

PLACE LOGIC RATHER THAN PROJECT LOGIC: LANDSCAPE OBSERVATORIES AS REGIONAL COORDINATORS OF LARGE-SCALE PROJECTS AND COMPENSATION MEASURES.

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ABSTRACT

This essay will focus on experiences from previous research projects and master courses with the aim of highlighting some core issues and problems regarding large scale infrastructure projects, landscape assessment and compensation measures, especially concerning cultural values in the agricultural landscapes of Scania, the southernmost part of Sweden. Problems, but also possibilities, related to evaluation, mitigation and compensation are discussed.

Landscape Observatories as established under the European Landscape Convention are introduced as a possibility for trans-organizational learning around landscape matters in a broad sense. It is concluded that regional landscape observatories could function as hubs for more efficient management of large-scale landscape interventions and contextually relevant mitigation and compensation measures. Incremental changes in the present legislation and administration, which seems to be the prevalent strategy, might not be sufficient in order to safeguard our cultural heritage or be in line with the objectives of international agreements.

KEYWORDS

Compensation measures, Landscape observatories, Regional planning, Infrastructure planning, Large-scale projects, Project logic, Place logic

INTRODUCTION – THE PROBLEM

In previous studies of compensatory measures for nature and cultural environments in large scale infrastructural projects in Sweden, we concluded that the possibility of demanding compensation measures by law for affected ecological and cultural values was seldom taken into consideration in practice. Besides, work on landscape analysis, environmental impact assessments and compensation measures were not carried through by local or regional coordination of ongoing, parallel large-scale infrastructure projects, but rather by a project centred logic. Each project had its specific budget and project management, which could lead to duplication of workload, problems regarding transparency within the planning process and poor considerations concerning possible synergy effects. One example illustrated how the almost simultaneous construction of a motorway and a railway affected exactly the same bird protection area, but no attempts were made to cooperate and look for synergy effects between the separate projects (Persson et al. 2015; Persson & Larsson 2014). In addition, compensation measures in Sweden usually only take place within the formal road and railroad area (fundamentally overlapping with the safety zone along the roads and railroads), and in-kind compensation measures are considerably more in use than out-of-kind measures, which further complicates the situation regarding cultural compensation, where in-kind compensation might actually be impossible. For some cultural elements, such as ancient remains, only documentation and dissemination of the results from e.g. an excavation is obligatory (Persson & Larsson 2014).

The jurisdictional base regulating compensation for damage regarding cultural values is found in the *Environmental Code* (Miljöbalken), chapter 7, 16 and 17, while the *Planning and building act* (PBL) and the law regarding cultural environments (Kulturmiljölagen) do not cover the issue of compensation for exploitation areas of general interest at all. According to the Environmental Code, compensation measures should be reasonable regarding actual costs, as contrasted to systems or policies focused on the principle of ‘balancing’, where costs for damages should be fully covered (Grahm Danielson et al. 2015). In a review of juridical cases, published in 2015, no circumstances of compensation for cultural environments according to the Environmental Code could be found (ibid.). Thus, in Sweden, there is a great need of further discussion on the juridical framework, terminologies and implementation in planning practice, as suggested by many others (e.g. Grahm Danielson et al. 2015). This paper will however not

specifically enter the legislative field any further than this, but rather focus on methodological and organizational issues.

EIA, VALUES, EFFECTS, MITIGATION AND COMPENSATION

An Environmental Impact Assessment (EIA) functions as a base from which ecological and cultural values are presented and where effects and consequences of infrastructure projects, leading up to mitigation and compensation measures, should be investigated and presented as transparently as possible (Trafikverket 2011). The reader of this essay will probably have sufficient knowledge about EIAs to follow the very basic discussion below. Of special interest is however to have the mitigation hierarchy (avoid, minimize, restore and compensate for expected damage on ecologically and culturally valuable environments) in mind for the coming discussion, since this is the 'leit-motif' when it comes to all theories and practices related to encroachment and compensation, whether in green or grey environments (e.g. Trafikverket 2018; Trafikverket 2011; BBOP 2009).

After having worked with infrastructure planning in practice as an EIA-coordinator, it is quite obvious for the author of this essay that ecological values influence the process much more than cultural values, which is validated by many other authors (e.g. Eliasson et al. 2018; Stenseke 2016). There is for example the European Water Framework Directive, Natura 2000 areas and red listed species to consider. The existing green/blue environments, or biotopes established as compensation for those lost, have to be at least as functional after the intervention as before. Ancient remains could on the other hand be excavated, and the obligatory compensation measure restricted to preparation of informational material and signs, where people can read about the no longer existing ancient remains and findings from the excavation. As Swensen and Jerpåsen (2008) formulate it, the cultural heritage and the protection and caretaking of cultural values is "*more to be seen as a derivate interest*", when compared to the protection and caretaking of the "*green interests*". In addition, the mitigation hierarchy seems to be constructed more from an ecological perspective than from a cultural perspective, where there is often an obvious link between identified damages and compensation measures. Application of the mitigation hierarchy in a cultural value perspective favours tangible values and clearly defined objects, at the expense of cultural aspects of more intangible and prosaic value, discussed further below.

One explanation for the dominant ecological perspective, at least within an infrastructural planning context, might be that the municipalities have the responsibility for streets within the urban areas, while the Swedish Transport Administration has the responsibility for the national and regional road and railroad networks outside the urban areas. Urban areas and their elements are more often considered and discussed in a cultural context (even parks and other obviously green elements), while large infrastructure projects outside our cities have more obvious negative effects on ecological values than cultural values. Cultural values in the countryside could also often be of intangible rather than tangible values, for example a long historical continuation of farming as activity, and the related open landscapes with no other identifiable tangible objects (more below). This puts further demands on the planning processes regarding cultural values in rural landscapes, since tangible values have always been more in focus within the mitigation and compensation process than intangible values, also when considering nature values (Germundsson 2005; Eliasson et al. 2018; Swensen et al. 2013). Additionally, the EIA-methodology has been in use for a longer time within infrastructural planning than within urban, comprehensive land-use planning in Sweden. Since compensation measures are tightly connected to EIA, landscapes outside of urban areas and tangible rather than intangible values, this might be the reason why we have not in the same way developed effective tools for compensation of cultural values as compared to ecological values, whether speaking of rural or urban environments (e.g. Swensen and Jerpåsen 2008; Rönn 2018).

The report *Kulturarv i samhällsplaneringen – Kompensation av kulturmiljövärden* (Grahn Danielson et al. 2014, available only in Swedish) explains how the concept of compensation has developed as a part of two separate scientific discourses on protection of ecological and cultural values – the former having been developed out of an environmental discourse while the latter has developed out of an antiquarian discourse. Thus, on one side we have the geological, biological and technological sciences, while on the other we have the archaeological, ethnological and artistic sciences. The legal framework for compensation measures is based on ideas from nature conservation, while cultural conservation and compensation had to inherit technically similar jurisdictional constructions. Priority is given to compensation measures, which could be delimited, measured and controlled via administrative systems for quality assurance (tangible values). Therefore, cultural compensation could not develop according to its own scientific discourse,

and there is still a long way to go before the scene is set for a more appropriate administrative environment for cultural compensation (Grahn Danielson et al. 2014). It should however also be mentioned that there can exist internal conflicts within e.g. the cultural heritage domain, such as between conservators/restorers, archaeologists and experts on landscape and the built environment on the other hand.

Another problem with a traditional EIA might be that it mixes *values* and *value assessment* within the same models, where different scales of effects and consequences, ranging from very negative effects to slightly negative or even positive effects, are distinguished between (e.g. Trafikverket 2011). One example is the diagrams where values are listed on one axis and the different alternative alignments (A-X) on the other, while the boxes where they intersect are filled with different colours related to positive effects (green) or very negative effects (dark red)(Figure 1). Quite effective and seemingly transparent, but maybe also confusing?

Erikstad et al. (2008) acknowledge the risk of mixing these different aspects, while also mentioning that the evaluation models as such vary, depending on

ENVIRONMENTAL ASPECTS ENVIRONMENTAL INTERESTS	Alternative 0	Alternative 0+	Alternative A	Alternative B	Alternative C
Landscape character	Impact with positive basis on the overall assessment basis.	Impact	Impact	Impact	Impact
Cultural environment	Impact	Impact	Impact	Impact	Impact
Natural environment	Impact	Impact	Impact	Impact	Impact
Outdoor life	Impact	Impact	Impact	Impact	Impact
Health	Impact	Impact	Impact	Impact	Impact
Etc.					

Figure 1. Fundamental example of overall assessment for feasibility study. The report provides an overview of the actual consequences, the scope of the consequences (evaluation), and the basis for the assessment. The report on environmental aspects should be ranked with regards to how essential they are. Green = Positive impacts. Light green = Negligible or no impacts. Yellow = Small or insignificant negative impacts. Light Braun = Observable negative impacts. Orange = Large or very large negative impacts. Source: Swedish Transport Administration (2011).

the authority or agency in charge of the work. Some models range from high to low value, while others range from international to local value, and when mixing different models, low value might be mistaken for local value. This is unfortunate since, within traditional conservation perspectives, local values could very well mean ‘of high local value’. Terms such as ‘international value’ might also be mistaken for being something of importance on a wider geographical scale, like bird migration, rather than something of ‘exceptional’ value and a quite unique phenomenon. A high local value does not exclude a high international value, and vice versa. Therefore, Erikstad et al. (2008) suggest a more transparent model, where values are separated from strategic considerations and cause/effect relationships such as risk and vulnerability (Figure 2).

The suggested model has a grading of values from large (international & national) to local, instead of a grading from large to small, after which an assessment of risk and vulnerability can take place (Erikstad et al. 2008). It could be discussed whether it would not be even more logical to skip the “large” and “medium” altogether in their model, and actually use the model from the Norwegian Ministry of Environment (illustrated in Erikstad et al. 2008), which ranges from international to national, regional and local value, perhaps even extended by a further subdivision from high to low within each

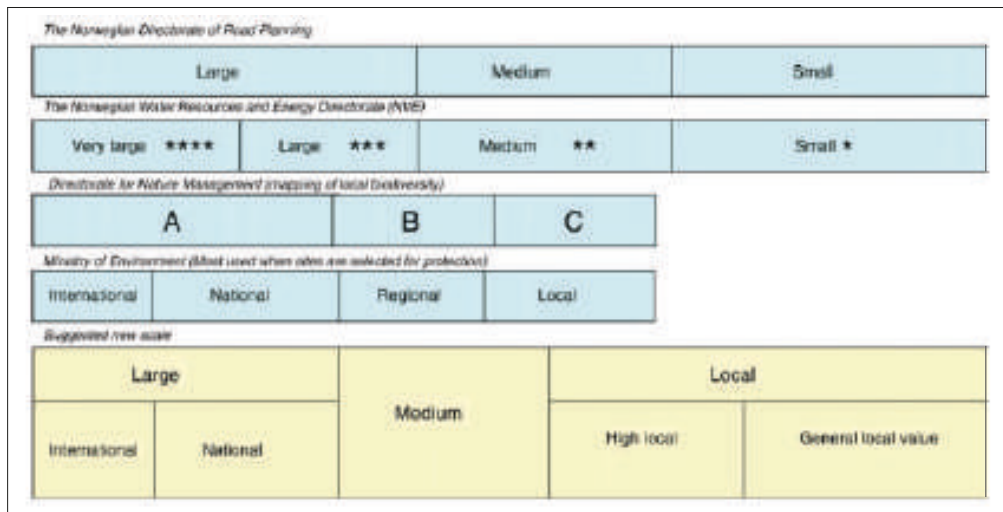


Figure 2. Different value scales used in Norway and a suggested modification for EIA-use. Source: Lars Erikstad, et al. (2008).

category. However, as mentioned by Germundsson (2005) there is always a risk that when heritage values are formulated as being of national interest (value hegemony), local and regional heritage values could be diminished by comparison. It is unclear whether the suggested model/models above would counteract this problem or not. The belief in the specific models as such could also be criticized. Comparability and simplicity are strived for, so that no matter who the person is that has the responsibility for the evaluation, within specific areas of competence, results should be possible to measure and control by the administrative system. This is also a result of the project-centred logic. Within a place-centred logic, focus is more on transparency, continuity and discussion among a group of specialists, rather than on comparability and simplicity. The latter is believed to lead to a higher level of efficiency, while it might actually be the other way around, especially when/if long-term effects (cumulative) and resulting consequences for landscape values would be given a better status and treatment within the EIA-process.

A more well-known and often discussed problem related to heritage preservation, which you could easily find examples of also within nature conservation, is the tendency to focus on individual objects rather than the landscape or system as such, especially since there is often less knowledge on landscape and the system-level than on the object-level. In the Scanian landscape, Skåne (southernmost part of Sweden), the historically wide and open agricultural landscape could for instance easily be mistaken for being a product of the modern and strongly rationalized agricultural industry, since it differs from the idealized Swedish enclosed and small scale farming landscape (Germundsson 2005). Many laymen do not know that the Scanian landscape of today is actually much greener than it was 100-200 years ago (Larsson 2004). Consider for instance the preservation program for Svaneholm estate (where the first full scale enclosure reform was carried out in the 1780s, resulting in an open and large-scale landscape). The preservation program focuses on the park and the old manor house, not the open Svaneholm landscape, representing a historically decisive moment, which had vast consequences for all other Swedish agricultural landscapes (Germundsson 2005). The old manor house and the park were not of such ground-breaking value for the forthcoming countryside estates. This phenomenon could easily be detected also when planning for large-scale infrastructures, where e.g. the alignment is drawn in such a manner that it effects as few objects as possible, while the possibly more intriguing landscape characteristics are not described in any more elaborate way than as the scenic backdrop.

Closely related to this is the discussion about tangible versus intangible values, which we have already briefly touched upon above (Eliasson et al. 2018; Swensen et al. 2013). Eliasson et al. (2018) mention that there is an awareness about how important it is to consider intangible values, but in practice the focus is more often placed on tangible aspects such as ancient remains, churches and historic buildings. Swensen et al. (2013) write that the actual distinction between tangible and intangible values is most often irrelevant to people, but it is the intangible values (narratives), which matter most to laymen, while experts tend to focus more on tangible values. From their case studies in three different Norwegian towns, they could conclude that non-visible elements such as sound, smell and memories of people and activities, and also elements and places, which were already lost, mattered a lot to people. Thus, additional methods for documentation of cultural values are needed (Swensen et al. 2013).

Instead of taking departure primarily in the aesthetics of the visual landscape, it is crucial to reverse the focus and take departure in the fact that the cultural landscape is one that is worked and formed by people (Germundsson 2005: 28).

So what to do about all of this? Eliasson et al. (2018) mention that the concept of cultural ecosystem services (CES), i.e. the dimensions of cultural heritage, place identity, aesthetic and existential values within the ecosystem services concept, could help to improve the status of cultural values in planning processes. Until now, however, studies have shown that due to the intangible nature of CES aspects, evaluation difficulties and methodological and conceptual reasons, the CES dimension has had some troubles concerning its integration into the ecosystem services approach (e.g. Eliasson et al. 2018; Blicharska et al. 2017), comparable to other results above, concerning nature versus culture. There is however increased support for integrated assessment of ecological and cultural values in landscapes within e.g. the Millennium Ecosystem Assessment (2005). Since the ecosystem services concept has had influence on international policies regarding socio-ecological systems, Eliasson (2018) also believes that there is a potential for further integration simply by utilizing existing knowledge and policies within heritage planning at local and regional planning levels. However, integrated assessment might cause some problems, regarding the necessity for cultural compensation to develop its own scientific discourse (Grahn Danielson et al. 2014).

In addition, the terminology in itself (ecosystem services) tends to point towards nature more than culture, even if the term cultural ecosystem is strengthened. Maybe it is not the assessment as such that needs to be a better integration of different values, but rather the legislation that needs to be more responsive towards the specifics of each discipline, while the *practical handling* of landscape compensation (nature + culture) should be undertaken as an integrated and trans-organizational learning process? As mentioned earlier, the planning and assessment process normally follows a specific project-logic, rather than being situated in a more holistic regional context, and comprised of several ongoing and overlapping projects and processes. Place-logic as alternative to project-logic will be further elaborated on below.

HIGH SPEED RAILWAYS AND THE CULTURAL LANDSCAPES

We have been working on the new plans for a High Speed Railway (HSR) through Scania within the framework of an international master's course at the Swedish University of Agricultural Sciences (SLU) in Alnarp during the past two years. The HSR is an interesting study object since it involves working with a completely new scale of infrastructure in Sweden. There is reason to believe that some forms of mitigation and compensation measures, such as those regarding ecological values and noise, could be carried through even better this time. This depends on the large-scale as such and the subsequent obvious conflicts, which of course leads to extra attention from the authorities, but also because we have learned to handle these types of problems relatively well by now. Building eco-passages in sensitive natural environments is a standard procedure rather than something novel, at least when it comes to the most simple and cheap versions of tunnels. However, we have not in the same way developed effective tools for compensation of cultural values (e.g. Rönn 2018). In addition, there is a risk that cultural values will be more negatively affected than usual, because a HSR must be given a much straighter alignment than railways for traditional, slower trains, which means that the railway will not be able to sneak around the most sensitive environments, as it used to. In the worst case, buildings, estates and coherent cultural environments of high conservation values might have to be removed almost entirely.

Compensation measures are only carried through in practice within the formal road and railroad area in Swedish infrastructure planning. Compensation in municipal policies is a voluntary agreement with the developer.

The situation seems to be quite different in for example Denmark, which was illustrated during field studies within the course. The formal requirements might have stipulated that compensation measures should actually foremost be carried through within the formal railroad area, but according to planning officers and landscape architects we met, it was all about finding constructive ways of discussing the problems and possibilities together with the municipalities. Thus, in Denmark, off-site compensatory measures were obviously discussed to a much higher degree than in Sweden. We saw examples of e.g. new recreation areas stretching far away from the formal railroad area, resulting in impressing solutions regarding parks for recreation and biodiversity that fitted well into the local landscape context. Thus, it is clear that the range of possibilities could be extended also in Sweden, not least during the very specific window of possibilities, which has opened up due to the public interest in the HSR project, if only the responsible authorities could be a bit more creative and open minded regarding the formal requirements and regulations.

Scania, which was in focus during the master course, is a densely populated region of Sweden, but with the population and villages in the plains scattered all over the landscape, rather than concentrated to fewer urban settlements



Figure 3: Illustration from student work by Julia Hellström, SLU Alnarp (2019).

near lakes, rivers etc., as in much of the rest of Sweden. The closeness to ground water made it possible to dig out wells and place your homestead almost anywhere. Most villages were destroyed, especially during the 19th century, since the land relocation reforms forced farmers to move their farms from the collected villages to their new plot of land. New drainage technology made most of the plains very well suited for large scale farming. Cultural heritage values and ancient remains from periods long before the farming era are found everywhere. There is additionally much existing, modern infrastructure to consider, like roads, railroads, power lines, etc. Thus, there is little possibility to avoid major negative effects on the landscape and for people living in Scania. There are however some possibilities to ‘overcompensate’ in such landscapes, such as building eco-passages over, not only the new railroad, but also adjacent and already existing infrastructure, in order to open up for wildlife and public access where there previously were barriers. Some students discussed this possibility within the course. Below is an example of a combined eco- and recreational bridge over a railroad, which could easily be extended to stretch over more than one infrastructural element (Figure 3).

Other students worked on suggestions about how to make better use of patches of leftover land close to the railroad area, which could not be used effectively for e.g. agricultural production after the intervention. If close to urban settlements, such land could be developed into new parks and recreational areas, just as the examples we saw in Denmark. The example below illustrates such a possibility close to the city of Eslöv (Figure 4). A new, green corridor through the western parts of the city is suggested, along with eco-passages, etc. The municipal officer from Eslöv who took part in the final presentations in the course stated that it now almost felt like the new railroad had become a prerequisite, not a hindrance, for getting green structure projects like this one on the table for negotiation.

The problem remaining might be that the present road and railroad process does not allow for such creativity. The system is still ruled by project-logic rather than place-logic (Persson et al. 2015), making it difficult to discuss synergy effects between other ongoing infrastructure projects or compensation measures that could bridge barriers created by already existing infrastructure. Within the project-centred planning process, it would be equally difficult to coordinate all the different authorities and stakeholders affected in the region, with their multiple and not always overlapping goals. The fact that little attention is paid to the cultural heritage compared to ecological

values, especially the intangible values, further complicates the situation. It could also be worthwhile mentioning the always-difficult issue of long-term consequences resulting from the project as such, new land values and further exploitation possibilities in which the infrastructure project will result, affecting forthcoming planning and development (cumulative aspects, e.g. Jones (2016)). A platform for discussing the complexity of regional landscapes and large-scale landscape interventions in its totality, including all relevant stakeholders, seems to be missing. Each sector is working individually on improvements and fine tunings of its own set of methodologies. Below, landscape observatories will be presented and discussed as possible hubs for regionally centred coordination of landscape-related data, interests, and measures related to mitigation and compensation aspects.

LANDSCAPE OBSERVATORIES

As stated earlier, the local or regional connection is of great importance since it will make it possible to avoid some problems, related to the project-centred



Figure 4: Illustration from student work by Johan Henriksson, SLU Alnarp (2019).

logic, which guides most large-scale infrastructure projects of today. Projects should rather be coordinated regarding competence, planning and management through a regional hub of some kind, where the parties involved represent a broad view on landscape values, threats toward these and ongoing and planned projects in the region. Such a regional landscape body should be able to coordinate landscape character analyses, impact assessments and compensation measures on e.g. major landscape projects (road, railroad, wind power, etc.). This would lead to a better picture of the regional context, minimize the risk of duplication, as well as understand how synergy effects could be better attained (Persson et al. 2015; Persson & Larsson 2014). Regional coordination is also preferred to national coordination since, as mentioned above, values formulated on a national level often diminish the importance of local values (Germundsson 2005). This is why it could be of interest to learn more about Landscape Observatories.

On behalf of the Swedish National Heritage Board (Riksantikvarieämbetet, RAÄ), a group of researchers at SLU Alnarp have written a report, which presents a number of examples of different types of European landscape observatories, with a particular focus on organizational issues and with the aim of discussing possible applications in a Swedish context (Sarlöv Herlin et al. 2019). Landscape observatories are largely based on the European Landscape Convention (ELC), which aims, for example, to increase the democratic elements of decision-making, map changes and raise awareness on landscape related issues. Sweden ratified the convention in 2011 and thus has a responsibility to implement the guiding principles of the convention within national policies and legislation directed towards matters affecting national landscapes (Sarlöv Herlin et al. 2019). RAÄ is the authority in Sweden with responsibility for the initial implementation aspects regarding ELC.

ELC came about as a reaction towards the manifold, negative, driving forces affecting the landscapes of today, acknowledged widely from the 1990s. Together with an insight about the need for a trans-sectorial landscape policy, this considers the citizens' right to information and right to participate in landscape related decisions. A relationship towards the Aarhus convention is obvious, just like the Faro convention regarding the value of cultural heritage from the Council of Europe (Sarlöv Herlin et al. 2019). An effective and appropriate protection, management and planning according to the statutes of the ELC raises a demand for continuous observation and suitable forums for exchange of information, such as observatories, centres or institutes for

landscape. A foundation of the ELC is to integrate the ecological and cultural heritage perspectives (including social aspects) and work towards a holistic perspective handling the entire landscape, and not only the specific objects one by one (ibid.). Thus, a landscape observatory, based on the ELC, should address most of the difficulties related to evaluation of ecological and cultural values, mitigation and compensation aspects mentioned above.

The Council of Europe (2008), responsible for the guidelines regarding the implementation of the ELC, have listed possible tasks to be carried out by landscape observatories, which could include information about the status of the present landscapes, developing indicators for observing landscape changes or the carrying through of such observations, collecting information about landscape policy and experiences on protection, management and planning, through collecting and using historical documentation on how the landscape has developed over time, and providing data which could increase the understanding of current trends (Council of Europe 2008; Sarlöv Herlin et al. 2019). The existing landscape observatories are of many different types, from those which have a local focus or handle very subject-specific tasks, to those of much higher complexity, initiated either through national legislation or from a grassroots perspective, covering a larger geographical area (often regional level) and with professional governance supported by e.g. regional political bodies. It should be noted that many of the topics and functions included in European landscape observatories are already considered and handled by various official authorities in Sweden, even though there is no collected landscape body corresponding to an observatory (Sarlöv Herlin et al. 2019).

An inventory in 2015 found approximately 60 European landscape observatory initiatives in Europe. A majority of these (27) were local observatories in Italy. 13 observatories of a regional character were found in France, whereof one is a transnational observatory in cooperation with Belgium. Other initiatives regarding observatories can be found in countries such as England, Holland, Finland, Portugal, Switzerland and Sweden. Spain has 3 observatories (Catalonia, the Canary Islands and Andalucía), whereof the one in Catalonia is the most well-renowned in Europe (Sarlöv Herlin et al. 2019).

The landscape observatory in Catalonia (<http://www.catpaisatge.net/eng/index.php>), active since 2004, functions for example as an information hub, a link between politicians and citizens and an initiator of various preser-

vation and development projects in the region. The board of the observatory consists of representatives from regional authorities, universities and professional organizations. The chairperson is a representative from the local Catalanian government from within the ministry of land and sustainability. The landscape as such is located in Olot, where there are both archives and a library with landscape related material available for all citizens. Through bottom-up projects such as “Wikipedra” (<http://wikipedra.catpaisatge.net/>), a part of the inventory of the cultural environment, citizens are encouraged to submit information about where traditional dry stone buildings and dry stone walls can be found and, after inspection, the data is registered digitally, and could eventually end up on tourist maps of the region. Thus, important cultural environments are made visible and available in a much better way than before, as well as the historical knowledge about these objects increases (Sarlöv Herlin et al. 2019). Such regional and bottom-up projects are often more effective than conventional, top-down, landscape management approaches (e.g. Bohnet & Konold 2015). Other tasks carried through within the Catalanian observatory include e.g. Landscape Catalogues, containing landscape character assessments, landscape quality objectives and guidelines on preservation and management for different parts of the region. There are many other tasks carried out by the Catalanian landscape observatory, such as initiating education on landscapes, including didactic material to be used by the elementary schools, arranging seminars and workshops, which are documented and published on the homepage, plus several publications written by the staff, such as newsletters, annual publications, bibliographic catalogues, calendars and information about international landscape related projects (Sarlöv Herlin et al. 2019).

The most important aspect of a landscape observatory might however be that it should function as an active part in planning processes and exploitation projects affecting regional landscape values. Thus, it should not be mistaken for other, more local, forms of visitor and information centres, often established for touristic reasons, where information about geology, flora, fauna, cultural history etc. (e.g. the Swedish “naturrum”) is available. Nevertheless, there might of course be overlapping functions as well as cooperation between landscape observatories and other forms of local and/or regional information centres.

A Scanian restart and redevelopment of the “Skånes Landskapsobservatorium” is planned to be introduced during the autumn of 2019, with SLU as

coordinating department. This will however start with a much more limited agenda compared to the Catalanian example, but with ambitions that will grow successively.

DISCUSSION

Individual trees in a tree avenue cannot be preserved forever, but must be replaced with new and vital plant material from time to time to safeguard not only the ecological status, but especially the cultural value of the object as such – the tree avenue. In addition, why could nature not sometimes be compensated by culture, or vice versa, as well as objects be compensated with activity, or vice versa? What would be the best for the affected area as a whole, in a longer time span, and in what ways could authorities facilitate the development of vital agricultural landscapes that not only preserve, but also re-generate, natural and cultural values? There are many more questions than the above mentioned to consider when it comes to safeguarding cultural heritage, when planning for large scale infrastructure in Sweden, clearly illustrating the complexity of handling legislation, implementation and cooperation among different stakeholders.

One might wonder if "compensation" as such is actually the best concept to use, since this relates back towards the landscape, or landscape objects, as it or they was/were before the intervention. This might also unconsciously give priority to in-kind and on-site measures, especially when it comes to ecological, green, features. If a pond was destroyed, we would of course like another one in its adjoining surroundings, in order for the present inhabitants of the habitat to thrive and reproduce to at least the same extent as before the intervention. However, it might be more difficult if a castle and its surrounding English park were ruined. The risk of aestheticism is obvious if an imitation of the castle would be erected right next to the old one, and a new adjacent park laid out in front of this (Duncan & Duncan 2001). This would be true even if the castle could be kept as it is, and transported to a new place. A landscape, which has had a high-speed railway placed right through it, will never again be the same as before. On the other hand, the new cultural landscape might thrive in its original meaning (e.g. farming and gardening) even better than before by more up-to-date interventions (out of kind).

Should we, to a greater extent, try to illustrate and describe the conditions for a qualitative and vibrant cultural landscape after the intervention just as accurately as we do when documenting the landscape and its existing

values before the intervention? Instead of seeking to replace an old estate environment, with classical buildings and hunting grounds, with something that is even reminiscent of what has been, we could instead aim to preserve the phenomenon as such – a vital and diverse landscape when it comes to production of food and other meaningful activities for the population of today. The old estate must of course be given its historical documentation, open for coming generations to be aware of, but there might not be a need for more large-scale farming in the surroundings. Looking at a broader context, one might discover that the nearby apartment area is an area where unemployment is high and people are eager to learn about urban farming and urban gardening, leading towards small-scale production of food supplies to be sold to the public or nearby restaurants, or not at least to social benefits (e.g. the project Stadsbruk, as illustrated in Rasmusson et al. 2016 & Nilsson 2015). The historical *idea* of working with the land and producing food is safeguarded, but put into a modern context. This might be more interesting than to preserve the buildings as such, especially when they are most probably occupied by people with jobs in the nearby cities, outside the agricultural sector, while the land is taken care of by a farming company situated somewhere else, especially if there is no realistic alternative for re-locating the railroad alignment. However, there is a need for a more profound discussion regarding out-of-kind and off-site solutions, both regarding the cultural heritage and ecological values. The lost habitat might not be of the most vulnerable kind in the region, while a very different kind of habitat could lead to great improvement of the situation regarding extinct species of a very different kind. Fish should maybe be substituted by birds, or the other way around. The mitigation hierarchy might be obsolete. One objection could be that any such changes in the strategies or willingness to compromise about the value of the original environments, objects and functions might lead to a more liberal form of planning in general, where out-of-kind compensation is rather seen as an excuse while not bothering too much about the destruction of heritage values.

Instead of getting rid of the mitigation hierarchy, which might to some degree prevent a too liberal attitude towards the original environment when in use, it should maybe be extended by a fifth, more forward looking step (e.g. improving and strengthening both ecological and cultural aspects). Here, landscape observatories could be used as a platform in the early stages of planning processes to facilitate a constructive dialogue between different agencies and developers. The report “*Kulturmiljövårdens riksintressen enligt 3*

kap. 6 § miljöbalken” (Riksantikvarieämbetet 2014) mentions some examples of improving and strengthening values related to cultural heritage, such as improving accessibility, creating or re-creating connections, structures and other spatial attributes, which increase the possibility to interpret the landscape, i.e. the possibilities to understand and experience the cultural environment. Ann Whiston Spirn’s discussions regarding “landscape literacy” could also be well worth developing further in this context (Whiston Spirn 2005).

To sum up, regional landscape observatories, as described above, would not only be timely to introduce in Sweden, due to e.g. international commitments, but could also function as the hub we need for better organizing an effective, democratic and constructive discourse on landscape change and preferred development. After all, we must work for the long-term benefit of landscape values, be they ecological or cultural, not looking at each project as an isolated object or specific time limited process. Cumulative Effects Assessment (CEA) are after all best undertaken regionally, not project-by-project, as mentioned by Jones (2016). A fresh start might be preferred instead of a continued handling of projects, mitigation aspects and compensation measures within the present project-oriented system, incrementally moving a little bit towards better part-solutions year by year, while our landscapes are destroyed bit by bit because of unpredicted cumulative effects. The present planning system regarding large-scale infrastructure most certainly does not correspond to the obligations we have undertaken, especially regarding public participation and democratic values, by ratifying the European Landscape Convention.

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