Landscape mosaics

Thoughts and proposals
for the implementation
of the Council of Europe
Landscape Convention

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Contents

Preface

The European Landscape Convention of the Council of Europe (ETS No. 176)[1] aims to promote landscape protection, management and planning and to organise international co-operation. It applies to the entire territory of the parties and covers natural, rural, urban and peri-urban areas. It concerns landscapes that might be considered outstanding, but also everyday or degraded landscapes. The convention represents the first international treaty exclusively devoted to all the dimensions of landscape, considered from a perspective of sustainable development.

The Council of Europe is continuing the work undertaken, since the adoption of the convention in 2000, to examine and illustrate certain approaches to landscape.[2] This book, entitled *Landscape mosaics – Thoughts and proposals for the implementation of the European Landscape Convention of the Council of Europe*, explores certain ways of understanding the landscape and makes proposals for more attention to be paid to it.

It brings together the reports presented by Council of Europe experts on the occasion of the Council of Europe conferences on the European Landscape Convention, organised at the Palais de l'Europe in Strasbourg, on 23-24 March 2017, 6-7 May 2019 and 26-27 May 2021. Representatives of governments and international organisations, both governmental and non-governmental, who took part in these meetings were able to discuss the subjects dealt with and make progress in the implementation of the convention.[3]

The experts who contributed to the production of this book are warmly thanked for the quality of their reflections and their proposals:

- ► Valerio Di Battista – Towards a grammar of European landscapes;
- ► Régis Ambroise – Designing agricultural landscapes for sustainable development;
- ► Patrice Collignon – The rural landscape in transition: energy, agriculture and demography;
- ► Mauro Agnoletti – Experience of Tuscany, Italy;
- ► Carmine Nardone – The Manifesto for the beauty of rural landscapes in Campania, Italy;
- ► Jean Noël Consalès – Urbanisation, town planning and landscape;
- ► Felix Kienast, with F. Wartmann, A. Zaugg and M. Hunziker – A review of integrated approaches to landscape monitoring;
- ► Barry Hynes, Valentin Riehm, Maguelonne Déjeant-Pons, with the contribution of Enrico Buergi – Experiences with public funds and the landscape;
- ► Yves Luginbühl – Landscape and responsibility;
- ► Michael Oldham – Professional recognition of landscape architects;
- ► Claire Cornu – Dry stone walls in the landscape, inheritance and innovation for rural sustainability;
- ► Gerhard Ermischer – Walking the landscape;

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1. Adopted by the Committee of Ministers of the Council of Europe in Strasbourg on 19 July 2000, the European Landscape Convention (https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/176 ETS No. 176) – now entitled "Council of Europe Landscape Convention" – was opened for signature by European states in Florence on 20 October 2000. A protocol amending the convention (https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=219 CETS No. 219), which entered into force on 1 July 2021, aims to promote European co-operation with non-European states wishing to implement the provisions of the Convention, by opening it to their accession.
2. *Landscape and sustainable development – Challenges of the European Landscape Convention*, Council of Europe Publishing, 2006; *Landscape facets – Reflections and proposals for the implementation of the European Landscape Convention*, Council of Europe Publishing, 2012; *Landscape dimensions – Reflections and proposals for the implementation of the European Landscape Convention*, 2017. www.coe.int/en/web/landscape/publications.
3. Conference reports: Documents CEP-CDPATEP (2017) 19; CEP-CDPATEP (2019) 20; CEP-CDPATEP (2021) 16. www.coe.int/en/web/landscape/conferences.

► Klaus Fürst-Elmecker: Traditional forms of thought and spirituality;

► Michael Oldham, with the contributions from Ana Luengo, Niek Hazendonk, Leor Lovinger, Indra Purs: Urban landscapes and climate change: the contribution of landscape architects to improving the quality of life;

► Régis Ambroise: Landscape and the responsibility of stakeholders for sustainable and harmonious development.

Maguelonne Déjeant-Pons

Secretary of the European Landscape Convention, Head of Landscape, Environment and Major Hazards Division, Council of Europe

Sanja Ljeskovic Mitrovic

Deputy Minister of Sustainable Development and Tourism of Montenegro, Chair of the 10th Council of Europe Conference on the European Landscape Convention

Krisztina Kincses

Senior Governmental Councillor, Ministry of Agriculture of Hungary, Chair of the 11th Council of Europe Conference on the European Landscape Convention

Chapter 1
Towards a grammar
of European landscapes

Valerio Di Battista, expert to the Council of Europe

Emeritus Professor of Architectural Technology, Deputy Dean of the Faculty of Architecture and Society of Milan Polytechnic and a National Director of Research in Italy.

Introduction

A systemic vision

The state of the art in landscape studies, in academic research and in the field brings together a body of knowledge (literature, landscape programmes and projects) provided by many contributors and from such diverse approaches that they are sometimes both disparate and contradictory. This shows the need for methodological guidelines that are more in keeping with the concepts of the European Landscape Convention of the Council of Europe, and so closer to a systemic vision.

The convention recognises the essential role of landscape in the fundamental relationship that populations have with their living environment. It indicates that: "'Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". (Article 1.a)

Taking the landscape into account transcends the domain of "experts" and specialisation, and requires informed interpretation and decisions which should, as far as possible, be shared, in order to confirm the nature of landscape as an open collective work, continuous, rich in the symbolism and meaning necessary for existence.

It is in this context that this report was undertaken, in order to begin to systematise some methodological references (mainly focused on theory) and, from there, to identify methodological guidelines (focused on implementation). The general concepts stated should be applicable to different cultural settings and operational contexts.

In the logic of a close interaction between knowledge and decisions, the analysis and project phases complement each other throughout any planned intervention. It is a question of developing collaborative and interactive approaches between public authorities, professionals and the public, in order to promote actions and achievements in favour of the landscape. It is about facilitating open, continuous and interactive processes that give better perspectives and conditions conducive to self-organisation.

The symbolic value of the landscape

Nowadays, the landscape, as a symbolic form, can assume the role that perspective played for people of the Renaissance (Panofsky 1927). According to Guido Neri, in Panofsky's view:

> two essentially different conceptions have arisen. ... One which corresponds to the disjointed, contradictory, "finite" objectivism of the ancient world, and one which corresponds to the homogeneous and "infinite" modern subjectivism ... and this will accompany us right to the start of this century. (Neri 1961)

Just as perspective became at the time a symbolic form in that it expressed a certain concept of the world, the landscape now conveys an open, complex concept, discontinuous in its signs and meanings, and also unstable, but continuous in time. The landscape is coming to represent a relative "reality" that matches certain cognitive interactions with advances in knowledge and the language of contemporary art. It is now taking on a very relevant cultural and operational role. Referring to people's perceptions permits the emergence of a new balance of uses, decisions and actions involving the landscape, while opening up further prospects, some of which may be difficult to accept.

It is possible to identify contradictions and discrepancies between the various approaches, as well as between these approaches and the everyday operational practices applied in landscapes. This is the result of a culture of separation – cf. the Cartesian paradigm (distinction between *res cogitans* and *res extensa*) critically examined in Morin 1999 – and our dual role as landscape beneficiaries and operators. The human being is thus the bearer of concepts, opinions and actions which always have an impact on the landscape. That impact is an unintentional outcome of the cumulative actions and interactions of random processes, which often dissipate energy, coherence and other material and immaterial resources. There are also coherent elements that explain the positive values of many spontaneous, human-made landscapes and of processes from which forms of self-organisation have emerged (Gutkind 1958).

These preliminary remarks, together with the landscape's correspondence to the "place-based identities" of environmental psychology (Bonnes and Secchiaroli 2005), suggest that greater attention should be paid to the different types of unintentional processes.

1. Methodological references

Experiencing the landscape

The concept of landscape as perceived by people implies taking into account all the cognitive references that have the notions of "territory" and "environment", supplementing them with symbolic values which those references do not possess (Changeux 2012).

Who observes what?

The public – individuals and social groups, with their narratives and representations, as well as scientific bodies and institutions – are all systems engaged in observation, systems which describe and use landscapes and take decisions and actions affecting them. They have different levels of expertise and

awareness. Some steer and manage intentional processes and projects. All are users of the landscape and are sometimes involuntary actors.

What do we observe?

The landscape is the system of signs and meanings which surrounds us. Sensory enjoyment of the landscape is total. In other words, what we see is accompanied by noises, sounds, scents or odours, in a multiscalar dimension. The term "multiscalar" is understood to mean the perceptual coexistence of signs that are very close and/or fairly close, along with signs that are fairly distant and/or very distant. This is the single image that the human being constructs from all the visions and representations available (in computerised mapping, it is possible to use zoom effects or a vision from different points). The human being is always and only surrounded by landscapes.

How do we observe?

Landscapes can only be observed by moving through a territory. The landscapes of a territory can only be observed by travelling through it. Aerial, satellite or map views, describing positions and distances that are not identifiable by direct observation, are necessary operational descriptions, but they are not the same as the beneficiaries' perception, because they never manage to recapture the emotive and cognitive impact of direct perception.

Territories and the environment are analysed using a variety of methods from many scientific disciplines – environmental, anthropological and economic – through different approaches (perceptive-visual, psychological, social, historical and cultural and descriptives). These are mostly associated with pictorial, photographic and literary representations. All of them provide valuable knowledge, but because they are partial and disparate, they struggle to capture the entirety of a system. As this scheme of isolatable units acting in a one-way causality has proved insufficient in modern science, notions of wholeness, holistic, organisational, or Gestalt, have expressed the need to think in terms of systems of mutually interacting elements (Bertalanffy 1968; see also Farina 2006).

Visibility and visual perception

Visibility is about the sight as observed, free from all meaning and value. Its evaluation across a territory is essential to identify the various visual weaknesses (areas visible or not visible from given points). It can be carried out by an analysis or interpretation: indirect (visibility is assessed by means of cartographic bases, and different types of representations, such as photos or videos); direct (it is carried out in the field by experts along with representatives of the population); passive (it takes into account the ways and probabilities of being observed).

Beyond visibility

Recognition

Recognition is essential for a complex perception. It allows a person to identify and assign value (a name and meaning) to the various landscapes. Recognition involves sensations and memory, activates cognitive functions and organises complex judgments based on delimitation of the observation area.

Delimitation

The primary function of visual information, for humans as well as for animals, is to allow the recognition and delimitation of a territory for survival purposes (food, security, well-being). Nowadays, for human beings, delimiting boundaries involves recognising the context of social, emotive and identity-related interactions.

> A context is defined with particular physical characteristics in which the participants are engaged in particular activities, in particular roles for a particular period of time. The factors of place, time, physical characteristics, activities, participants and role are elements of the context. (Bronfenbrenner, 1979)

Documentation

The visual perception of a territory is not complete without taking into account the extensive information and descriptive or interpretative framework generally available. Every place is a cultural repository of information which it can be useful to collect and organise (cartographic and other documentation from museums, ecomuseums and other sources). The documentation can be informative, descriptive or interpretative.

Most of the time, informative or descriptive documents already exist. However, they are sometimes difficult to identify or are not always known. They can also be discontinuous, in time or with regard to the arguments presented. However, they are still useful and can be updated.

Interpretative documentation includes historical and literary texts, pictorial, photographic and filmed representations and much else. Narrative and iconography, including modern interpretations, offer important historical and geographic points of comparison.

Identification

What is visible or invisible helps identify places and brings to mind the *Gestalt* laws. Occurrences, quantities, physical characteristics (features, geometry, dimensions, materials, colours) and their disposition give the system its name and its primary meaning (for example an agricultural, urban, marine, mountain or river landscape). If we consider a landscape containing a plain, a river and a hilltop bastion,

the observer is assumed to be on the plain or on the hill, depending on the point from which the observation is made (law of proximity). However, if, for example, the observer is on a plain within a wide valley among mountains, the landscape will be identified as a mountain landscape (law of good *Gestalt*). Similarly, the landscape will only be defined as fluvial if a river can be seen or if the observer has a memory of being next to it, even without seeing it (law of past experience). In an indirect view the same landscapes lose these denotations.

The visual, temporal and associative characteristics of a landscape represent structuring factors that make it possible to identify a landscape by organising the many variables that compose it (Norberg-Schulz 1979; Lynch 1960). They determine its dominant components by giving it specificity.

- ► Visual characteristics derive from signs: shapes, figures, volumes, surfaces (flat, inclined, concave, convex), textures (thick, thin), profiles, lines, points which configure the elements (soil, water, trees, clouds, constructions, roads, buildings) under observation conditions (directions, light, shadows) and in terms of distance, horizon, boundaries, position, dimensions, materials or colours.

- ► Temporal characteristics derive from the observation periods (duration, frequency, cyclical nature of use, dynamic perceptions, seasonal conditions, diurnal cycle), and also from the accumulated visual and cultural memory. The latter is determined not only by the various lifetimes within the systems being observed, but also by the different identifications made by observers. Therefore, the landscape reflects a present which interacts with a mosaic of memory traces which have various symbolic values.

- ► Associative characteristics are observed by associations of images (views that resemble each other may be perceived as having similar meanings) or situations (views may take on meaning or vary depending on the situation or particular events experienced or remembered: synchronic, diachronic, mnemonic).

Intervisibility

In any landscape, the human being sees spaces (open, closed or otherwise) as well as many other things. Their combinations change with the visual observation conditions (positions, movement type, seasonal variations, brightness), interacting with the other senses, with memory (emotions and knowledge) and with different intentions and information.

Because of the importance of visual experiences, any landscape analysis must consider the issue of intervisibility, direct and indirect. It is necessary to carry out cartographies of views, from and in different places. The resulting processing of information must take into account the direct perception, the most common, that each person has of their landscape and their place in life. It is important not to limit the appreciation of the landscape to only remarkable elements and not to put obstacles between knowledge and experience, between use and regulation.

Indirect intervisibility methods should be applied, while integrating them with local direct intervisibility perceptions.

Interpretation of the conditions of intervisibility of a territory makes it possible to adjust the observation in relation to what one wants to look at and to improve the perception of the system operating through different views and fields of vision with accentuations, corrections and reductions in various visibility conditions.

The analysis of intervisibility (indirect and direct) is a working basis necessary for many operations (identification of the landscape sensitivities of a territory; selection of panoramic views with different degrees of suitability; selection of fields of active and passive vision, as the basis for the functioning of the landscape; enhancement of landscapes, natural, rural or urban, with the creation of paths and stopping points).

By working mainly on the issue of perception, these different options make it possible to design a landscape project without the landscape as such being transformed, and to improve it by making better use of its specific characteristics.

Complex perception

Assessment

Every landscape offers a host of primary stimuli required for survival (usability, safety) – "It is about understanding these ambivalent relations which are woven between the elements of the landscape and the body" (Galimberti 2010) – and gives information to help recognise places, "things" and ourselves.

> "Place" refers … to the essential nature of the location differentiating it from all other locations. "Place" ... is the way in which landscape dimensions combine together and are identified to produce a distinct environment and a particular sense of location. (Canter 1984)

As observation systems, we gather, select, process, memorise and compare stimuli and visual information which we use to control instinctive reactions, activate emotions and "feelings" and accumulate knowledge (Peirce 1980). Mallgrave says of emotions that by most definitions, they precede our conscious awareness of feelings, and initially code whether an environment is pleasing or not (Mallgrave 2013).

Interpretation of the interactions between positions (near/far, below/above), dominant configurations (mountain landscape, urban landscape) and prevalent characteristics (wooded hills, dense construction, cultivated open plains) allows recognition (known/unknown) and identification, and generates first impressions and assessments (harmonious or inharmonious landscape, coherent or incoherent landscape; approval, indifference or disapproval; safety or danger; well-being or discomfort, etc.) of a landscape.

In the landscape these forms of recognition and assessments always relate to numerous observers with different degrees of expertise. Individuals develop different levels of appreciation and well-being. Professionals (analysts, decision makers, operators) target their assessments to confirm or modify their intentions and, therefore, consciously choose their descriptive terminology. Professionals and local inhabitants (often the same people) constantly interfere in each other's assessments but can come together with difficulty. The expert perceives the landscape (abiotic, biotic and human systems and subsystems) using scientific methods which "colour" the landscape based on their own content and terms. However, there are also multidisciplinary contributions dealing with the specific problems of each territory that use a mutually agreed language resulting from comparison of the assessments.

These unconscious and conscious denotations, which vary in their degree of intent, include processes for conserving or transforming the landscape with internal, disparate and variable consistencies or inconsistencies.

Assigning values depends on many individual variables (such as knowledge, motivations, physical and psychological conditions) and social variables (cultural models, customs, shared appreciations).

The most common values attributed to the landscape are aesthetic: approval and acceptance (beautiful, pleasant); indifference (mundane, insignificant); disapproval and rejection (ugly, unpleasant).

In fact, there are more mixed values involved. Subjective (affective, emotive) and social values (naturalist, religious, linked to material and immaterial culture) reflect the local consensus and prevalent cultural models and together form the complex perception of a place (Donadieu and Périgord 2007).

Public perception

An initial approach to involving the public envisages "a joint effort among academics in the fields of natural and human sciences, planners, administrators and local populations; an effort to provide education and training, linked to field projects" (MAB 1988; Bonnes and Secchiaroli 2005). The perception of a landscape is a cognitive process and encapsulates recognition, identification and assessment (Bateson 1979; Maturana and Varela 1980; Varela and Shear 1999; Neisser 2014). It occurs in different ways and at different levels of interaction between "knowledgeable" and social observations, and between expert and emotional perceptions (CM 2008: II.2.1; Changeux 2012). In every case, it provides interpretative analysis which is essential for exploiting the landscape's signs and meanings.

Every landscape supplies a vast amount of information, the selection and deciphering of which depend on what we want to know, on what we already know and on the levels of emotive involvement.

Many actors (of various ages, activities and interests), as well as many structures (political, administrative, scientific), with diverse, varied and possibly conflicting experiences, skills and interests, carry out targeted observations, depending on their specific motivations.

Often, each of these observations has the effect of limiting the emotive relations and experiences which generate cognitive processes, but taken together, they offer a composite, albeit frequently specific, perception. The path that goes from "elementary" perception, to "complex", and then "interactive" perception, translates in a simplified but real way the scientific debate between cognitive and neurological sciences. "Through the landscape, there is this exchange between man and the environment through which man adapts (psychological and mental) to his own world." (Turri 1974).

All individuals, as landscape beneficiaries, describe global perceptions (sensorial, psychological, emotive, pleasurable, beneficial, economic, etc.) and always mention, individually or as a community, their living environments. The social perception deriving from the various local observations and experiences is therefore always composite, uncertain and fluctuating. It is based on different recognitions of the visual perception, while being influenced by the expert identifications, and tending towards general assessments which are often imprecise and sometimes biased. However, the analysis of this perception is necessary since it is the starting point for actions that produce and change landscapes.

Public and experts

Everyone is both a user of and actor in the landscape (CM 2008: II.2.1). Each of us manages the areas and aspects of the landscape in which we live. We look after and/or modify "our" private space (by choosing colours, objects, layouts) and interact with public areas (by planting flowers, but also by dumping rubbish).

When they are observing, users of and actors in the landscape have the impression that other users and actors offer sectoral or insufficient descriptions of the landscape. This feeling can arouse mistrust, leading to dismissal of the recognition of the concept of landscape as an important common good. Differences in perception, motivation and language can cause misunderstandings between the public, experts and institutions.

Utility use

Utility use is always one of the reasons for interaction between the public and living areas (environments, territories, landscapes) and often assumes symbolic values (Magnaghi 1998). Factor variations, in place and time, interact with all the characteristics of the landscape and have quantitative and qualitative implications with positive and/or negative symbolic values of the landscape.

Utilitarian and symbolic enjoyment is always present and derives from individual and social motives (activities, interests, opportunities, demonstrations of belonging, wealth, power, etc.). They vary in their causes and levels of intensity; they are random, or they build up and generate habits (inertia), become local customs (not always positive), highlight links and offer degrees of freedom. They produce positive encounters (shared experiences) and negative ones (rejections), social relationships conducive to co-operation, but also to conflict.

> The person as a social agent seeks and creates meaning in the environment … a second important process issue involves the understanding of inter-relationships between the environment on the one hand and group formation and maintenance on the other. (Saegert and Winkel 1990)

Coherence between interactions

Within landscapes we can perceive signs and information elements with coherent meaning (generally comprehensible and well-accepted) or incoherent meaning (difficult to grasp and with a low level of acceptance).

The difficulties in achieving coherence between the intentions of the various actors, the discrepancies between expert interpretations and practical perceptions, between utilitarian values and symbolic or emotive ones associated with living areas, generate, involuntarily, unintentional processes.

The perception (and the very concept) of a landscape accordingly fluctuates with the instability of interactions between systems that lack consistency. But this very state of instability could generate self-organisation.

Conditions and levels of incoherence – the presence of signs with configurations or materials which are incompatible with the context – can trouble perception (visual and descriptive). Visual incoherence results from signs and meanings which diminish or distort the system's values, as happens, for instance, with an element which is "out of tune" in a piece of music or a literary work.

Intentional and unintentional processes

Within landscapes, various analysis, decisions or operational processes occur, which are intentional, partially regulated ("implicit" effects) or unintentional (spontaneous, diverse and disparate). Intentional projects are projects (run by institutions or operators) which are supported by planning, scheduling and design techniques with effective and efficient cause–effect relations. In partially regulated processes, the rules and programmes do not generate sure and certain relationships but allow probabilities or implicit effects (Dematteis 2007). Unintentional projects are heavily emotion-orientated and have uncertain cause-effect relations. Social psychology defines "spontaneous" processes as those which occur: "without any cognitive effort and without careful reflection; attitudes are automatically triggered and have a direct influence on behaviour. The more accessible the attitudes, the more foreseeable the spontaneous behaviour." (Boca et al. 2010).

All these processes interact with each other in space and time, engendering a tangle of indeterminate, unpredictable and only partially controllable relationships – in other words, an essentially unintentional process. This can cause difficulties and require the development of new concepts, new levels of interpretation and ways of organising actions, which in turn have an impact on the project concept.

Intentional processes can also, in general, cause unintentional events. This means that it is very restrictive to apply to the landscape the logic and procedures of an intentional project. No intentional project can withstand the power of an unintentional process which has a continuous effect on the landscape. Contemporary landscapes created by humans seem largely to originate from global unintentional processes, guided by cultural models (products, available techniques, customs and tastes) which are becoming increasingly homogeneous and standardised.

Unintentional processes easily cause negative effects: banalisation, noise, waste, neglect. They also reflect the cultural rejection and the limits of dissipative models. However, in some cases, strong interaction between the community and the natural characteristics of places has given rise to unintentional landscapes with significant coherence between architectural elements and the landscape (Rudofsky 1964).

It is therefore still possible to envision that those processes that develop in a more conscious way can improve conceptions and behaviours in the relationship between man and territory, the environment and the landscape.

The landscape project

Issues

The landscape always shows an accumulation of projects. Some of them are intentional, run by technical specialists (infrastructure, constructions), often having an impact on the surrounding landscape and always on the near landscape, and producing, as a whole, unintentional outcomes.

Many projects follow the cultural trend of "novelty", which very often underestimates the importance of a good knowledge of the physical and denotative interactions still present in every place. However, insufficient consideration of the history of places more often generates attitudes of indifference, or even errors at the local level.

> How have we managed to reach the point of condemning the theory and practice of construction as the symbols of everything we believe as being the most destructive ... of being the worst ugliness, sordid venality ... huge projects which destroy the life of the common man, organised malice which is not mitigated by a single social value? (Blake 1978)

It is therefore necessary to adopt a project approach that draws on the legacy culture (Battista 2006).

This approach comprises analyses – ranging from perceptual analyses to identification, assessment and ultimately to operational diagnoses – and strategies for planning interventions and selecting more suitable operational practices.

Standardised landscapes

Nowadays, many landscapes reflect a pervasive form of downgrading through standardisation, which occurs on two parallel levels: the neglect of existing landscapes and the arrogant unoriginality of new landscapes. Existing landscapes (natural or anthropised) embody identity-related values, which are weakened when the forms of use and appreciation that prevail result from new types of consumption (such as mass tourism). The new is often accepted as such, even if it is aggressive in a particular context.

Urban landscapes are becoming increasingly similar throughout the world, and it is significant that this affects areas with a potentially high real-estate value as much as shanty towns. Too often, only pre-existing areas still have distinctive features; however, everywhere fairly similar transformations are taking place.

Rural landscapes are marked by the invasive presence of single-crop farming, new production facilities (warehouses), energy systems and dwellings (housing and small apartment blocks).

Participation

The presence of unintentional processes in the landscape requires public participation, which today takes place mainly during the analytical phases, but is seldom present in the decision-making process. This shows the prevalence of top-down models, which seem surmountable only on a small scale, for instance in a village or a neighbourhood where it is easier to initiate shared analysis of the existing landscape and involve users in operational decisions and processes.

Even in these cases, participation requires the people's faculties to be as receptive as possible, and a broadening of the appreciation, which in addition to visual, emotive and symbolic appreciation embraces all the other values (ownership, use, availability, efficiency, performance, economics, social relations). This enlargement of appreciation encompasses decisions which are the preserve of those with political and technical mandates and alters the culture of the project.

Methods

Legacy culture

Under the legacy culture, we are all responsible and we are all actors and operators in relation to our surroundings (houses, roads, districts, villages and territories). In relation to the landscape, the legacy culture (in terms of both analysis and assessment) requires expert knowledge and the people's perception:

> Participation implies two-way communication from experts and scientists to the population and vice versa. The population possesses empirical knowledge (local and naturalistic knowledge) that may be useful in completing and contextualising specialist knowledge. (CM 2008: II.2.3.A)

The analyses provide the structure for assessments which define objectives. This (analytical/decision-making) process occurs via means which are intentional (informed and expert) and unintentional (spontaneous, little informed), and these co-exist but do not collaborate.

Any project must therefore be based on the existing situation and consider that each action undertaken affects and produces the landscape (Morris 1881). The evaluation of projects must constantly guide the projection of what will be, the vision of the future. The project organises a process (intention, preparation of actions, activation, control of the outcomes and any feedback) which provides a specific context for relationships of cause and

effect. This concept enables better outcomes to be achieved based on few variables and simple aims. In the case of complex elements, the project organises separate processes. This procedure, when applied to cities, territories and landscapes, proves to be inadequate as a means of regulating indeterminate processes and achieving the desired results (Dematteis 2007).

Legacy projects

This concept makes it possible to draw inspiration from certain established procedures in the field of architecture (ANCSA 1986), to consider the following elements in a landscape context:

- ► knowledge and evaluation of the conditions of use (diagnosis);
- ► taking into account the diversity of the people, their roles and the necessities;
- ► complexity of the processes (interactions, durations, instability);
- ► complexity of the choices to be made between conservation and processing, identity and utility;
- ► iterative procedures involved in diagnosis and decision making;
- ► the requirement for pragmatic, participatory, open and continuous guidelines.

In the landscape, as with the built environment, ongoing, pervasive processes become prominent, processes which reflect social organisations, methods of production and cultural developments, and which also interact with abiotic and biotic systems. Landscape management unifies the range of political and cultural options on the ground and necessitates operational methods compatible with the long-, medium- and short-term variables present in settlement systems.

Interactive perception and unintentional projects

The landscape involves all the environmental conditions (climate, soil, water) and all living organisms (from bacteria to human beings) and brings to the fore, on different scales, interactive perceptions and projects (intentional and unintentional) which function with different purposes, modes and time frames.

In this dense network of processes, the intentional objectives cannot merely give rise to ad hoc instructions and verifications; the aim must be to create a diffuse culture (material and immaterial) of skills and sensitivities for guiding improvement processes. This requires gradual self-adjustment (as in politics and the programmes of large business groups) in order to identify strategies and run projects.

Landscape strategies

The term "strategy" is used to designate a process which influences the interactions between all the individuals in their relationships (utilitarian and symbolic) with the various places (landscapes, environments and territories). Landscape strategies require autopoietic approaches, namely practices which are flexible and adaptable to perceptions of the values and critical issues at stake in the operational context, with a view to self-adjustment and integration of intentional projects, mitigation of the adverse effects of unintentional factors and the triggering of improvement processes.

To a first approximation, these are networks of management processes (signs, meanings and uses) which, by interacting with each other, reorganise and characterise the system (Donato 2010).

These are difficult processes, but they are simple to initiate based on the human resources most concerned (almost always present in every community) and the most feasible improvement and/or enhancement objectives. It is advisable to proceed in stages, involving both the population and the experts.

Awareness raising

Interpretations of intervisibility (expert exploration of visual perceptions) highlight indisputable values (such as sensitive and hidden areas, symbolic places and goods) that can trigger perceptions among people that gradually become more complex and interactive.

Article 6.B (Specific measures) of the European Landscape Convention recommends approaches which create a kind of complicity with the landscape, such as awareness raising in schools, museums and ecomuseums (see also CM 2014).

Assessment

To identify values and clarify strengths and weaknesses in an open and participatory manner, the following methods can be used: SWOT (strengths, weaknesses, opportunities and threats) analyses, focus groups, surveys, interviews and "parish maps" (a concept from anglophone experiences of culture mapping in the 1980s). It is also possible to carry out post-occupation evaluations (POE); similar procedures can be applied by questioning users about situations in the areas they use, to verify and rectify technical weaknesses.

Devising strategies

The above analyses identify areas requiring more in-depth examination and suggest priorities and alternatives for maintaining strengths and positive values and reducing weaknesses and negative

values. Multicriteria participatory assessment of such options can enable joint strategies.

Implementation policies

It is for the public authorities in their administrative area to devise framework regulations, select quality objectives and adopt (joint) strategies to be converted into short-, medium- and long-term implementation policies (CM 2008: II.2.2). At the same time, they should facilitate and initiate forms of public participation. This will produce direct effects (in reassessments, reuse of public goods) and implicit effects (brought about by rules), which can be combined with the unintentional processes arising from local needs and the existing culture.

Monitoring

Over time, institutions at every level can monitor positive and negative outcomes, update objectives and adjust intentional actions (programmes, plans and projects). It is important to know that every decision or action can preserve or modify, improve or degrade the signs and meanings of the landscape.

Transparent and ongoing plan and project

The methods already tried and tested for the built environment result in rigorous iterative diagnosis and decision-making programmes which explain where and what to preserve and/or transform, and how to identify the various types of intervention to achieve results which are compatible with the objectives (Di Battista 2006). Regarding programming, refer for example to Italian standard UNI 10914/21 and about projects, refer to standards UNI 11150 (1-2-3-4) and 11151. In the various landscape systems (macro, meso, micro), each of the actors (at their level of influence) determines eventualities based on assessments of the status quo; comparison of the various assessments generates decisions which require mediation. If the assessment is satisfactory, it will tend to favour conservation and, if unsatisfactory, it will tend to favour transformation.

Decisions made about the existing heritage will generate processes with various levels of motivation and awareness (intentional and unintentional) and will interact with the abiotic and biotic systems, even when partly controlled by environmental impact assessments or strategic environmental assessments. Within a landscape these processes reflect identities, alongside the state of the living environment. In this respect, the landscape provides a unique opportunity to adopt an integrated approach to interpreting and governing the material and immaterial interactions of settlement systems.

Enhancement of the quality and roles of the stakeholders

It is wise to promote quality improvements in the operations and roles of:

► institutions with political or technical responsibilities (expert analysis phases, simulations and monitoring);

► users/operators with social responsibility for interpreting values and requirements (social, economic, cultural, psychological) and in possible forms of grass-roots self-organisation.

Developing a co-evolving dialectic

The development of a co-evolving dialectic of stakeholders would make it possible to bring together various policies related to habitat (landscape, environmental and territorial) and landscape; and promote an open, ongoing project with the aims of:

► interpreting diagnoses, positive or negative (operational diagnoses are regulated by the strategy, but allow feedback);

► simulating choices and advising on alternative assumptions;

► regulating the life cycles (continuity and/or change) of the signs and meanings present in the landscape.

If simulation is needed, current rendering software makes it possible to present environments, even complex townscapes, from different viewpoints at various levels of detail, and to simulate explorations by moving within the model.

Initially, an open and continuous project can be tedious and slow to complete. However, this is accompanied by a large number of positive effects in terms of awareness and training, which are less visible but essential. They can indeed contribute to enhancing the quality of cultural models, the techniques used and "tastes". It is useful to define methodological guidelines for improving unintentional processes that have effects on the landscape and the living environment. Assessing the likelihood of sustainability offers numerous opportunities for regulating and choosing among the various types of intervention.

2. Methodological guidelines

Methodological guidelines can be consulted for any type of landscape, at any scale and with different modes of participation. The guidelines presented below are open indicators that can be used together or separately, irregularly or periodically. It is suggested to use only those approaches that have a strong likelihood of success; there is no need to waste time with unusable results. The results achieved may then require more in-depth analyses.

They can be adapted to the specific situation of each state or territory, considering the applicable legal framework.

Awareness raising among civil society, private organisations and public authorities is a prerequisite for increasing the attention paid to and interest in landscape issues. The landscape is a resource and an opportunity.

Taking care of the landscape should, as called for by the European Landscape Convention, permeate training and education processes. Specialisation and refresher courses using appropriate teaching methods for technical staff and professionals of public authorities can thus prove useful.

Public participation is a complex process which is different every time and relates to a delimited area.

> It implies recognition of the rights and responsibilities of populations to play an active role in the processes of acquiring knowledge, taking decisions and managing the quality of the places where they live. (CM 2008: I.2)

In small villages, where active associations co-operate with the authorities, the possibilities to participate in the whole process are greater but depend to a large extent on the availability of the necessary capacities. In medium and large centres, organisations representing beneficial interests and better organised associations seem to predominate.

The presence of local observers and the support provided by university research and pedagogic activities in the field have an important role here. Participation can be strengthened by involving the population in data collection, project development and landscape management. Participation in analysing and assessing the maps and subsequent strategies may focus (intentional) policies through better informed management, launch actions, improve (unintentional) behaviours and allow continuous interpretation of the processes under way. Landscape observatories, centres or institutes, as well as specialists and professionals, can support this work.

Landscape analysis

Visual perception

To define what is seen in a landscape, it is necessary to carry out visibility analyses to understand how the landscape is perceived, and then to make assessments. These are indirect, when they are made from representations of the landscape, or direct, when they are made in the field.

Indirect analyses of visibility

Indirect analyses of visibility are made from graphics, photographs and other representations, in association with analyses of indirect intervisibility. This form of analysis selects observation points and identifies what can be seen from these points (the "viewshed"), considering altitudes and landforms. Similarly, a digital terrain model (DTM) can be used to calculate lines of sight by means of algorithms. In both cases, the viewshed is defined from the point being considered.

Theoretical intervisibility (excluding probable obstacles) makes it possible to measure the likelihood of the various parts of the land being seen when a territory is traversed. The Natural Breaks method allows the researcher to obtain normalised values between 0 and 1 and to classify them into five intervals. This involves measuring the differences in theoretical visual sensitivity for the land's different viewsheds. On a large scale these techniques make it possible to establish a basis for raising individuals' awareness and identifying landscape areas, or territorial units (in terms of character, identity, etc.), and promoting management strategies.

Direct visibility analysis

This involves identifying places, paths and points with various landscape qualities, then describing the landscapes visible from the fields of view and viewsheds.

▶ Field of view. The field of view defines what is in front of a person, to the right and to the left, up and down, in respect of a directrix (optical cone). In the vertical and horizontal planes, an optical cone has a generatrix at an angle of 30° to the main straight line directrix. It allows you to estimate distances, positions and conditions of movement. It is unidirectional and selects the views of interest from every point. The field of view of a landscape from every point can be used to determine different levels of visual enjoyment, using such parameters as: expanse, which indicates the entire distance the view extends across the horizon (possibly measured in degrees); and depth, which is the distance from the most distant profile (in defined conditions of clarity and possibly measured in miles or kilometres, verified by mapping).

▶ Viewsheds are areas delimited by points with two-way intervisibility. They are useful for verifying visibilities (i.e., the different probabilities of an area being observed). However, landscapes are not qualitatively similar. For this reason, in direct intervisibility it is useful to distinguish between active and passive visibility. The brain, in its sensorial processing and image making, operates through a process of pattern recognition, for which metaphors seem to be an ordering principle (Edelman 2007). Up/down, front/back, static/movement, all are metaphoric or

existential categories emanating from the body and through which we read the events of the world (Mallgrave 2013).

Active visibility

The active view creates interaction with elements of the landscape and with the landscape as a whole. A view can be experienced directly by individuals with differing levels of expertise. In organising observations, the following data should be noted: the area concerned (which may correspond to a landscape unit, or not); transport (by car, on foot); means of recording (photo, audio, video, notes, drawings); identification points on a map showing the path followed and observation points; identity of the observer; direction of fields of view, characteristics of and problems with the landscapes at different distances; various notes (e.g. season and time of observation, light conditions, clarity). If observation is being carried out by several individuals, the composition of the sample should be specified. Notes can be used to record other relevant conditions (sounds, odours), which may be positive or negative, permanent or occasional. Observations always require pictorial documents (photos, videos) and can be supported by measurements (breadth and depth), maps (paper or digital) and relevant symbols, as well as by specific protocols, if comparisons and follow-up are to be made.

▶ Multiscalarity is an "active view", which places people in a space defined by different dimensions, each contained inside another. Such a view can give access to landscapes of varying extents and can focus on sections of space placed in different positions and with varying characteristics.

▶ Background landscapes are determined by the last visible profile, which may coincide with the successive limits but may also, with high mountain systems and good visibility, be beyond 150 km distant.

▶ Wide-area landscapes have very distant horizons (between 5 and 15 km away) and include extended territories which sometimes have heterogeneous characteristics. The public can recognise them as identity related. The boundaries of a landscape differ depending on whether it is perceived in terms of visibility or as an identity-related area.

▶ Contextual landscapes allow visual recognition of the signs present, which diminishes with distance. A distinction should be made between near (0 to 1.2 km away), intermediate (1.2 to 2.5 km) and distant (2.5 to 5 km) landscapes. "Near" includes landscapes within touching distance (within a few metres, where the concept of

proxemics is relevant)[4] and those a short distance away, which offer the best analysis of details (up to 0.5 km). These distances influence the perception of all the above landscapes. In each type, the differing distances lead the observer to mark positions and distinguish signs using different definitions, features and visual characteristics.

▶ Visual perception, passive view. A passive view corresponds to the way a place appears when observed from the outside. Every system of signs can be seen (with different probabilities) only from certain positions. It will not be visible from others, as if it did not exist (thus, more attention is given to street fronts than to inner courtyards). A passive view makes it possible to identify passive sensitivities. For example, a historic village may have street fronts which are particularly visible (and therefore need to be looked after with particular care and attention), or conversely a territory can include areas which are barely visible (where objects with a negative visual impact can be concentrated).

Visual sensitivity

Greater visual sensitivity is associated with places that are easier to observe and more likely to be observed. This means that some places may be visible from more paths, for longer periods and by more people.

Intervisibility

When analysing the landscape, it is necessary to consider interactions between the observed system (distance, recognisability of configurations and profiles) and the observers (positions, means, probability). As a result of this analysis, a first map (networks or sequences of points and paths) can be produced, with areas of varying visual sensitivity, making it possible to verify with other individuals whether the visible elements indicated are significant in terms of the character and identity of the relevant territory. This initial exploration (during this phase indirect expert observations can be used) discovers and denotes the territory and constitutes an indispensable foundation for getting administrations and the public to focus attention, even if very slowly at first, on their own landscape and on establishing conservation or transformation programmes.

Complex perception

Recognition

Orientational recognition processes information about the observer's position and movement. It

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4. Proxemics studies the human use of space and the effect that population density has on behaviour, communication and social interaction (Argyle 1988; Bechtel 1997; Bell et al. 1996).

involves limbic functions which trigger instinctive reactions and emotive assessments, and activate the senses of safety or fear, well-being and pleasure, or discomfort. It can derive from the roles of key landmarks and dominant elements and be modified by distances. We can distinguish three kinds of recognition:

► Primary unintentional and involuntary recognition allows comparison of emotional interactions with the landscape.

► Comparative recognition compares systems of signs; it is both voluntary and involuntary, and may depend on the reasons for observation, on memory and on existing cultural models.

► Intentional recognition is voluntary and conscious. It generally uses highly structured cultural models (scientific, philosophical, religious, etc.) and functions through selective observations geared towards gleaning specific knowledge.

Visual delimitation

Visual delimitation allows to delimit areas with active views (fields of view and viewsheds). Areas under observation often do not have clear-cut boundaries; they may change as the observer changes position. Boundary delineation may be open or closed, depending on the types of movement involved, such as linear or circular. The border lines can overlap and be permeable (areas whose attributes are structured by links with neighbouring territories). Some links can be perceived from a social point of view but not visually.

Information material

Every landscape unit, however defined (it may, for convenience, coincide with an administrative area), relates to a huge quantity of information, much of which is scarcely known or used. Each landscape study requires general information (geography, history, anthropology) and specific information (pedagogical, typological, repositories of local culture: thematic collections, finds, documents, targeted interviews).

It is advisable to consult the urban planning documents (general and sector-specific), studies and reports (including grey literature produced by institutions, research centres, universities), statistics, basic and thematic maps, archives, descriptions, literature and other available sources. It is useful to have a cartographic database (maps, historical property registers, surveys) and a bibliographical database (history, climate, geology) including titles and sources of general and specific findings concerning the observation area, and to have a historical and current picture repository for paintings, drawings, photographs, videos and film clips.

The task of collecting and organising the material can be carried out at local community level with the help of local libraries, schools and other groups, and help with training among stakeholders and awareness raising on the characteristics and issues of the territory (CM 2014).

Identification, qualitative sensitivity

The "character" of a landscape derives from dominant elements, key landmarks and the physical presence of the elements which identify it. Characteristics may be visual and temporal.

Visual characteristics

Every view provides a whole host of information (Lynch 1960; Cullen 1961; Bishop and Lange 2005; Gombrich 1985; Fiorani 1998; Arnheim 1954): positions (front, side, above, below, alignments), dimensions (large, small), distances (near, far), signs (shapes, figures, masses, volumes, areas, profiles, lines, points), elements and materials (soils: rock, earth, sand, gravel; water: still, slow- and rapid-moving, steam, ice; trees, bushes, meadows; roads, buildings, paths, facilities; everything with textures, grains, surface colours), light conditions (direction, intensity, reflections).

The direct visual perception of the landscape depends on the openings or obstructions (compact or semi-transparent) which structure the landscape, giving access or not to certain views from a given point or along a path. This perception makes it possible to synthesise information about the landscape and to analyse it, highlighting areas of different sensitivity.

The first and best-known system of interpretation is that proposed by Lynch (1960), who in the case of large-scale urban landscapes distinguishes paths, edges, districts, nodes and landmarks. One might add the following considerations.

► Paths are places where the observer moves around (regularly, occasionally, potentially). They are streets, walkways, canals, railways or other routes. People observe the landscape while moving within it. The landscape's elements are arranged and linked along the paths.

► Edges are linear elements which define boundaries: shores, railway embankments, walls, ridges, etc. They separate different physical components (water, land) or form vertical closures (constructed or green) along a route.

► Districts (and contextual landscapes) are areas which the observer moves within, enters or leaves. They are recognisable from a few easily identified characteristics (dominant and prevalent elements). Urban areas are mainly identifiable from the inside.

► Nodes are focal points, which observers move towards or away from. They are accessible,

strategic points of a city or territory. They may be points where paths from different contexts or districts cross or converge. They are also concentrations of activity, places of denser use or high-profile places (open or constructed elements), playing a dominant role.

► Key landmarks are defined as external, high-profile point references. They are dominant, guiding components, visual stimuli at various distances, which provide basic information for establishing position and direction of movement. Since they permit adjustments to achieve greater reliability and reduce difficulties (choice of paths, directions, stops), they are easier to memorise; in adapting our actions, we must distinguish the distances of elements which give us information, and this explains the meanings and implications of the relationships of distance. One dominant contextual element is always the orographic element of the land (flat, undulating, steep, ridges, escarpments, aspects), and the presence of bodies of water or large built-up areas.

Several factors make it possible to interpret the structures of the landscape:

► Dominant characteristics and key landmarks: components with a strong visual "intensity" (major backdrops, contours of the land, prominences and landmarks) which assume functions of providing direction, polarity and/or identity.

► Prevalent features: the most common layouts, textures, materials, colours, etc., in terms of continuity and homogeneity. They are important for the categorisation of landscapes (wild, cultivated, urban).

► Natural features: the presence and combination of natural (abiotic and biotic) and anthropogenic components; each group of elements should be the subject of an analytical and articulated description.

Temporal characteristics

Every landscape includes physical elements with varying durations over time (life cycles), requiring "Examination of their developmental processes and highlighting the past, present and foreseeable time-related forces due to either human or natural factors and the possible pressures and risks facing landscapes" (CM 2008: II.2.1). The analysis and monitoring of developments (mapping of timespans) are particularly important because they make possible operational strategies (assessments, projects and updates). In every landscape the various groups of elements (abiotic, biotic, human-made) have different time cycles.

► Time cycles for abiotic components (Scesi et al. 2003; Selby 1985; Chorley et al. 1984;

Scheidegger 2004; Barry and Chorley 1998; Elías and Castellvi 1996; Guyot 1999; Castiglioni 1982; Persicani 1989): the tectonic conditions reveal the seismic and orogenic activities that have taken place over a long period. Lithological systems show erosion of varying duration and frequency. Climate conditions and hydrogeological phenomena follow periodic cycles with variable phenomena and interdependencies. Land, water and the atmosphere reveal major local forms of fragility (landslides, floods, pollution).

► Time cycles for biotic components: fauna and flora are open ecosystems producing exchanges of matter and energy. The life cycles are extremely diverse (ranging from hours to centuries), as are reproductive rates and intensity. Their various lives are interdependent and subject to the impacts of human actions. Organisms include autotrophs (green plants, some bacteria), which produce organic substances from inorganic substances; heterotrophic consumers (animals, parasitic, saprophytic plants), which feed on other organisms or substances produced by them; heterotrophic decomposers (bacteria, fungi, other saprobic organisms), which degrade organic molecules and release simpler substances. Ecosystems can suffer degenerative processes, leading to destruction or extinction of species. Observation of ecosystems is necessary, and it is essential for natural and cultivated areas (Rosenberg et al.1983; Strahler 1969; Bras 1990; Cunningham et al. 2003; Alcock 2005).

► Time cycles for human-made components: land uses and human artefacts bring with them materials, signs, meanings and values of varying durations – short-term (seasonal in agriculture), medium-term (buildings) and long-term (routes, subdivisions of land, particular buildings). The dating of these components reflects the social systems and cultures (material and immaterial) which produced them. These life cycles depend on the decay of the various materials and, above all, on human uses, which vary over time and with the methods employed (Lepetit and Pumain 1993; Balbo 1991; Bonfiglioli 1990).

Assessment and perception

Assessment

Assessment involves assigning adjectives which supplement identification (CM 2008: II.2.1.b). Every time a landscape is observed, a voluntary and/or involuntary process of assigning meanings and forming judgments takes place. More or less conscious, the evaluation process is nonetheless important because it allows to attribute values to the landscape and to structure perceptions. Assessments (emotive and/or reflective) report

positive or negative conditions. They result from the dominant cultural models, motivations and preferences, inherent in observer systems. The place being observed influences the observer in defining the field of observation (viewing direction and technique, delimitation of boundaries, dominant features, most relevant analysis), and suggests an initial assignment of common values.

Basic common values

In the case of landscapes, the emotive impact triggers an intuitive appreciation, which comes to the fore in the different types of values assigned by individuals and communities. Coherent interactions and explicit labelling help to unambiguously categorise the entire system (agricultural, urban, marine, freshwater), whereas incoherent and unclear interactions produce descriptions which are vague, uncertain and even uncomfortable (peri-urban landscapes).

▶ Positive views are generally appreciated: natural landscapes (more than urban landscapes, perhaps because they evoke ancestral relationships with nature), expansive and deep views from a height (they evoke feelings of control and possession of extensive territories) and varied views (expanses of water reflecting the light of the sky, hilly landscapes with different features). Monotonous, mundane views arouse scant interest or indifference.

▶ Negative views, such as dark, menacing places, which arouse a sense of the unknown and risk, are regarded as unpleasant. Degraded places evoke a lack of care, decline, abandonment and insecurity. The assignment of negative values often results from a visual inconsistency between different components of the landscape. The presence of a refinery, for example, can be disturbing along a coast but be consistent with an industrial landscape. The level of visual incoherence depends on the visibility and the place that discordant elements occupy in the landscape (considering their size and distance). A dead tree among blossoming trees and a very small building among skyscrapers are discordant features, yet in keeping with their context, but an industrial shed in an agricultural context seems out of place. A waste disposal facility is more out of place in a prestigious historic centre than in an abandoned area. Elements in discordant interactions produce a sense of inconsistency (whereas consistency is expected). Discordance is not always negative, however; a strong, contradictory sign in a mundane landscape can make it more meaningful and interesting. The sense of annoyance, or possibly pleasure, derived from incoherence originates from individual analysis, but can bring with it possibilities of finding common ground (positive or negative), which

needs to be considered as part of the conservation or transformation processes affecting the landscape.

▶ Complementary values (positive or negative) depend on individual and/or social factors, as well as on psychology and/or phenomena. Individual and social values vary and interact with each other. Their presence, intensity and combinations often determine the "spirit" of places (Norberg-Schultz 1979).

▶ Emotional values are assigned to living areas and to places relating to family memories, work and important events. They lead to self-recognition and a sense of identity. They also reinforce symbolic, historical and other values. They can be interpreted from shared local points of recognition through surveys and interviews.

▶ Associative values consist in the assignment of adjectives to the landscape (on an individual or shared basis) which serve as a reminder of images (for example of places, "resembles Provence"), situations (places associated with everyday events, holidays, welcomes, danger) and references (pictorial, historical, literary, religious, military).

▶ Documentary values. All human-made elements and signs are material cultural assets. Some transformations lead to loss of information, which could have provided knowledge.

Asset values

Assets can assume a rare documentary value (for example, archaeological assets) but are valuable only if they are recognised as such. Otherwise, they are at risk of destruction, so these are values which need to be managed carefully (De Marine 2005). The landscape accumulates material cultural elements which acquire more value over time.

▶ Long-term values. Landscape elements (signs) which are more long-lasting acquire value because they confirm and pass on a sense of recognition and an identity. Lack of change over time becomes a value which favours the conservation and care of existing elements but can also generate wariness of new and diverse signs and meanings. If there is a change in identity with a new requirement of conveying a different social status (such as a switch from agricultural work to industry or the services sector), the previous signs and meanings become non-values and lead to transformation.

▶ Economic values. The landscape is also always a system of economic assets, with values which depend on the opportunities for and/or limits on using the land (mineral resources, growing crops, urbanised areas). Values and trends in real estate (land, buildings) depend on the market, and on

the facilities and services available, and reflect expectations and variations triggered by rules and regulations (all legislation relating to rights and duties pertaining to the ownership of land and its assets) and their political management. Economic values are significant indicators of the processes operating within a territory (Roscelli 2005; Jacobs 1969). A study of locational changes and trends in real-estate values over time can explain many of the dynamic processes affecting landscapes.

▶ Aesthetic values. A. G. Baumgarten's book Aesthetica (1750) defines aesthetics as "the science of sensible knowledge *cognitio inferior* (lower cognition) – which is obtained by sensation". At present, the consideration of aesthetic values may lead to a tendency to propose to turn something into art, as William Morris suggests. Taking these values into account, however, can also lead to defining aesthetics as a possibility of "looking through" something, as Garroni proposes, borrowing from Heidegger and Wittgenstein.

▶ Landscapes, like the systems of signs corresponding to their pictorial representations, can arouse emotions in us in the same way as sounds (music) and words (poetry). Landscapes can give rise to harmonious, coherent and moving combinations of configurations, materials and colours, as well as of extraordinary human abilities.

According to R. Thorn : "The waves of the sea, the little ripples on the shore, the sweeping curve of the sandy bay between the headlands, the outline of the hills, the shape of the clouds, all these are so many riddles of form, so many problems of morphology".

Aesthetic values ("beautiful" and "ugly") can also derive from translations of various other values. Something which appears healthy, in good condition and in "order" gives us pleasure and becomes "beautiful", whereas something which is degraded, run down or in ruins causes us concern, does not give us pleasure and becomes "ugly". Assessments which can be applied to the landscape have their origin in the emotive, cognitive/cultural, personal or collective filters which we use to identify the differing degrees of pleasure we gain from our surroundings.

W. Morris stated: "And first I must ask you to extend the word 'art' beyond those matters which are consciously works of art, to take in not only painting and sculpture, and architecture, but the shapes and colours of all household goods, nay, even the arrangement of the fields for tillage and pasture, the management of towns and of our highways of all kinds; in a word, to extend it to the aspect of the externals of our life".

▶ Aesthetic values are also affected by: iconic cultures (historical and modern); a broad range of scenic languages appreciated on the basis of elitist taste or the "pervasive taste" of the common cultural model (the sense of "propriety" of public places), which is the filter we use to invest emotions with our personal and/or socially shared values or non-values languages which vary in duration, distribution and intensity ("Klee spoke to us about expressive values, told us that things must have form and meaning, that the function of the image is to express something", to quote Hertel in Klee 1956-64). Cultures structure the configurations of human-made landscapes with knowledge, intentions and capabilities, in intentional and random combinations and with varying degrees of coherence.

▶ Naturalist values include both the long-standing tradition of the "artificial" landscape of gardens, which made a return during the Renaissance as geometric structures and then in the 19th century with a romantic flavour, and the ecological culture prevalent today, which affirms the value of wilderness. This is attracting scientific and political interest (sustainable development) but is also seen as a consumer good for tourism and as a concept to replace the previous "naturalist" character of the agricultural landscape. It can be noted that the concept of landscape is strongly linked to naturalistic values (less frequent reference is made to the concept of urban landscape). Such naturalistic values are assigned to wilderness and unspoilt landscapes (desert, volcanic, alpine, river, marine, forest areas), but also to protected natural areas (parks), agricultural landscapes and the natural characteristics of anthropogenic landscapes (lake shores, marine coastlines) or parts of urban landscapes (parks, gardens). Naturalist values derive from the characteristics (and also the rarity) of abiotic systems (rocks, earth, water) and biotic systems, and from plant ecosystems and the presence of wildlife.

▶ Symbolic values. According to C. G. Jung (1964), "The concept of the archetype, which is an indispensable link to the idea of the collective unconscious, indicates the existence in the psyche of definite forms which seem to be present always and everywhere".

▶ All landscapes have strong symbolic values in the relationships between humans and nature, dwelling places, work. The landscape, as a polysemous outcome of material and immaterial cultures of the past and present, conveys positive and negative metaphors (Ricœur 2006) for belonging, the community and identity. They may be consolidated or contingent (Galimberti 1984), conscious (places relating to everyday life, places of worship, power, suffering, passion for

sport) or unconscious (values of non-institutional social relations, shared to differing degrees, and crowd effects: places for meeting and getting together with people, but also those associated with unpleasant experiences, abandonment and the effect of broken windows). Awareness and consideration of local symbolic values (to be obtained through public participation in assessments) is of paramount importance in providing guidance for projects, including their detailed definition.

► Social values. Landscapes reflect social differences and levels of well-being or malaise across the whole planet, in countries, regions, areas, villages or districts. Areas with high and/or low population concentrations generate landscapes which are run down as a result of overpopulation or abandonment. The contrasting images of opulent areas and shanty towns are strong social symbols. These imbalances in dwellings, even if played down, occur in every territory and are evident in the care or neglect, affection or lack of it, for such places, which often evolves into social well-being or malaise. This is why people's perception of their own landscapes and living environments interacts with the forms of democracy and feeds into collective demands for the assessment and governance of landscapes. Such demands set aside the now-obsolete models to seek more suitable responses to territories' emotive and symbolic values, and not just their utilitarian values, in a way that is still confused but is growing in importance.

► Historical values are assigned to recognised elements from the past, whose current meanings are very different from their original meanings (archaeological sites, castles). These are identity anchors essential to each settlement system. Confirmation of their social value over time is conducive to the preservation of the corresponding signs. According to A. Magnaghi (2015), "The concept of 'history in action', applied to the territory (Muratori, 1967) in affirming consequentiality between territorial functions and the morphotypological development of settlements (Cataldi, 1977), poses a risk of generating deterministic interpretations".

Public perception

Public perceptions and actions carried out on the landscape are interdependent. Local people's involvement can be achieved in various ways, depending on a host of factors: nature and qualification of operators, resources and documentation available, and the size and characteristics of the population.

The initial visibility analyses (and places of interest) allow the public to be involved in numerous ways, in particular through visual appreciation and a survey or interview. The first highlights categories and trends, and can be obtained through direct visits and gathering of appropriate photographic images (representative of the place's diversity and taken according to appropriate standards) to be classified and assessed (including the use of scoring). The second (carried out separately or in parallel) comprises questionnaires and/or open interviews, and explains the reasons for people's appreciation. Both these analyses make it possible to draw up maps (showing places and paths of major value and/or critical significance) in order to initiate attention processes.

The stages to follow can be put into order of priority by considering the values (positive and negative) at stake. In essence, this is about awareness raising, using suitable methods on a case-by-case basis, to improve perceptions and increase, broaden and maintain public and administrative attention focusing on the landscape. To this end, it is particularly important to have stakeholders and those actively involved in this task available on site. Their identification, training and involvement is a strategic objective which should be part of the plan. These analyses do not have to be complete, perfect and in depth. Their role is rather to launch a process which can be improved and continued over time.

Analyses of public perceptions

► Public and professionals analysis is about mobilising a significant sample of the local people (including those with opinions and expectations that are opposed to development of the territory) who will co-operate with the professionals (those having technical knowledge of the place) to explain the character of the landscape in relation to how it is used and its meanings (CM 2019). Maps and images are conducive to the exchange of information. It is useful to raise awareness and involve schools and local associations in analysing maps to indicate values and non-values perceived across the territory. These maps (showing places, assessments and intervention projects) can be presented at public meetings for beneficiaries and operators. Their scope can be broadened to consider the problems requiring special local attention (private utility uses, public services).

► Landscape analysis is important for analysing interactions with the landscape and involving the stakeholders. It is possible to utilise reports linked to territorial area plans, the targeted analyses available and appropriate working meetings.

► A strength, weaknesses, opportunities and threats analysis (SWOT) has been used for some time for assessing businesses. This highly

flexible assessment tool can be used at different times and in different ways by stakeholders, associations and citizen groups. It aims to gather information about current strengths and weaknesses, future opportunities and threats. Different periods of time can be considered, depending on the issues, but 10-year forecasts are usual for territorial areas. This method of analysis can also be used to produce summary or analytical interpretations for each value being examined (Hill and Westbrook 1997). The results obtained from an analysis can indicate problems, conditions, objectives and priorities, to be juxtaposed with the mapping of municipalities with a view to devising strategies.

▶ Analysis of the use of public goods (post-occupancy evaluation, or POE) aims to assess the current state and operation of public assets (areas, roads, installations, buildings). Note that different countries use various methods of interpretation for assessing the technical condition of buildings. A condensed analysis allows for assessment of users' opinions (for example, in the case of a school, this means pupils, parents and all staff, both teaching and non-teaching). It is useful when considering the needs and opportunities for different types of intervention (maintenance, upgrading) to assess programming priorities. A similar analysis could also be recommended for private assets, starting with premises open to the public and those areas or frontages in important public spaces.

Intervention in the landscape

Knowledge of the territory

In order to assess whether there is a need to carry out a landscape project and to develop it, the first requirement is to gain knowledge of the territory by collecting and organising documentation, drawing up community maps and preparing public presentations.

Landscape hermeneutics

An intervention in the landscape must be based on analysis of the existing landscape. The interpretation of a landscape is a complex process. It must bring together analyses of various kinds – territorial, urban, environmental, anthropological, sociological and environmental psychological – with the aim of reconnecting places and populations, bringing to the fore the collective unconscious (which gives rise to negative forms of behaviour) and raise awareness of those who have close and vital links with the site. Nowadays, there are some initial operational indicators that are relevant here, but their focus and approach still require research (Magnaghi 2015). The first stage of interpretation determines the area

of interest. This task can consider visually delimited zones, landscape areas (as defined by landscape plans, generally based on indirect methods), administrative boundaries and shared identity-related perceptions.

Development of a project

Project development involves more in-depth study and an extension of the approach to include the various issues present in the territory which have an impact on the landscape: condition and use of public areas, problems with production activities, private behaviour. The analysis of strengths, weaknesses, opportunities and threats, carried out generally and then thematically with the stakeholders, is a useful tool for this activity.

Diagnostic

The awareness-raising and assessment stages provide initial indications for considering other options, identifying priorities and devising operational strategies. The first stage may require further studies and sectoral analyses: territorial, environmental, technical, economic – that is to say, the diagnostic practices necessary to focus on the issues and opportunities. Further studies might be various expert visual analyses (inspections, geo-referenced maps, orthophotos, streetview shots); taking stock of material and immaterial cultural assets; location and documentation of material assets and immaterial cultural assets in the territory; social analyses (sample surveys, interviews, community maps) aimed at understanding the levels of equivalence between values (strengths and weaknesses) perceived and/or already known (assessment opinions and justification for actions); interpretation of levels of pervasive social perception, which vary over time in interaction with many conditions in and outside the system.

▶ Specialised diagnosis is clearly aimed at tackling identified issues. It can be used to interpret causes of a problem, landscape conditions, the values' relevance and the positive or negative expectations identified, with their various levels of accuracy. The responses obtained will suggest conservative or transformative actions to be applied to the various systems (abiotic, biotic, human-made). The actions require co-operation with the public authorities and, if necessary, depending on their technical characteristics, they are begun during the development stages and updated during the management stage. Professionals should be consulted for the most important decisions.

▶ System diagnosis involves collecting all the specialist diagnoses and assessments carried out (at the appropriate level of completeness or approximation) and devising and assessing interactions

(where considered useful) between analyses, even those which are diverse. Periodically, analyses and assessments must be integrated, so that adjustments can be made in the interactive relations between knowledge and decisions, and the processes can be updated.

► The operational diagnosis summarises the places identified within the defined area and the assessments produced during the analytical stage. It facilitates bottom-up reinterpretation, at a local scale, of the broad conclusions of the general landscape (or territorial) plan. It therefore highlights emergency situations, needs and opportunities in relation to the landscape, which can be perceived only on the spot. It provides information which supports or integrates with updating of the various levels of a local plan and can contribute to programme policy decisions. The operational diagnosis can guide programming on a local scale by defining the purposes, timing and methods of public works. Political decisions on the implementation of technical projects and the adoption of intervention measures must be based on these diagnoses.

Intervention practices

Action on the landscape is a combination of protection, management and planning measures on the same territory: certain parts and features can be protected, others, particularly processes, should be managed and still others should be intentionally adapted (CM 2008: I.5). The wide variety of objectives and practices found in human interventions in the landscape can always be summed up in the dialectic between the two fundamental approaches: conservation and transformation (Di Battista 2006; Gambino 1997; Magnaghi 2005). These always co-exist. Their combinations involve the whole system of signs and meanings, with varying rates of inertia and acceleration. Within a landscape it is useful to recognise the places and times of conservative and/or transformational actions and their reasons: intentional, implicit and unintentional (Dematteis 1995). Operational practices involve all stakeholders (and some beneficiaries also propose actions) but are managed by technicians from public administrative agencies and other professionals. Awareness of the interactions and of the possibility of assessing alternative options has a considerable role to play.

Conservation

Conservation, intentional or unintentional, leads to the preservation of existing elements (materials, signs) through actions aimed at prolonging their life cycles. The Recommendation CM, 2008 evokes "Conservation and upkeep of quality features (morphology, constituent elements, colours, etc., also [takes into account] construction methods and

materials and symbolic characteristics and places, etc.)" (Appendix 1.2), and notes: "Measures should ensure the conservation and upkeep of significant or characteristic aspects of a landscape; protection should be accompanied by a phased management plan" (II.3.1).

► Intentional conservation takes up elements, conditions and intervention methods from the diagnosis. It encompasses various types of action which are more or less continuous and complex, along with the following conservative interventions.

– Occasional maintenance refers to discontinuous actions which involve resetting functions, repairing damage and reintegrating material.

– Preventative or programmed maintenance consists of regular, ongoing activities that are intended to avoid damage and maintain or prolong life cycles. They are intended to prevent problems, impairments or losses (of existing objects, material, information). They can be arranged at any point in the life cycle. They entail the timing and scheduling of preventive interventions, involving arduous and generally costly organisational and operational stages (made easier if arranged during the project stage). In the context of the landscape, they can be applied to preserve conditions and/or elements which limit the risk (plantations of trees to counter hydrogeological degradation).

► Unintentional conservation. This type of conservation relates to everything which remains in place because of inertia or out of habit, and to actions, no matter why they are carried out, which contribute to preserving in their entirety, on different scales, in different ways and at different times, the condition and spirit of places. Examples of such actions are forestry and irrigation activities (clearing and cleaning practices, stripping, appropriate pruning and drainage activities), agricultural activities (ploughing, sowing, harvesting) and urban activities (cleaning, painting, paving), in both the public and private sector. These practices do not always have a positive impact.

Transformation

Although everything is destined to change over time, intervention practices in the landscape should tend to improve it rather than degrade it. Recommendation CM/Rec(2008)3 states: "The concept of protection includes the idea that landscape is subject to changes which, within certain limits, have to be accepted. Protective measures, which are currently being widely trialled, should not be designed to stop time or to restore natural

or human-influenced characteristics that no longer exist; however, they may guide changes in sites in order to pass on their specific, material and immaterial features to future generations" (CM 2008: I.5); "Provision for hubs of development in accordance with the various recognised landscape features, ensuring that development does not degrade landscape quality; Reassessment and/or rehabilitation of degraded or problematic areas in order to restore their qualities or create new ones" (Appendix 1.2).

Improvement

► Intentional redevelopment is based on diagnostic assessments and determines what should be improved (materials, configurations, performances, meanings) and how to intervene, based on criteria of benefit, scope, intensity, feasibility and convenience. Several actions can be carried out.

– Restoration restores the system to the configurations and performance levels which applied at earlier stages of the life cycle (in the case of meanings and values, the variations in terms of information and meaningfulness brought about by the intervention should be assessed).

– Performance-based redevelopment aims to enhance deficient service levels (due to reduced operation and/or the emergence of new requirements) or ensure that services which are lacking are put in place.

– Aesthetic redevelopment boosts the beneficiaries' approval and appreciation. It may take the form of rehabilitation, correction or a complete makeover. This can be achieved through reorganisation, removal, addition, integration or the replacement of components, materials and colours.

– Enhancement of the value and/or perceived quality is achieved by means of material (conservation/redevelopment) and/or immaterial (knowledge, awareness raising, promotion, communication) interventions.

► Unintentional redevelopment is the random outcome of various intentional practices, which jointly contribute to improving the state and/or perception of places without any intentionality or complex controls. These intentional practices might be individual agricultural, forestry and irrigation activities, which jointly bring about unforeseen improvements in the system's state; individual urban activities, public and/or private, which jointly contribute, at differing scales and times and in different ways, to improving the state, meaning and social perception of places.

Downgrading

► Intentional downgrading arises from transport needs and/or plans for reconversion or a more lucrative use, which bring about disposal, abandonment and neglect.

► Unintentional downgrading corresponds to outcomes generated by transformational or mixed processes that bring about reductions in quality. It can arise from conditions outside or inside the system (reduction in revenue, discontinuation of activities) which are not intended to cause abandonment or decline, but reduce the upkeep given to places.

Reuse

Reuse is a variation on the use of elements and/or interactions – for example, in extraction, energy and tourist activities, land use, types of crop or manufactured goods, and in buildings or urban areas. All systems (abiotic, biotic, human-made) in a landscape are subject, at different times and in different places and ways, to processes involving reuse, more or less intensively and/or extensively. These always transform the landscape meanings, with increases and/or reductions in value.

► Intentional reuse is based on diagnoses and entails identifying opportunities, the elements involved, their suitability and the feasibility of modifications being implemented (or their interactions and/or combinations) within a system, generating variations in value and in social perceptions, creating value increments or reductions.

Value increments usually occur when new activities boost value in terms of use, exchanges and social perception (for instance, transformation from a warehouse to a dwelling), although such increments sometimes originate from dilapidation of valuable elements, with only rare elements of documentary value surviving (concerning, for example, archaeological areas).

Value reductions are found where new activities generate reduced value in terms of use, exchanges and social perception (for instance, a decommissioned production site).

► Unintentional reuse arises either from the random accumulation of intentional interventions which bring about unforeseen use interactions or from variations in use (type of users) which produce additional values that can vary over time. In these cases too, the variation in meanings and social perceptions can be either positive (enhancement) or negative (degradation). An element, while maintaining the same uses, may have constant meaning for some users and changed meaning for others.

Removal and substitution

Removal and substitution apply to the reuse of urban areas or complexes (such as decommissioned

land, buildings, industrial areas, rail terminals, military areas).

> ► Removal entails removing the elements which, at the end of their life cycle, do not lend themselves to any form of survival. It causes irreversible loss but can also generate new potential benefits and/or value.

> ► Substitution offers scope for new configurations and meanings with positive or negative impacts (economic, social, emotive) on different scales (decommissioned areas, buildings).

Human activities transform landscapes, with their existing configurations, interactions and values, by constantly adding new elements (roads, bridges, railways, dams, canals, installations, infrastructure; production, commercial and residential settlements). Each of these, on every scale, is planned and fulfils specific intentions. However, it is difficult to control all the interactions which come about. Even in optimal circumstances (environmental impact assessment and strategic environmental assessment) many of them escape control. In general, the new elements are confined to providing functional coherence and to producing an impact on their direct surroundings or in a local neighbourhood context. They produce unintentional effects not only cumulatively, but often also individually.

There are also indeterminate outcomes. All actions involving conservation and transformation have configured the landscape in the past and continue to do so today. Every project involves intentions limited to its specific objective. However, the chaotic accumulation of diverse projects produces unintentional effects which are constantly visible and present in the landscape. Furthermore, in any landscape the unceasing combination of abiotic, biotic and anthropic processes produces continuous changes in configuration and meaning. These changes, which differ from place to place and over time, interact in different ways with the population and generate new perceptions, which, in turn, trigger conservation and transformation activities with indeterminate outcomes.

Monitoring and feedback

Regular monitoring can be used to compare the expected processes with those that actually occur and can help ensure continuous and appropriate adjustments to programmes and projects. Monitoring (for example, on thematic maps with online access) can, over time, allow all public and private operators to verify the interactions and the outcomes of the various intentional and unintentional processes.

This assessment possibility (causes and outcomes) can help to improve decisions and actions. Today, documentation, simulations and monitoring are already possible via information technology networks. In future, increasingly efficient and simple tools will become more readily available for devising open, joint strategies which can be broader and more extensive. The global analysis and decision-making practices make it possible to promote interventions favourable to better management of the living environment, designed with public participation.

A simple, but growing, awareness of the landscape as an outcome of the choices made by many individuals can be achieved through the perception of its numerous values and opportunities. To this end, involvement in the process, even if it requires more laborious procedures, makes it possible to compare alternatives and gradually improve the relationship between populations and their living environment.

Abandonment

Abandonment is a result of intentional and/or unintentional practices in relation to ecosystems (possibly even self-regulating ones), human-made environments (with frequent irreversible losses of material and information) and settlements.

Conclusions

Landscape is an asset which is easy for everyone to perceive.

The evocative, symbolic and rich language used in respect of each landscape can give rise to processes that are more conscious of our interactions with what exists.

Within landscapes, numerous environmental, functional, economic, social and psychological interactions, intentional and unintentional, can be taken on board and explored by different operators and beneficiaries.

The methodological procedures presented aim to propose a "grammar" that can help to increase the level of awareness and responsibility of the stakeholders intervening in the landscape.

Every intervention created and adapted on the basis of specific local features (expanse and nature of the territory, interaction with plans and policies already adopted, relativisation of the hierarchy of issues involved) can thus be initiated in a very progressive way. It is these distinctive interventions (for local domains, issues and opportunities) which systematically become "grammars" specific to the various landscapes.

These iterative procedures, which must become very open and flexible while also allowing internal structuring, could in time make possible a move towards forms of self-regulation which enhance awareness, responsibility and effectiveness. In other words, they could generate forms of self-governance and

interactive democracy which would in time reflect new beneficial relationships between territories, their populations, novel methods and technical tools.

This open, continuous process of reflection, enhancing the interactions between biotic, abiotic and human-made processes and between environmental, territorial – whether planning- or landscape-related – and symbolic approaches, has already been initiated in different areas (Magnaghi 2015).

> These value systems (universal, specific to national cultures, to local cultures, to each individual's culture) belong to both scholarly culture and to popular culture: they are qualitative and not quantifiable and some of them are sometimes mutually opposed. The concept of participation involves considering the social perception of landscape and popular aspirations in choices regarding landscape protection, management and planning. In this sense, the concept of landscape proposed by the convention implies an exercise in democracy whereby differences are accepted, common characteristics found and operational compromises eventually reached; these represent an alternative to the drawing up by experts of hierarchical classifications of landscape qualities. (CM 2008: II.2.3.A)

Many means of communication can be used to transmit information on the problems and results identified through monitoring, and to take decisions in a participatory manner with regard to the assumptions and options. Information – as well as a more widespread awareness of the issues and the potential responses – can, starting from the landscape and as stipulated in the European Landscape Convention, foster new forms of governance of the landscape which seem to be becoming increasingly necessary for managing the living environment.

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Akateeminen Kirjakauppa
PO Box 128
Keskuskatu 1
FI-00100 HELSINKI
Tel.: + 358 (0)9 121 4430
Fax: + 358 (0)9 121 4242
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The Council of Europe Landscape Convention aims to promote the protection, management and planning of landscapes, and to organise international co-operation in this field. It applies to the entire territory of the contracting parties and covers natural, rural, urban and peri-urban areas. It concerns landscapes considered outstanding, as well as everyday or degraded areas. This publication presents thoughts and proposals for the implementation of the convention and addresses a "mosaic" of key issues related to its future. It forms part of a process of reflection on major themes concerning the living environment.

ENG

The Council of Europe is the continent's leading human rights organisation. It comprises 46 member states, including all members of the European Union. All Council of Europe member states have signed up to the European Convention on Human Rights, a treaty designed to protect human rights, democracy and the rule of law. The European Court of Human Rights oversees the implementation of the Convention in the member states.

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