

Early grasp of the whole

Integrated Landscape Character Assessment ILCA, Sweden

A presentation of the task and the team

This paper introduces the research and innovation project, Including landscape in long term spatial planning. A project that has been financed by the Swedish Transport Administration, in collaboration with the Swedish Heritage Board. Bengt Schibbye, senior Landscape Architect and Emily Wade, Landscape Architect, both with extensive experience from landscape planning will present two regional cases studies. They are members of the consultants, *Befaringsbyrån*, a team of specialists in landscape ecology, urban planning, landscape planning and landscape history. We see that the challenges of planning for future, demands an understanding of the complex, and tools to able to do so. The collaboration in the methodology integrates the knowledge and engagement of different disciplines.

Starting points

Sweden's transport policy targets and Sweden's signing of the European Landscape Convention are important starting points for the work of the Swedish Transport Administration. This means that our activities must contribute to the furthering of Sweden's environmental quality targets and to the maintenance of attractive landscapes and the facilitation of their development.

Implementing this target requires a comprehensive understanding of the landscape, that is to say, a collective view of its natural, cultural, formal, visual and functional features. Landscapes are not static. Knowledge of the ongoing transformation processes in a landscape, its sensitivity to change and potential in how it could be developed is crucial. Equally important is an understanding of the impact of infrastructures on, and their interaction with, the landscape wherein they lie. And, of course, the ability to translate that understanding into action when planning, maintaining and developing new infrastructures.

A dilemma faced by today's sectorised planning with its segregated expert analyses, legislation and organization is that it rarely allows for such a holistic approach. The purpose of the Research and Innovation project "*Including landscape in long-term spatial planning*" (*Landskap i långsiktig planering*) is to find, develop and test methods for a holistic awareness that can be employed in the work of the Swedish Transport Administration.

As consultants, we had the opportunity to develop this new tools for landscape analysis on a regional scale.

Fragmented planning offers poor solutions

Community planning is by tradition fragmented with each sector making its own assessment, often unaware that a measure in one area can have significant consequences in another. Late in the process, conflicts arise causing unexpected delays and additional costs.

By observing the landscape as the arena where changes take place, we believe that a holistic landscape perspective can influence the planning process. Through a common understanding and engagement, different sectors can collaborate to develop a sustainable and responsible

landuse strategy.

All authorities are responsible for maintaining sustainable development. This presupposes that the landscape be viewed and treated as a whole. What is required is a shift in thought patterns, from a focus on limited designated areas to holistic reasoning.

Landscape issues have long been treated as a matter of the protection and conservation of particularly valuable areas. Change has been regarded as an infringement. This view is not adequate when working to achieve sustainable development. By focusing on the whole landscape, it becomes possible to collaborate with other actors to find solutions that can significantly improve the situation, instead of the earlier focus of planners on avoiding tangible damage in specific areas. In the case of e.g. cultural heritage management, this means that “the history of the landscape” becomes an important contribution for understanding the processes of change, and thus plays a role in creating future habitats. The European Landscape Convention has contributed to this change in our thinking.

Process and results

The method presented here – *Integrated Landscape Character Assessment (ILCA)* – aims to provide an overall picture of the main features of the landscape, its character, idiosyncrasies and assets. It allows for the analysis of functional, visual and meaningful elements along with ecological and historical descriptions of the area. A prerequisite for integrated landscape character assessment should be that it is composed of contributions from many different types of expertise. Planners, project managers, natural and cultural heritage specialists, landscape architects, geotechnical engineers and many more, come together to create a shared picture of the conditions, opportunities and complications that the landscape offers.

Integrated landscape character assessment calls on many individuals of various professional backgrounds collating their information into a collective description of the landscape. How is it experienced today? Why does it look and function as it does today? What types of different character areas can be defined and what distinguishes them? This is done in practice through a series of workshops and field trips – so-called ‘group landscape observations (*befaring*)’ – where the planners, project leaders, planning managers, specialists in nature and heritage conservation, landscape architects, and geotechnicians, etc., work together, developing a common understanding of the landscape.

The methodology used is based on – but does not copy – the British method of Landscape Character Assessment (LCA). The strength of this method is that it views the landscape as a whole: how it is perceived today and how it has evolved, i.e. why it appears and functions as it does. The method is applicable at various scales. The study presented here has been carried out on a regional scale. Classification, description and evaluation can be refined within the same methodological framework on a more detailed scale.

In short the method of characterizing the landscape is not a linear process. Field visits – landscape observations – are combined with desktop studies, meetings (workshops) with the participation and exchange of ideas from different directions and at various intervals. In this way, knowledge builds up and assessments get constantly reconciled. The workshops and landscape observations are often needed to be carried out several times before classifications, descriptions and assessments are agreed upon and finalized.

The method is transparent and repeatable in that it separates the different aspects of the landscape: character, development trends, sensitivity and potential. Through a system of checklists, anyone with a specific interest can trace the underlying basis for the various definitions, descriptions and evaluations. The checklist below has been used during the field observation trips.

Main points of the check list. It helps to make a description clearer, more transparent and comparable across different areas.

CONTENT

Land form / topography, watercourses, geological direction, bedrock and soil types
Scale
Relief, height variation
Land use
Vegetation / vegetation structure
Nature
Biotopes
Communications
Settlement (character, age, structure, function)
“Cultural references” (famous places, local sites, meeting places...)
Key elements, further defined where necessary

CONTEXT

Spatial context (boundaries, patterns, structures, movement, landmarks...)
Functional context
Ecological context
Historical context

ONGOING PROCESSES

Natural
Agriculture / Forestry
Developments in society / building enterprises

The analysis provide a planning tool

When the narrative description is finished, the assessment itself takes place: What are the development trends? What are the sensitivities in the different character areas? What changes can the landscape tolerate? What values and functions exists and how can they be enhanced in the different areas? – and, above all, – What purpose do we want this landscape to serve? The methodology is adapted to each circumstance, but the aim is always to find the best solutions from a holistic perspective. The meaning of sensitivity, includes not only visual but cultural, social, historical and ecological aspects. In this respect it grasps more than a landscape and visual impact assessment. The identification of character areas has proved to be a useful platform for describing the landscape from different sectors.

A properly collated integrated landscape character assessment also allows for the early involvement of those who live and work in the district, which is especially important since the assessment is not limited to merely assessing damage but also entails improving specific environments.

In 2013 a range of applied studies and demos are being carried out using ILCA. The intention is that the spatial planners at the Swedish Transport Administration, in the future, always will address landscape characters in early planning stages. And thereby contribute to a sustainable development by enhancing landscape qualities.

The project creates a common arena where regional and national authorities can meet and discuss the impact of the plan.

Good practice in two regions in Sweden

Regional transport infrastructure plan Västra Götaland

The first analysis was carried out in the Västra Götaland Region, covering an area of 24 000 sq km including the second largest city in Sweden, Gothenburg. The regional and national plans for transport infrastructure (2010-2021) were used as preconditions for assessments. The objective was to ensure that a holistic interpretation and description could be made of the landscape, to identify the landscape as a resource and judge what effect transport infrastructure would have on the landscape. The aim was to provide information in a manner that will help spatial planners making good decisions.

By working in the multidisciplinary team we could distinguish significant characters, structures, functions and qualities. A lot of effort was put into producing narrative texts that makes the study accessible to both stakeholders, public and experts.

The study identified 12 character types and 26 character areas on a regional level. In five of the character areas development trends, sensitivity and potential for enhancement was identified. These aspects included both visual, cultural and ecological qualities, grasping the aspirations of the ELC. Experts from local government and countryside administration participated in the workshops and observation fieldtrips. This participation proved very fruitful in both acquiring knowledge and engagement.

In one of the applied studies, Kinnekulle railway, the ILCA had great timing and proved useful in the Strategic Choice of Measures examination. From the ILCA it was possible to appraise how the landscape around the railway would be effected in different management scenarios. The scenarios included dismissed railway crossings, electrifying the tracks, modernising the stations and clearing trees close to the rails. With the analysis as a baseline and with additional field study observations along the railway, we identified four significant aspects for the landscape that could be ventured in the development. Firstly the Trees- the railway crosses one of the most valuable oak habitats in Northern Europe, an intact historical setting and a developing tourist destination with great visual qualities. A clearing of trees in accordance to the Swedish railway safety regulation, would venture this value. Next; the villages along the line and the crossing roads and watercourses. Last; the potential of enhancing the connectivity and biological diversity along the railway.

The most recent contribution to the Kinnekulle railway project is a guideline how and where these enhancements could be made. This will provide the Swedish Transport Administration with a tool for a best practice for the landscape as a whole and a basis for a cost estimate. Utilizing the knowledge from the Integrated Landscape Character Assessment (ILCA) it has been possible to initiate and manage activities that can enhance landscape qualities early in the planning process. These are questions that may not usually be addressed, but have a great potential in both planning and maintaining infrastructure.

Regional spatial development plan Västmanland

In the second case study the timing of our consultation was planned to contribute in the process of making a regional spatial development plan in Västmanland. Once again the participation of stakeholders and local government resulted in an energetic working

process, fostering ambassadors of the landscape as a tool for sustainable development. In Västmanland there was a broader baseline of effects. The objective was to understand how both transport infrastructure, expanding towns, receding villages, agricultural landuse, wind farming, recreation etc. could effect the landscape. The region is bottom heavy with development towards Lake Mälaren and receding villages in the furthest areas. In the assessment we made some interesting observations of visual, cultural and ecological hotspots. The knowledge of the landscape provided a new mindmap over the region, a map that demonstrated significant values and gave a spatial dimension to all the sectorial interests.

“There are so many interests to consider. Sometimes this can obscure possibilities for development. Integrated landscape character assessment provides a constructive starting point. One can develop and do things provided they are done in the right way”, says Lars Eriksson, County Administrative Board, rural areas section.

The results show that the method provides a new arena for regional planning that is useful for making landscape issues visible and that landscape qualities can become an important factor/driving force in the planning process. The Integrated Landscape Character Assessment has highlighted a new significance of the natural resources. The country administrative board can communicate with a regional toolbox and avoid major conflicting claims.

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Read more about the project at

The Swedish Transport Administration: <http://www.trafikverket.se/Om-Trafikverket/Andrasprak/English-Engelska/Community-planning/Integrated-landscape-character-assessment/>