

Landscape facets Reflections and proposals for the implementation of the European Landscape Convention

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Landscape facets

Reflections and proposals for the implementation of the European Landscape Convention



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Facettes du paysage – Réflexions et propositions pour la mise en oeuvre de la Convention européenne du paysage

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Preface

The Council of Europe European Landscape Convention (ETS No. 176) is a groundbreaking international treaty adopting an approach to spatial development that takes account of the landscape, in other words the quality of the environmental life of individuals and societies, in keeping with the Council of Europe's concerns with regard to human rights and democracy. It does this by recommending that member states involve the public in all stages of landscape policies.

Since the European Landscape Convention was adopted by the Committee of Ministers of the Council of Europe in Strasbourg and opened for signature in Florence in 2000, the Council of Europe has examined and illustrated some of the themes relating to the convention, in other words certain facets of the landscape:¹

- landscape, towns and suburban and peri-urban areas;
- landscape and transport infrastructures: roads;
- road infrastructures: tree-lined avenues in the landscape;
- European local landscape circle studies;
- landscape and education of children;
- training of landscape architects;
- landscapes and ethics.

This publication is a collection of the relevant reports drawn up by Council of Europe experts in the light of the conclusions of the meetings of the workshops for the implementation of the European Landscape Convention.² These reports were also presented at the Council of Europe conferences on the European Landscape Convention, held at the Palais de l'Europe in Strasbourg on 22 and 23 March 2007,

^{1.} See the previous publication, *Landscape and sustainable development: challenges of the European Landscape Convention*, Council of Europe Publishing, Strasbourg, 2006, ISBN 972-92-871-5988-5.

^{2.} The proceedings of the meetings of the Council of Europe workshops for the implementation of the European Landscape Convention have been published by Council of Europe Publishing in the collection European spatial planning and landscape, and these are available on the European Landscape Convention Internet site: http://www.coe.int/Europeanlandscapeconvention.

and 30 and 31 March 2009. The representatives of governments and of international governmental and non-governmental organisations that attended these conferences had the opportunity to discuss the relevant issues and to take the first steps towards optimum implementation of the convention.³

Following the order in which these reports were presented, we would like to express our gratitude to the experts for the high quality of their work and for their important contributions: Mr Diedrich Bruns, Mr Ignacio Español Echániz, Ms Chantal Pradines, Mr Terry O'Regan, Ms Benedetta Castiglione, Ms Ingrid Sarlöv-Herlin, Ms Marina Kuleshova and Ms Tamara Semenova.

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Head of the Cultural Heritage,	Landscape Convention
Landscape and Spatial Planning	Head of the Landscape Office, French
Division, Council of Europe	Ministry of Ecology, Energy, Sustainable
	Development and the Sea

^{3.} Conference reports: Documents T-FLOR (2007) 14 and CEP-CDPATEP (2009) 19.

V. Education on landscape for children

Benedetta Castiglioni, Council of Europe expert



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Summary

In the framework of the European Landscape Convention, the present report aims to present requirements, objectives and methodologies concerning education on landscape, in its general aspects and in particular in its application in primary and secondary schools, at the European level.

The first part of the report contains the main reference points which relate education on landscape to the European Landscape Convention, finding in the concept of the convention itself the basis for the implementation of the specific educational targets. These targets are further developed as specific aspects of education for sustainable development, particularly important in the United Nations Decade of Education for Sustainable Development 2005-2014 in a wider pedagogical perspective. Considering landscape as heritage, the dissemination of greater knowledge of landscapes and of the processes of landscape change, as well as improving landscape reading abilities, represents some of the necessary requirements in order to make people more aware about the value of the places in which they live, more open towards other places and other cultures, and more responsible towards landscape management.

In the second part of this report more practical and operational aspects are developed. Nevertheless, in order to avoid confusion arising from the polysemic meanings of "landscape", the definition of the term and its implications need to be presented first. A general grid for landscape reading is then proposed, not as a didactic tool in itself, but as the starting point to put into practice school activities, since it contains all the "ingredients" that education on landscape should have: landscape elements identification and description; non-material features of landscape (emotions, significances, symbols, etc.); natural and human factors that are "building" the landscape; and landscape change from the past to the future.

In the following section, specific aspects of education on landscape are presented, both in a general and in a practical way: first, the focus is on landscape in all its facets, then on the different roles of the people involved. Each methodological issue has its roots in a theoretical framework and in a pedagogical target, and at the same time is presented along with practical provisions. Examples of activities concerning education on landscape implemented in the European panorama are then offered.

1. Education on landscape and education for sustainable development

1.1 The European Landscape Convention and education on landscape

People and landscape

The general aim of the European Landscape Convention is to "provide a new instrument devoted exclusively to the protection, management and planning of all landscapes in Europe", in order to gain two wider main objectives: "individual and social well-being" and "sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment". Landscape issues are presented here in a wide perspective and action on landscape as well as landscape policies find a more extensive dimension than just a technical one for planners and politicians.

The first article of the convention proposes a definition of landscape that helps in understanding these statements: "Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". Namely, landscape is not only conceived from an ecological point of view, but it involves human (historical, cultural, economic, social, etc.) aspects as well as non-material characteristics arising from perception. It is at the same time a tangible matter and a source of feelings and emotions and, when dealing with it, both dimensions have to be considered. Since landscape reflects the interaction of nature and humans through time, it becomes part of our heritage, a resource we inherited from our past and we must care about, for our future. Moreover, due to personal and social values assigned when perceived, landscape contributes in determining people's well-being and consolidating territorial identities.

Therefore, a strong relationship between people and landscape lies at the base of the European Landscape Convention. This relationship takes two directions: in fact, one of the most important assumptions proposed in the preamble is that landscape "protection, management and planning entail rights and responsibilities for everyone". On the one hand, the convention stresses the fact that each action towards landscape has to take into consideration people's aspirations towards their well-being, with effective participation processes: in this sense it entails rights. On the other hand, participation is not an option but a duty, and being involved in it requires tasks for everybody, all people being responsible for landscape policies definition and implementation. Actually, the idea is that "landscape is something which needs care and which, if seen only as a commodity good, will inevitably lose its value and also its attraction". 10

This "democratic" approach, in which "people are given an active role in decisionmaking on landscape",¹¹ is applied also to the spatial dimension: all landscapes (throughout the territory of each state party) are considered by the European Landscape Convention, all of them have to be considered as heritage and are important for local identities and for a more general well-being as well as in the perspective of territorial sustainable development.

Education on landscape as a specific measure: aims and objectives

The first specific measures provided by the European Landscape Convention that states have to undertake are devoted "to increase awareness among the civil society, private organisations, and public authorities of the value of landscapes, their role and changes to them" and "to promote training for specialists ..., multidisciplinary training programmes ... for professionals in the private and public sectors and for associations concerned, and school and university courses which, in the relevant subject areas, address the values attaching to landscapes and the issues raised by their protection, management and planning" (Article 6, A and B).

If the object of the convention is "landscape", the importance that is given to people (even more than landscape itself) highlights the relevance of the link between people and landscape, and underlines the importance of an effective participation.

"Education and training with special reference to the landscape issue are crucial to whatever improvement of the landscape management we want to achieve. Many activities can be imagined to promote the proper approach in awareness-raising, education and training".¹² In the second part of this chapter, methodologies and examples are provided, concerning education in schools.

These kinds of activities have therefore to deal with both "personal connection with the landscape, and personal commitment to the landscape. Only personal

^{10.} Pedroli, B. and Van Mansvelt, J. D., "Awareness-raising, training and education, Theme 3", in *Proceedings of the Second Council of Europe Conference of the Contracting and Signatory States to the European Landscape Convention*, Council of Europe, Strasbourg, 28-29 November 2002. In: Council of Europe, *Landscape and sustainable development: challenges of the European Landscape Convention*, Council of Europe Publishing, 2006, p. 117-140.

^{11. &}quot;Explanatory report of the European Landscape Convention", paragraph 24.

^{12.} Pedroli, B. and Van Mansvelt, J. D., op. cit., p. 121.

connection with the landscape can allow people to know their landscape in depth, including its opportunities and threats, and base their actions and activities on knowledge of the landscape in all its complex relationships. Personal commitment or engagement with a specific landscape can guarantee the sustainable development" of landscapes.¹³

Taking into specific consideration school courses and, in general, didactic activities in primary and secondary schools, the European Landscape Convention expresses explicit remarks, concerning the commitment of the countries. Activities have to deal with the promotion of "values attaching to landscape", not in an abstract way, but also dealing with and taking care of actual aspects like protection, management and planning. Actually, value awareness increases the connection with the landscape and the acknowledgement of the rights, while the concrete approach increases personal commitment and acquisition of responsibility.

At the same time, landscape value belongs to a very wide field, among which some categories can be identified:

- ecological values (like biodiversity or ecological functions);
- economic values and functions (land use values, tourist values of some characteristic landscapes);
- historical and cultural values, heritage values;
- emotional values linked to the place of life, identity values, social values;
- aesthetic values;
- the values of the knowledge of the landscape developing processes;
- etc.

In this context, education on landscape emerges not as a specific education on a defined subject, but much more as a general upbringing process, through which children increase their knowledge, awareness and responsiveness. It is not simply a bottom-up process in which children get to know certain information regarding landscape, but it is more of an experience involving the person in his/her entirety. Education on landscape therefore assumes an important meaning: through it, landscape really becomes a key element of individual and social well-being. At the same time, it assumes a specific role within the framework of education for sustainable development.

^{13.} Ibid.

1.2 Education on landscape in the framework of education for sustainable development

United Nations Decade of Education for Sustainable Development 2005-2014

As the general aim of the European Landscape Convention is to achieve sustainable development, education on landscape promoted by the convention can be considered as one of the possible ways of implementing education for sustainable development.

The United Nations proclaimed the years between 2005 and 2014 the Decade of Education for Sustainable Development (DESD), promoting education as one of the main targets for sustainability. In fact, education is considered a cornerstone and the first required measure (as well as education on landscape): "education is a driving force for the change needed".¹⁴

The points in common between the sustainability approach and the landscape approach have been strengthened since the Johannesburg Summit, considering not only the environmental issues but enhancing the aspects concerning the social ones; in this sense, the approach of the European Landscape Convention, with its focus on involving people, suits the goals of sustainability very well. Environmental education broadens to education for sustainable development, including education on landscape.

Actually, analysing the basic document of the DESD, many points suit the features and the goals of education on landscape. First, the fundamental values of education for sustainable development take their place within a "new vision of education, a vision that helps people of all ages better understand the world in which they live". Second, most of the indicated features of the DESD are very similar to the ones of education on landscape that will be presented in detail below:

- Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as a separate subject;
- Values-driven: it is critical that the assumed norms the shared values and principles underpinning sustainable development – are made explicit so that that can be examined, debated, tested and applied;
- Critical thinking and problem solving: leading to confidence in addressing the dilemmas and challenges of sustainable development;

^{14.} For all the documents concerning the United Nations Decade of Education for Sustainable Development see the website www.unesco.org/education/desd.

- Multi-method: word, art, drama, debate, experience, ... different pedagogies which model the processes. Teaching that is geared simply to passing on knowledge should be recast into an approach in which teachers and learners work together to acquire knowledge and play a role in shaping the environment of their educational institutions;
- Participatory decision-making: learners participate in decisions on how they are to learn;
- Applicability: the learning experiences offered are integrated in day to day personal and professional life;
- Locally relevant: addressing local as well as global issues.

Moreover, the seven strategies indicated in the documents concerning the DESD to implement education for sustainable development can also be effectively and consistently used in implementing education on landscape: "vision-building and advocacy; consultation and ownership; partnership and networks; capacity-building and training; research and innovation; use of information and communication technologies (ICTs); monitoring and evaluation".

In addition, education on landscape shares the same general concepts as education for sustainable development and can be considered, as it is mentioned in the documents of the DESD: "fundamentally about values, with respect at the centre: respect for others, including those of present and future generations, for difference and diversity, for the environment, for the resources of the planet we inhabit. Education enables us to understand ourselves and others and our links with the wider natural and social environment, and this understanding serves as a durable basis for building respect. Along with a sense of justice, responsibility, exploration and dialogue, education … aims to move us to adopting behaviours and practices which enable all to live a full life without being deprived of basics."

Finally, it is also mentioned that, "everyone is a stakeholder in education for sustainable development" and in education on landscape, with different roles and partnerships that will be presented later.

Pedagogical aspects

In an educational context, some important pedagogical focus points concerning landscape can be found: the attempt is to understand better what contributions education on landscape can offer for individual development, not only when a child learns to act better in given circumstances, but also to improve his/her general upbringing process.¹⁵

An important point deals with the dialogical function of landscape, in the developing of the dialectic between identity and otherness. When approaching a landscape, on the one hand, we discover our roles as inhabitants of a place, keepers of a heritage, witnesses of a culture and people responsible for its future. On the other hand, we experience our wish to take possession of new places, even for the brief period of a journey or an excursion.

From a pedagogical point of view, identity is defined in terms of subjectivity, intimacy and inter-subjectivity; all three are associated with the landscape approach. Moreover, the identity/otherness dyad is not separable, just as landscape is not separable, since the desire for rootedness goes together with the wish to "discover".

Education on landscape therefore means to learn to observe with new eyes what is around us: sometimes what we see is too familiar so it no longer communicates with us any more and does not activate our ability to contemplate. We need to reactivate the ability of listening to what is unexpected and unforeseen, leaving enough space for surprise and emotions.

In addition, three different, more detailed functions of landscape in a pedagogical context have to be underlined:

- hermeneutical function, because we can learn to "read" inside the landscape and through its signs; landscape implies two different ways of reading: the sensorial way, as it can be considered as an "education of the sight and of the senses"; and the cognitive way, for its "explorative" character, towards a better comprehension of natural as well as human aspects and factors;
- pragmatic function, for its practical and designing nature, referring to responsible management of landscape change; this can be also considered an ethical dimension;
- social function, as landscape belongs both to the single person and to the communities that live in it and that perceive it; moreover, it involves and it promotes the development of local identities as well as opening to otherness (both time-otherness, concerning landscapes of the past, and place-otherness, concerning landscapes of faraway places).

^{15.} The following contents come mostly from Zanato Orlandini, O., 2007: "Lo sguardo sul paesaggio da una prospettiva pedagogico-ambientale", in Castiglioni, B., Celi, M. and Gamberoni, E. (eds), *Il paesaggio vicino a noi. Educazione, consapevolezza, responsabilità.* Proceedings of a conference on 24 March 2006, at the Museo Civico di Storia Naturale e Archeologia, Montebelluna, Italy.

In the following chart (Table 1) we see a schematised representation of possible routes into education on landscape, depending on different purposes and methodologies. The third column presents the broadest approach, coherently with the pedagogical and educational remarks proposed before. It is not in opposition to the first two; on the contrary, it includes and goes beyond them.

	1	2	3
	Education <i>about</i> landscape	Education <i>in</i> landscape	Education <i>for</i> landscape
Purposes	Knowledge of landscape and of landscape change dynamics and processes	 learning to see learning to learn acquiring empiric research ability acquiring and/or applying transversal knowledge 	 knowledge motivations ethical awareness identity building possibility of new significance attributions social, designing and transforming skills supporting processes of assuming responsibility
Prevailing approach	Instructive	Cognitive, although not excluding aesthetic and social dimensions	Integrated model, on several axes: - cognitive - emotional- motivational - ethical - aesthetic - participative-community
Didactic highlighting	On contents: to make children acquire correct information (to know)	Landscape as didactic intermediary, towards: - in-the-field research - subject knowledge	To build knowledge, skills, values (to know, to know how to be, to know how to do)
Preferred context	School and age of development	School and age of development	Everywhere and lifelong
Remarks	To know is not enough in knowing how to be and how to do	Exploitable use of landscape, starting point for acquiring transversal knowledge	Landscape as elective context towards reorientating: - knowledge - emotions - will - behaviours

Table 1 – Educational methods concerning landscape

Source: Zanato Orlandini 2007.

According to the third approach, education on landscape should be a process "more like lighting a fire than filling buckets, meaning that learning should be more a way of finding, sharing and evaluating ways to solve problems, practical ones as well as theoretical ones". Education on landscape is therefore a process of "human resource development in its true sense" as it follows the three following criteria to be implemented with the steps proposed in the chart below (Table 2):¹⁶

- intellectual education (knowledge oriented: cognition);
- emotional education (finding out about the feelings and values: affection);
- relational education (knowing about doing, how to practice: conation).

Education on landscape is therefore summarised as "teaching both theory and practice in a way that includes the training of the affective domain".

	Cognitive domain	Affective domain	Conative domain
	Knowledge Receiving		Imitation
Pre-emancipatory levels	Comprehension	Responding	Handling
	Application	Valuation	Mastering
Increasing internalisation	Analyses	Orrentiaine	Franciscut
	Synthesis	Organising	Engagement
of learning	Evaluation	Characterisation	Dedication

Table 2 – Steps and criteria valorising human resources

Source: Pedroli, B. and Van Mansvelt, J. D., op. cit.

Education on landscape for "active citizenship"

Such arguments demonstrate how comprehensive the values concerned with landscape education ultimately are. Education on landscape shows its importance not only towards safeguarding landscape and improving landscape quality, but also in itself, as an important step in a child's upbringing. Landscape is not only an object to take care of, but becomes a source of inputs to reach children and aid their growth as complete human beings. It is not only an object to be taught, but also a teaching tool, a sort of "teacher" in itself.

^{16.} Pedroli B. and Van Mansvelt J. D., op. cit.

Different peculiarities and methodologies for education on landscape will be presented below, with special attention to educational activities and courses for schools (mostly primary and secondary). However, it is important to note that its general aims and potentialities need to be put into effect not only in formal contexts, but also in informal and non-formal ones, as well as in permanent education processes, exactly like in education for sustainable development. It can be assumed that education on landscape, to some extent, belongs also to the first specific measure provided by the European Landscape Convention (Article 6, A): awareness-raising of civil society.

Actually, all the characteristics of education on landscape represent essential elements which contribute towards a positive and responsible relationship between each person and his/her environmental context and place of life; they are basics contributing to the unity of the person, with his/her different ways of approaching and knowing the world, and towards an active and constructive participation in the life of one's own community.

2. Discovering education on landscape

2.1 From "landscape" definition to a method for landscape reading

Different approaches to landscape

The word "landscape" is as "fascinating" as it is difficult to be "pinned down", because of the variety of meanings that are assigned to it. It can be used either as a common language term (synonym of panorama) or to express a concept, such as an object of study or something to be planned and safeguarded. The meaning changes – with smaller or larger shifts – from one disciplinary field to another, from one language and cultural context to another and, evidently, it has also changed over time.

Nevertheless, when exploring this variety of meanings and of points of view concerning landscape, it is possible to find some common features.

In most cases, landscape does not deal with a single object, but with a synthesis of different elements, related to one another. Landscape is a "unity".

The elements belong both to the natural and to the human sphere. Thus, landscape forms a sort of bridge between natural sciences and humanities and it is considered both environmental and cultural.

In fact, another landscape feature is the dimension of change, evolution and transformation. It is a "diachronic construction", never equal to itself. Landscapes of the past were necessarily different from the present landscapes, and cannot be rebuilt with exactly the same features. However, landscape keeps signs of the past and of the change processes it faced or is facing within.

Another important feature is that landscape is simultaneously "the representation" and "what is represented", the non-material sight and what is being seen, in its materiality. Both the subjectivity of senses, feelings and emotions, on the one hand, and the objectivity of reason and rationality, on the other, are needed to "meet" the landscape.

At any rate, it is important to underline the difference that exists between landscape and "space", or between landscape and "territory". Landscape is "what is seen", the "sensible datum", the "empirical evidence of territoriality", but not the space in itself. Spatial systems form the support of landscape, while landscape has its own individuality, never becoming a synonym for environment, space or region.

Using the metaphor of landscape as theatre,¹⁷ the human being is in a twofold relationship with the landscape: he is the actor, in the sense that he acts and builds the landscape, in all the different ways a person can interact with their environment; and at the same time, he is the audience, for he looks at what he makes, in order to understand the sense of his action, in a circular relationship. Landscape is in this sense the "the medium between making and looking at what we made", implying that, when speaking about this topic, perception, knowledge and practice are all involved.

Concerning practice, it is known how many different approaches we can have and how many different forms of regulation according to law now exist: from strictly considering the total protection of small areas with very special features (natural as well as cultural), to large-scale landscape planning integrated within regional and spatial planning, in order to manage changes at every level.

The definition of landscape provided by the European Landscape Convention

Aware of the polysemic nature of landscape and of the variety of approaches, Article 1 of the European Landscape Convention presents some basic definitions. First landscape is defined as "an area, as perceived by people, whose features are the result of the action and interaction of natural and/or human factors". In this definition, most of the aforementioned remarks can be found:

^{17.} The metaphor of landscape as theatre is proposed in Turri, E., 1998, *Il paesaggio come teatro*, Marsilio Editore, Venice, Italy.

- the presence of both nature and culture, going beyond the division between physical, natural landscape and cultural, human landscape;
- the dimension of "relation" implied in landscape, characterised by a synthesis of interrelated elements;
- the uniqueness of each landscape, as "natural and/or human factors" "act and interact" in a unique way in each specific "area";
- the importance of landscape perception as fundamental in defining landscape itself: landscape is "what is seen and perceived" and therefore it is different from space, it is instead a concept with its own individuality. Moreover, subjectivity of perceptions (both of individual and of society) is recognised as something to be taken into consideration, when dealing with landscape.

Among the basic definitions, Article 1 of the convention also presents the meanings of the three actions landscape requires: protection, management and planning. They are listed from the least to the most responsible for landscape change.

The other important point, proposed in Article 2 of the European Landscape Convention is that the concept of landscape must not be applied only to small restricted special areas, but to each and every part of the region/country/world.



A conceptual model for landscape

A conceptual model for landscape (modified, from Castiglioni 2002)

The model presented in this diagram is an attempt to show in a more direct way the basic concepts mentioned above. It clarifies them and it shows how to move within this complex, both with research and educational aims. It helps as a reference framework in order to give the landscape concept its individuality, without overlapping it with space; as explained later it helps in "finding a way" for reading landscapes, too. $^{\rm 18}$

Considering the two parallel planes, the bottom one represents the space, the territory, the geographical reality, while the top one represents the landscape itself, precisely what is seen and perceived of the complex territorial dynamics, the processes and factors of which are often hidden and invisible.

If both planes are composed in a systemic pattern, the bottom one is structured in two subsystems: nature and society, involved in a close and complex reciprocal relationship.

In the top one, on the other hand, three subsystems are related to each other. The first one contains the natural features of landscape (that is, relief forms, vegetation). All the signs of human presence that have modified natural features (that is, buildings, villages and towns, or land cover and land use forms or infrastructures) are in the second one (human or cultural features). Both these features are related to material, tangible components of landscape. The third subsystem instead includes all the nonmaterial, non-tangible landscape features: namely, the significance and the values assigned to the landscape, either in the aesthetic sphere, or in the affective one (landscape as a part of our own identity), or in the symbolic one (when certain landscape elements can provide specific significance to people perceiving them). As regards values, we can also consider functional values such as ecological or economic ones. Significance is therefore divided into three groups:

- *functional significance:* what-is-it-used-for functions (material), including both economic and ecological functions;
- symbolic significance: what-does-it-transmit functions (non-material), related to aesthetic, cultural values and those preserving the memory and the local identity of the community;
- *anticipatory significance:* ideas, and explicit (planning) or implicit projects that are going to change the landscape.

Of course, if landscape elements belonging to the first two categories are considered and analysed objectively, the category of significance involves perception and subjective representations: different kinds of "perceived" or "lived landscape" can correspond to the same "observed landscape".

^{18.} See Castiglioni, B., 2002, Percorsi nel paesaggio, Giappichelli Editore, Turin, Italy.

Anyway, a landscape is made up of the interrelation of the three subsystems; it is not only the "sum" of the different parts, but the "product" of their relationships.

Which are the links between the two planes? The arrows simply show how the spatial dynamics of natural and human factors "produce" the landscape. Actually, it is not possible to consider the landscape without considering at the same time the processes – often invisible – that are at the base of the forms we perceive; here, landscape has its "roots" and its uniqueness, together with the driving forces for its change.

Paths for landscape reading

All the different proposals which are possible in any educational activity on landscape start from a first approach to a specific landscape (or several specific landscapes), in order to read it, according mostly to its hermeneutical function.

The conceptual model for landscape proposed in the diagram above suggests three different but complementary reading landscape paths, in order to get a reference framework for each landscape study and analysis, or, as in this case, for educational activities concerning landscape. In the latter case, the application of the conceptual model helps identify more clearly the topic and the content as well as didactic objectives and methodologies. In Box 1 a general pattern is presented, following the paths explained here.

Referring to the model, the first path moves in a horizontal dimension, in the upper plane of landscape elements and features. Along this path, attention has to be paid first to the characterisation and description of elements (eventually gathered in categories) and then to the specification of their relationships – mostly spatial relationships – among elements (that is, between landforms and vegetation, or between settlements and water resources). The non-material landscape features must be identified, too, giving space to the observer's feelings and emotions, as well as to his/her different perceptions and assigned values. The uniqueness and the specificity of each landscape emerge through these procedures, achievable in different ways and at different levels; it is the first basic step towards further investigation. The horizontal paths answer the question "What is the landscape like?"

The second path goes deep "inside" the landscape, in order to explore – in a vertical dimension – the causal relationships between landscape factors and

landscape features. In order to answer the questions "Why this element? Why this landscape?", both natural and human processes need to be considered. In this sense, landscape is a sort of indicator of spatial dynamics, the very first point of contact with factors and processes that cannot be seen directly. Careful research work is surely needed to explore the links between landscape features and factors.

The third path moves in a temporal dimension, trying to understand the landscape change, a result of different driving forces acting today as well as in the past. It is a sort of landscape "tale", in which the timescale can be chosen depending on which landscape features are considered or analysed: it is either the tale of geological processes and landform change, or the tale of recent and rapid change due to industrialisation and urbanisation. Also, seasonal or daily change can be considered, especially in educational activities, in order to understand that landscape is a diachronic construct. An understanding of landscape change processes is essential in order to understand to what extent human action is responsible for landscape change and to look towards the future of landscape, for example with planning.

The three paths often cross each other: in fact, landscape is more of a hypertext (needing non-linear reading) then a linear text.

Below (Table 3) we find the main phases characterising each educational activity aiming to increase specific landscape knowledge as well as a general ability at landscape reading. Phases 1 and 2 are mostly related to the horizontal reading path, phase 3 to the vertical, and phase 4 to the temporal one. These phases can be applied in many different ways and in each educational context, according to the age of children, and how much time and how many instruments, etc., are available. They become didactic targets, with various activities and tools; verification of assets will be necessary at the end of activities, to move to the following phase.

Table 3 – Steps of educational activities

	Phases (didactic target)	Examples of tools	Verification
1	Recognising different landscape elements and their relationships that characterise each landscape uniqueness	Excursions, drawing, sketching, storytelling (oral or written), picture making, puzzle composing or undoing, discussion groups, maps, simple geographical information system (GIS).	Care and accuracy in descriptions (with different techniques). Ability of identifying and rejecting non-pertinent elements and relations.
2	Recognising the power of landscape to stimulate sensations and excite emotions in oneself and in other people	Excursions, texts (prose and poetry), discussion groups, interviews with different people, different drawing techniques.	Expression of feelings through texts, drawings, drama, etc.
3	Looking for an explanation of landscape features, in connection with natural and human factors	Research activity through different sources such as bibliographic references, present and past maps, aerial photos, statistical data, economic data, archive research, simple GIS, Internet research, interviews with experts.	Understanding the link hypothesis/control and some causal chains. Acquisition of some contents.
4	Understanding landscape change, and "telling its story"; imagining and planning future landscape change	Old pictures and maps, old descriptions, interviews with old people (namely, grand- parents), discussion groups, design of "landscape plans", photomontages, storytelling about the past and the future.	Putting on a timeline certain events in land- scape change. Comprehension of the issues that drive the question: what is the right thing to do?

Box 1 – Exercise for reading and understanding landscape

The exercise presented here displays a general logical pattern and is more an example rather than an activity that is possible to implement directly in class. Each step needs to be adapted according to the ages of the children and depending on the specific educational targets.

General didactic target

Acquisition of a methodology for the observation and analysis of the landscape, to be further applied to each landscape encountered, as a first step in a deeper understanding of spatial processes, both in the nearby and in the distant world.

Remarks

- this exercise can be performed observing different types of landscape, through a picture or, even better, by visiting the location in person;
- attention must not be paid to putting the "exact" answer in each box of the chart (very often an exact answer does not exist), but on following and applying the logical pattern;
- see below for references and broader explanations.

First step: drawing

Drawing, much more than picture taking, is a tool that allows an individual to make careful observation. Children have to know that the graphic (or aesthetic) result is not important, their drawing could also be as simple as a sketch. Note that children of different ages have a different attitude towards drawing.

Activity: after carefully looking at the landscape, sketch and/or draw it.

Second step: landscape elements (horizontal reading)

Landscape is a complex of different elements related to each other and it is important, firstly, to break down the landscape into them. Elements have to be identified and described according to their shape, type, location and distribution. Reciprocal relationships among elements also have great importance, as they make a landscape different from all other landscapes.

Activity 1: insert in the following chart some elements that you find in the landscape you are observing (you drew in the previous step) and that, in your opinion, are the most important in characterising this landscape. You can consider single objects as well as homogeneous sets of objects (landforms, trees, fields, similar buildings, etc.). Then, describe them mentioning their features (What kind of thing is it? What are the dimension, shape and colour of it?), their location and distribution (Where is it?), their reciprocal relationships (Are they far/close? Are they related to each other in any way?).

	Element	Description
1		
2		
3		

Activity 2 (advanced): choose some categories of elements. Describe them with care, using also data collected in the field and/or from the maps (how steep are the mountain/hill slopes? How much of the area is covered by forest? How many residential/industrial buildings are there? etc.).

Third step: landscape sense and value (horizontal reading)

Landscape is not only a collection of material objects, it also has a non-material dimension, due to the significance and values that people assign to it. It stirs up different feelings and emotions in the observer. The significance is different and depends on the observer; a main difference is often between insiders (who live and know the landscape from inside) and outsiders (knowing the landscape only from outside, that is, tourists).

Activity 1: look at the landscape and write in the following chart what you feel: which emotions does it inspire?

My feeling and emotions

Activity 2 (advanced): interview a few people and write in the following chart what they feel when looking at the landscape. You can also divide the results according to the different categories of the people interviewed (age, job, insider/outsider, etc.).

Categories	Feeling and emotions

Fourth step: landscape factors (vertical reading)

Landscape is the result of action and interaction of natural and/or human factors, acting in the spatial system, differently in each area. It is important to ask "why", to inquire "below" the landscape, to question causes and processes. In this perspective, landscape assumes value not only as a surface film, but because it links with spatial dynamics.

Activity 1: complete the first column of the chart with the elements identified in the second step; draw some arrows to link each of them to the factors in the second column, answering the questions: Why is this element here? Which factors are responsible for its presence, its features and its distribution?

	Element	Factors
1		Climatic
2		Geological
3		Biological
		Hydrological
		Economic
		Political
		Technical
		Sociocultural
		Demographic

Activity 2 (advanced): consider some elements (the same you chose in the second step, Activity 2) and the arrows you drew in the previous activity. Research how these factors act on the landscape, using different sources like bibliographic references, present and past maps, aerial photos, statistical data, economic data, archive research, simple geographical information systems, the Internet, interviews with experts, etc.

Fifth step: landscape change (temporal reading)

Landscape always changes, thanks to many factors, on different timescales; sometimes change is sudden and abrupt, sometimes very slow and continuous. How can we analyse landscape change? And how can we evaluate it? Was the past landscape more or less valuable than the present one? To answer this question past and present landscapes have to be compared, in terms of their structure and their significance. Both the lost elements and significance, and the new ones have to be considered. Various sources are often available for this analysis: pictures, aerial photos, maps. Our present view of landscape can also suggest some of the changes. Finally, landscape changed in the past as it will change in the future. To imagine future landscapes, it is important to know the processes and driving forces acting today. But it is also important to be able to express personal wishes and aspirations.

Activity 1: fill in the chart by observing the present landscape and making hypotheses of possible landscape changes. Choose a time interval (for example, related to the date of the document used for activity 2): What do you think has changed in the last ... years? Which elements were present then and appear today only as remains and as a witness to the past? Which one of them changed their features and/or their function? Which are the new elements?

	lost	
Elements	modified	
	new	

Activity 2 (advanced): using a document (a picture, an aerial photo, etc.), fill in the chart comparing the present landscape with the past landscape. Make hypotheses concerning functions and values, using your observations, your previous knowledge or ad hoc research. In the end, you should be able to give a general evaluation of how much this landscape has changed.

	lost	
Elements	modified	
	new	
	lost	
Functions	modified	
	new	
	lost	
Values	modified	
	new	
Landscape change – General evaluation		

Activity 3: make a copy of the drawing in the first step. Transform it according to what you want this landscape to look like in 20 years: rub out some elements, modify or add some others. Then, make another copy of the same drawing. Transform it according to what you think will really change in the next 20 years: rub out some elements, modify or add some others. Compare your drawings and discuss with your classmates..

Activity 4 (advanced): try to think about the future landscape (that is, in 20 years), starting from your knowledge of the processes and the driving forces that are in action today. Write in the chart which elements, functions and values you will find modified or inserted as new in the landscape. Discuss the results within your group and give a general evaluation of this future change, pointing out what kind of choices should be implemented in order to achieve the best "desirable" landscape.

Elements	modified	
	new	
Functions	modified	
Functions	new	
Values	modified	
values	new	
Future landscape – General evaluation		

2.2 Educational and pedagogical aspects

Landscape education and cognitive development of children

Can the didactic targets presented above be proposed at every school level? Are there specific targets for different ages?

Certainly, the way children approach landscape varies depending on their cognitive development. Small children (4-7 years old) have a very instinctive non-conceptual approach: they use all of their body and all of their senses, not sight only. Children from 7 to 12 begin to rationalise, but their approach is rather egocentric. From the age of 12 onwards, a larger perspective on space and time opens up and the ability to deal with complex causal systems develops, although, at the same time, teenagers can have more difficulties in putting into effect school activities directly involving the emotional sphere.

On the other hand, the importance of proposing landscape "as a whole", in all its aspects, has to be acknowledged: it would not do any good – for example – to propose only the "emotional approach" in the first years of primary school and only the research of causal factors at secondary level; splitting landscape into parts leads to a loss of the added values obtained by the juxtaposition of characteristics and approaches.

At the same time, didactic activities on landscape give better results if they are proposed intensively over short time periods. Probably the best way for an effective education on landscape is to propose complete activities two or three times during the school curriculum. At different ages, some targets will have more importance than others, and different aspects will be gone into in more depth than others, but each time "landscape as a whole" must be proposed. There is no risk of boring repetition, because children spontaneously use different approaches. This structure does not exclude the possibility for short forays into landscape issues when implementing different didactic activities, thanks to the multiperspectiveness and interdisciplinarity of landscape itself.

Education of the senses and scientific education

Knowledge of landscape always involves both reason and the senses since the landscape always has a double nature: reality and the image of it. Therefore, education on landscape assumes at the same time two dimensions: on the one hand, it is education of sight and of the other senses, and, on the other hand, it is education of logical thinking.



The "sight" dimension of education on landscape first involves the sensitiveness of children: confronted with a landscape, feelings arise, in different, subjective ways of perception. They can be positive or negative emotions, linked to aesthetic values as well as symbolic ones. Also, they can either emanate from a sense of place transmitted by the landscape in which they live or a sense of being lost in an unfamiliar landscape. They can be similar for children with the same age and background, or different because of their own personal attitude. This sensory approach is designed to involve not only sight but the other senses too. To express these feelings various tools can be used: drawings, texts, poetry, etc.

Children's perceptions can be compared to those of other people: young or old, insider or outsider, etc. Subjective points of view are compared, each of them with its place, its importance. At the same time, different ways of expressing feelings on landscape can be taken into consideration: pictures, paintings, literary texts, poetry, etc.

The visual dimension also includes a definition of the landscape structure, through identification and characterisation of elements, as proposed in the first steps of the landscape reading exercise in Box 1.

But landscape is also a matter of complex relationships: education must include rationality as the other important medium for understanding. An interpretation of the links among elements themselves and between elements and factors requires a scientific approach, with rational processes of analysis and synthesis: landscape must be divided into its essential components (natural as well as human), for example collecting data and building thematic maps, and then recomposed in its unity putting data into logical connections. Some of the complex causal relationships among factors and elements need to be defined and understood through research work, using different sources like bibliographic references, present and past maps, aerial photos, statistical data, economic data, archive research, simple geographical information systems, the Internet, interviews with experts, etc.

Depending on the age of the children, a further step is possible, moving from an analysis of local and directly perceived landscapes to different landscapes further away and this might favour the appropriation of general conceptualisations and mental schemes.

It is important to note the complementarity existing between these two dimensions of education on landscape. Emotional and rational approaches are often presented in separate, or even alternative terms: putting them together in educational activities on landscape helps in the integration of the two approaches, towards valorisation of the wholeness of each person and all of his/her potentialities.

Interdisciplinarity of education on landscape

Is education on landscape a sort of a "new subject" in school activities? Are there specific school subjects for education on landscape? In which curricula does it have to be included?

Probably, education on landscape is one of the best ways for implementing interdisciplinary activities, since the topic itself asks for the involvement of different subjects. It should not be considered as a subject in itself, even it has its own specific approach and didactic targets.

Geographical education is traditionally closely concerned with landscape; although the approach (for example, in some national curricula) has not always been updated to the wide one provided by the European Landscape Convention. Landscape risks in such cases becoming a general description of places, although geography maintains its special role concerning landscape. The spatial dimension and a synthesis approach, on the one hand, and tools, like maps and fieldwork, on the other, are just some of the properties that characterises geography education and that are also essential for education on landscape. Moreover, most of the education for sustainable development targets are shared by both geography education and education on landscape.

Looking at other school subjects, many of them do link with education on landscape (Table 4); in most cases their contribution is crucial for an effective educational project. The habit of working in teams among teachers definitely helps in putting into practice activities where each subject maintains its peculiarity and, at the same time, provides important elements to reach the general targets.

Subject	Connection with the landscape issue and examples of activities	
Geography	Knowledge of features of places; territorial approach; synthesis approach; geographical tools; fieldwork; education on sustainable development.	
Natural sciences	Natural features and factors in landscapes (earth sciences, botany, etc.); scientific approach.	
History	Landscapes of the past (how did people live and use resources?); historical factors for landscape change.	
Language/ literature	Personal descriptions of landscape (including the emotional approach); analysis of literary descriptions of landscapes; setting of literary works.	

Table 4 – Links between scholarly disciplines and education on landscape

Foreign languages	Foreign landscapes and cultures; international activities (on distant landscapes) through exchanges (via the Internet) with other children.
Arts	Personal production of landscape representations with different techniques; analysis of artistic representations of landscapes.
Mathematics	Quantitative analysis of some landscape features.
Technology	Tools for landscape analysis (GIS, ICT, etc.); tools for land- scape reproduction (that is, 3D models); technological evolution as a factor in landscape change.
Economics	Economic factors in landscape change.
Social sciences	Social and cultural factors in landscape change; cultural values of landscape.
Physical education	Whole approach to landscape; excursion.

2.3 Which landscapes?

Nearby landscapes and faraway landscapes

As already mentioned, education on landscape considers the way children perceive and locate themselves on Earth.

Educational activities on landscape usually take into consideration the landscape of "an area": Where is this area? How big is it? Different possibilities are available.

To approach landscape as a familiar issue, it is probably useful to implement activities starting from the neighbouring landscape, the one that children are assumed to know better. If activities are presented as a sort of "discovery route", children should learn a methodology allowing them to discover any other place in the world.

Exploring their nearby landscape, children should find out that what they thought they knew presents in reality many unknown aspects. This experience might really be fascinating for them. They are invited to take their previous knowledge (increasing its value) and build a shared knowledge of local landscape, together with the amount of knowledge and information that comes from school activities. They could play an active role by interacting with other people (parents, friends, etc.) to gather information, and present their results to the class or, for example, in an exhibition of everybody's works.
As already noted, a better knowledge of local landscape (in its different forms) contributes to enhancing our personal link with it, our local identity and our own sense of place. A positive attitude towards where we live is developed, together with a greater sense of responsibility and awareness of the need to protect local values and the consequences of human actions on the environment. Children feel this is "their own landscape" and they have to care for it.

But education on landscape should not only deal with neighbouring landscape. It is just as important to deal with foreign and faraway landscapes. The ability to read landscape gained by looking at one nearby can be easily used to analyse and get to know landscapes of other regions, countries or continents. Of course, it is much more difficult to interact with distant landscapes (even if some short excursion in a nearby region should not be so difficult to organise), but children can easily get to know them through pictures, aerial photos (easily available on the Internet), an atlas, reports, etc. Educational activities make it possible to understand that, under an almost mute image of a far landscape, elements and features can talk to us about factors and processes (similar or different from our local ones). Children therefore understand how the presence of other people and of other cultures builds their own landscape in different ways, just as their society has always done through the centuries.

This double role – insider in neighbouring landscapes and outsider in foreign landscapes – is a very important exercise, for a better knowledge of other parts of the world, for a better understanding of different cultural contexts, for enhancing a more open approach to the global world. In this frame, the achievement of a strong local identity through educational activities on nearby landscapes does not lead to narrow-mindedness; instead, it contributes to a better awareness of one's place in the world.

The information and communication technologies provide very powerful instruments to approach faraway landscapes and to bring them near. An excellent way is the international projects aimed at building networks of schools around the world: children have the possibility to present their local landscape on web pages and to know other landscapes presented by other children. A web forum can provide the possibility of a direct exchange among children: they can communicate their point of view on distant landscapes and receive others' opinions about their own.

Landscapes of the past and landscapes of the future

Faraway landscapes belong to the dimensions of both space and time. In other words, distant landscapes are also landscapes of the past, as well as landscapes of the future. A consideration of the time dimension in educational activities presents very interesting aspects and leads to the achievement of important goals.

Past landscapes can be analysed in co-operation with history courses using tools like old photographs and maps, interviews with old people (if the time period is recent enough), literary descriptions, old objects that remind us of the context in which they were used, etc. On a large timescale, archaeological studies can also help us to better discover landscapes of the past. Understanding the way people used to live, used resources and dealt with the environment, that is, our past civilisation and culture, has great educational importance. Much care has to be taken not to approach the past nostalgically and not to transmit to children the fruitless idea that "the best of all possible worlds is not the present one, but the one we inherited".

At the same time, educational activities that deal with the future of landscape present broad educational possibilities. If landscape is always in the process of changing, as it changed from the past to the present, so it will change from the present to the future. The challenge is to manage this change towards the "most desirable" landscape. When dealing with the future landscape in relation to educational aims, children experience the possibility of expressing their own aspirations and listening to the aspirations of other people (in accordance with the European Landscape Convention approach). They are even stimulated to assume their own responsibility in landscape change. To deal with future change with a positive and non-nostalgic attitude, the activities have to consider, on the one hand, actual driving forces and processes and, on the other hand, present landscape functions and values (and also emotional and local identity values), in order to identify which landscape features demand conservation or very careful transformation, and which others can safely change, in the framework of a "creative conservation".

Exceptional or unattractive landscapes? Landscape conflicts as a learning environment

A common approach to landscape is to consider only exceptional places, with a very singular and special combination of natural and human input: it can be a mountain landscape where wilderness still prevails, or a wide panorama open to the horizon, or a landscape characterised by a particular monument or by a well preserved pattern of land use and settlements that transport us back to the past.

The approach of the European Landscape Convention is different, as we know. Landscape is everywhere, wherever people and environment interact and build the "face of the Earth", depending on natural and cultural factors. The importance of the landscape issue does not come from the beauty of some landscapes, but from its values in a much wider sense. Landscape belongs to cultural heritage as it records the phases and the different types of cultural transformations of places (every one of them). In this perspective, education on landscape does not deal only with certain landscapes, chosen among the best preserved or the exceptional ones. Every landscape can be read, interpreted and studied; every landscape arouses emotions when looked at (even if not necessarily positive ones); in every landscape, change can be reconstructed and understood (see Box 2, for example).

Many children do not live in "nice" landscapes, but in towns, in suburbs, in urban sprawl with very banal characteristics. These are the places they consider their homes, even, of course, with their negative aspects and problems. Although it can be useful to get to know other landscapes, with different features as well (for example, rural landscapes for children that are used to living in towns), in order to make comparisons, not-so-nice (critical) landscapes should not be excluded from school activities.

Dealing mostly with well-preserved and nice landscapes could lead to idealising landscapes, and approaching them without being able to face real processes and problems.

On the other hand, approaching landscapes that are full of contrasts and conflicts, which are far from idyllic but normal instead, will help achieve two complementary targets:

- children can start by observing what they do not like in the landscape (because it emerges from its negative aspect), in order to begin to observe it with greater care;
- children are encouraged to deal with reality, to approach by questioning landscape – other issues concerning environment and society.

In this sense, conflicts on landscape become a good learning environment. The contrasts arising in landscape forms can help in facing other problems and in widening our questions: Why is this contrast there? What are the factors? What will change? Which values should be safeguarded? Which different actors are playing with contrasting aims?

If this kind of question seems more suitable for activities in secondary schools, younger children can still benefit from them when approaching "normal" landscapes. When negative emotions emerge, it could be an opportunity to improve their ability to ask "why?" and consequently to see matters in a wider perspective.

Box 2 – Education on landscape in Catalonia (Spain): "City, territory and landscape"

The Landscape Act 8/2005 is the basic regulation and reference upon which the landscape policies of the Government of Catalonia are founded. Among many other issues, in agreement with the purposes of the European Landscape Convention, it contains special commitments concerning aims and instruments for sensitisation and education (Article 15).

At present, the General Directorate of Architecture and Landscape of the Ministry of Town and Country Planning and Public Works, and the General Directorate of Educational Innovation of the Ministry of Education of the Government of Catalonia are co-operating with the Landscape Observatory of Catalonia (an advisory body of the Government of Catalonia and Catalan society in general matters of landscape) in the project called *Ciutat, territori i paisatge* (City, territory and landscape), designing innovative teaching materials to be disseminated to pupils in compulsory secondary education.

The teaching materials, prepared by people of recognised prestige in these matters and destined mostly for children in secondary school, are made up of:

- 12 illustrative prints in a provisional format, allowing the pupils to work in teams on the interpretation of these landscapes in Catalonia;
- 12 sets of teaching activities;
- a teaching guide for the academic staff;
- a web page on the project, which was started in 2007.

The materials were trialled in secondary schools.

From 2007-08, along with the printed materials for classrooms, the Landscape Observatory web page (www.catpaisatge.net) has become a fundamental tool to deepen and extend activities about the 12 illustrative prints referred to, so that pupils can also use new information technology in the learning processes.

For each of the 12 landscapes presented the web page provides a set of activities containing special exercises, in five main steps (here is an example on the activity on the fluvial landscape of the Ebro River):

Discovering the landscape. Children should look at the panoramic picture displayed and "find" the six elements that more than others characterise the landscape; to proceed to the next step they will have to write in the proper window some of these features. Through this very first approach, children are stimulated to observe with care.

What is the landscape like? After identifying the elements, children should divide them into natural and human and indicate them on the map and on the orthophoto available on the page; the "pass question" consists in rewriting two natural and two human elements. The exercise aims at approaching the landscape more rationally, using the specific tools of spatial analysis (maps and aerial photos).

How does landscape change? Comparing an aerial photo of 1986 with one from 2006, children should identify four main changes, with the help of some notes giving details about the change. To go further they have to choose the most important changes and explain the reason for their choice. Children are encouraged to think about the different kinds of landscape change and about the factors that triggered them.

The opinion of the people involved. Some virtual interviews occur in this phase, with hypothetical people living and working in the landscape in question, showing different attitudes concerning their landscape due to their diverse jobs; they give answers to five questions evaluating the landscape changes and the perspectives for the future. The "pass question" is rather demanding: children have to answer some questions by commenting upon the opinion given by the people interviewed. Through this activity, children experience the existence of diverse points of view, each of which starts from an explicit statement.

The final phase is to sketch different future landscape changes, depending on the choices children make among diverse possible statements about present landscape processes. When choosing, children have to consider all the information they obtained with the previous activities, including people's opinions. This final synthesis helps students to see all the links among the previous phases and understand the landscape as a whole. Moreover, children understand that the various hypotheses concerning future landscape do not come only from fantasy and aspirations, but also from different factors and the personal choices of people.

These activities propose, in a rather simple (but never simplistic) approach, landscape as a complex matter, with its natural aspects, its human change, the roles played by different people, and, finally, the planning issue. The proposed landscapes are never "idyllic" ones; on the contrary, they show local critical situations and conflicts concerning landscape choices. Such environmental conflicts become indeed a "learning environment" for an effective education.

Landscapes of foreign children: occasion for cultural integration of young immigrants

Over the last decades, large numbers of people have moved from their countries of origin to Europe, or within Europe itself. Migration is an important issue today, and European classes and schools are becoming more and more multi-ethnic and multicultural. Facilitation of integration processes is often needed.

In this context, education on landscape plays a relevant role. It helps immigrants to know the "new" landscapes around them better and, through it, the new geographical, historical, social and cultural spatial context. At the same time, the outsider's point of view of the foreign children helps native children to observe their local landscape more carefully.

Activities can also be carried out on foreign children's native landscapes, comparing them with the local one; this represents a good way for widening geographical knowledge and involving all children in school activities directly: if each child can show to the others his/her native landscape, and the dynamics that built it, all landscapes receive the same attention, and at the same time we have a very effective process of cultural integration.

In-the-field education: the role of the excursion

If landscape is "an area as it is perceived", it is important to stress the fact that a picture is not enough to get to know it! A picture is just a tool; it is very limited. The best way to know a landscape is to perceive it in a very wide sense, probably going "inside" it and experiencing it in all its aspects. A good starting point to perceive an area is to look at it from a high viewpoint; but that is still not enough. Much more effective experiences can be gained by walking through it, touching it with your hands, listening to it and smelling it, and looking at different objects while standing close to them.

In this sense, whenever possible, education on landscape should be carried out through field activities, in direct contact with it.

So, when an excursion is chosen as a tool of education on landscape, special care should be taken to avoid reducing activities to a simple "guided tour" for tourists. If different parts of the study area are to be visited (not only the most outstanding), involving the children directly in preparing the route would probably be very useful; in the same way, each stop should provide special activities.

Among the educational activities that can be organised during an excursion, we suggest:

- sketches and drawings are the first tool in observing with care; they can be panoramic sketches as well as drawings of some nearby objects and characteristics; it is also possible to help children to make their sketches, with guided schemes such as grids;
- making pictures and video-recording: often cameras and video-cameras are quite readily available and children generally like to use them; these instruments should never substitute for the personal effort of observing and reproducing landscape (for example, by drawing), but are very useful for further activities, once back in the classroom, to relive the landscape perceived and its peculiarities;
- collection of some "pieces of landscape", leaves or flowers or small stones, etc., frequently evidence of the natural aspect of the landscape, help children to get personally involved in its perception, and can be used in further activities in the classroom as well as at the final presentation of the educational project results;

- explanation (by teachers or by experts) of some peculiarities of the landscape: this is always much more effective if proposed outdoors and right in front of the feature explained;
- walking through the landscape: apart from the length and the difficulty of the route, the personal experience of different parts, of their shapes (for example, landforms) and of the environment in its "physicality" is essential at all ages.

An excursion is often proposed as the starting point of the didactic activities regarding landscape. In fact, it helps in getting the children immediately personally involved and it represents a common experience to which further activities make reference.

Preparing the excursion through a short activity will make sure the excursion itself is effective; preparation should not present contents in advance, but help children to be more aware both of the location and of the activities that will be performed.

Good educational effectiveness can be achieved by repeating the excursion in different phases of the didactic activities on landscape: children have therefore the possibility of directly verifying hypotheses, of deepening some aspects that emerged en route and, most of all, of heightening their personal link (also in emotional terms) with the landscape. The repetition of excursions in different seasons highlights the many differences in the same landscape and therefore supports our perception of landscape change.

Young children derive great advantage from direct knowledge of landscape through excursions; in this case such experiences – performed in physical terms, with all their body – are complete didactic activities for education on landscape.

Sound-scapes, smell-scapes, touch-scapes

Landscape perception – in its widest sense – includes not only visual perception but everything that is transmitted by the five senses. Human beings have the possibility to distinguish sound-scapes as well as smell-scapes and touch-scapes; these are the many different ways through which the environment around us communicates.

Like visual landscape, they can be "read", by dividing them into elements and classifying elements into categories; they can be valued according to the feeling they inspire, they can be interpreted according to different factors and we can understand the changes that have shaped them.

The possibility of using different kinds of perception in educational activities on landscape enlarges the field of didactic proposals and increases their effectiveness by

deepening the children's involvement. In fact, the event becomes more intense, and children get to experience a real twofold interrelation with landscape.

Especially for young children, having direct experiences of landscape and of using different means of communication would be very advantageous. As for teenagers, they are often very attracted by music and sounds; sound-scapes could ignite real enthusiasm and could be followed with great interest.

Moreover, in this contemporary world of ours where the body is ever growing in importance, using a wide physical approach in educational activities will achieve much more.

Literature, art and photography

Landscape recurs frequently as the subject or background matter of artistic representations, photographs or literary works. In various cases, these reproductions contribute to give cultural values to real landscapes. Taking them into consideration during educational activities could be highly relevant.

As already stated, interdisciplinary work is a fundamental requirement for education on landscape: in this case the disciplines involved are literature and arts as well as artistic education.

The interesting part comes with the possibility of comparing real and experienced landscape with the one described by a writer or a poet, portrayed by a painter, or shot by a photographer. Teachers usually find this kind of material concerning local landscapes quite easily; landscape represented by artists is often available in local museums and libraries.

These representations give us the possibility of acquiring more information (mostly historical) on the chosen landscape. In performing this activity, we need to proceed with extra care, as these special media rely heavily on subjectivity: they are not direct and faithful presentations, but they communicate the personal vision and interpretation of the artist. Actually, this is not a limitation, instead it can be used to our great advantage. Analysing these materials, children get to know very special points of view and they can compare them with one another and with their own.

Starting from these readings of artists' work, children can then make their attempt to perform as artists: they can write poems or subjective descriptions, paint with different techniques or take pictures in order to communicate their own feelings and emotions about landscape.

Hypertext, information and communication technologies and virtual landscapes

As underlined before, an intricate net of relationships among elements and links between elements and factors constitutes the structure of the landscape. Some reading paths have been proposed in order to move through this network; the paths avoid the risk of "getting lost" and, at the same time, they maintain and appreciate the richness offered by this complex structure.

Broadening these remarks, landscape can be considered hypertext, with nonlinear passages and reading steps, while the close network of links suggests the possibility of choosing different routes. Some links connect the inner structure of the landscape-hypertext with external references, with regard to all the issues associated with the "area as it is perceived", for example the interdisciplinary links proposed above.

The way of reading landscape and its own real structure are both well represented by the metaphor of the hypertext. In many cases confused and incoherent landscapes, as well as non-hierarchical spatial organisation, are difficult to read in a traditional way; similarly, the hypertext metaphor fits the structure of contemporary "global" landscapes even better than a mosaic metaphor, where the links are not based on spatial contiguity but are rather open to the whole world.

A very effective exercise in analysing and proposing landscapes in educational activities consists of drawing hypertextual maps of landscapes, to represent the links among elements and factors more than the features of elements (see Box 3). They are conceived as conceptual non-spatial maps: the names of elements and factors are linked with lines and arrows in a reticular structure. Many different maps will come from different children, each one presenting and highlighting different peculiarities and details, according to their personal attitude. So we will witness a very interesting discussion opportunity within the class, not to correct wrong opinions (there is no right or wrong), but to compare individual works and to build "shared maps". Alternatively, conceptual maps can be drawn at the beginning by groups of children: an example is to make different groups of children work on different topics (for example, natural features, cultural features, the change, etc.) in a first phase, then join all the parts and build the whole map, finding new links in a sort of jigsaw puzzle.

Box 3 – Panoramic hyper-landscapes

The Eco-Pedagogic Institute and the Laboratory of Methodologies of Geography of the University of Liege (Belgium) elaborated, from 1999 to 2002, a method for an original pedagogic utilisation of multimedia tools and of the Internet (www.geoeco. ulg.ac.be/lmg/hyperpaysages) in education on landscape. The project developed both into the preparation of two "hyper-landscapes" (*"Les hyperpaysages pour sensibiliser à la nature et à l'environnement*" and *"Les hyperpaysages pour sensibiliser à l'aménagement du territoire*") and into a pedagogic investigation into the use of such tools in schools. This led to the making of a guide for teachers, containing indications for different uses of hypermedia in schools (mainly, secondary schools).

School activity with hyper-landscapes can be simply navigating ready-made ones or actually producing them starting from a panoramic (360°) photo. In this case, the work proceeds through the following different stages:

- from landscape observation (in the field), children should ask themselves some questions, identifying at least 10 elements which will become the "active" part of the picture; when clicking on such elements, windows with further information will open;
- children should find answers to their questions, and prepare the content of the opening windows, through research work; they should find the right way to summarise contents and good titles for the labels indicating opening windows;
- to work out such a complex structure like that of the hyper-landscape, children will make a "hard copy" of it first, working with tangible materials: the "active" parts of the printed 360° picture will have strings connecting them with pieces of paper, representing the computer windows; the structure could be very simple or indeed very complex (with many multicoloured strings indicating different kinds of links), if children reach a deeper knowledge of the landscape in question;
- the production of the hyper-landscape will be completed by reproducing it on the computer with the adequate software. Then, it will be possible to put it online.

The pedagogic interest increases when going from the simple navigation of a hyperlandscape to the active construction of it. Navigation is only intended, for the most part, as a tool for general sensitisation, even if it also contains some interesting exercises. However, being involved actively in the production, facilitates children's achievement of the following targets:

- working with 360° panoramas allows the children to perceive the environment in its entirety, and to "immerse" themselves completely in it, both physically and cognitively;
- identifying the landscape elements to be activated in the hypermedia stimulates the ability of "decrypting" the landscape; we can ask direct questions to it, as we would to an interlocutor;

- selecting the spot to take the panoramic photographs helps in perceiving the complexity of the landscape and discovering its multiple aspects;
- defining multiple links among the "information knots" which form the structure contributes to achieving a complex scheme of thinking;
- the group work involved in building the hyper-landscape increases our negotiation ability and encourages the comparison of our own values and representations;
- uploading the product enriches the social value of the activity;
- finally, it helps in acquiring a holistic and systemic approach to the landscape issue, as well as a cultural one, which is open to different subjectivities.

Moreover, when using information and communication technologies, children have the possibility of reproducing these maps, building simple hypertext made of single pages or windows (knots) and links opening them. Probably, when using the computer, we no longer have hypertext but hypermedia, since we deal not only with written language, but with a large amount of images, too.

It is already possible to use some products that are available online or on a CD-Rom (produced by research groups, NGOs, editors, administrations, etc.), either for educational purposes or for other purposes, like regional promotion. Exploring them might provide more information and offer a new tool for didactic activities; this exercise has great potentiality in directing attention to the links that structure the landscape and in favouring the approach to faraway landscapes. However, this approach should not take the place of knowing the landscape directly; visiting it in person is always preferable.

Directly building hypertext with simple available software is surely a very effective exercise. Children will get a very clear idea of landscape structure, and will have to choose the most important features to represent it. Since their aim will most probably be showing their work to other people (as often happens with educational projects), they should be able to build a net, however simple, and choose meaningful links with great care to move around in it.

The ability to observe can greatly benefit from the use of information and communication technologies, because of the possibility of dealing with images, of modifying them (to understand changes), of zooming in (to look at certain landscape components), etc. Here is an example: we start from a general picture. Some parts of it, corresponding to certain landscape elements, can be activated when moving over them with the pointer. Windows or pages will open up and more information will be offered or even asked of the student. We can proceed with the exercise only when every element has been identified. In this way, children are stimulated to look at all of the parts of the landscape, in order to discover it more fully. The use of information and communication technologies offers more interesting educational potential. With adequate technical support, it is possible to build an interactive learning environment, where children can create their landscapes together virtually: either the reproduction of a real landscape (similar in a way to the production of the hypertextual map) or the production of "new" or future landscapes.

Dealing with landscape change using "virtual reality" becomes a very appealing activity. Certain programs already provide examples of how different choices generate different transformations (for example, Simcity is a video game that presents similar possibilities). These programs can make children reflect upon the causal links and people responsibility in making these choices. Besides, starting from their imaginary landscape, filled with the children's wishes about the place where they live, their activities can be directed towards imagining and planning the landscape of their future, proposing changes and sharing knowledge and aspirations.

Information and communication technologies present another very important educational potential: connecting people living in different places. For education on landscape it represents a very important tool, helping children working on one landscape (for example, a nearby one) and at the same time taking into consideration faraway landscapes where other children are living and studying. Regional, national or international projects involving children of different backgrounds, using information and communication technologies, should always be planned and then put into effect, since their educational significance is very high.

2.4 The roles

Teachers' education

Education on landscape does not require a particular expertise in one subject or another. The team of teachers (that will put into effect this activity), possibly co-ordinated by the geography teacher, will be enriched by the presence of different competences, as regards the approach, the methodology and the contents.

But, if a specific branch of learning is not to be favoured above the others, what is really important is that all the teachers develop a good understanding of landscape, both as a concept and for its educational value. To some extent, every teacher will have to be sensitised, in order to be made aware of the broad educational values associated with landscape and presented here in detail. In the education of teachers, both in general terms and when implementing a project, a lot of care must therefore be taken to clarify the European Landscape Convention approach to landscape, in order to avoid the confusion that often comes from the multiplicity of meanings assigned to it. The next phase will be presenting and analysing in detail educational targets and methodologies.

The education of teachers can greatly benefit from direct experiences with landscape since they will be personally involved. More than specific information, teachers should achieve a good understanding of the main general questions, the knowledge that landscape interpretation demands. They should visit a landscape and face it, read it through guided steps and hypertextual maps, listening to their own emotions while in front of it, so as to tackle the conceptual and methodological issues from the start.

In order to profitably run interdisciplinary activities, teachers should improve their ability to work in teams. It is recommended to keep as open-minded an attitude as possible towards all the various personal approaches. Children in fact often develop didactic activities in unexpected ways.

The active role of pupils

As noted above, education on landscape is much more of a personal route of discovery involving children directly, than a series of lessons conveying certain contents. Of course, contents are proposed anyway, but they are achieved with active methodologies. For example, anytime a teacher or expert is directly intervening, it is always in response to questions posed by children, and only after children have looked carefully at the landscape and have begun to interpret it.

In many cases, projects for education on landscape use materials produced ad hoc by landscape experts. Panels for an exhibition, books, leaflets, web pages and so on often show different pictures of landscapes, with special explanations, so that children can comprehend the main feature of a place or region. Public administrations or other institutions will often be the ones in charge of these projects since their aim is to develop the children's knowledge about the local territorial values. This is certainly a very important target and this methodology allows one to reach a large number of children of different ages, coming from different places.

Generally, different kinds of activities follow the presentation of landscape pictures and explanation: from the exercises that just test the level of attention in looking at the landscape and in analysing the materials supplied, to the personal reproduction of the landscape through drawings or texts, and to excursions for a more direct involvement with the landscape. In these kinds of projects (see Boxes 4, 5 and 6), children of different schools could participate for prizes, as an incentive, with their own productions.

After all, the more active the role of the children engaged in the didactic project, the more effective the results of education on landscape will be. As presented above, many kinds of experiences can deeply involve children: excursions, sketching the landscape, taking pictures, interviewing people, expressing their own emotions, and later answering questions that arise along the way are just some examples. Landscape – in this sense – becomes an important part of these children's life, something they get used to dealing with.

This important target will be met with greater success if children are directly involved not only in knowing the landscape, but also in presenting the results of their discovery to other people. If they have the possibility of preparing exhibitions or web pages and thus popularising landscape features, they might indeed take more responsibility for landscape and its change.

Education on landscape activities, moreover, provide a possibility to develop and improve abilities often left aside in more traditional didactic approaches and school activities. This fact allows the children to mix and swap the roles they usually take inside the class group, so that every child has space to express him/herself.

Partnerships

Education activities and projects about landscape can be developed on different scales and – as already mentioned – in many different ways. The single teacher with his/her class can perform interesting and successful activities. At the opposite end of the spectrum, national governments or regional administrations can propose big projects for many schools at a time.

How big a didactic project is, however, is less important than how much care needs to be put into the precise definition of the targets, the organisation of the activities, the support to be given, the time schedule and the final output.

In many cases, schools develop their activities together with other partners, in the framework of either formal, informal or non-formal education. These partners are often local public administrations – as mentioned above – that share the general targets of education on landscape and aim to promote their regional or local territorial context.

Other cultural institutions might participate in such activities too. Museums, libraries or eco-museums can play the role of cultural mediator and help put in contact schools and local territorial organisations. They naturally possess a wide knowledge of them, they are the keepers of large amounts of material concerning them and are already in contact with experts of different branches or with research teams and institutions (namely, universities). At the same time, they are used to working with schools for cultural promotion and, last but not least, they definitely share the general targets of education on landscape.

Box 4 – The Cultura 2000 European project 3KCL – Karstic cultural landscapes

Supported by the Cultura 2000 European programme in 2004-05, the project was led by the Museum of Natural History and Archaeology of Montebelluna (in north-east Italy) and involved research centres and schools in Italy, France and Slovenia. As the title suggests, the project concerned the peculiarities of three karst study areas analysed by three research teams, "discovered" by local school pupils and then disseminated to the wider public by the pupils themselves. The project involved approximately 40 researchers, 50 schoolteachers and mentors, and 600 pupils of different ages.



The network and partnerships of the 3KCL project were quite complex. The Montebelluna Museum coordinated the whole activity and research partners (Geography Department of the University of Padova, Italy, Geography Department of University of Nicethe Sophia-Antipolis, France, and Karst Research Institute of Postoiina, Slovania) were constantly in contact in order to exchange methodologies

and research results. School partners had the role of "popularisers": as soon as they received specific contents from their research partners, they built the materials for the exhibition and the website pages (www.3kcl.net). All the partners were in contact through the website itself.

The project represented both a challenge and a chance to develop and implement educational strategies on discovering landscape, in the framework of education for sustainable development.

The general aims of the project were stated in the proposal document:

 to provide innovative contents, both from the scientific and the educational fields, in studying and interpreting the evolution of the karst ecosystem and of its relationship with human settlements, in order to highlight the value of this cultural heritage;



- 2. to promote a widely spread cultural dialogue at international level about the karst phenomenon, with its unique morphological structures and landscapes;
- 3. to raise children's awareness about the delicate balance of karst landscapes;
- 4. to exchange experiences and good practices;
- 5. to give the schools and the museum the active role of putting into practice a friendlier approach to knowledge for children.

To attain these goals, the project proceeded along two main paths: the first concerned research on natural and human aspects of karst landscapes and their relationship; the second focused on education and popularisation. The knowledge achieved through the research was directly shared with schoolchildren, aiming to reach a larger public.

The second path can be subdivided into three different steps.

The first one consisted of a sort of introduction to school activities, a general view of landscape, required to introduce the following phases of studying specific landscape features in depth. Specific educational targets were set in this phase too, using specific educational tools: learning to look at landscape with attention; recognising different landscape elements characterising the uniqueness of each landscape; acknowledging the fact that landscape produces sensations and excites emotions in the viewer and in everybody around him/her: looking at natural and human factors to explain certain landscape features; and understanding landscape change.



In the second step, the researchers and the pupils met; they went for excursions together and had lessons to communicate the results of the research with the correct language.

In the third step, the pupils themselves prepared posters, web pages and other materials to present what they had learnt to a wider public.

The direct contact between the research world and the school world and the active role played by pupils in disseminating the newly acquired knowledge make this project a very special, innovative and important one.

In Montebelluna (Italy), in Postojina (Slovenia) and in Annot (France), a travelling exhibition held in 2005 of 30 posters showed the final products of the educational phase. The exhibition was completed in each country with more original material. The posters' content coincides with the main content of the website pages. The Internet has had great importance for disseminating the results far and wide, reaching not only people living in the karst areas, but, potentially, the world over. Moreover, through the website pupils of three countries could keep in contact, feel the international dimension of the project and, to some extent, "exchange their land-scapes". They learnt about other karst areas and – most of all – they were encouraged to find the way (and the language) to present their "own" karst landscape to pupils in other countries.

Karst landscapes are not so uncommon but are well known only where large caves exist. Their uniqueness represents a very interesting "experimental field" to devote action to better know, compare and popularise landscape, as well as improve the assumption of responsibilities towards landscape matters. Moreover, reading remote and recent changes through time led to rediscovering near but often unknown worlds. Landscape played the pivotal function of a "knot" between different cultures and between different generations. Thus, the activities and the results of the 3KCL project matched very well the goals of the European Landscape Convention.

The final verification of assets, with researchers and teachers, showed that knowledge about the territory, awareness of landscape values and care for its conservation and protection all increased, thanks to the good partnership among different groups and the cultural mediation of the museum.

Professional associations (for example, landscape architects, as in Slovenia) and NGOs (at different levels, from international to national to local NGOs) can also be involved by the schools in educational activities on landscape. This kind of partnership is rather special because it allows sharing the targets through voluntary co-operation within our society. Many environmental or cultural NGOs are used to supporting schools, with their special competences and with the enthusiasm that often marks them. In such cases, teachers and didactic managers, bearing in mind their educational purposes, should pay attention to the fact that professional associations and NGOs are often more specialised in certain landscape features, and/or not completely neutral with respect to landscape issues, due to their own particular aims.

Box 5 – The Slovenian project "We are Making our Landscape"

The project was carried out from October 2004 to May 2005 by the Slovenian Association of Landscape Architects (SALA – www.dkas.si) in co-operation with the Department of Landscape Architecture, Biotechnical Faculty of the University of Ljubljana, with the financial support of the Ministry of the Environment and Spatial Planning, and other sponsors.

The purpose was to propagate knowledge about the landscape, and especially to better present Slovenian landscapes to the general public. The project aimed at stimulating children and adults to observe the landscape in their everyday surroundings and recognise the landscape qualities in order to raise their awareness of the environment, space and landscape, starting from the earliest age possible. The project focused on educating pedagogues, mentor teachers, as well as children and their parents, together with the general public. It pointed out that all of us living in a certain environment, with our attitude and our way of living, can influence the state of our landscape and our space, and thus take part in the creation of our everyday environment. In accordance with the objectives of the European Landscape Convention, being aware of the important value of landscape should become a commonplace and, consequently, should become also a criterion for interventions in the physical space.

The project was put into effect with a series of activities and events:

- publication of a series of five posters entitled "Slovenian landscapes". The concept of the five posters was based on a previous research project: Regional Distribution of Landscape Types in Slovenia (1998). Each poster presents one of the landscape regions, with some photographs and short descriptions. It also contains an explanation of the terms related to landscape in general, and Slovenian cultural landscapes and outstanding landscapes in particular. The posters were distributed in Slovenian schools everywhere.

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- a seminar and an accompanying workshop, to inform teachers about the project. It was mainly attended by primary schoolteachers. It focused on the creation of a notion of landscape, on the role of the landscape architect in society, and on the perception, the analysis and the shaping of the landscape. The participants actively took part in the discussion, and gave several interesting suggestions on additional methods of knowledge dissemination.
- publication of a teaching tool kit containing the general presentation of the project, a definition of the term "landscape", an introduction to the European Landscape Convention, the presentation of the project Regional Distribution of Landscape Types in Slovenia, and other notions about landscape, its perception, analysis and representation. It was designed for the general public, with special regard for mentors and teachers of primary schools and kindergartens.
- a competition for art and photographic works. The competition was held in schools throughout the country in order to involve children (from 4 to 15 years old) directly. Children were asked to capture special situations in the landscape, or the individual character of landscape elements. The competition was based on the observation of the landscape we live in, and on the representation of its characteristic images through art and photography. It was widely attended (more than 1000 works),



and the subjects of the works received were natural and cultural landscapes, city and urban landscapes, landscape patterns presented also in an abstract manner, or individual landscape elements. A panel of experts selected the winning works, basing their decision on creativity, innovation, readability, message conveyed and composition.

 an exhibition of the best works and an awards ceremony. The exhibition was opened in the Technical Museum of Slovenia at Bistra; during the ceremony 95 children received prizes. The project, presented during the 4th meeting of the Council of Europe Workshops for the Implementation of the European Landscape Convention (Ljubljana, May 2006), aimed at strengthening the idea that we have to face the changes in the landscape consciously and creatively, and we should increase familiarity with it. The visual character of the landscape depends on what images society holds of it, also influencing the way we deal with it. The quality of the space and the living environment depends to a great extent on the development process, but also on every individual and his/her willingness to make decisions about future development and the destiny of our landscape heritage. That is why the project intended to encourage children and adults alike to observe their everyday environment and therefore to establish a positive relationship with the Slovenian landscape.

Box 6 – The Armenian project "Settlements, nature and the landscape through the children's eyes"



А children's paintings competition was organised by the Urban Development Ministry of the Republic of Armenia together with the National Museum-Institute of Architecture of Armenia (NMIA), order in to promote a better awareness of the importance of the landscape as a background to the quality of life, as mentioned in the European Landscape Convention.

The preparation work for the exhibition began in March 2003. An invitation was sent to art education schools, centres of study, secondary schools, NGOs and youth centres. In the following months the ministry organised some visits to classes, schools and centres where explanatory training work with teachers and children was held, aimed to align children's works with the competition theme.



The members of the commission that chose the best paintings were painters, sculptors and art pedagogues. The commission was directed by the academician Gh. Chubaryan. The project concept had its roots in some basic ideas of the European Landscape Convention. These include:

- the aim of creating a harmonious life context for the present and for future generations; involving children directly in the landscape issue through the competition represents a way of looking directly towards a positive future;
- the importance of the promotion of a conception of the world as rich in human values, mostly at an early age, as is underlined by psychologists.

The exhibition of the best 134 works (more or less half of the total works presented) was co-organised by the Council of Europe and the Republic of Armenia in the framework of the "Spatial planning and landscape" seminar. It was opened in Yerevan on 23 October 2003, in the hall of



the National Institute-Museum of Architecture. The Armenian Urban Development Minister and other officials from the Armenian Government and the Council of Europe and other international organisations, numerous guests from the regions and the authors of the exhibited works (pictures), together with their parents and teachers, took part in the opening of the exhibition. The exhibition was presented by the Armenian mass media.

A part of the exhibition (51 works) moved later to Strasbourg and was opened in the hall of the Palais de l'Europe during the 2nd meeting of the Council of Europe Workshops for the Implementation of the European Landscape Convention, at the end of November 2003.

Conclusions and recommendations: promotion of education on landscape

1. European landscapes are the result of a long history of interrelations between humanity and nature, expressing the stratification of different cultures that built them through the centuries. European landscapes have great value as natural and cultural heritage, and need to be safeguarded and valued in order for further sustainable development.

- 2. The European Landscape Convention gives great importance to the relationship between people and landscape. On the one hand landscape is part of people's well-being, consolidating territorial identities; on the other hand landscape requires a certain awareness, knowledge, wise behaviour and a willingness to assume responsibility in taking direct or indirect actions.
- 3. "Education is a driving force for the change needed". This is one of the basic statements of the United Nations Decade for Education on Sustainable Development (UNDESD) 2005-2014, promoting education as one of the main targets to achieve sustainability. In this frame, the European Landscape Convention proposes education on landscape as one of the first necessary specific measures (Article 6.B.c). Due to the strong connections existing between landscape and sustainability issues, education on landscape is one of the best possible ways for implementing education for sustainable development.
- 4. Landscape is not only the visual aspect of places, in a strictly aesthetic approach. It is the "surface" of a spatial entity, where many different factors, both natural and human, act and interact. Landscape should be considered a tool for understanding spatial processes in depth and discovering different cultures and different environmental contexts. All landscapes should be investigated, not only the exceptional ones, in order to find out what is below the "surface".
- 5. The ability to read landscape is therefore an important means for a better knowledge of both the nearby and the distant world. Being a means available to all people, it can be implemented to some extent simply by making careful observations, without special research instruments. It is the way, for example, of widening and enriching the relationship between the tourist and visited places, if people become used to reading "through" the landscape.
- 6. Since landscape possesses a high value, culture and identity-wise, education on landscape can play a relevant role in facilitating cultural integration processes in multi-ethnic and multicultural contexts, nowadays so common throughout Europe. Hence landscape represents a way for a better knowledge of different places and cultures.
- 7. People generally behave with greater care towards landscape after they have got used to reading it and recognising the effects human actions have on it. Namely, learning to act responsibly first requires learning to see.
- 8. Education on landscape is education at all levels: intellectual, emotional and practical. It deals with knowledge, feelings and hands-on activities. Therefore it is a very good tool for helping with the upbringing process of children, enhancing all their potentialities and their wholeness as people.

- 9. In consequence, the Conference of the Council of Europe on the European Landscape Convention and then the Steering Committee for Cultural Heritage and Landscape (CDPATEP) are invited to examine a possible request to the Committee of Ministers to recommend to the member states to:
 - 9.1 include education on landscape programmes in primary and secondary school curricula, within the programmes devoted to education for sustainable development or, more generally, as part of "citizen's education";
 - 9.2 encourage special training in education on landscape for teachers; teacher's training is important not only to gather information on local landscapes but mainly for sharing didactic objectives and acquiring methodology; such training should always have an interdisciplinary character and help in improving the habit of working in teams;
 - 9.3 provide schools with materials for the implementation of activities on education on landscape. The material should cover both content and methodology and should be specially oriented to different school levels. Exceptional or beautiful landscapes should never be the only landscapes addressed; everyday-life landscapes should be mainly addressed, even when they show contradictions and provoke questions;
 - 9.4 support projects concerning education on landscape at national and international level in order to encourage exchanges among children coming from different places; such projects should be carefully designed to make children aware of the specificity and identity values of both their local landscapes and faraway landscapes;
 - 9.5 promote the use of information and communication technologies in education on landscape projects, since this technique presents high potential for this kind of activity. It is useful for understanding landscape as an entity consisting of a net of relationships, a "hyper-landscape"; it is also useful because it allows the use of different kinds of media (texts, pictures, drawings, videos, sounds, etc.), because it allows children from different places, working on similar projects, to contact each other, and finally because it can disseminate the results of education on landscape projects to a wider public;
 - 9.6 support all the possible ways and occasions for sharing best practices on education on landscape. This will encourage teachers and school managers to implement such activities more and more, applying the most effective approaches and methodologies, in accordance with their school level and local context;
 - 9.7 promote the involvement of different partners and sponsors in education on landscape projects. This will create useful networks especially among partners directly interested in culture dissemination and the promotion of landscape values;

9.8 establish a commission on education on landscape at national and/ or regional level with the co-operation of those departments of the national/regional administration that are concerned with the landscape (spatial planning, environment, sustainable development, cultural heritage, etc.) and the co-ordination of the education department. The commission should become a reference point for education on landscape and its main commitment should be diffusing education on landscape issues. This could be done by providing the necessary support in terms of materials and methodologies, as well as by directly starting activities and projects, or helping local administrations or single schools in organising them.