in primis architecture. It is common knowledge that since the first years of the past decade also in Italy were introduced courses concerning disciplinary area of Landscape Architecture. Nevertheless, the practical implications on the professions have been rare, as the introduction in the early years of 2000 of the section of landscape architects in the professional register of architects, or else significant contributions in handbooks and in the referring publications in general.

Recent researches of MiBAC (Ministry of Cultural Heritage and Activities) carried out after the realization of the first and second edition of the Landscape Award of the European Council, underline on the one hand a growing sensitization towards the promotion of the cultural legacy and the carefulness of the local identities. On the other the actual scarceness of planning models and the nearly total lack of the introduction of techniques and innovative materials able to interpret on different scales and in different contexts (from the urban to the rural or natural) the principles inherent in the COE convention.

Landscape sensibility has historically been widespread and deep-rooted in Italy, even if strictly linked to conservation and law bonds rather than to projects and transformations. In the specific terms of the architectural culture is still often remarkable the difficulty of overcoming the rivalry between building and environment, between architecture and landscape, between form and background.

There is therefore a fertile ground for a project research on the opportunity that the change of attention of the public opinion, carefully managed by the international bodies through conventions and protocols on the subjects of environment and landscape, has offered to the architectural culture, and that requires an investment of resources in the identification through the scientific instrument of methodologies and project sustainable models aimed at the promotion of the qualities of the architectural and landscape heritage.

The application of a rigorous methodology to carry out a research into the landscape able to give elements of evaluation of the qualities of the projects is an innovative instrument to identify strategic project models, which contribute towards the practice application of the European Convention and the shared objectives of sustainability.

### **2. MATERIAL AND METHODS**

The landscape is a product of the superimposition of human signs on the land, in a process of ongoing transformation, through specific cultural behavioural models which require, for the purposes of analysis and assessment, construction of appropriate methods for reading and interpretation.

This concept is very clear in Europe, and particularly in Italy, where a series of different civilisations have progressively adapted the land to suit their changing needs, along with major climatic and historical changes, producing a rich stratification of signs representing what we now call our heritage. Our peninsula, situated in the centre of the Mediterranean, contains more UNESCO world heritage sites than any other country, clearly revealing that cultural reflection in Italy has given rise to terms of study and debates which are often in contrast when it comes to protection and enhancement of the landscape.

The ancient legislative tradition in the field of landscape in the Italian state began with the Constitution, stating

that “the Republic also protects the landscape and the Nation’s historic and artistic heritage” (art. 9.2). Though awareness of the importance of landscape has broad historic roots in the country, for a long time it remained linked to the idea of conservation and restriction rather than planning and transformation. Only after the Second World War, partly as a reaction to rapid uncontrolled growth generated by a frantic building boom, did Italians come to be aware that preservation of their monuments was closely bound up with preservation of the environment surrounding them, and that new legislation was required in this area. A series of provisions were therefore passed in subsequent years providing guidance in this direction, from the 1985 Galasso Law to the creation of the Environment Ministry in 1986 and the European Landscape Convention (Florence, October 20 2000), implemented in Italian legislation through the Cultural Heritage and Landscape Code.

The European Convention defined landscape as “a given part of the land, as perceived by populations, whose character is the product of the action of natural and/or human factors and the way they relate to one another” and extends its application to all the Parties’ territory, including both natural rural spaces and urban and suburban areas, with regard to landscapes considered exceptional, landscapes of everyday life and degraded landscapes.

It starts therefore an innovative position which went beyond the concept promoted thus far of protection of individual heritage locations granted exceptional status and concerned itself with the entire dimension of landscape. Another important element to be underlined is that the provisions were concerned not only with protection and management, but with creation of new landscapes as well.

The Convention is therefore a skeleton law subscribed by many countries (At the moment it has been signed and ratified by 37 countries and signed but not ratified yet by 3 countries [1]), which provides a sufficiently ample framework to permit application of its directives in geographically and culturally diversified Europe. In the past decade numerous signatory nations have implemented a series of measures promoting adoption of the guidelines and goals identified in it in their own legislation. And, as indicated in the specific measures contained in the document, a series of studies have been undertaken with the aim of identifying, analysing and assessing landscapes in each country, leading to construction of identifying documents (maps, atlases, etc.), creation of specialised organisations for monitoring the dynamics of transformation (agencies, observatories, etc.), and experimentation with methodologies for interpretation and assessment of the quality of landscape in a given context.

These experiences, often coordinated by groups of experts appointed from outside the organisations officially entrusted with implementation of the Convention, are necessarily tied up with the historical/cultural heritage and legislative tradition of each country. To approaches prevailing of

environmental and scientific nature, as for instance the German, directly referred to the Federal Law of environmental protection, many other studies concentrate more on the historical, cultural aesthetic aspects referring to the territory; among these some of the most advanced methodologies were forwarded in Spain with the Landscape Catalogues (Nogué and Sala, 2006 [2]), in Great Britain with the LCA Landscape Character Assessment and HLCA Historic Landscape Character Assessment (Swanwick and Land Use Consultants, 2002 [3]; Fairclough and Macinnes, 2003 [4]), in France with the *Atlas de Paysages* (Luginbühl, 1994 [5]; Brunet-Vinck, 2004 [6]), in Switzerland with *Paysage 2020* (Office federal de l’environnement, des forêts et du paysage OFEFP, 2003 [7]). In line with the directives of the Convention and of the principal international treaties regarding landscape sustainability, these instruments are based on an integrated vision of landscape and contribute to creation of a qualitative method based on a series of values or types of values, often attributed by the people in charge and by the population as a whole.

In Italy too were noticed some experimentations on the methods of lecture and assessment of landscapes, among which the recent elaborations of evaluation procedures for the realization of the first and second edition of the Landscape Award of the European Council started up by the Ministry of Cultural Heritage and Activities, body appointed at the implementation of the Convention. These procedures, based on the Award Regulations (CM/Res Resolution (2008)3) with the aim of “acknowledging concrete, exemplary initiatives for the achievement of landscape quality goals in the territory of the Parties to the Convention”, represent an important contribution made by Italy in the area of experimentation with analytic and assessment methods.

### **3. RESULTS AND DISCUSSIONS**

For while environmental studies are supported by a vast range of established and, so to speak, objective scientific disciplines, landscape studies are still often associated with perceptive and aesthetic factors anchored in the sphere of subjectivity. The subjective dimension is also introduced by the very definition of landscape in the European Convention: “a given part of the territory”, and therefore an objective physical reality, “as perceived by the population”, that is, considered through human experience of it.

The study of a specific methodology for the field of landscape necessarily requires expansion and reworking of the frameworks, in conceptual rather than quantitative terms. The parameters in fact must be capable of analysing not only scientific data but also different factors which are not always easily quantifiable and measurable and must be applied to a very wide and heterogeneous survey.

For the above reason the Landscape European Convention, being a shared document which has already been signed by many countries, is a valid support for the redaction of a possible evaluation methodology of the

landscapes in accordance with common rules which may be shared within the international scientific community. As experimentally used in the assessment procedures of the Council of Europe's Landscape Award, the basic criteria stated by the Convention, along with identification of the key quantitative and qualitative elements identifying an intervention, offer valid tools for assessing the quality of landscape projects and the related actions, both material and immaterial.

In particular the guidelines set forth in the document are synthesized in four fundamental criteria:

1. Sustainability: actions aimed at safeguarding and enhancing natural and cultural resources.

The sustainability method, very important within the total sphere, is supported by a series of studies and debates that have their fundamental stages in the conferences and international protocols on the definition of a sustainable development as a model consistent with the exigencies of environmental protection and safeguard of the resources. Sustainability represents a very wide concept summing up not only environmental but also economic and social criteria. From the environmental point of view, sustainability has its main objective in the use of sustainable resources, which assure a natural reconstruction of the ecological system. The evaluation parameters are therefore represented by factors as use of sustainable resources, materials and technologies, use of environmental accounting analyses, implementation of sustainable development processes, presence of actions for protecting and enhancing the quality of the landscape and actions opposing or remedying any previously existing conditions of degradation, use of landscape sustainability indicators, presence of regulations regarding landscape planning in the guidelines for sustainable development.

The social and economic sustainability refers prevalently to actions pursuing a fair redistribution of wealth and involves analysis of figures such as the cost of implementing and managing the project, the type of funding to be used, economic impact on the area, presence and type of participants, implementation of models of cooperation between different organisations, participation in a convention or a network of international conventions regarding safeguarding of cultural and natural heritage.

2. Exemplary value: identification of cultural organisational and relational models that may be reproduced in the cognitive process of the identities of places. This criterion looks at factors such as identification of organisational management models and organisational practices, the feasibility of replicating the project and transferring the experience, the documentation used and the preliminary studies conducted.

3. Public participation: procedures aimed at getting the local population involved in the process of recognisability of a place. The importance of the practice of involving local people in management of territorial policies, which has already been recognised at the European level for decades, is underlined in the

Convention itself, starting with the very definition of landscape. The landscape is in fact perception of the population, and this perception requires adequate conditions to develop, to be conscious, acquainted and most of all participated. By collecting experiences, cultures and traditions that constitute the heritage of a community, allows the integration of knowledge of the community with the scientific contributions, becoming fundamental in the transformation processes and in the government of the territory. Within an evaluation methodology of landscape projects, the most important parameters expressing this criterion are represented by implementation of participatory processes based on the Local Agenda 21 model, opening of public relations points, presence of standards and rules governing the transparency of the decision-making process.

4. Awareness-raising: communications and educational strategies for the promotion and increased awareness of landscape as an essential component of life for people living in a given place or context and a basic part of their identity. It involves creation of information points, both tangible and intangible, the presence of communicative, educational and promotional actions, and the generation of printed and web publications.

The parameters identified on the basis of the four criteria described above determine the path of the assessment methodology and, together with information identifying and describing the projects, will provide useful indicators permitting identification of the qualities of a given design context and help make the reading of the character of the landscape as objective as possible, on the basis of which we may identify an exemplary, replicable organisational model.

Independently of the issues addressed in each case (prevalently anthropized, natural or cultural environments, etc.), the tool must permit collection of information which may, when appropriately organised, provide useful indicators for identifying the qualities of the context of a given project. Indicators which, though descriptive, can help classify, identify problems, and make the reading of the characters of landscapes as objective as possible as part of a shared model for construction of a local identity in the current unstoppable process of globalisation.

#### **4. CONCLUSIONS**

The capacity developed by the above-mentioned methods of evaluation aimed to identify projects that emerge for exemplarity and methodological innovation is an important instrument of creation of an enough reliable range of project models feasible in accordance with the directions of the protocols and international conventions of sustainability and of landscape.

The analysis and the comparison of the different behaviours, of the variety of the themes discussed, of the project contexts, of the typologies of intervention etc., according to the indicators revealed by the above-mentioned criteria, allow us to make more easily intelligible the value of the different project practises.

A first important potential development of these instruments is the definition of a way able to pass from a model of theoretical research, based on evaluation criteria of the project landscape, sufficiently objective and shared, to an application in the sphere of the project experimentation, able to create new models aiming at changing the behaviour of different figures, among which the planners, involved in the transformation of the landscape.

From one hand the definition of scientific criteria giving indications on the qualities of the interventions; from the other the study of the possible interpretation of these project models so that the European Convention may be a practical instrument, not only a simple declaration of intents.

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