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Ecostrategies: Presentation and elaboration of a conceptual framework of landscape perspectives

Abstract

The conceptual framework of ecostrategies (views and use of landscape) presented here have been used to analyse various cases of nature-based tourism and related activities such as outdoor recreation, outdoor education, nature reserves and conservation. The role of the ecostrategies is to illustrate the intersections, conflicts and alliances between different types of nature based tourism and relations to other rural activities. The framework consists of four main ecostrategies, which are identified from the tension between "functional specialization" vs. "territorial adaptation" and the tension between the ideals of "utilization" vs. "appreciation". The four ecostrategies are the landscape seen as: (i) a museum for external consumption, (ii) a factory for producing activities and products, (iii) a dedicated place to be utilized and (iv) a dedicated place to be contemplated. These ecostrategies are linked to various consequences in terms of democracy, environmental issues, views of nature, local development, planning, pedagogy, identity and conflicts. The framework has proved fruitful in discussions about landscape futures, as illustrated by the case studies on nature based tourism, outdoor recreation and nature reserves presented in the article. Some of the framework's shortcomings are here presented, together with suggestions for further development, such as quantitative survey investigations and using a three-dimensional version to illustrate previously hidden tensions.

Key words: nature based tourism; nature reserves; national parks; outdoor education; outdoor recreation; public access

Introduction

Society's landscape relation is dynamic and includes fundamental discussion themes like "environment", "natural resources" and "development". This means that in a democratic society, continually discussing different landscape futures is vital. Tourism is one of the major activities transforming and preserving landscapes for the future and nature based tourism is one of the major influencing actors with regard to rural landscapes. But there are many different types of nature based tourism and many related interests, such as outdoor recreation, outdoor education, nature reserves and conservation. There are also other actors in the landscape, such as agriculture, forestry and infrastructure. Here, the role of the ecostrategies – views and use of landscape – is to illustrate the intersections, conflicts and potential alliances between different types of nature based tourism and other rural activities. Using a presentation of the conceptual framework and some of its applications as a platform, the *aim* of this article is to illustrate the potential of the framework, outline its current shortcomings and propose subsequent elaborations.

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The ecostrategical framework shows the underlying differences in intentions with regard to how the landscape is related. It therefore serves as a communication tool for an analysis of and discussions about strategies, conflicts, alliances, consequences and compromises. Here the perspicuous, simple and graphical nature of the conceptual framework is an important advantage. Based on earlier work (Sandell, 1988) on development strategies and basic rural resource issues in a Third World context, this framework has been developed and applied in various studies of nature-based tourism and related activities such as outdoor recreation, outdoor education, nature reserves and conservation. These cases of prevailing and suggested landscape use have included qualitative empirical methods such as observation, policy proposals, teaching materials and media debates. It should be noted that the conceptual framework does not seek to identify the driving forces behind the ecostrategies – such as power, the economy and governance. Instead the conceptual framework is an analytical tool for a number of case studies and proven suitable to illustrate underlying landscape perspectives, indicate consequences, potential alliances, main action alternatives, and act as a communication platform for discussions and planning about landscape futures – here applied to nature based tourism.

Founded in human ecology and development strategies

Basic human ecological issues have always been necessary for humans to reflect upon. In a modern democracy this includes the necessity of concepts and frameworks suitable for public discussions and nature based tourism is one out of many landscape interests with growing significance. When seeking a basic conceptual framework for discussing the dynamics of human relations with nature and landscape, we often identify a dichotomy of domination *vs.* adaptation. A similar division was suggested by Friedmann and Weaver (1979) with regard to regional development, using the concepts of "functional" *vs.* "territorial" development. Also, parallels with the "space" *vs.* "place" terminology could be noted (Cresswell, 2004). A major effect of this approach – in many ways parallel to centralized and decentralized perspectives – is that various aspects of social integration (politics, economy etc.) are brought into focus together with human-ecological issues.

The original version of the conceptual framework of ecostrategies was used for analyses of low resource agriculture in a Third World context (e.g. Sandell, 1988, 1993) but after further development it has mainly been used for analysis of nature based tourism, outdoor recreation, public access, conservation and outdoor education in industrialized countries (e.g. in Swedish Sandell, 2001, 2005; Emmelin, Fredman, Lisberg Jensen & Sandell, 2010; and in English e.g. Sandell, 2006, 2007).

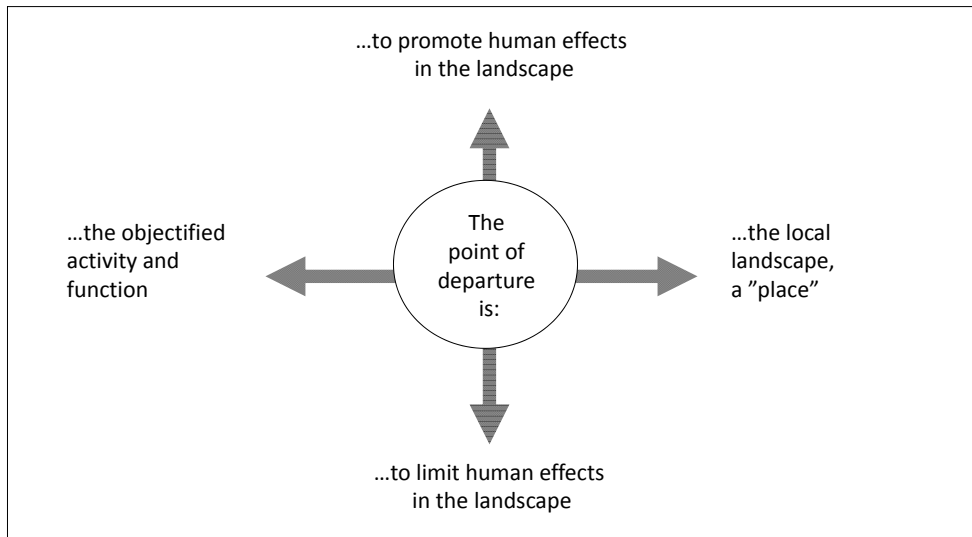
In short, the conceptual framework makes use of one axis to illustrate the tension between "functional specialization" *vs.* "territorial adaptation" and a second axis to illustrate the tension between the strategies of "utilizing" *vs.* "appreciation" (Figure 1). The critical questions identifying different ecostrategies are:

- (a) To what extent is the point of departure the objectified activity and function searched for, *or* is it a specific localized landscape, a specific place? – Giving a left-right position.
- (b) To what extent is the view of human change and intervention that these should be promoted *or* limited? – Giving an up-down position.

Out of this, four main ecostrategies are identified as the corners of these axes, namely, *the landscape seen as*: (i) a *museum* for external consumption, (ii) a *factory* for producing activities and products, (iii) a *dedicated place to be utilized* and (iv) a *dedicated place to be contemplated* (Figure 2). The term "dedicated place" could be the place of abode, but should be understood as a basic issue dealing with identity and familiarity (cf. the concept of "place" and "topophilia" in geography; Relph, 1976; Buttimer, 1976; Tuan, 1990; Cresswell, 2004).

Figure 1

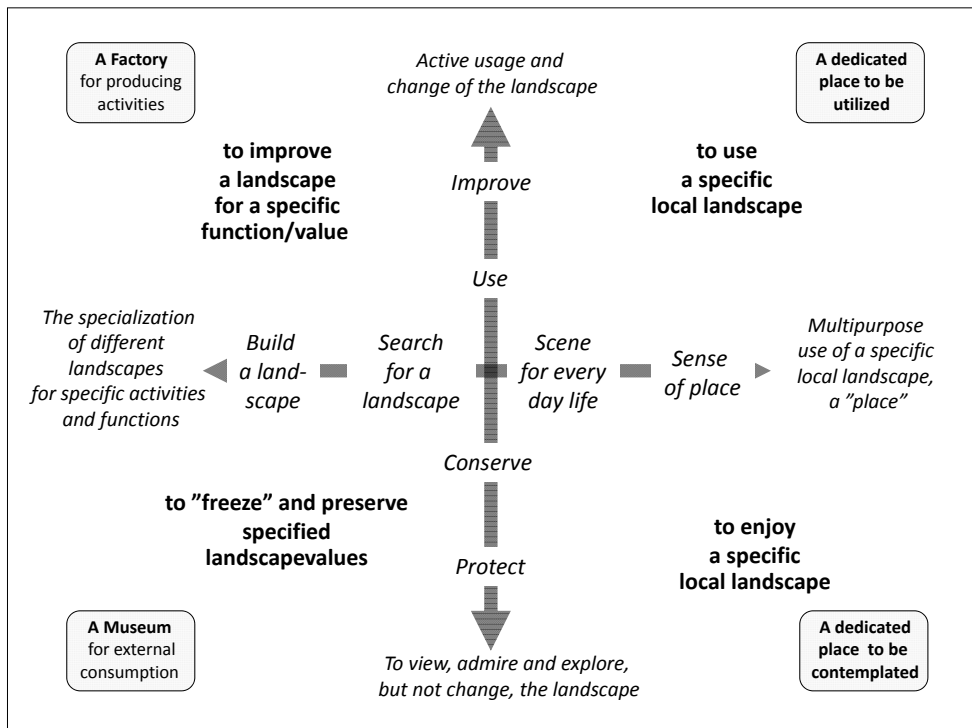
The points of departure for the conceptual framework of ecostrategies are the tensions along the continuum of two basic axes



Source: Adapted from Sandell (2001).

Figure 2

Some characteristics of different landscape perspectives along the two main axes and some key words for the four ecostrategies as the corner positions



Source: Adapted from Sandell (2001).

Also, we could note discussions of place in education (e.g. Mannion, Fenwick & Lynch, 2013) and the term "place meaning" (that also could include "place attachment", Brehm, Eisenhauer & Stedman, 2013). In a globalized and mediatized world there are also relations to remote not visited – imagined – landscapes (cf. Massey & Jess, 1995; Whatmore, 2002; Williams, 2002). These four ecostrategies involve various crucial consequences in terms of democracy, environmental issues, views of nature, local development, planning, pedagogy, identity and conflicts. Even though the different strategies illustrated in the diagrams may appear to be clear-cut categories, in reality it is a question of tendencies and blends involving a greater or lesser degree of functional *vs.* territorial strategies and of the promotion *vs.* limitation of human effects in landscape. It is also important to note that that people can have/show/practice different ecostrategies in different contexts, for example when they are on a skiing holiday in the French Alps or picking berries in the local forest.

Nature – culture – landscape

Like all conceptual frameworks, the presented framework makes explicit and implicit suppositions, for example about how humans' landscape relations are constituted, including ontological and epistemological points of departure. Here, basic ontological and epistemological positions are in line with the critical realism (Sayer, 2000) that goes beyond the dichotomies of positivistic and hermeneutic perspectives and nomothetic *vs.* ideographic. An important source of inspiration with regard to basic aspects of the human-environmental inter-relationship has been "deep ecology" (e.g. Naess, 1989) and with regard to the case studies of nature based tourism and outdoor recreation inspiration is for example Patterson and Williams (1998) plea for closing the gap between the philosophy of science and the practice of science in line with a "critical pluralism". Ingold's (e.g. 2011) relational perspectives of human - nature - environment have been of great importance too with for example "dwelling" and "lived experience" as important concepts.

The concept of *landscape* – instead of for example nature or environment – has been chosen in order to point to a relational perspective of a specific segment of our surroundings, including nature and culture (cf. e.g. Cosgrove, 2006; Olwig, 2007; Jones & Stenseke, 2011). The landscape geographer Hägerstrand (1984, p. 374) highlighted "two fundamentally different ways of approaching reality conceptually", i.e. in a classification system, or, to "enclose a part of the world as it is found with its mixed assortment of beings, stationary and mobile as the case may be". With the latter approach we could look "at the world as a fine-grained *configuration of meeting places*" (ibid, p. 378, emphasis in original). In this way every place can be seen as a continuing and changing interdependent network of people and things. Ingold (2011, p. 190) says that landscape "...is not 'land', it is not 'nature', and it is not 'space'" but is qualitative and heterogenous and "through living in it, the landscape becomes a part of us, just as we are a part of it" (Ingold, p. 191). He concludes that "...landscape is the congealed form of the taskspace" (Ingold, p. 199).

To sketch a more concrete picture of a landscape approach I suggest as follows. The physical aspect of the landscape – the *material landscape* – is transformed by an interaction between nature and culture and through bio-geo-chemical processes, and is seen as an aggregated combination of: (1) natural conditions (e.g. climate, bedrock, biotope); (2) different "cultural impressions" (e.g. paths, forestry, resorts); and (3) different natural change processes that affect both natural conditions and cultural impressions (e.g. erosion, succession) at a specific time and with reviewable scales (Sandell, 2001). In order to show that the landscape cannot here be seen as independent of ongoing meanings, social relations and human actions, alongside the aforementioned material landscape, the following three concepts are regarded

as important themes in the perspective of what a landscape is (with inspiration from Bladh, 1995; cf. e.g. Widgrens, 2004, landscape concepts: "institution", "scenery" and "resource"):

- (a) The "*institutional landscape*" – that by being part of social relations in various societal institutions people create a type of abstract landscape by means of written or unwritten rules and thereby regulate human actions in the landscape (e.g. who is the landowner).
- (b) The "*landscape of signification*" – means the patterns of meaning that people as individuals and social groups form as "ways of seeing" when interacting with the landscape or considering what counts as for example "nature" or "forests" (cf. the "tourist gaze" in Urry, 1990).
- (c) The "*action landscape*" – is about how people in their everyday lives form their landscapes through practical action including both actions linked to ordinary homestead and travelling to resorts and distant places to explore. This is the link between "nature" and "society" in the landscape and by "closing the circle", thereby often affecting the material landscape as being part of continuous new impressions in the *material landscape* (as above).

People are thus seen as interacting in and with the landscape. Even though the dichotomous and definite physical "localisation" of nature-culture is here seen as an illusion, the apprehension of for example what *nature* is (cf. Buijs, 2009; Doevendans, Lörzing & Schram 2007; Macnaghten & Urry, 1998) and where it "lies" has significance for different groups' landscape perspectives. For example it is a basic element in what is perceived as worthwhile to pay for with regard to ecotourism. And even though the concepts of nature and culture are obvious cultural constructions interwoven into our landscape relations, a point of departure for this conceptual framework is that as part of the analysis of different ecostrategies it can still be important to see how one relates to elements and processes that are not – in the actual situation – experienced as controlled by humans, but can be seen as reminders of the constant presence of something other – nature – in our environment (Sandell, 1988). From such a perspective, different landscapes contain differing degrees of nature (cf. a city environment *vs.* a mountain area). The degree of nature that is experienced in a certain landscape depends on for example upbringing, experience and the activity being pursued. This means for example that an ambition to create more room for the changing processes of nature in a landscape indicates a downwards direction in the diagram towards a limitation of human effects, even though this can initially include actively working to for example break up an asphalted area in order to provide more space for green, less controlled, and "overgrown" areas.

In short, landscape is seen as a relational concept, where the material landscape with its natural processes and human-land relations belongs in the form of physical activities and structures, social practices, ways of seeing and power relations. Landscapes can be visualized, but vision also implies reworking experience through imagination and the creation of images. Visions and landscapes thus point to present relations as well as possible futures. The overall approach to the material landscape consists of a combination of signification, institutional structures and related actions, which are here called "*ecostrategies*". These ecostrategies are manifested – and are possible to study – in the form of what is said and written (*eco-views*) as well as in actions (*ecopractices*) in, or in relation to, the landscape studied. These ecostrategies are *changeable* and *contextual* and are established both in *direct physical relation* to specific landscapes and as distance construed (cf. globalization and mediatization). It is about the *endeavour* (conscious or unconscious), the changing directions and recurring patterns – i.e. "strategies". It should be noted that the prefix "eco-" merely indicates that the landscape relation (including "nature" and "culture" as touched upon above) is in focus and does not involve any normative aspects of which relation is to be preferred, even though basic issues of power, governance and environment are obviously involved.

The conceptual framework illustrated

In a modern industrial society the human ecological linkages are to a large extent hidden and concrete experiences of landscapes not primarily characterized by human influences (cf. "rural nature") are often linked to leisure time with nature based tourism and outdoor recreation. The four ecostrategies, starting with the lower left position and going clockwise (Figures 3 and 4), can then be summarized as follows:

(i) The ecostrategy of "freezing" (conserving) specific landscape values (and maintaining that "frozen" landscape) to be set aside as a *museum* for external consumption accommodating nature based tourism, biodiversity or science priorities or the like, on a national or international level. This combination of focusing the activity and function, but also limiting human change, may sound somewhat far-fetched, but it does make sense in that it takes the important environmental history of preservation, conservation and protection of areas and species into account (Sandell, 2007; Frost & Hall, 2009).

(ii) An ecostrategy in line with a utilizing functional strategy where the point of departure is the activities searched for. Special areas, equipment and organizations are created for these specialized outdoor activities. Long-distance travel and a heavy use of material resources and landscape changes are generally involved. It could be argued that the landscape is looked upon as a *factory* for the production of for example an adventure park or downhill skiing. In their more extreme forms the activities are rebuilt indoors or even in a computer (e.g. climbing, swimming; Sandell, Arnegård & Backman, 2011; Öhman, Öhman & Sandell, in press).

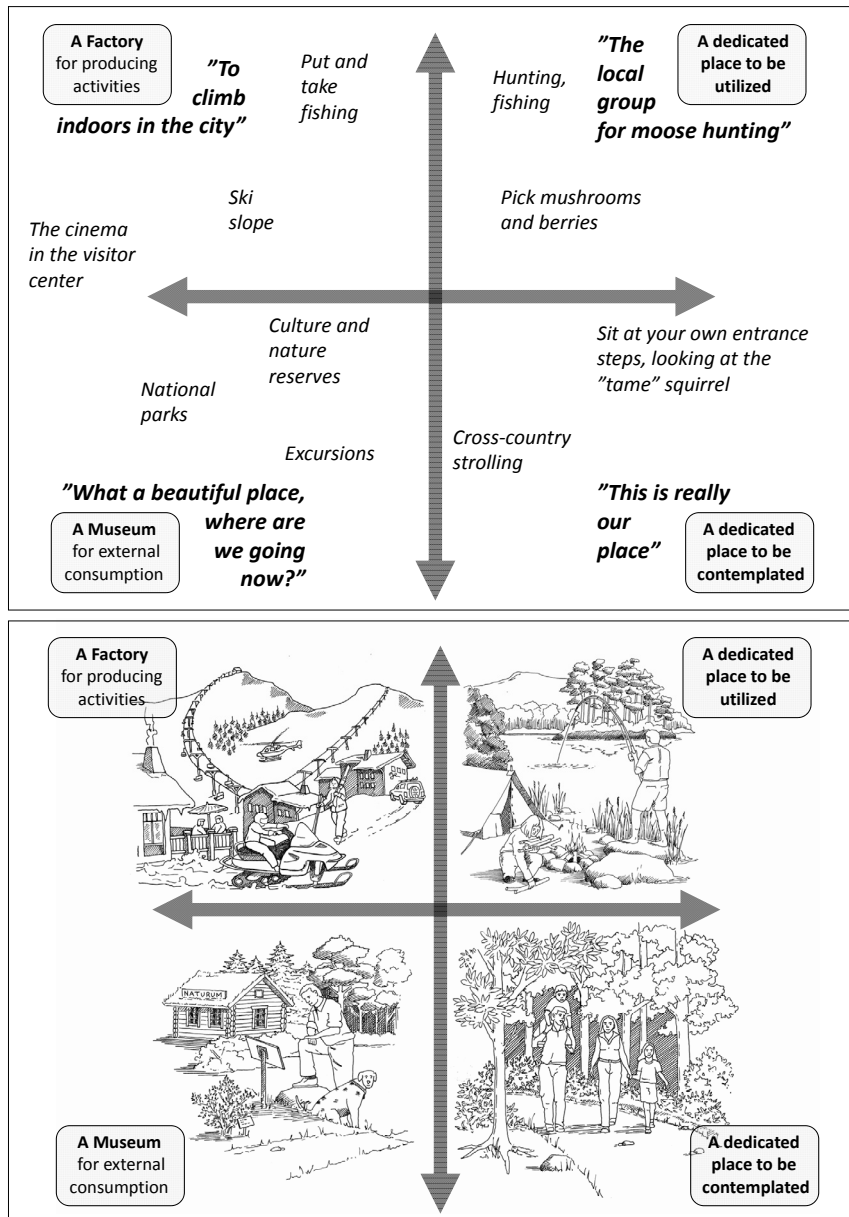
(iii) An ecostrategy in line with a multipurpose usage of a specific landscape. Here, as in the strategy of appreciative adaptation outlined below, interest is directed towards the features of the local natural/cultural landscape, for example the topography and the seasons. But the ecostrategy of utilizing adaptation also involves direct utilization of the landscape – for example firewood, fishing and hunting as a leisure activity. Outdoor recreation is one of many locally integrated aspects of *a dedicated place to be utilized*. The area regarded as one's dedicated place is basically a question of identity and it should be noted that this feeling could be an important aspect of both urban and rural landscapes, and part of permanent living, leisure visits and multiple dwelling (Sandell, 2006).

(iv) In the ecostrategy of appreciative adaptation, activities like strolling, cross-country skiing, bird-watching and looking for flowers, are carried out in *a dedicated place to be contemplated*. These activities are characterized by non consumptive experiences and, at a superficial level (e.g. in terms of what is done or the type of equipment used) could be equated with the museum ecostrategy. It is nevertheless important to point out that, apart from the special feature(s) visited, the museum ecostrategy is conducted without any deeper integration and identification with the total local natural/cultural landscape with its seasons, weather, history and other dynamics but instead the museum ecostrategy involves a delimitation to the chosen and protected landscape value per se (cf. e.g. Brehm et al., 2013).

In the two ecostrategies of dedicated places to the right in the diagram – from the entrepreneur's point of view – we also find many versions of ecotourism and small-scale locally based nature-oriented recreation (e.g. Gössling & Hultman, 2006). This involves utilization, such as in hunting and fishing (in line with a dedicated place to be utilized), or appreciation, as in hiking and photographic excursions (in line with a dedicated place to be contemplated). Here tourists are invited to one's home district, their dedicated place – although from the tourist's point of view the context is still part of the tourist industry in accordance with the strategy of functional specialization to the left in the diagram. But if the tourist is a recurrent and devoted visitor the feeling of the destination as a dedicated place could of course also develop for him/her and an ecostrategy in line with this could evolve and effecting for example reactions to changes and exploitation.

Figures 3 and 4

The conceptual framework of four ecostrategies, here illustrating various aspects of nature based tourism, outdoor recreation and conservation



Source: Sandell (2001); Figure 4 illustrated by Matz Glantz.

Besides the illustrations below, and in addition to studies in Swedish, the framework has been used for the analysis of for example outdoor teachers' use of green spaces as classrooms (Bentsen, Schipperijn & Jensen, 2013), farming practices and environmental problems in Peru (Sivertsen & Lundberg, 1996), visitors' emotional bonds to a place in coastal zone planning (Ankre, 2007) and as a theme in the framework for discussing nature-based tourism in peripheral areas (Müller, 2005). It has also been applied to different groups of second home owners (Sandell, 2006) and landscape perspectives of "exergames" (exercise TV- and computer games; Öhman et al., in press).

The cases of nature based tourism, outdoor recreation and nature reserves summarized below relies upon different empirical studies carried out in different research programs through a number of years. More information about *methods used* could be found in the different reports referred to below, but recurrently it has been a combination of different qualitative sources like semi-structured interviews with key persons and analyses of text materials such as: planning documents, magazines from organizations, textbooks and newspapers. More in detail, for the different illustrations referred to below could be said that some are based upon broad synthesized general information – such as Figures 1 - 4 (basic information about the construction of the framework) and Figure 5 (pedagogic styles in nature based tourism and outdoor recreation). Some are based upon a combination of such more general information and specific empiri – such as illustration no. 7 (the Swedish right of public access), and some are primarily based upon specific empirical investigations (Figures 6, 8 - 10). With regard to these empirical bases; for Figure 6 (radical outdoor recreation tradition) text books used at the studied outdoor recreation course were the primary source of information (Östman, 2015), for Figure 7 (the Swedish right of public access) historical studies of the Swedish Tourist Association 1886-1986 (Sandell, 1997) plus various current and historical policy documents were the empirical bases (Sandell, 2011). Concerning the illustrations of nature reserves, the empirical base for Figures 8 and 9 (a national park proposal in the Lake Torne area) was an in depth study of this proposed national park in Sweden involving various debates and groups whose perspectives were manifested through reports, media material and key-person interviews (Sandell, 2000). With regard to illustration no. 10 (a general shift in conservation policy) the background is a combination of a specific case study of a proposed national park in the Jämtland region of Sweden (Sandell, 2005) mainly involving planning documents, but also the international debate concerning trends with regard to national parks and other nature reserves was a source of inspiration (Zachrisson, Sandell, Fredman & Eckerberg, 2006).

Analysis of cases of nature based tourism and outdoor recreation

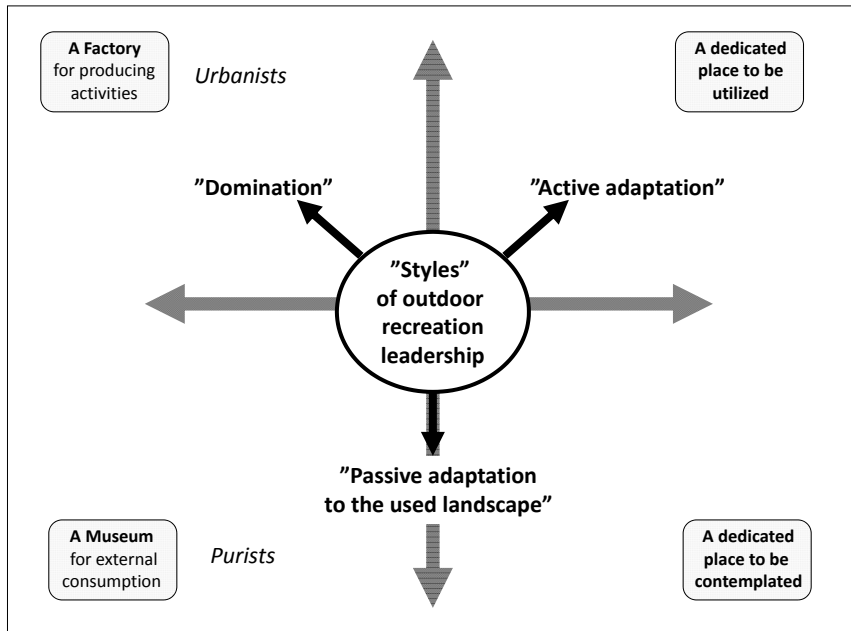
In modern urbanized societies nature-based tourism and outdoor recreation are important aspects of people's relationships with nature and the landscape (e.g. Manning, 2011). One theme for using the ecostrategies has been "styles" of outdoor leadership and guiding (i.e. the approach, landscape relation, equipment and activities chosen by the leader) used for example for discussions related to outdoor education and environmental concern (Sandell & Öhman, 2013; cf. e.g. Wolf-Watz, 2014). Here a "domination" strategy of searching the designated landscapes suitable for the preferred activities and a "utilizing adaptation" strategy with regard to the local landscape for fishing and hunting are both easily identified and being in line with the ecostrategies of "factory" and "a dedicated place to be utilized" respectively (Figure 5).

When it comes to the two ecostrategies in the lower part of the diagram, the outdoor leadership styles are very similar once the landscape for the activities has been chosen (even though this choice – the placing – is of utmost importance, cf. e.g. Mannion et al., 2013). The parallels between the left-right tension in the conceptual framework of ecostrategies and the place attachment distinction between place dependence and place identity used in leisure studies, could usefully be noted here (e.g. Kyle, Bricker, Graefe & Wickham, 2004). Also, Figure 5 indicates the frequently used dichotomy between urbanists and purists with regard to preferences concerning landscape and management in nature based tourism (the former prefer more facilities and the latter more "wilderness" e.g. Manning, 2011). As these are tourist groups (i.e. coming from "outside"), they are located to the left in the diagram. Being more interested in active management and cultural facilities, the "urbanists" are placed close to the factory perspective. This is in contrast to the group of "purists" looking for the "wilderness" without any trace

of touristic infrastructure – although as all landscapes are dynamic with culture and nature intertwined, this is probably a more or less "frozen" landscape conserved for such a sense of wilderness.

Figure 5

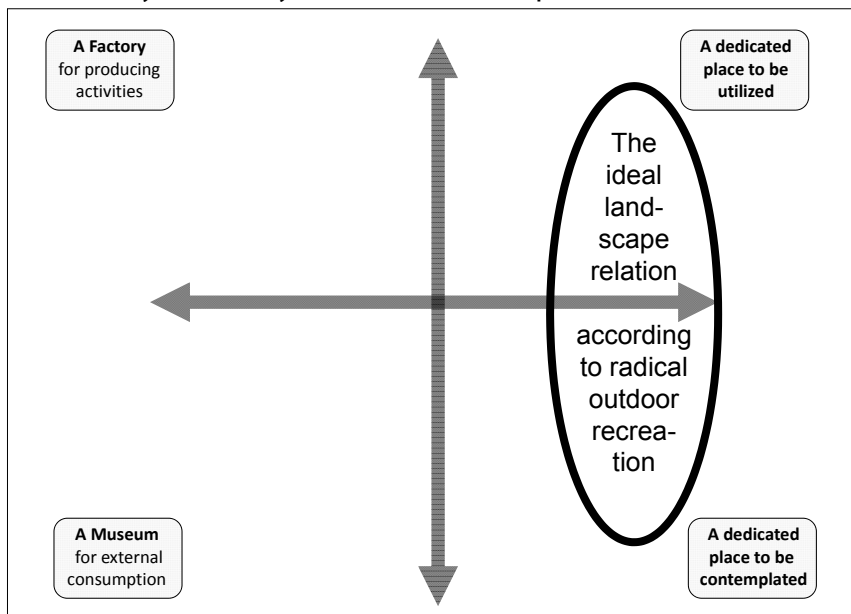
The conceptual framework of ecostrategies applied to different pedagogic styles with regard to nature based tourism and outdoor recreation, but also the dichotomy between "urbanists" and "purists" are indicated



Source: Sandell (2001).

Figure 6

An example of the ideal landscape relation according to the radical outdoor tradition analysed in a study of different educational practices



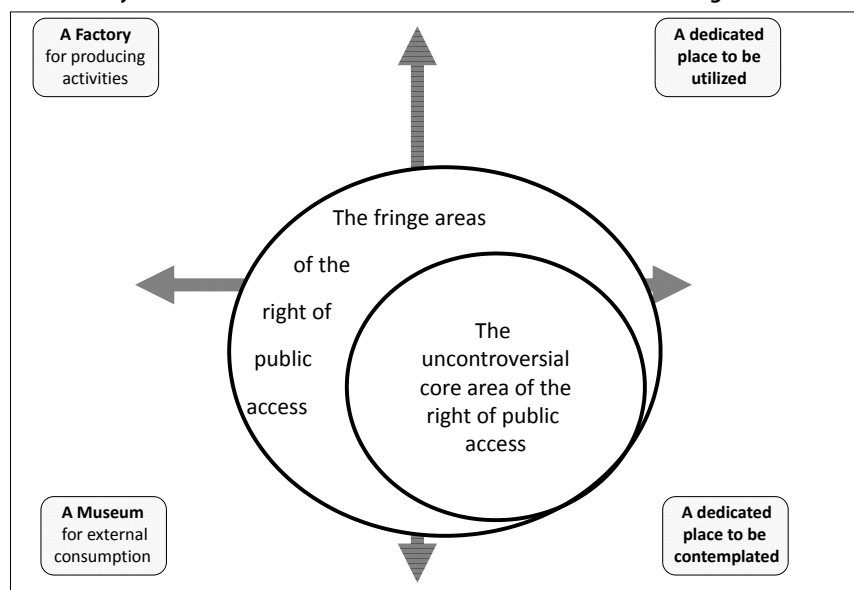
Source: Östman (2015).

In the project "Encounters with Nature and Environmental Moral Learning" (Östman, 2015) major educational practices in Sweden focusing on encounters with nature and environmental learning have been investigated. Three specific practices – Outdoor Education Centres, All-weather Outdoor Schools and the Radical Outdoor Movement – have been analysed in depth by investigating the practices and analyses of central texts. An interdisciplinary model for text analyses, called the LED-model (Landscape, Ethical and Didactical), was created and includes the ecostrategies framework. One example of the result is given in Figure 6 showing the ideal landscape relation according to a radical outdoor recreation tradition inspired by for example deep ecology (cf. Naess, 1989).

A third illustration of the use of the ecostrategies with regard to nature based tourism and outdoor recreation is the so-called right of public access in Sweden. To summarize, in Sweden the right of public access is legislated for and can be seen as the "free space" between various restrictions related to economic interests, local people's privacy, preservation and the actual use of and changes in the landscape (Kaltenborn, Haaland & Sandell, 2001). For example, camping for 24 hours or less is generally allowed, and the traversing of land, lakes or rivers and swimming is permitted as long as the above mentioned restrictions are not violated. Even though this tradition is well established, there are recurrent conflicts and discussions about its principles and practices, and simultaneously this tradition of access is of great importance for nature based tourism in Sweden (Sandell & Fredman, 2010). Figure 7 shows how the current content of the right of public access in Sweden is divided into two main regions by using the ecostrategy framework. Here, we find the uncontroversial core area associated with appreciative recreation adapted to the landscape (incl. topography, weather, climate etc.) where the recreationist can "read" the landscape with regard to the restrictions mentioned, which to some extent exclude the foreign tourists as it could be hard for them to "read" the local context (e.g. how close to a house you can put up your tent). But also we can identify the increasingly divisive fringe areas of: protected area regulations in line with "museum"; infrastructures for commercial recreation and tourism in line with "factory"; and various resource-based uses in line with "a dedicated place to be utilized". All these are areas of contention in today's Swedish community.

Figure 7

The conceptual framework used to illustrate the right of public access with its relatively uncontroversial core area and its much more debated fringe areas



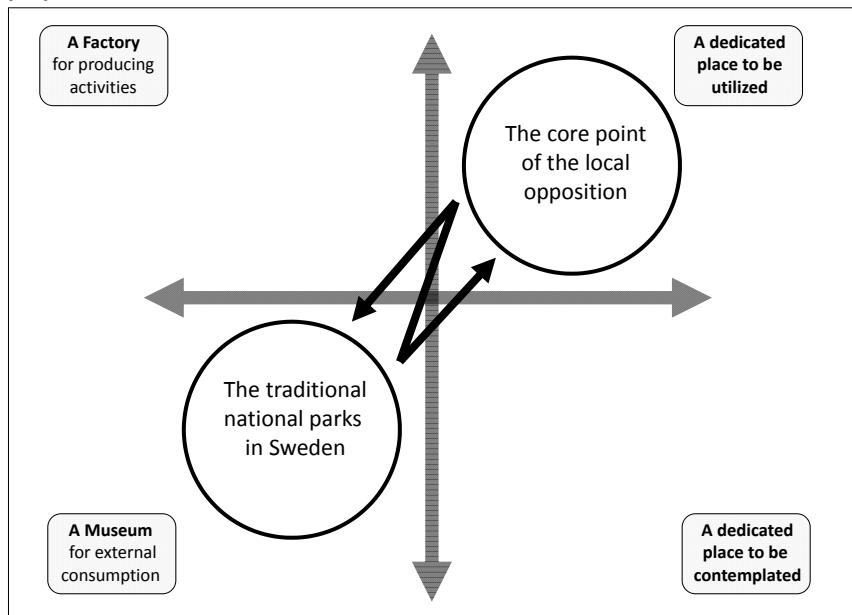
Source: Sandell (2001).

Analysis of cases of nature reserves

To a large extent nature based tourism is directed to nature reserve areas such as national parks (e.g. Frost & Hall, 2009) and therefore here follows some examples of how the framework of ecostrategies have been used to analyse such cases. During the latter part of the 1980s a debate was conducted concerning the possibility of establishing a large national park in the mountainous Lake Torne area, close to the town of Kiruna in the north of Sweden. Even though a variety of interested parties were represented in the working group, the clash of interests was such that the Swedish Environmental Protection Agency decided to shelve the plan for an indefinite period (Sandell, 2001, 2007). The main reason as to why the original plan was withdrawn was resistance from local groups, who were afraid that their use of the area would be curtailed, for example due to possible restrictions on outdoor leisure activities like fishing, hunting and the use of snowmobiles. As part of a general scepticism towards the intentions of central authorities, there also seemed to be a general fear that severer restrictions than those initially proposed might be imposed in the future. It was clearly stated in the plan that reindeer farming would not be subject to restrictions but, even though generally maintaining a low profile in the quite heavy debate, the Sami people (the Laplanders) seemed sceptical. The main actors in favour of the plan were the Swedish Environmental Protection Agency and the regional tourist organisation. It was argued that the proposed national park would give larger groups of people more opportunities for genuine and first-rate experiences of nature by offering a wilderness-type landscape. In short, it could be said that the conflict boiled down to a clash between very different views of conservation, nature based tourism and outdoor recreation (Figure 8).

Figure 8

The ecostrategies applied to the main conflict with regard to the national park proposal in the Lake Torne area in Sweden

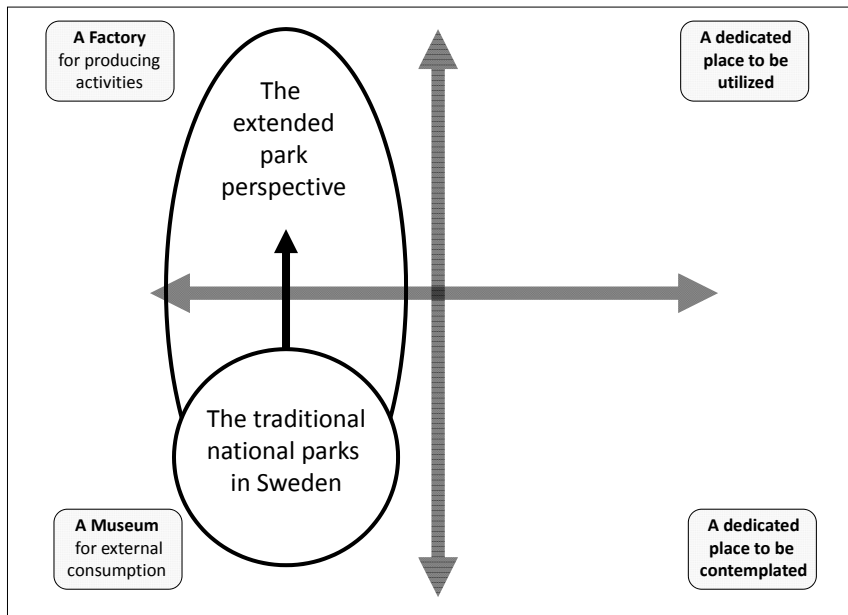


Source: Sandell (2001).

Also, the proposed national park involved a widening of the traditional Swedish view of the national park concept. Inspiration was gained from how national parks and nature based tourism was dealt with in North America. For example, a tourist centre that housed exhibitions, shops and a cinema seating

220 people was suggested – a strategy that led to criticism from a more traditional nature protection perspective (Figure 9).

Figure 9
The ecostrategies applied to the national park proposal in the Lake Torne area and its extended approach



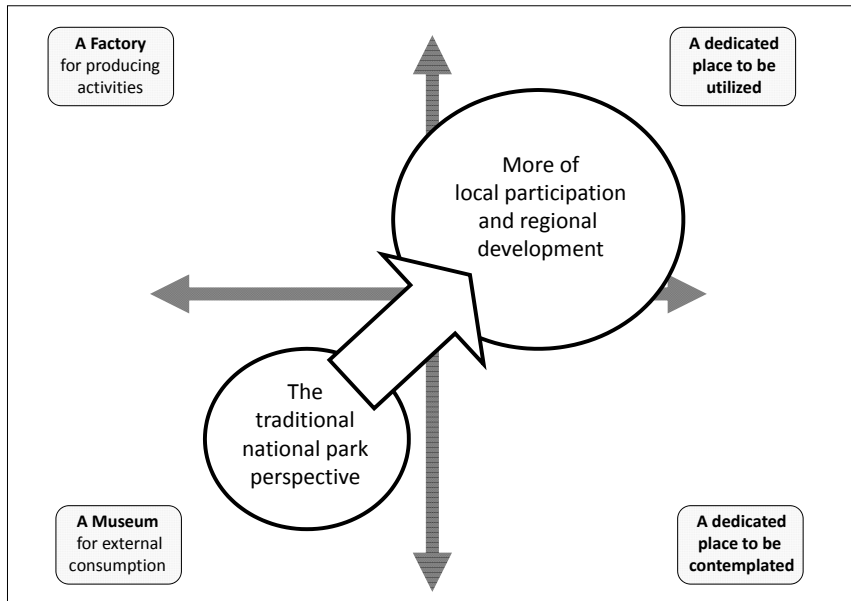
Source: Sandell (2001).

Similar tensions around nature reserves can frequently be observed. An example from the same region is the halting of a proposed national park in the southern part of Jämtland's mountainous region in Sweden during the 1990s. The halting was mainly due to local resistance, even though the process involved a shift in favour of "local conditions", which highlighted the need for all tourism to adapt to current local land use and with a profile that gave priority to local entrepreneurs (Sandell, 2005). Although the proposed development was put on ice, discussions to create a national park in the area are still continuing. Also, we can note that in 1986 a UNESCO Man and Biosphere Reserve (MaB) was established in the Lake Torne area using traditional natural science arguments relating to valuable nature and the need for scientific reference areas (Sandell, 2005). However, due to the lack of local support, in 2010 the reserve was omitted from the list of Biosphere Reserves in accordance with the modern biosphere reserve concept (Biosphere Reserves, 1996).

As shown here, and also internationally, intentions to create nature reserves have often evoked local resistance (Luz, 2000; Brockington, 2002; Adams & Mulligan, 2003). Even in ecological terms the traditional protection policy has had problems, since biodiversity may even decrease when human interference (e.g. domestic animal grazing) is interrupted. These are some of the reasons why local participation in the management of protected areas has been increasingly emphasized (Zachrisson et al., 2006; Figure 10). It is now argued that nature conservation should be done with and for people, and not only for protection and if tourism is an important aspect local involvement is crucial (cf. Nejati, Mohamed & Omar, 2014).

In closing this section of cases it is important to highlight the close relationship between the legitimacy of the planning of nature reserves in the mountainous areas of Sweden and the original use of the ecostrategies in analysing low resource agriculture in the Third World. In other words, it is about the tension between the strategy of a general approach to be applied in various local contexts (to the left) *vs.* territorial local adaptation strategies (to the right) and the degree of human change and intervention in the landscape is something to strive for (upwards) *vs.* something to try to limit (downwards).

Figure 10
The ecostrategies applied to a perceived general shift in conservation policy



Source: Zachrisson et al. (2006).

Shortcomings and proposed developments

Although the framework has proved fruitful in discussions about landscape futures, it has its shortcomings and could be developed further. In any future elaborations its original role of illustrating ongoing landscape related conflicts and future directions should be kept in mind. Two themes are highlighted here. The first is the possibility of widening its empirical applications to involve quantitative survey investigations. The second is developing the framework so that tensions between similar ecostrategies are revealed.

Up to now the ecostrategies have been used to analyse qualitative empirical material, such as text books and policy documents. The possibility of studying ecostrategies among individuals could also be considered. For example, questions that could be tackled with such a strategy are whether the ecostrategies can be quantified with regard to attitudes, landscape preferences and activities and to what extent they are consistent with and related to different background variables. Some issues are directly linked to the conceptual framework, for instance whether and how the two axes (right-left *vs.* up-down) can be formulated as questions in a survey and how an individual in relation to a specific landscape situation might answer such questions. Both these aspects will strengthen the conceptual framework if the results are favourable, in which case a number of other empirical questions will need to be addressed. Questions like this could include how people with different roles in the landscape

(landowners, tourism entrepreneurs, second home owners etc.) are linked to the different ecostrategies and how other background factors like gender, age, education, upbringing and so on, covariate with them. A concrete suggestion for a survey investigation is to formulate Likert-type questions and organize them in terms of preference, using the arrowheads in Figure 1 as a guide (cf. Figure 11). This would indicate the extent to which respondents agree or disagree with statements relating to "the objectified activity and function" *or* "the local landscape, a 'place'" as their points of departure (giving a horizontal position between 1 and 5 in Figure 11) and how they respond to the arguments "to promote human effects in the landscape" *or* "to limit human effects in the landscape" (giving a vertical position between 1 and 5 in Figure 11). The formulation of these questions would also take the context of specific case studies into account.

Figure 11

The conceptual framework of ecostrategies tentatively arranged for an analysis of a quantitative survey investigation with Likert-type questions (e.g. with response alternatives 1-5 as in the figure) constructed with the aid of the perspectives at the ends of the two double arrows

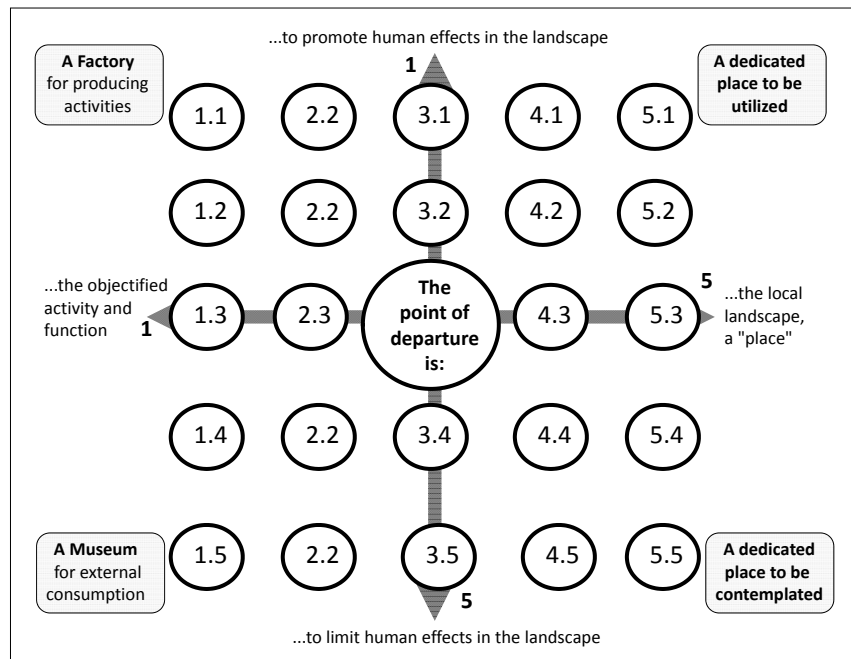
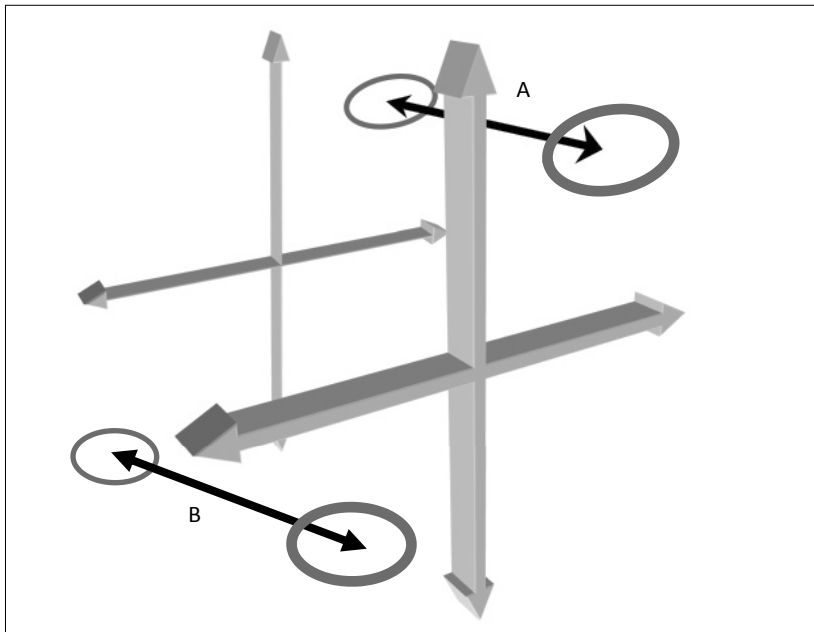


Figure 11 is a tentative illustration of how such material could be analyzed. For example, if the responses of one individual are disparate (and if aggregated are close to "3.3"), it would indicate that the conceptual framework (or its operationalization) is faulty. However, if the opposite is the case and the patterns for individuals and groups are distinct, the ecostrategies will be of value and could for example be used for comparisons over time or to evaluate different propositions, plans and projects. One area that could be scrutinized is how the left-right dimension compares with other discussions of activity involvement/commitment and place attachment in tourism research (e.g. Mowen & Williams, 1994; Meyer, 1999; Fredman & Heberlein, 2005). With regard to the up-down dimension, comparisons could be made with discussions about environmental history, conservation and the concept of nature (e.g. Adams & Mulligan, 2003; Buijs, 2009; Doevendans, Lörzing & Schram, 2007; Ingold, 2011; Macnaghten & Urry, 1998; Naess, 1989; Whatmore, 2002).

As the aim of the conceptual framework is to illustrate different landscape perspectives, the tensions and conflicts between these are clearly shown. But many of the tensions and conflicts related to landscape are between individuals and groups with similar ecostrategies, such as a conflict between more than one investor in the factory corner. These types of landscape related conflicts are "hidden" in the conceptual framework of ecostrategies, in that it only focuses on the tensions between *different* landscape perspectives. But what about the possibility of illustrating these so far hidden tensions by elaborating on the layout of the framework? In Figure 12, the principle of a three-dimensional view of the conceptual framework of ecostrategies is used to illustrate (A) a conflict between two groups advocating a landscape perspective of "a dedicated place to be utilized" but competing with each other, for example two local entrepreneurs in fishing tourism, and (B) a conflict between two groups both basically advocating a "museum" landscape perspective but putting forward different landscape values in terms of what ought to be prioritized in the "museum", for example the protection of an endangered species or access to a spectacular view for mass tourism.

Figure 12

The principle of a three-dimensional view of the conceptual framework of ecostrategies that allows more than one person/group with similar ecostrategies to be shown individually (see the text for a description of A and B).



Societies' relations with natural resources are always complex, but nevertheless perspicuous, simple and graphical conceptual frameworks as a communication tool are important as the complexity of information is often a constraint to public involvement (cf. Robson, Rosenthal, Lemelin, Hunt, McIntyre & Moore, 2010). The conceptual framework of ecostrategies has been used as an analytical tool in a number of case studies and is able to illustrate underlying landscape perspectives, recurrent tensions and choices, indicate consequences, potential alliances and main action alternatives. It could serve as a communication platform for discussions about and planning for landscape futures.

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