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### 38. Landscape scenic values

# Protection and management from a spatial-planning perspective

#### Claudia Cassatella<sup>1</sup>

**Abstract** The aesthetic dimension distinguishes the concept of "landscape" from other concepts such as "environment" and "territory", and is a recurrent justification for conserving both natural and cultural landscapes. However, scenic beauty remains particularly difficult to define and protect under specific regulations. Moreover, the topic is seldom dealt with in spatial planning literature and practice. This lack of a systematic approach severely limits the capacity of public administrations to protect and enhance scenic resources. The paper highlights the need for further research into technical tools and suggests a number of perspectives which call for international collaboration. As a worked example of how planning can deal with scenic resources, an Italian case is illustrated, the Piedmont Region's "Guidelines for the analysis, protection and enhancement of the landscape scenic characters". The guidelines focus on the protection of visual relationships, which connect designated heritage assets and outstanding features with their settings and the area as a whole. The implementation measures within the planning regulatory system are discussed, as well as the role of different actors, planning levels and phases.

**Keywords** Scenic landscape, Natural beauty, Landscape planning, Landscape protection, Italian landscape heritage

## 38.1 Protecting nature for its scenic beauty, protecting landscape for its natural values: common roots, different prospects

The protection of nature and landscape was born as one. The world's first National Park was established in the United States in 1872 to protect not merely natural areas but also areas which represented the values of national identity. In 1994,

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the International Union for Conservation of Nature (IUCN) introduced the designation "Protected Landscapes" to classify areas with "significant ecological, biological, cultural and scenic value", and the use of this category is increasing. In many western countries, the categories of protected assets reveal the coexistence of scientific and aesthetic instances. This derives from the legislative framework at the beginning of XX century, for example, Areas of Outstanding Natural Beauty in England, Natural Monuments in Germany, Remarkable Viewpoints in France, and National Landmarks and Wild and Scenic Rivers in the USA. In Italy, along with the birth of the first National Park in 1922, a Law was established "For the protection of natural beauty and buildings of particular historical interest" (Kingdom of Italy, Law no. 778/1922). The subsequent "Regulations on the protection of natural beauty" (Kingdom of Italy, Law no. 1947/1939) introduced the expression quadri della natura [literally "pictures of nature"], and stated that

[the following] are subject to this law because of their high degree of public interest: 1) sites that have substantial character of natural beauty or geological singularity; (...) 4) panoramic beauties seen as pictures of nature as well as those viewpoints accessible to the public, from which the sight of those beauties can be enjoyed.

For more than a century, what has to be protected has been stated but "how to protect" it is not clear. Indeed, scenic beauty remains difficult to define and to protect by means of specific measures. Moreover, it is now clear that nature-oriented actions can have controversial effects on scenic landscape and vice versa<sup>2</sup>. Dealing with such controversy requires us to move beyond old paradigms: for example, Visual Impact Assessment methods generally assume that the most natural landscape is the most scenic (Daniel 2001, Cassatella 2011, Churchward et al. 2013).

The attention that is currently being paid to ecosystem services, which include cultural services, such as spiritual and aesthetic experiences, seems to encourage the consideration of the scenic values of landscape in environmental policies. Nevertheless, a clear distinction of concepts is needed in order to avoid ambiguities and eliminate the potential risks of actions which claim to be "multifunctional". Indeed, landscape can simultaneously provide multiple benefits, such as biodiversity conservation and public enjoyment, simultaneously. However, this is not always the case: "multifunctionality" is an option, a possible goal, and not an intrinsic characteristic of landscape actions. As a consequence, in order to better understand and manage the interferences and synergies between nature-oriented and landscape-oriented policies, specific tools for identifying, assessing, planning and managing the scenic character of landscape must be developed, both in theory and in practice (Cassatella and Seardo, in press).

<sup>&</sup>lt;sup>2</sup> For example, planting new forests for ecological reasons can mean compromising the openness of the landscape. Similarly, cutting down trees in a park in order to create a panoramic view and keeping a notable and appreciated "natural scene" can be considered environmental damage. Respecting the natural processes of vegetation change can mean eradicating traces of traditional agriculture: what priority should be given to the natural and cultural values recognised by people? (See the approach of the Scenic Vista Management Plan for Yosemite National Park in California, and other examples in Cassatella 2012a).

### 38.2 Scenic landscape in spatial planning and management tools

The literature concerning scenic landscape is rich in paradigms and in methods of analysis and assessment (Daniel 2001, Ode et al. 2008, Cassatella 2011, Nijhuis et al. 2011, Churchward et al. 2013). Although there has been a recent surge in interest in the general area of perception studies by social and environmental sciences, the literature that connects these areas of study with planning issues is generally weak. The majority of studies concern the visual impact of interventions in sensitive areas. Moreover, due to the need for field surveys and interviews, perception studies are often carried out at the local scale, while landscape planning concerns a variety of scales.

While assessment methods can be easily found in international literature, planning measures and techniques regarding scenic quality are seldom considered. Although the value of scenic beauty has been explicitly referred to in European and US law since the start of the XX century, spatial planning measures to protect and manage landscape heritage of scenic value have never been systematised, and more scientific evidence of their application within the regulatory system and implementation measures is needed. This lack of a systematic approach severely limits the capacity of public administrations to protect landscape resources.

The variety of institutional and legislative frameworks hinders a systematic study of planning and regulation systems from an international perspective. To carry out an international overview of these issues using significant local cases for in-depth examination and discussion, a research perspective is urgently needed, requiring international cooperation. In fact, a structured overview of protection categories and legislation, assessment methods (including participatory approaches), sectoral plans and other forms of regulation at a local level that concentrate on scenic-perceptive issues would be relevant to landscape, park, regional and local planning, and for the assessment and establishment of control procedures regarding both natural and cultural heritage. Specifically, in the European context, an international overview of regulatory systems could contribute to the harmonisation of landscape policies (thus implementing the European Landscape Convention), provide an effective consideration of cultural services in the EU agrienvironmental schemes and help to manage trans-national protected areas.

Despite the lack of general theories and methods, a number of examples demonstrate that scenery can be subject to regulation, planning and management. The following list identifies a number of fields and topics that may be useful for further studies:

- Scenery management in the context of nature park planning. In particular, the manuals and experiences of the US National Park Service, and Bureau of Land Management;
- Cultural heritage protection. For example, recent guidelines issued by English
  Heritage deal with the visual relationships between historic assets and their surroundings (English Heritage 2011); Management Plans of World Heritage

Sites, which implement the recent UNESCO Recommendation on the Historic Urban Landscape (2011);

- Townscape appraisal and town development regulations. Many western cities have adopted sophisticated rules for protecting their skyline or for creating impressive new ones (Cassatella 2012b); geographic information systems techniques for controlling the visual effects of urban development, notably the rise of high buildings (Nijhuis et al. 2011);
- Visual Impact Assessment methods, in the context of Environmental and Landscape Impact (a wide and updated review in Churchward et al. 2013);
- Protection and enhancement of Scenic routes; guidelines for interventions on existing routes or for designing of new transport lines;
- Design codes and standard requirements, in particular for designated areas and assets;
- · Landscape plans.

The overview set out above shows that scenic features can be a subject of consideration in many kinds of spatial planning instruments, dealing with different landscape characters (natural, rural and urban), scales (regional, local, site-specific), normative and design approaches (guidelines, strategic plans, statutory plans, regulations).

The following section illustrates a worked example of a set of rules for the preservation of scenic assets, related to an Italian regional landscape plan. Inspired by an international review of practices, it focuses on those visual characteristics which can be subject to planning control in the Italian context. Natural and cultural resources are integrated within the same scenic perspective.

## 38.3 A case study in Italy: Guidelines for the analysis, protection and enhancement of the landscape scenic characters

In Italy, landscape beauty deemed a strategic asset tied to national identity and to economic development. Protection of landscape by national laws dates back to the beginning of the XX century (see Section 38.1 above). However, for a long time it was translated into protection acts, which imply control over development, and was not accompanied by land-use plans or specific requirements. A recent law (the Cultural Heritage and Landscape 2004) states that protective designation acts must associate the description and appraisal of landscape assets with regulative measures and requirements (that is, limitations on its use and transformation). The consequent process of "ruling" (which also applies to the thousands already designated landscapes) is still underway, in connection with the formation of new statutory regional landscape plans, which cover the entire territory of each Region<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> Before 2004, landscape plans were compulsory for conservation areas only.

This process entails collaboration between Regional Authorities in charge of landscape planning, and the Regional Departments of the Ministry for Cultural Heritage and Activities (MiBAC), in charge of landscape protection.

Italian landscape plans usually pay limited attention to scenic features, instead merely considering designated scenic roads and views and restricting building activity to narrow buffer zones. Sometimes, aesthetic and cultural values are explored in the analyses, but they are not subject to planning measures.

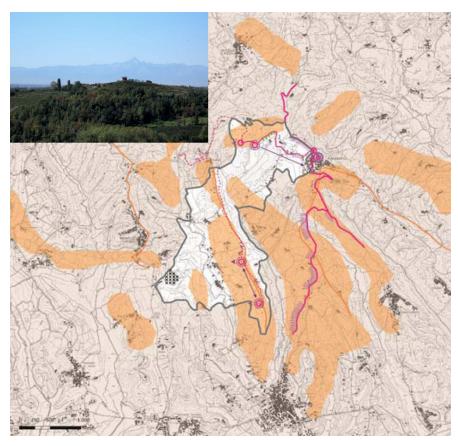
The Piedmont Region Landscape Plan (Regione Piemonte 2009), drawn up with the technical support of the Politecnico di Torino<sup>4</sup>, introduced a wider-than-usual set of categories of scenic features, namely: viewing places (belvedere, panoramic routes, and others), scenic features (such as landmarks, skylines and profiles, and others), visual relations and areas with specific characters, and visual detriments. These categories are applied to natural, rural or urban landscape, with appropriate specifications<sup>5</sup>. The scenic features have been mapped at the regional scale (1/100,000), and dealt with systematically by the plan's regulatory system. A crucial aspect is that the same measures can and must be applied to any similar scenic feature in the landscape, whether it is a designated asset or not. In this way, the scenic character of a landscape can be planned and managed as a whole, beyond the boundaries of conservation areas (Figure 38.1).

Due to their scale, the regional planning measures in question are mostly guidelines, directives, and requirements that more detailed indications be provided by local statutory plans. In order to help their implementation at the local scale, the MiBAC Regional Department of Piedmont commissioned the Politecnico di Torino to conduct a further study on landscape scenic assets, which outlined the *Guidelines for the analysis, protection and enhancement of the landscape scenic characters* (G-SCL) (Cassatella 2013). These address, in particular, the protection of designated landscapes (which require prescriptive regulations), the application of regional directives in local planning, and visual assessment in occasion of procedures regarding interventions on conservation areas and assets. Nevertheless, as will be explained below, they are also intended to be used for spatial planning purposes in relation to the ordinary landscape.

The G-SCL provides a glossary, criteria for identification and representation (including GIS-based analysis of viewshed and visual sensitivity), planning measure proposals and impact assessment criteria, using worked examples and illustrations of Piedmont landscapes. In so doing, the G-SCL supplies both regional and local authorities (and, of course, professionals) with a shared language and method.

<sup>&</sup>lt;sup>4</sup> Politecnico di Torino, Studies for the Regional Landscape Plan, research programme commissioned by Regione Piemonte, Scientific Director Prof. R. Gambino, 2006-2008. The Author participated in the research group which investigated the perceptive values associated with landscape. A brief summary of the study approach can be found in Cassatella and Gambino (2011).

<sup>&</sup>lt;sup>5</sup> For example, 'Landmarks' comprises the subcategories 'natural' and 'man-made' landmarks.



**Fig. 38.1** Scenic Landscape Characterisation of the Abbey of Santa Maria di Vezzolano and sourroundings. A National Designation Act concerns the area in the view, but not the scenic routes from which it can be seen and experienced. The map represents the main visual features and the intangible visual relationships between observation points and landmarks, thus extending the focus from the area under protection to the surrounding landscape (Source: Cassatella 2013)

The approach is pragmatic. As the history of landscape planning in Italy shows that applicable regulations are few in number and recurrent, drawing up a list of potential legislative guidelines has helped define the field of focus. Therefore, when it is appropriate to distinguish between legislative guidelines, the scenery categories (in the glossary) are also distinguished<sup>6</sup> (Table 38.1).

<sup>&</sup>lt;sup>6</sup> For example: 'Isolated landmark' is a subcategory of Landmarks, which requires a ban on building in the nearest area, while a generic landmark merely requires restrictions on building height and envelope.

Table 38.1. Guidelines for the analysis, protection and enhancement of the landscape scenic characters (Cassatella 2013). General assessment criteria and planning requirements, related to scenic character and features.

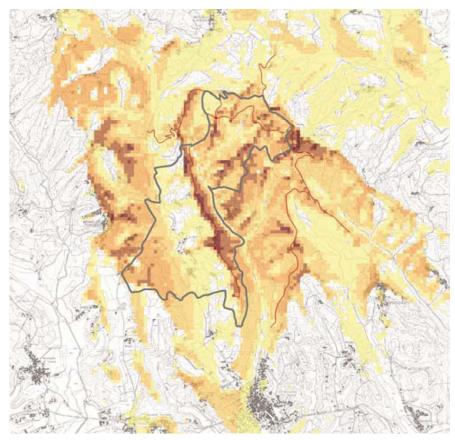
Category	Sub-categories	Assessing criteria and/or planning requirements
Viewing places	Viewpoint; equipped viewpoint; indoor vantage points (providing public access)	Accessibility, maintenance, protection of the view cone (ban on building, maximum building envelope, tree-cutting, etc.)
	Panoramic route	Protection of the viewshed (as above)
	Paths and minor routes	Maintenance of material and sen- sorial characters, improving public access
	Axial line	Protection of the view cone, continuity, design standards for lateral screens (alignments, height requirements, etc.)
Scenic features	Landmarks (at regional/local scale; built/natural; isolated)	Protection of the view cones which consent the appreciation of a landmark from viewing places; protection of prominence effect, avoiding competition (volumetric proportions, height, backdrop effects, etc.) in the zone of visual influence
	Natural profile; skyline	Integrity
	Other elements (tree lines and hedgerows; built/natural screens; areas with specific characters, such as textures)	Conservation, design codes and/or standards on materials, colours, etc.
Visual relations, views and pano- ramas	Inter-visibility; focal view; Axial line; viewing corridor/opening; enclosure	Building control (envelope, maximum height, screening effects), vegetation-cutting
	Viewshed [of a viewing place] (foreground; middle ground; second ground; background)	Visual impact assessment (avoiding obstruction and intrusion; proportions of building, texture effect, lightness, etc.)
	Zone of visual influence [of a landmark]	(see Landmarks)
Visual detriments and degraded areas	Visual detriments (punctual, linear, areal; high-distance visibility)	Elimination, remodeling, mitigation
	Alteration (intrusion; obstruction; disorder; de-connotation)	Requalification, mitigation

Regional authorities may use the suggested standard measures in the process of defining the requirements for each designated landscape asset, while municipalities may use the same ones in their overall local plans, dealing with features which are protected or not, if necessary in a "softer" manner, e.g. as design guidelines.

The main challenge is to involve local authorities in a process of awareness-raising with regard to landscape scenic values, leading to a specific focus in their statutory plans, which cover their entire area, instead of merely relying on prescriptive restrictions imposed by national and regional authorities. Local communities in Italy are frequently aware that landscape beauty enhances their quality of life and can be an economic resource. However, they lack an awareness of the technical measures that need to be taken in order to protect and enhance their scenery. The G-SCL aims to provide a set of tools for this purpose.

Special attention is paid to guiding the identification of visual relationships between viewing places and observed scenic features (such as landmarks or skylines), in order to avoid a fragmented panorama of "points" and "lines", and to underline the syntactic sequences of the landscape. The visual relations connect outstanding features with their surroundings (the ordinary landscape), and go beyond the administrative boundaries of conservation areas (Figures 38.1 and 38.2). For example, it is argued that the visual cones towards a protected landmark should be protected too, as well as the viewshed of a protected vantagepoint (although this is not explicitly stated in protective acts). However, in the context of Italian legislation, such form of indirect protection is a difficult task. The mapping of such intangible relations is a significant initial step towards effectively taking them into consideration. Maps of scenic character and visual sensitivity covering the overall territory contribute to planning decisions (for example, regarding the location of potential visual detractors, or land-use transformations) (Figure 38.2). Finally, they contribute to the assessment of development proposals by establishing assessment points which are not dependent on the individual case study, but on the overall scenery. For example: if a new high building is proposed, it is possible to know whether it would be visible from selected existing viewpoints, and whether it affects actual landmarks. Moreover, the impact of visual detractors can be evaluated in the planning process, when the debate may concern their location, and not just their design.

The technical process is fundamental in order to gather and provide decision makers with correct information. Items produced by this process, such as cartographic representations, are designed to facilitate the debate between stakeholders. The G-SCL method is expert-based, but public opinion may be taken into consideration during the assessment process. It is the responsibility of the authorities to involve local people in a public debate, in order to establish the significance of, or (preferably) identify, a scenic resource.



**Fig. 38.2** Santa Maria di Vezzolano Abbey, Map of Visual Sensitivity. The darkest areas are the most visible ones from the sum of the selected viewing places (Source: Cassatella 2013b)

### 38.4 Discussion and research prospects

The case study of the Piedmont Guidelines shows how a systematic consideration of scenic features might be introduced to spatial planning, in a trans-scale process linking regional and local planning, outstanding and ordinary places, and natural and cultural assets. The G-SCL proposes basic categories, which correspond to specific requirements and, thus, can be integrated with spatial planning tools, such as landscape plans, urban development plans and park plans, and also criteria for landscape assessment procedures.

With regard to policies and plans for natural protected areas, the importance of considering scenic resources is supported by the history of nature conservation (Section 38.1), by theories on environmental services, and by concrete experiences of scenery management. Integrating scenery into the toolbox may help to:

- expand the consideration of and draw public attention to the interaction between man and nature, thus increasing awareness of and attention to natural environments:
- emphasise the visual relations between protected areas and their surroundings, thus helping to identify and manage buffer zones;
- enriching the identification of the multiple values of an area, e.g. cultural and aesthetic ones (which mean amenity, recreation, spirituality, memory and so on), with a specific focus on tangible features which support their perception by local population, visitors and stakeholders;
- In so doing, reveal the potential conflicts between uses, functions and values deriving from different perceptions of the same places and elements.

The process of scenery analysis and assessment is a technical contribution to public debate and decision-making, as it enhances the information and its transparency. It aids understanding and management of potential conflicts regarding landscape resources (as well as synergies between them), thus fostering an alliance between landscape and environmental policies.

Once the objectives of such policies regarding scenic quality have been identified, their effective implementation in the regulatory planning system remains a challenge (Section 38.2) (Cassatella and Gambino 2011). In conclusion, future research should concentrate on the clear gap between knowledge and action by shifting the focus from scenic-perceptive landscape assessment methods to implementation methods within spatial planning regulation systems.

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