Sapienza University of Rome E-mail: saverio.miccoli@uniroma1.it

Key words: landscape assessment, economic valuation, stated preference, participatory assessment

Parole chiave: valutazione del paesaggio, valutazione economica, preferenze rilevate, valutazione partecipativa

JEL: Q57

Evaluation principles in Landscape Projects

Landscape is a crucial component of the world heritage. Landscape projects play a vital role in the development of sustainable scenarios.

The assessment of a project plays a dual role: it is a procedure to pass judgements on both "values" and "choices".

From a strictly economic perspective, the community's appreciation of Landscape Projects may be ascertained through its "total economic value". The value of a Landscape Project may be ascertained also through a multidimensional approach, based on the analysis of different project attributes whose outcome is calculated in non-monetary terms.

This paper illustrates the cultural foundations and theoretical-methodological principles to assess Landscape Projects.

1. Characteristics of landscape projects

1.1. Objectives and scope of the project

Thanks to the growing interest of society for the aesthetic and cultural aspects of the territory, in the last years landscape projects have become more important and more widely known. A landscape project mirrors the urgent need for an instrument to implement public policies aimed at strengthening the social use of landscape and fighting against the uncontrolled consumption of the land.

A favourable climate to actions aimed at protecting, enhancing and proposing new uses of landscape has emerged thanks to three simultaneous factors: a) the civil society has acknowledged that landscape is a primary factor of the community's welfare; b) the public administrators and political classes have become aware that protecting beauty, nature and culture pays off in electoral terms; c) the business community have realized that the return on investments on the quality of landscape and the environment is remarkable.

In this paper, the label "landscape project" entails an extended reference to all operational instruments (programmes, plans, projects, etc.) used to conceive actions on the territory, including the whole project development process (pre-feasibility and feasibility studies, preliminary planning, final plans and executive plans).

Whereas a certain expertise was available on drafting architecture, city planning and restoration projects, when landscape planning was introduced as a nov-

elty, no consolidated professional skills existed. On the other hand, the history of civilization had never seen levels of degradation of the landscape comparable with today's situation, nor had the large-scale need ever emerged for protecting and enhancing, creating and restoring landscapes or actively managing valuable environments from the aesthetic and cultural viewpoints.

Although in Italy the theory and practice and the landscape sector are well established, both aspects need to evolve. This is also true for many professional sectors and disciplines interacting in landscape planning development; in particular, this holds true for assessment activities, which have already seen a similar situation as regards initiatives dealing with the historical and cultural heritage, marked by close analogies with those involving the landscape. Especially from the theoretical viewpoint, those experiences may be fruitfully used as references.

1.2. Complex landscape problems

The value of landscape derives from interpretations of reality aimed at meeting qualitative needs. It has emerged in societies that have already met primary needs and characterized by high income, education and leisure levels, with the ensuing consequences on the lifestyle of individuals and the community.

In today's world, the role that qualitative values have taken on called for revising the theory of development, in which human beings are now considered the ultimate end, as well as the utility function, now based on the pursuance of a number of qualitative objectives. In practice, the traditional economic dimension has been complemented with the social and environmental-cultural dimensions. This integrated approach is opposed to growth models exclusively based on economic-quantitative approaches.

The European Landscape Convention (Florence 2000) and the Cultural Heritage and Landscape Code (Codice dei Beni Culturali e del Paesaggio - MIBAC 2004/2006) enshrine a series of concepts from which other crucial indications may be derived to develop an overall framework of reference to assess a landscape project.

Those documents acknowledge landscape as a fundamental component of the European heritage. Its distinctive features imply that the landscape setting of a location includes tangible and intangible, physical and cultural, natural and manmade resources; their joint and intertwined action does not necessarily lead to organic balance conditions, but implies the search thereof. Landscape should be given a constant and crucial role in any plan, project or program aimed at developing the territory.

The acknowledgment of the landscape value of an area is based on what is perceived as such by a given population, according to their culture in a given period. Perception leads to judgments which, in the same area, may involve different responses, either positive or negative, on the landscape settings considered. After all, the identification of a landscape, based on a community's perception and interpretation, entails a dynamic vision leading to the conception of different landscape scenarios liable to be modified in time.

Landscape stimulates the processing of information by local cultures, consolidates and represents the identity of a population, contributes to the welfare of human beings; all these repercussions can lead to important advantages from the viewpoint of the promotion of human beings, from both the social and individual perspectives.

It goes without saying that difficulties emerge in the procedures aimed at defining the public interest of a given landscape resource as well as the relation between the natural and man-made heritage, or between traditional and contemporary aspects.

Any intervention on landscape entails basic precepts, i.e.:

- the landscape is not only an intrinsic value i.e. an environmental and cultural good – but also a social value, in the light of its contribution to the welfare of the community;
- intervention procedures on the landscape should be compatible and consistent
 with the interventions aimed at development and protection, since any action
 on the territory entails repercussions on the landscape and any action on the
 landscape entails repercussions on territory transformation processes;
- landscape problems should be solved with a view to an active, dynamic and creative management of the good, thus avoiding mere limitations and passive defence provisions;
- a landscape project should provide the starting point to develop a modern vision
 of the territory and be the result of a careful analysis of the existing potential and
 incompatibilities;
- landscape issues should be dealt with according to an integrated approach along with urban, territorial, environmental and infrastructural issues, jointly framed within a sustainable development scenario;
- landscape policies call for participated planning involving civil society, public institutions and operators and accounting for both local and global needs.

The principles illustrated above and their interrelations call for checking explicitly the decision-making process during the project development stage.

1.3. New approaches proposed by environmental economics

Landscape is an integral part of public goods and, as such, fulfils a subsidiary function by meeting needs and preferences based on qualitative values.

From the economic viewpoint, the neoclassic theory defines public goods as aggregate assets characterized by: a) the ability to avoid excluding all individuals from the possibility to benefit from them free of cost, ad libitum and simultaneously with others; b) the prevention of the insurgence of competition among consumers, since the consumption of any good by anyone does not lead to a significant decrease in the consumption of others; c) a marginal cost of their use amounting to nil.

Consequently, public goods are not sold on the market, or they are available in limited – often insufficient – amounts. The presence of free riders prevents private production from meeting the demand for those goods and rationing their use through pricing; therefore the government's intervention is justified.

There is a growing sector of mixed public goods, distinct from that of pure public goods because of its product exclusion level, which is partial in the former and absent in the latter. The classification of a good as a public good does not necessarily imply that its must be owned by a public subject. Many privately owned goods entail inclusive use approaches.

The qualitative, inter-generational and inclusive characteristics of landscape suggest that, in the decision-making and assessment procedures in which they are involved, the limits of traditional economic analysis should be exceeded, since it tends to consider only short-term monetary effects (reference is made to market prices and production costs) affecting direct users.

Given the importance attached to landscape, which today is equal to that attached to other components of sustainable development, the need emerges for bearing in mind the aspects mentioned above by adopting new methods proposed by environmental economics. Those methods base their analyses and assessments on the study of external economies (utilities/disutilities dispensed without rewards), intangibles (utilities/disutilities not directly quantifiable and including extra-economic aspects) and long-term effects (utilities/disutilities calculated over extensive periods of times, suitable for considering the net benefits of future users).

In brief, making decisions in terms of actions affecting the landscape without considering externalities, intangibles and long periods, i.e. according to a partial outlook on the costs and benefits of the action, would lead to advantages for few and damage for many, in addition to jeopardizing the good.

1.4. Strategies and requirements of integrated enhancement

Landscape may play a strategic role if it is considered the starting point of urban, territorial and environmental requalification processes. In this respect, the first sites to be involved should include spaces of culture, beauty, emotion and socializing of a given community. Thanks to those values, such spaces encourage participation, communication and information, i.e. crucial factors in guiding development process towards shared goals and successful results.

Through enhancement interventions, their visibility with the public would be strengthened and there would be greater opportunities for further uses and safeguarding activities. More specifically, integrated enhancement actions could emerge, based on the diverse characteristics of the good and a heterogeneous flow of interconnections between the good itself and the context in which it is set. If the set of needs of the reference territory is taken into account creatively and rationally, integrated landscape enhancement contributes to the regeneration of the physical contexts involved and the relations among subjects operating in such contexts.

In Italy, thanks to the widespread presence of landscape, environmental, historical and cultural resources, territory requalification process should constantly base their strength on a set of such social attractors and exploit their enhancement to trigger widespread regeneration effects over the whole territory considered, to obtain a driving effect on related activities.

The outcome of a landscape project depends on the ability to strike a balance among a number of heterogeneous and often conflicting variables. To this end, the following factors prove desirable:

- a central role of the project with reference to the contributions of distinct disciplines necessary for its drafting. This means that, from a theoretical viewpoint, the collaboration is necessary of a number of disciplines, as well as, from the operational viewpoint, the participation of a number of professional skills. Substantially, a landscape project is to be considered the aesthetic and formal representation of an idea, albeit as a unitary synthesis integrated by distinct specialized proposals.
- the technical implementation of the community's claims (needs, preferences, objectives, etc.) by the integrated planning team. Social consensus may be considered a vital prerequisite to implement the project; from this perspective, landscape planning procedures call for developments based on the participation of subjects involved in their implementation and the use of dialogue to negotiate among different stances.
- the identification of a set of protection, management and planning interventions
 envisaging a number of planning actions: from preservation to restoration, from
 recovery to requalification, from enhancement to the transformation of the territory, urban and housing development, etc. Moreover, a broad survey of the territory involved is necessary to understand the past, present and future evolution
 of its physical, social, economic and cultural settings. Such a complex operation
 necessarily entails the evaluation of consistency, effectiveness and equity aspects.
- the implementation of the complex set of interventions described above, by finding its strength in the collaboration of different operators and the negotiation among subjects involved.
- the use of public and private financial resources and different financing instruments: capital expenditure, interest-rate subsidies, own resources, resources of third parties and derived resources, project financing.

The complexity factors mentioned above provide an overview of the kind of problems that landscape planning needs to face, whose realistic solution inevitably calls for an integrated approach.

In summary, a landscape project should always be an integrated project, capable of interpreting the complexity of reality, i.e. accounting for numerous, heterogeneous, sometimes clashing variables. The project should provide a unitary and creative response to that set of variables, not all of which may be streamlined albeit one more preferable overall solution may be identified.

2. Values, assessments and inferences based on complexity

2.1. Meanings and contents

Until recently, project assessment meant assessing costs and the profitability of an intervention; today, it is an instrument to estimate different values and select or conceive planning alternatives. In particular, landscape project peculiarities call for radically renewed assessment principles, techniques and approaches. The following items provide a summary of some of the new theoretical and practical aspects that should guide the assessment of a landscape project. For brevity's sake, many aspects are not analyzed in depth or dwelt upon as they should for the purpose of a thorough analysis.

The label "project assessment" is to be interpreted as the set of logical and methodological principles used to assign a value to given parameters of a project and choose among available project alternatives with reference to a predetermined set of criteria/objectives. In that sense, the term "assessment" is assigned the twofold meaning of a procedure aimed at formulating "value judgments" and "choice judgments".

The first meaning may include an estimate of the broad range of economic and extra-economic values derived from a utilitarian and anthropocentric approach. Among economic values which may be expressed in monetary terms, mention can be made of market value, cost values and derivatives, the use value and passive use value, the total economic value. Extra-economic values refer to values that cannot be expressed in monetary terms. Within the debate in this discipline, some experts include intrinsic (non instrumental) values among extra-economic values, which are allegedly "included" in the very items subject to estimate rather than deriving from the perception of value by human beings¹.

The second meaning of assessment provides an auxiliary instrument for making choices by assessing effects and impacts deriving from the actions implemented by a landscape project on activities and goods affected by the interventions, as well as compatibility and consistency levels of project actions with reference to the principles of landscape protection and enhancement.

Value and choice judgments are expressed according to assessment scales accounting for the different types of effects produced by the project, which may be both qualitative and quantitative, monetary and extra-monetary. The greatest amount of information is obtained by means of a cardinal scale. Normally, economic evaluations and estimates resort to a monetary cardinal scale.

The problem emerges of identifying suitable quantitative and qualitative indicators to assess specific impacts produced by a landscape project.

The concept of intrinsic value is often associated to a non utilitarian (non anthropocentric) approach. This is often used, among others, in the most radical environmentalists groups. Researchers are discussing the possibility of acknowledging an intrinsic value not related to the viewpoint of human beings: according to many, opinions on the value of a commodity outside an anthropocentric system are meaningless.

A crucial perspective which may be adopted to assess landscape projects is a social viewpoint. To this end, an assessment is developed depending on the impacts produced by the project on the community, i.e. according to the interpretation of those who are actually affected. This means that effects are not assessed per se, rather they are assessed in the light of their repercussions on human beings and according to their positive or negative perception.

In general, the scenario which may serve as context to assess a landscape project is defined by values included in the sustainable development equation, based on the relation between the economic, social and environmental dimensions.

The hierarchy of variables that come into play is to be configured according to different transient situations; however, by means of the assessment process, dominant project alternatives should be developed, i.e. they should tend to pursue all objectives effectively and simultaneously.

2.2. Stages and functions

A project evaluation may be conducted after a project has been completed or while a project is being developed.

In the former case, it may have a "demonstrative" function of the validity/feasibility of the project, either in absolute terms or in comparison with other alternatives. It is a "partial" assessment, supporting and providing evidence of a positive judgment passed on project choices, favouring those who are in charge of the project proposal. It may also have a "critical-interpretative" function of the final solutions implemented in the project, which shall be assessed according to a predetermined set of criteria/objectives. The outcome of the assessment may lead to a total or partial revision of the project, its endorsement or its inclusion in a preference/priority scale, if more alternatives are available. The outcomes of more general assessments may or may not lead to the subsequent stages envisaging detailed interventions; the assessment of final and executive plans may or may not lead to the implementation of the project.

If the assessment is conducted while a project is being developed, its function is to "support" planning as a real component of the planning procedure and to produce data necessary to make conscious decisions. During this stage, the assessment contributes to the "construction" of the best balanced decision with reference to the system of variables under discussions. It is a very useful creative function, worthy of being developed from both the theoretical and operations viewpoints. A constant comparison between the objectives to be achieved and the effects obtained through different solutions leads to a progressive improvement of the choices made, in the search for the preferable overall project scheme.

In summary, the latter function of an assessment may confirm, modify or integrate the starting project hypothesis. The final draft of a project will derive from iterative and interactive processes proposing and assessing different intervention hypotheses.

With reference to the project implementation stage, assessments may be of two kinds: ex ante and ex post.

Ex ante assessment deals with the foreseeable effects and impacts of a project that still needs to be implemented. At this stage, any assessment has a very important function: it is during the programming/planning stage that an effective implementation strategy may be developed through an evaluation process capable of correlating the available means and the objectives of the project.

Ex post assessment is focussed on the actual effects and impacts of a project that has already been implemented. By accounting for the outcome of the implementation strategy that was adopted, any assessment has a critical function. The advantage of this stage is the possibility of using information obtained from the assessment of a completed projects for new applications in the future.

Basically, an assessment should not be seen as a set of autonomous, occasional and unstructured stages, but as a logical and structured process applicable to all project stages, decisions and alternative hypotheses. It should be extended to different project scales, from the most general and preparatory (pre-feasibility and feasibility studies) to the most analytical stages (preliminary, final and executive plan). All the decisions made, based on the assessment process, shall be mutually consistent and consequential.

Especially on the most general planning stages, the need emerges to introduce adequate assessment procedures, i.e. when indeterminate elements come into play and call for instruments aimed at their progressive limitation and combination to obtain effective, efficient and consistent results. The greater use of broader scale (ideational and preliminary) assessment, the greater the quality of the final and executive plan. It should be remembered that assessment plays a crucial role in the ideational and preliminary planning stages for the final outcome of the initiative. From the strategic viewpoint, fundamental planning choices are made on those scales, whereas the verification and thorough analysis of decisions already made take place on more detailed scales.

The level of approximation of value and choice judgments may be related to the project scale being analyzed: broader scales will lead to overall values and judgments, which does not entail a generic or imprecise estimate, but an estimate based on the information provided by a broader scale; detailed scales lead to punctual judgments and values. However, since all planning scales entail peculiar problems and solutions, each one should be associated to a specific assessment procedure, based on criteria and requisites related to its goal.

2.3. Assessment criteria

In assessing a landscape project, reference can be made to different criteria and procedures. In this case the analysis shall focus on the most significant approaches marked by theoretical and operational differences.

According to its qualitative features, a landscape has an impact non only on its direct users but also on the community in general as externalities, i.e. costs and benefits which most of the times cannot be quantified on the market, although they affect the welfare of individuals greatly. This aspect shows that the value and

assessment of a landscape project should express the appreciation of a community for that project.

Within the scientific circles, over thirty years ago Carlo Forte identified the "social use value" as a criterion to assess cultural real estate. It did not coincide with the market value since it was a broader concept, including social, environmental, cultural values that could be expressed in monetary terms.

According to Marshall's interpretation and based on the aggregate demand curve, the social use value of a good amounts to its market value plus the consumer's surplus amounting to the monetary sum that consumers are willing to pay in addition to the market value for the total utility received from that good.

Despite difficulties in accounting for the qualitative impact, a landscape project may be assessed according to the mere economic dimension or a single monetary criterion by assessing its total economic value.

As regards marketed benefits, their base value may be inferred according to traditional estimate criteria: market value, cost value and derivates. In contrast, their total economic value may be derived from the relevant use value plus an independent-use value (or passive use value) depending on the characteristics of the resource for which the community is willing to pay a price. If non-marketed benefits emerge, the total economic value is to be calculated as above, through estimate processes suitable for expressing benefits in monetary terms.

In expressing the passive use value, the literature available resorts to the concept of the existence value, excluding all values deriving from current and future, direct or indirect, real and potential uses from its analysis. It expresses the value of a landscape connected to its peculiarity, regardless of the instrumental role it may play for human beings. The estimate of the existence value is subject to the possibility to ascertain the willingness to pay for the mere knowledge that a given resource exists, regardless of its actual use.

To express benefits in monetary terms, two sets of techniques are generally used: "Revealed Preference Techniques" and "Stated Preference Techniques" (see Figure 1). The former are based on the market complementarity (or substitution) concept, by evaluating benefits through the effects that a non-marketed good produces on the actual market of other goods. The latter set refers to hypothetical markets, based on surveys carried out on representative samples of the community. Interviewees are asked to declare the economic value attributed to non-marketed benefits. Both techniques may be used to evaluate the use value, but only Stated Preference Techniques (classified as contingent valuation and choice modelling techniques) lead to assess the passive use value, which may be assessed according to the willingness to pay of interviewees. For a more rigorous assessment, choice modelling techniques seem to be preferable because they can account for the attributes playing a crucial role in the calculation of the total economic value. This advantage is counterbalanced by the greater costs and longer time required by that technique to complete the assessment procedure.

The total economic value may be considered the assessment criterion most similar to estimate logic, since it expresses a mere monetary evaluation.

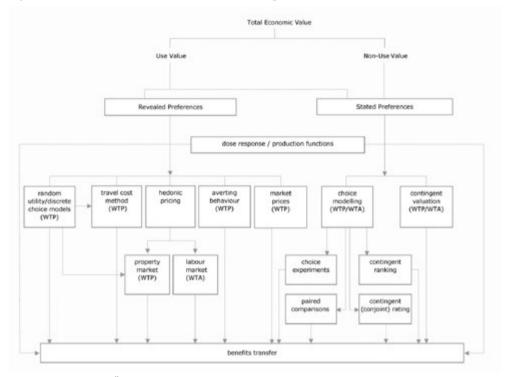


Figure 1. Total economic value and valuation techniques.

Source: Pearce D. & Özdemiroglu E., 2002.

The need has been repeatedly shown for exceeding an economic monetary calculation to extend the traditional interpretation to include all externalities produced by a resource, i.e. non-economic externalities or those that cannot be expressed in monetary terms.

For precision's sake, it may be said that a value needs to be calculated capable of expressing the quantity and quality of net benefits produced in the mediumlong term by the project and perceived by the community or its homogeneous component groups. This value is multidimensional since it can convey the global value of the project deriving from the fundamental dimensions of sustainable development (economic, social and environmental component) while accounting for equity aspects, i.e. the correct distribution of effects among different social groups.

Against this theoretical background, the assessment of a landscape project may be based on the analysis of attributes connected to its different impacts and may express the final outcome in non-monetary terms.

The selection among various project alternatives is made according to an overall multi-dimensional procedure aimed at the simultaneous assessment of the project: a) with reference to different (economic and non-economic) dimensions; b) accounting for the interdependent synergies and conflicts at hand; c) studying

the various viewpoints of the subjects involved; d) resorting to quantitative and qualitative (monetary and non-monetary) evaluation scales.

Substantially, a multidimensional approach exceeds a maximizing and monodimensional economic calculation and gives the possibility to make complex decisions and choose/develop project profiles that are well balanced and more preferable and are the outcome of acceptable compromises.

Assessment techniques based on multi-dimensional approaches are multi-criteria and multi-objectives analyses. By weighing their various assessment criteria, they lead to choice judgments based on precise alternative scenarios. Different levels of preference may be associated with economic or environmental, aesthetic or functional, social or individual, public or private aspects etc., leading to assessments that reflect the multiple elements coming into play.

The opportunities offered by multi-criteria and multi-objectives analyses for choosing among "discrete" and "continuous" mathematical models and quantitative, qualitative and mixed scales support the planner's choices when limited or unlimited alternatives exists and encourage the search for a preferable or optimal solution.

Mention must be made of the difficulties emerging from the language used to analyse some categories of intangible values (e.g. aesthetic, perceptive, historical, cultural, psychological categories etc.), as well as the great potential for controlling a complex system of variables and reaching a synthesis by formulating a final overall judgment.

2.4. Redistribution aspects and participation

The number of interests liable to be aroused by a landscape project calls for an assessment process open to society. Basically, this means that any assessment should: a) operate from a social viewpoint, by highlighting the distribution of the impact of the project on the subjects involved; b) involve the community in planning choices, by defining criteria and priorities upon which the evaluation of values and selection of alternatives should be based.

The assessment of social repercussions of the various planning alternatives leads to the expression of the distribution equity level of each one of them and, consequently, to the selection of the most satisfactory; else, to the improvement – through dialogue, negotiation and communication with the project stakeholders – of the social profile thanks to the alternative having the greatest potential. In short, an assessment process should ascertain non only "if" and "how much" a given planning alternative is valid, but also "for whom". And this is obtained through the assessment of the project impact according to a disaggregate analysis based on its users.

However, its should be remembered that the redistribution issue has played a central role for a long time in assessment processes; in this respect, mention can be made of M. Hill's Goal Achievement Matrix (1973), N. Lichfield's Planning Balance Sheet (1968-69) and Community Impact Evaluation (1996), specifically dealing with the aspects mentioned above.

New participation procedures, based on the citizens' perception and dialogue-information relations, support decision on the exchange of knowledge among the promoters of the project, operators, stakeholders and civil society. They ensure remarkable benefits by identifying collective preferences if these cannot be identified through market mechanisms.

Participation processes may be classified according to the share of professional power transferred from institutional decision-makers to the participation context. There are procedures that merely create information for citizens; other lead to collective consultations; some search for the collaboration of all participants to develop scenarios or identify solutions; finally, some assign the decision-making power to citizens. In any case, information and communication are the prerequisites for any significant participation process.

In the current practice, deliberative consultation procedures are being consolidated, based on an assembly of randomly selected citizens. Those initiatives were born in the 1970s but began to be implemented only at the beginning of the 1990s, starting in Germany, followed by Britain, US and Australia. Among the various procedures developed during the years, "deliberative opinion polls" lead to informed and aware choices, made by highlighting one's opinions, to be discussed and modified accordingly.

Finally, an assessment procedure contributing to choose or develop a more democratic and equitable planning alternative through socially shared choices is a vital prerequisite for a successful project, both in the drafting and implementation stages. This approach may lead to more effective planning based on sustainable development principles.

3. Epilogue

The European Landscape Convention was signed in Florence in 2000 as a markedly innovative document in terms of its contents, its expected impact and the extension of the territories involved (see Table 1).

At European level, after one decade, two very innovative concept have emerged: the first gives landscape a dominant function for the welfare of populations; the second underlines the opportunity to operate on landscape through integrated enhancement projects, consistently with the principles of sustainable development and a compatible use of the territory. Although it is the outcome of cultural and relational processes, the final result is very important because it provides the best possible platform to start concrete, shared and high-quality operations all over Europe.

In Italy, the stimulus of the European Landscape Convention led to an articulated regulatory system (Codice MIBAC and a range of regional regulations) and thorough reflections both cultural and technical-methodological in nature. Such strictly intangible repercussions are also proving decisive to prepare the forthcoming initiatives in the political and institutional sectors, in the scientific and professional communities and in the civil society.

This final remark shows that at present no significant results emerge in the implementation of public landscape policies. In addition, it should be noticed that such actions are constantly included in the programmes of the administrations in charge. However, there is no doubt that successful protecting and enhancing initiatives envisaged by the landscape planning approach agreed between the State and Regions will mainly depend on the ability of Municipal Administrations to welcome and implement the general guidelines illustrated above in their own local planning instruments. After all, with reference to landscape initiatives, the message should come across that a more effective public sector - protecting the public interest -, a more authoritative and responsible civil society and a greater and more widespread citizen awareness play a crucial role.

Table 1. European Landscape Convention. Status as of: 25/7/2012.

Member States of Council of Europe	Signature	Ratification	Entry into force
Albania			
Andorra	23/3/2011	7/3/2012	1/7/2012
Armenia	14/5/2003	23/3/2004	1/7/2004
Austria			
Azerbaijan	22/10/2003	30/8/2011	1/12/2011
Belgium	20/10/2000	28/10/2004	1/2/2005
Bosnia and Herzegovina	9/4/2010	31/1/2012	1/5/2012
Bulgaria	20/10/2000	24/11/2004	1/3/2005
Croatia	20/10/2000	15/1/2003	1/3/2004
Cyprus	21/11/2001	21/6/2006	1/10/2006
Czech Republic	28/11/2002	3/6/2004	1/10/2004
Denmark	20/10/2000	20/3/2003	1/3/2004
Estonia			
Finland	20/10/2000	16/12/2005	1/4/2006
France	20/10/2000	17/3/2006	1/7/2006
Georgia	11/5/2010	15/9/2010	1/1/2011
Germany			
Greece	13/12/2000	17/5/2010	1/9/2010
Hungary	28/9/2005	26/10/2007	1/2/2008
Iceland	29/6/2012		
Ireland	22/3/2002	22/3/2002	1/3/2004
Italy	20/10/2000	4/5/2006	1/9/2006
Latvia	29/11/2006	5/6/2007	1/10/2007

Member States of Council of Europe	Signature	Ratification	Entry into force
Liechtenstein			
Lithuania	20/10/2000	13/11/2002	1/3/2004
Luxembourg	20/10/2000	20/9/2006	1/1/2007
Malta	20/10/2000		
Moldova	20/10/2000	14/3/2002	1/3/2004
Monaco			
Montenegro	8/12/2008	22/1/2009	1/5/2009
Netherlands	27/7/2005	27/7/2005	1/11/2005
Norway	20/10/2000	23/10/2001	1/3/2004
Poland	21/12/2001	27/9/2004	1/1/2005
Portugal	20/10/2000	29/3/2005	1/7/2005
Romania	20/10/2000	7/11/2002	1/3/2004
Russia			
San Marino	20/10/2000	26/11/2003	1/3/2004
Serbia	21/9/2007	28/6/2011	1/10/2011
Slovakia	30/5/2005	9/8/2005	1/12/2005
Slovenia	7/3/2001	25/9/2003	1/3/2004
Spain	20/10/2000	26/11/2007	1/3/2008
Sweden	22/2/2001	5/1/2011	1/5/2011
Switzerland	20/10/2000		
The former Yugoslav Republic of Macedonia	15/1/2003	18/11/2003	1/3/2004
Turkey	20/10/2000	13/10/2003	1/3/2004
Ukraine	17/6/2004	10/3/2006	1/7/2006
United Kingdom	21/2/2006	21/11/2006	1/3/2007

Source: Treaty Office on http://conventions.coe.int.

Project assessment, meant as a judgement on economic and financial profitability and a value judgment on production costs, has long been implemented in Italy, but not so in the broader meaning illustrated here. However, over the last three decades, a theoretical and methodological approach to assessment was developed and made available by researchers and specialists of the discipline, also following pressing issues raised by the environmental context.

As Confucius said "the essence of knowledge its that implementation follows discovery". In this sense, it is deemed necessary that the theoretical approach of the environmental assessment discipline developed over the last decades become habitual practice. First of all, the perplexities should be avoided deriving from the

outcome of recent natural heritage assessment; in addition, an assessment approach should play a supportive role of city planning initiatives that have become uncertain and elusive.

However, it is beyond doubt that many operators are now aware of the importance of assessment procedures in making choices: it should be sufficiently structured in finding planning solutions that are both feasible and sustainable; it remains in progress when making fair, transparent, democratic and creative decisions.

Actually, the main novelties in the assessment procedures under scrutiny derive from complexity factors caused by the number of features involved in any landscape context; consequently, traditional economic and evaluative methods prove unsuitable. Externalities and intangibles, quality and sustainability, social use and civil participation are only part of the many elements contributing to two approaches: a) a total economic approach capable of accounting for a broader set of values that can somehow be expressed in monetary terms; b) multidimensional solutions capable of considering all the values at hand and avoiding unnecessary cash conversion. In any case, landscape is an occasion to open new horizons, update investigative and operative procedures based on the current requests of society, economy and ecological citizenship.

Bibliography

Ackerman B., Fishkin J. (2004). Deliberation Day. Yale University Press, New Heaven.

Aprile M. (a cura di) (2007). Sul paesaggio – Questioni, riflessioni, metodologie di progetto. FrancoAngeli, Milano.

Bentivegna V., Miccoli S. (2010). Valutazione Progettazione Urbanistica. Edizioni DEI, Roma.

Bobbio L. (a cura di) (2007). Amministrare con i cittadini. Viaggio tra le pratiche di partecipazione in Italia. Rubettino, Soveria Mannelli.

Brookshire D.S., Eubanks L.S., Randall A. (1983). Estimating option and existence value for wildlife resources. *Land Economics* 59: 1-15.

Castiglioni B., De Marchi M. (a cura di) (2007). *Paesaggio, Sostenibilità, Valutazione*. Quaderno 24 del Dipartimento di Geografia, Università di Padova.

Fishkin J. (2000). Democracy and deliberation: New directions for democratic reform. Yale University Press, New Haven.

Fishkin J. (2003). La nostra voce. Marsilio, Venezia.

Forte C. (1977). Valore di scambio e valore d'uso sociale dei beni culturali immobiliari. Il Restauro, Napoli.

Geuss R. (2001). Public Goods, Private Goods. Princeton University Press, Princeton.

Krutilla J. (1967). Conservation Reconsidered. American Economic Review 57: 777-786.

Lichfield N. (1988). Economics in urban conservation. Cambridge University Press, Cambridge.

Miccoli S. (2009). *Progetto per il Paesaggio: Problematiche e Prospettive della Valutazione*, relazione tenuta al Convegno "Valutazione e Progetto di Paesaggio", Napoli, 23/6/2009.

Ministero per i Beni e le Attività Culturali (1999). Relazioni presentate alla Prima Conferenza Nazionale per il Paesaggio. Roma, 1999.

Morin E. (1993). La sfida della complessità. Feltrinelli, Milano.

Nijkamp P., Rietveld P., Voogd H. (1990). Multicriteria evaluation in physical planning, North Holland Publ., Amsterdam/New York.

Nijkamp P. (1989). Quantity and Quality – Evaluation indicators for our cultural – architectural heritage. *Research memorandum* 46: 5-36.

Pearce D.W., Turner R.K. (1990). Economics of Natural Resources and the Environment. Harvester Wheatsheaf, New York.

- Pearce D. W., Markandia A., Barbier E. (1989). Blueprint for a Green Economy. Earthscan, London.
- Pearce D., Özdemiroglu E. (2002). Economic valuation with Stated Preference Techniques. Department for Transport, Local Government and the Regions, Rotherham.
- Popper K.R. (2004). La società aperta e i suoi nemici, 2 voll. Armando Editore, Roma.
- Sen A. (1982). Choice, Welfare and Measurement. BasilBlackwell, Oxford.
- Touring Club Italiano Centro Studi (a cura di) (1998). La tutela del Paesaggio in Italia. Touring Club Italiano, Milano.
- Turner R.K. (1988). Sustainable Environmental Management: Principles and Practice. Belhaven Press, Francis Pinter, London and Westview Press, Boulder, Colorado.
- Turner R.K., Bateman I., Adger W. (2001). Economics of coastal water resources: valuing environmental functions. Kluwer, Dordrecht.
- Weisbrod B.A. (1964). Collective consuption services of individual consuption goods. *Quarterly Journal of Economics* 78: 471-477.
- World Commission on Environment and Development (1978). Our common future. Oxford University Press, Oxford.
- Zeleny M. (1982). Multicriteria Decision-Making. McGraw-Hill Book Company, New York.
- Regulatory references
- Decreto Legislativo 22 gennaio 2004, n. 42, Codice dei beni culturali e del paesaggio, ai sensi dell'articolo 10 Legge 6 luglio 2002, n. 137
- Decreto Legislativo 24 Marzo 2006, n. 157, Disposizioni correttive ed integrative al decreto legislativo 22 Gennaio 2004, n. 42, in relazione al paesaggio.
- Decreto Legislativo 26 Marzo 2008, n. 63, Ulteriori disposizioni integrative e correttive del decreto legislativo 22 Gennaio 2004, n. 42, in relazione al paesaggio.
- Legge 11/6/1922, n. 778, Per la tutela delle bellezze naturali e degli immobili di particolare interesse storico, G. U. 4/6/1922 n. 148.
- Legge 29/6/1939, n. 1497, Sulla protezione delle bellezze naturali e panoramiche, G. U. 14/10/1939.
- Legge 8/8/1985, n. 431, Conversione in legge con modificazioni del decreto legge 27 giugno 1985, n. 312 concernente disposizioni urgenti per la tutela delle zone di particolare interesse ambientale, G. U. della Repubblica Italiana n.197 del 22 agosto 1985.
- Legge 9/1/2006, n. 14, Ratifica ed esecuzione della Convenzione Europea sul Paesaggio, fatta a Firenze il 20 Ottobre 2000, G. U., n. 16 del 20/1/2006 Suppl. Ordinario n. 16.