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Tourism – as exploration and demonstration of which sustainable development?

The case of a biosphere reserve

Abstract

In contrast to traditional nature protection strategies, UNESCO's Man and Biosphere Reserves (BRs) can be seen as a more pronounced perspective that includes nature, culture and sustainable development. Tourism is generally supported in BRs, which also are meant to function as "learning sites of excellence to explore and demonstrate approaches to conservation and sustainable development" (UNESCO, 1996 p. 16). The focus of BRs has centred on environmental sustainability, due to the concept's history in nature preservation. However, like all global concepts, the interpretation of sustainable development in BRs is filtered over time through national, regional and local conditions. Explicit or underlying development strategies are also in place when the concept is applied in practice. It is therefore important to gain a better understanding of how sustainable development is interpreted and how BR stakeholders see the role of tourism over time. It is against this background that a case study was carried out on the Lake Vänern Archipelago BR in Sweden, its tourism aspects and the interpretation of sustainable development. The findings illustrate an ambivalence with regard to which approach to sustainable development is preferred, but there are striking parallels between the evolution of environmental commitment during the 20th century and the changing profile of BRs in general. Further, it can be noted that studying concrete examples of situated cases of sustainable development efforts in terms of biosphere reserves can contribute greatly to the ongoing discussion about which development approaches are seen as more or less sustainable.

Key words: biosphere reserves; tourism; nature-based tourism; sustainable development; Sweden

Introduction

Tourism is often discussed as a threat to the environment due to the use of fossil fuels, the exploitation of local populations, the waste and pollution in tourist destinations. Counter-strategies that adapt tourism to environmental needs and socio-economic sustainable development are therefore sought after and the importance of e.g. "sustainable tourism" (Miller, Rathouse, Scarles, Holmes & Tribe, 2010) and nature-based tourism such as "ecotourism" (Picard, 2015) argued for. But could tourism also be seen as a device for putting sustainable development into practice?

Here, UNESCO's Man and the Biosphere Programme (MAB) and the establishment of biosphere reserves (BRs) are of special interest (Hoppstadius & Dahlström, 2015; Ishwaran, Persic & Tri, 2008), in that these reserves are meant to function as "learning sites of excellence to explore and demonstrate approaches to conservation and sustainable development on a regional scale" (UNESCO, 1996, p. 16). The main idea is that humanity and nature can coexist in a development that is sustainable and beneficial for all, and that learning, demonstration and exploration are important aspects of this transition (UNESCO, 1984, 1996, 2016). The focus in BRs tends to revolve around environmental

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sustainability, due to the concept's history in nature preservation and conservation. However, like all global concepts, BRs and the interpretation of sustainable development are filtered through national, regional and local conditions. Explicit or underlying development strategies are also in place when the concept is applied in practice. Tourism is an important theme in the context of BRs. For example, when UNESCO announced the year of ecotourism in 2002 it was clear that nature-based tourism could be promoted in BRs due to its explicit focus on preservation, nature, learning and community engagement (UNESCO, 2002). However, the implementation of sustainable development in tourism is often complex and involves many different stakeholders over time (Simão & Partidário, 2012). Acquiring a better understanding of the role that tourism plays in the understanding and interpretation of sustainable development over time in a BR is therefore important.

It was against this background that a case study was carried out on the Lake Vänern Archipelago BR in Sweden, its tourism aspects and the linkages to the concept of sustainable development. In this article, the results focus on how the BR concept is applied in a local and place-specific context that is regarded as a site for exploration and a demonstration of sustainability through tourism. This involves investigating how sustainable development is interpreted in the BR, the kind of role that tourism plays in sustainability efforts in the BR and the kind of sustainable development that is practised in the studied BR between 2004 and 2017. In our case, environmental sustainability is understood as a prerequisite for sustainable development and the alignment of different understandings of sustainable development is explored through tourism development over time. In what follows, the background is outlined in terms of the evolution of the modernisation paradigm and the phenomenon of tourism and the striving towards sustainable development are presented. A main theme here is the recurring tension between 'functional' development (in line with conventional modernisation) and 'territorial' development (in line with alternative demands for locally based strategies and a much more radical reading of sustainable development). Thereafter, the case study is introduced and some historical stages in the studied BR are described with a focus on the role of tourism. In the discussion, the history of the studied BR is compared to the 'function/territory' tension. The tricky question of the extent to which tourism can be combined with the underlying principles of BRs is also highlighted.

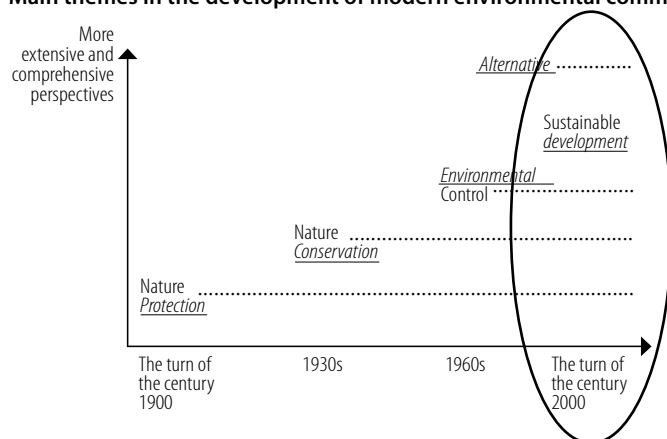
Modernisation, tourism and environmental commitment

Tourism is a central element in modern industrialised and urbanised society (Gössling, 2002). With its roots in technology-dependent mobility and globalised market forces, tourism is not just an important industry and appreciated recreational activity, but is also a characteristic expression for geographical and mental functional specialisation (Bianchi, 2006; Higgins-Desbiolles, 2008; Teo, 2002), which a central theme in the modernisation paradigm. Tourism builds on divisions such as nature – culture, work – play, housing area – industrial area – recreational area etc. However, from at least the 1980s (Bruntland, 1987), modern industrial society and tourism were challenged on the basis of environmental and climate issues, the exploitation of resources and how power relations could be coupled to these. With regard to tourism, this critique can be limited to the need to attend to the different negative side-effects (waste, energy usage, pollution, economic exploitation etc.) of tourist sites. However, the critique can also be more fundamental, in that tourism can be viewed from a system perspective that also includes long distance transport, views of nature and global power relations (e.g. Buckley, 2012; Holden, 2008). Svensson (2015) states that research on sustainability would benefit from acknowledging that there are competing interests and unbalanced social relations among stakeholders such as experts, citizens, businesses and different participants (Chen, 2009; Martinez Alier, 2009; Riley & Love, 2000; van den Bergh, 2011). The fundamental critical reflections on tourism can be seen as parallels

to other criticism of the modernisation paradigm and to some extent how this paradigm relates to the environment, nature, local populations and landscapes. In short, sustainable development is a highly debated concept, especially when it comes to relations between its main elements of ecological, social and economic sustainability (Ciegis, Ramanauskiene & Martinkus, 2015).

A fruitful way of deepening the discussion about different approaches to sustainable development today is to look at how environmental commitment has evolved since the end of the 1800s. Figure 1 illustrates the development of environmental commitment in western industrial countries like Sweden. These perspectives can, in the main, be linked to specific time periods; some sources of inspiration go further back in time and are also constituent parts of the current debate on sustainable development (Sandell, Öhman & Östman, 2005). The progression from nature protection, to nature conservation and to environmental control, and further to alternative perspectives and sustainable development, shows how this increased comprehensiveness of perspectives has influenced contemporary understandings of sustainable development. Around the turn of the 20th century, a perspective can be identified in which certain areas (e.g. national parks), locations, objects (e.g. natural monuments) and species (e.g. endangered animals) were *protected* from the large scale and increasingly dramatic transformations of the Industrial Age. Then, parallel with the evolvement of modern industrial society, engagement shifted towards a more dynamic perspective of *conservation* that was oriented towards deciding which values should be adhered to. After the Second World War, it became apparent that measures could not be isolated to certain places, areas or species (the 'nature'). Further, a growing interest in systems ecology and governmental institutions became apparent, as did legislation on *environmental* issues. However, in the 1970s, more explicit critical questions about the type of development emerged. There was also a sharp increase in the number of new environmental movements. Radical environmental groups adopted a global development perspective and began to demand 'alternatives' that initially represented a negation of the ongoing conventional development strategy. Since the UN conference in Rio in 1992 (UNESCO, 1992), 'sustainable development' has been a central concept in environmental commitment. It could be argued that a major tension in sustainable development is whether a globalised version of treating the symptoms of industrialised societies is sufficient, or whether alternatives requiring fundamental changes in the priorities of industrialised societies are necessary (Redclift, 2005; Saarinen, 2013; Sharpley, 2009; Westley et al., 2011). One recurring theme in this context is the problematic relations between the ecological, social and economic pillars of sustainable development, which are almost always unbalanced (Ciegis et al., 2015).

Figure 1
Main themes in the development of modern environmental commitment



Source: Sandell, Öhman & Östman (2005)

The progression from protection to alternatives with regard to the comprehensiveness of perspectives of sustainability according to Figure 1 raises basic questions about development ideals (e.g. Corlett, 2015; Ingold, 2011; Macnaghten & Urry, 1998; Steffen et al., 2015; Walton & Shaw, 2015; Worster, 1993). When looking for a conceptual framework in order to discuss the dynamics and sustainability of humans' relations with nature and landscape, the dichotomy of domination *vs. adaptation is commonly identified* (Sandell, 2005). A similar division with regard to regional development was suggested by Friedmann and Weaver (1979) using the concepts 'functional' and 'territorial' development. A major effect of this approach is that various aspects of social integration (politics, economy and culture) are brought into focus together with human-ecological issues. Therefore, the tension between 'functional' development (in line with conventional modernisation) and 'territorial' development (in line with alternative demands) is useful when discussing which sustainable development is striven for in the studied BR.

As an example of the tension between 'functional' and 'territorial' development, the conceptual framework of ecostrategies (view and use of nature and landscape, e.g. Sandell, 1988, 2016a) has been used in discussions about nature-based tourism, nature reserves, outdoor recreation, public access and conservation. Here, a basic choice is between functional dependence on exchange with other areas *vs.* territorial dependence on the best use of local resources. In practice, development always includes both these strategies, although the balance – the centre of gravity – between the two approaches leads to very different situations. Other ways of highlighting the tension between 'functional' and 'territorial' development strategies is the often-claimed linkage between locally oriented 'territorial' development strategies and more radical approaches to sustainable development. Some of the most well-known radical approaches are 'deep' ecology (Naess, 1973), 'bioregionalism' (Barry, 1995) and 'ecoregional strategy' (Bahrenberg & Dutkowski, 1993). A common trait in these approaches is that they involve an increased "capacity of individuals and groups to control their own resources" (Adams, 1990, p. xiii). Advocates of 'alternative development' (Hettne, 1994), rather than a mainstream 'functional' development of society of which global tourism is a striking example, often favour 'territorial' local development and landscape adaptation. In more recent overviews of development and sustainability, interest in such deep and critical views of the modernisation project are still very relevant (e.g. Buch-Hansen & Lauridsen, 2012; Parpart & Veltmeyer, 2004), as is interest in 'ecoregional planning' (Mason, 2011) and 'pragmatic planning' (Healey, 2009). In an overview of what could also be called the dependency paradigm, Weissenbacher (2017) discusses the "self-reliant development model that was to counter penetration from the outside, and to be based primarily on its own resources" (p. 11). These arguments can be traced back to what John Friedmann refers to as the tensions around 'function *vs.* territory' indicated above.

Nature-based tourism and biosphere reserves

A sub-category of tourism is nature-based tourism, which to a large extent takes place in different kinds of specially designated areas, such as national parks and other types of nature reserves (Frost & Hall, 2006; Kim, Lee, Uysal & Ahn, 2015; Mayer, 2014). The designation of nature-based tourism is a further illustration of categorisations that are typical of the modernisation process outlined above, in this case by designating nature and nature experiences to specific places and activities – even though 'nature' in its basic sense is of course present in all landscapes and activities (Sandell, 2016b). The large-scale functional division of landscapes and places that the establishment of a national park means, also often leads to conflicts with local inhabitants and their 'territorial' interests and activities (e.g. Adams & Mulligan, 2003; Brockington, 2002; Dahlberg, Rodhe & Sandell, 2010; Zachrisson,

Sandell, Fredman & Eckerberg, 2006). Here, the UNESCO BR concept, with its links to tourism, nature reserves and sustainable development, is of special interest. BRs are international designations that are suggested and approved by UNESCO's Man and Biosphere Programme (MAB). Ishwaran et al. (2008) identify three generations of BRs that make up the current World Network of BRs.

The first generation of BRs that appeared in 1976 focused on nature conservation, the study of the structure and overall effects of human impact in a multitude of ecological systems the knowledge and education that such aspects generated (UNESCO, 1973). The second generation of BRs consisted of designations following the Action Plan for Biosphere Reserves (UNESCO, 1984), where 'development' emerged as a new influence on the BR concept (Batisse, 1982) and the importance of human activity in BRs became fundamental. The third generation of BRs consisted of those designated after 1996 with the changes brought about by UNESCO's Seville Strategy (UNESCO, 1996), when BRs were considered as more than protected areas and were instead viewed as landscapes and ecosystems in which sustainable development became imbedded in their management and governance. An example of this shift in strategy is the cancellation of the first MAB reserve in Sweden, which was established in 1986 in the high mountain area close to Kiruna in the north. This was withdrawn from the list of BRs in 2010 due to the lack of local development integration (cf. Sandell, 2005). Instead, Kristianstad's wetland BR was established in 2005, thereby illustrating UNESCO's new focus on nature-culture interaction and development issues.

The sustainability of tourism and its connection to BRs is interesting at a time when mobility, transport and global inequalities are making society socially, environmentally and economically unsustainable (Gössling, Ceron, Dubois & Hall, 2009; Harvey, 2005). Recent research has shown that the field of sustainable tourism research is coming of age and moving beyond definitional and conceptual papers to instead focus on testing and applying theory through empirical research (Ruhanen, Weiler, Moyle & McLennan, 2015). In doing so, the broad nature of tourism and the interconnections, opportunities and pitfalls with regard to sustainability can be explored.

Tourism can also be used as an important argument for establishing nature reserves, creating job opportunities and economically support conservation and nature protection, e.g. of wildlife (Altmann, 2016). Nature reserves have been arenas for learning about nature, outdoor recreation and conservation for some time (Beery & Jönsson, 2017; Frost & Hall, 2006; Ishwaran et al., 2008). Basically, in the work on the case study of a Swedish BR we can see that in the last century there has been a dramatic change in environmental commitment and that there are strong links between nature reserves and the earlier stages of this change. We can also note the parallel evolvement of the concept of BR over a much shorter period of time and identify tensions in the radical transformations of society that are necessary to achieve a sustainable development, e.g. in terms of 'function' vs. 'territory' where tourism is closely linked to the former perspective. Another issue that we examine is how sustainable development is interpreted amongst the stakeholders in the studied BR and the kind of role that tourism plays in sustainable development in this context.

The case of the Lake Vänern Archipelago Biosphere Reserve in Sweden

From the frames of reference presented above, a field of tension can be identified between tourism in a traditional sense linked to 'functional' development strategies of the modernisation paradigm on the one hand, and radical versions of sustainable development in the direction of 'territorially' oriented and locally adapted development strategies that are sceptical of large-scale tourism on the other.

The studied case is the Lake Vänern Archipelago Biosphere Reserve in Sweden (Fig. 2), which includes the three municipalities of Mariestad, Götene and Lidköping. These municipalities are all part of the BR and have been active stakeholders since its establishment. The BR initiated many different projects and processes, many of which focus on the development of tourism. Our case has been researched using document analysis on secondary data and semi-structured interviews. The empirical material consists of interviews (conducted 2014-2015) with eight tourism entrepreneurs active in the BR, eleven tourists visiting the BR in the summer of 2016, two interviews with people working in the BR office (conducted 2014 and 2017), two people from local nature and heritage organisations (2017), one local journalist active in the BR (2017), two municipal decision makers (2017) plus information gathered during five rounds of field work in 2014, 2015 and 2016. Two weeks of participant observations with tourists in the BR are also included.

The tourism entrepreneurs were selected for their active involvement in BR tourism and asked how they understood and actively participated in environmental sustainability. The entrepreneurs represented a sample of the businesses active in the BR, e.g. accommodation, hostels, restaurants, café and handicrafts, adventure tours, historical tourism. The tourists – men and women between the ages of 28-65 years – were selected through a snowball approach originating from the entrepreneurs' businesses and were asked about their visit to the BR, how they understood environmental sustainability and the BR and their own roles in environmental sustainability. The informants from the BR office, the local journalist and the municipal decision makers were asked about their understanding of sustainable development, how the BR contributed to this, what they thought about tourism and sustainable development in the BR and how development in the BR had changed over time.

Further, the study includes analyses of the municipal development plans from Mariestad, Götene and Lidköping and an analysis of BR project reports, biosphere guidelines, BR vision and BR practices connected to sustainable tourism management planning in the BR.

Figure 2
Map of Lake Vänern Archipelago Biosphere Reserve.
 Courtesy of the Swedish Mapping, Cadastral and Land Registration Authority



Map created by Jan Alexandersson.

When analysing the interviews, secondary data and observations, the focus has been on the arguments related to sustainable development and tourism in the different stages of the BR's development in order to explore the implicit or explicit development strategies used. A thematic analysis influenced by the work of Braun and Clarke (2006) has been used to find and interpret the meaning of different patterns (themes) in the empirical material. We began by examining how sustainable development was understood in different contexts and how this affected the development of the BR. Four time-based stages could be identified in the empirical material and the projects in the BR: (1) the emergence of the biosphere reserve from 2004-2010, (2) the establishment of the ecotourism network from 2009-2012, (3) the development towards an export-ready destination in 2013-2014 and (4) increasing tourism sustainability in the biosphere reserve from 2014-2017 (Backman, 2012; Lake Vänern Archipelago Biosphere Reserve, 2013a; Lindström, 2012). The stages described below consist of the empirical material indicated above and theoretical reflections connected to the literature review. Together, these two components help to paint a picture of how sustainable development is interpreted in the BR, the kind of roles that tourism plays in sustainability efforts in the BR and the kind of sustainable development that was practised in the studied BR between 2004 and 2017.

Stage 1 - Emergence of the biosphere reserve from 2004-2010

UNESCO's Seville Strategy influenced the notion of sustainable development during the emergence of the Lake Vänern Archipelago Biosphere Reserve. The three above named municipalities began to collaborate and explore the possibility of becoming a BR. Before the BR was realised, several processes helped to shape the area and prepare it for its BR designation. One of those processes was the Life Project spearheaded by the county administrative board. The time span of the project was 2001 to 2007. The aims were to create the necessary conditions to safeguard pristine nature and fauna in accordance with the Habitat and Birds Directive, to increase accessibility in the area and to spread information about the local environment and landscape to tourists (Stenseke, 2013). During the emergence of the BR, tourism, and especially ecotourism, was encouraged and understood as a way of generating economic development and increasing accessibility to the landscape and nature for tourists and locals alike. The importance of creating opportunities for environmentally sustainable travel to and within the BR was also emphasised in the BR application. The Lake Vänern Archipelago Biosphere Reserve aimed to provide the necessary conditions to facilitate the safeguarding of nature and the generation of sustainable development (Lake Vänern Archipelago Biosphere Reserve, 2013a). The area changed from being seen as a place of environmental designation, to a locality that embraced an understanding of sustainability in accordance with UNESCO's Seville Strategy and a more 'territorial' approach to environmental sustainability. The BR chose tourism development as a way of generating sustainability and at the same time of applying the BR concept in the locality. A feasibility study for the BR was approved by the Swedish MAB committee in 2006 and on 2nd June 2010 the area was officially designated as a BR (Lake Vänern Archipelago Biosphere Reserve, 2010).

In its BR application letter to the Swedish MAB committee in 2008, Mariestad Municipality stated that a BR would greatly improve the development of the area. The letter was an addendum to the BR application and suggested that sustainable development would be a way for locals to prosper through enterprises and job opportunities, while at the same time safeguarding the nature in the area for future generations. Emphasis was also put on developing renewable energy and generating a common identity around the local landscape. The two remaining municipalities wrote similar letters. Lidköping Municipality highlighted the opportunities for collaboration amongst the municipalities and a way of promoting and safeguarding the large tourism attraction of Läckö Castle. Götene Municipality wrote

about community engagement, local commitment and the opportunity to acquire, share and disseminate local knowledge. All three municipalities wrote about sustainable development in a way that aligned with UNESCO's Seville Strategy of understanding BRs as more than protected areas. At this stage, the BR was viewed by the municipalities as a local and regional engagement and as ecosystems and landscapes, with sustainable development as an integral part of the management of the area where learning and collaboration would be paramount. In other words, sustainability was intended to be locally anchored and not explicitly growth oriented; features that are described by other researchers as important in the implementation of sustainability (see Saarinen, 2013).

Stage 2 - Establishment of the ecotourism network from 2009-2012

This stage involved the establishment of the ecotourism network and, according to the BR office, was when sustainable tourism really became embedded in the biosphere's sustainable development efforts. The understanding of sustainable development was still influenced by the Seville Strategy ideas (UNESCO, 1996), although at this stage increased economic development through tourism also began to manifest itself amongst larger tourism companies and in the visions and planning documents of the three municipalities. Nevertheless, during this stage we found that the focus was mainly on a Seville understanding of sustainability, i.e. that BRs are more than just protected areas and that sustainable development can be achieved by utilising strategies that could be interpreted as 'territorial' rather than 'functional' development approaches. The ecotourism network focused on creating nature-based sustainable tourism that was locally anchored and environmentally conscious. Here, the bottom-up objectives of the BR became an important strategy for demonstrating environmental sustainability.

The ecotourism network project was initiated by the BR office in Mariestad with the objective of developing a sustainable network of tourism entrepreneurs that would together generate new opportunities for public transport both to and within the BR, generate new and innovative ecotourism products and collaborate in the marketing of tourism in the BR (Backman, 2012). The ambition was to create Sweden's first ecotourism destination. The interviewed tourism entrepreneurs in the area saw the network as a great opportunity to learn more about sustainability and collectively work to develop their businesses. The entrepreneurs' companies were of varying size, and one of the main grievances expressed by four out of eight of our tourism entrepreneur informants was their differing conditions and opportunities. Smaller tourism businesses tended to be more lifestyle-oriented and mainly driven by ideological ideas about sustainability, whereas larger companies tended to display a more practical day-to-day use of sustainability, either as a way of reaching new customers or improving their tourism products. With regard to sustainable development, regardless of their varying ambitions for growth, the businesses found common ground in interactions with other tourism businesses, other regional firms, local BR officials and tourists.

There was a significant increase in tourism in the BR from 2007-2012 (when according to an informant at the BR office the revenue doubled). The three municipalities' tourism development plans for the BR show nature and sustainability as potential marketing strategies for further increasing overnight stays in the area (Götene, 2010; Mariestad, 2015; Lidköping, 2013). From a local decision maker perspective, the consensus among the municipalities was that the tourism potential of the BR was great, but that there was considerable room for improvement.

With regard to the ecotourism network, and in retrospect, a local journalist said that tourism in the BR seemed to be steadily increasing, although it was difficult to determine whether this had anything to do with the BR office's projects. In Götene Municipality, the journalist had not noticed any increase in

new tourism businesses or widespread marketing campaigns, but thought that the increase in tourism was mainly attributed to the tenacity of the small-scale tourism businesses that managed to continue to do what they were doing and to the quality of tourism products. In an interview conducted in 2016, an informant from the BR office claimed that the increase in tourism had more to do with a collective understanding of sustainability among stakeholders and participants in the ecotourism network than with attempts to generate collaborative tourism packages. There was a deliberate attempt to focus on sustainability for both locals and tourists in the ecotourism project. Further, the informant from the BR office stated that "one of the biggest obstacles connected with the tourism network was to find flexible solutions [for developing sustainably] that would fit the busy schedules of both small and large companies". The tourism entrepreneurs taking part in the project had different reasons for being involved in the network and different financial opportunities and available time to further develop their businesses. The ecotourism network project was concluded at the end of 2012 (Backman, 2012). In our analysis, we found that the establishment of the ecotourism network stage affected sustainability in that more 'territorial' development in line with the Seville Strategy proved useful for generating sustainability efforts in the BR.

Stage 3 - International destination ready for export in 2013-2014

In the wake of the ecotourism network project, the BR initiated the 'international destination ready for export' project in 2013-2014 (Backman, 2012; Lindström, 2012). The project was a local application of the Swedish national tourism strategy of 2010, in which Sweden attempted to create 20 international destinations within its borders (Svensk Turism, 2010). In the BR, the packaging and marketing of the area for international tourism export was to be combined with sustainable development in accordance with the MAB BR concept. One of the tourism entrepreneurs in the region stated that the objective of the project was to achieve economic growth in the regional tourism sector, while at the same time holding on to the common values generated in the previous ecotourism network project. However, the informant also stated that there had in fact been a shift in focus, in that small-scale local experiences in nature were now to be packaged together to attract more attention. There was also a shift from the provision of environmentally-friendly local transportation, such as trains and buses within and towards the BR, towards attracting larger numbers of international visitors travelling by air or road. Some of the minor problems that arose in the ecotourism network project, such as the businesses' different goals and ambitions, now became major ones. A tourism entrepreneur attended a meeting about the new project but left feeling alienated and excluded from the process: 'I'm just a small business owner, this is my hobby, and I am unable to invest time and money in attracting thousands more customers. I hardly have time for the customers we already have. Are we supposed to hire more staff now?' Other entrepreneurs, on the other hand, felt that things were finally shaping up. A local tourism entrepreneur claimed that this new project was a real opportunity to work and collaborate with serious businesses, so that those taking part in it could make entrepreneurship a full-time occupation. He then went on to say that there were different types of sustainability: the small-scale approach and the efficiency approach, in which smart solutions helped businesses to stay sustainable whilst they grew.

An informant from the BR office said that "...it [the international destination ready for export project] was not a successful project. In my daily work I meet lots of businesses and entrepreneurs active in the BR. We often end up talking about that project and why it didn't work". At times the discussions between the BR officials and the entrepreneurs revolved around notions of sustainability and the fact that many tourism businesses were not ready to upscale in a way that fitted the national profile of an international destination ready for export. Another informant from the BR office stated in 2016 that:

"many of the tourism businesses in the BR are small-scale lifestyle entrepreneurs who conduct their tourism businesses part-time, whilst the larger tourism businesses are too few to bear the marketing costs themselves". The larger tourism companies that were part of the former ecotourism network were generally more positive to the international destination ready for export idea. In contrast, the smaller tourism businesses saw major flaws in the ideology of developing tourism in a local small-scale and bottom-up manner while at the same time trying to generate a large base of new international tourists.

Many of the processes of combining the themes of a more 'territorial' perspective of sustainability in line with the Seville Strategy found in the MAB Programme and the former ecotourism network in the BR now became secondary to the more traditional market-oriented approach of tourism development (Hassan, 2000; Line & Wang, 2017) advocated by the Swedish national tourism marketing company, Visit Sweden. This change in the role of sustainable development in the area can also be found in the arguments of a municipal tourism officer in one of the municipalities. By downplaying the importance of the BR, and instead contributing growth in the tourism sector to entrepreneurial spirit and municipal assistance for new companies, the focus shifted towards more 'functionally' oriented sustainable growth perspectives. The local tourism officer said that: "Sustainability is of course important for all destinations to consider, but I don't know if it matters if the work is done in a BR or not. Our tourism sector will continue to grow and more tourists will find us. Not because we are part of a BR, but because of marketing and profiled tourism products." Sustainable development that is unhinged from the BR understanding and the Seville Strategy tends to be more placeless, 'functional' and growth-oriented, which is in line with discussions by Redclift (2005) and Ciegis et al (2015).

The more 'territorial' approach to sustainable development that was common in earlier sustainability efforts and throughout the ecotourism network project came under pressure when large-scale tourism development plans became part of the local strategies. This can be seen in the way in which small-scale tourism entrepreneurs who were ideologically oriented towards sustainability opted out of the project due to feeling lost in the transition from the ecotourism network project to the international destination ready for export project. It can also be seen in the tourism strategies of the three municipalities involved in the BR. Here, early BR projects with a more 'territorial' approach to sustainability are described as worth developing further. In the three municipalities' tourism development strategies, and also in the regional and national tourism strategy (Götene, 2010; Mariestad, 2015; Lidköping, 2013; Turistrådet Västsverige, 2015; cf. Svensk turism, 2010), we can detect a shift from long-term work and investment in the development of tourist products and common values towards increased revenues and investments in tourism marketing. Another shift is that from the preservation of unique and local values connected to bottom-up involvement by local tourism entrepreneurs and a sustainable small-scale tourism towards a strategy of adapting to the needs and wants of tourists and a focus on international large-scale export. In short, a clear example of how the understanding of sustainability and tourism changed over time is when the ecotourism network was followed by a different focus, where sustainability became more 'functional' and where there was a shift from local and small-scale tourism with environmentally friendly transportation to large-scale internationally oriented tourism.

Stage 4 – Increasing tourism sustainably in the biosphere reserve from 2014 - 2017

The ideas about sustainable development in stage 4 focus on the same platform as the first and second stages of development in the BR, i.e. alternative small-scale 'territorial' adaptations. According to tourism entrepreneurs and the BR office, sustainable development is here understood as inclusive, small-scale and collaborative. Further, the BR office initiated a cross-sectoral position called 'potluck',

in which tourism stakeholders collectively contributed and influenced development in the BR (Lake Vänern Archipelago Biosphere Reserve, 2013b; Malena & Schultz, 2017).

Today, the general consensus amongst the diverse tourism entrepreneurs, tourists and municipal tourism officers is that there are many possibilities for tourism development in the BR. Local decision makers, local businesses, local inhabitants, local organisations, the BR office and the various local, regional and national tourism strategies are all seen as playing important roles in determining the kind of sustainable development that will be in focus in the future. The tourists who were interviewed when visiting the BR thought that economic growth connected to international tourism development would directly influence the way in which sustainable development was implemented in the BR, e.g. more focus on attractions that were sustainable for large numbers of visitors and buying tourism packages that took sustainability into account. One tourist informant argued that tourism could be a 'necessary evil' to ensure that the scenery, nature and landscape in the BR were safeguarded, both now and in the future. Another tourist informant claimed that they welcomed increased tourism in the area, because it would create more job opportunities for locals that focused on environmental sustainability.

In 2017, the BR's visions have been to reduce fossil fuel transport both to and within the BR, increase self-sufficiency and create opportunities for innovation on the part of local and regional entrepreneurs (Lake Vänern Archipelago Biosphere Reserve, 2013b). The views of sustainability connected to tourism appear to be in line with a 'territorial' perspective of development, in contrast to stage 3. This is combined with an ambition to increase tourism in the BR, albeit more slowly than in stage 3, meaning that 'territorial' is once again preferred, rather than 'functional' development. The national coordinator and president of the Biosphere Council in Sweden thought that the main flaw with tourism sustainability during stage 3 was the focus on results, rather than generating sustainable conditions that would enable collaboration between tourism organisations and stakeholders. She also thought that the switch to an emphasis on local development would create opportunities for the BR to inspire learning about sustainability and find common ground for combining the needs of human enterprise and nature in the biosphere. Ideas about what sustainable development and tourism could mean in a BR were also stipulated by the Swedish MAB committee and discussed at a breakfast meeting in 2017:

The five biosphere areas in Sweden need to focus on long-time local process of learning that generates collaboration and enables for a discussion on sustainability issues.... The global sustainability goals tell us what needs to be done, but the biosphere reserves show us how we go about achieving them This is done by leading the way in community development, facilitating research that shows what works and why, and by simply striving to inspire more sustainable behaviour and development throughout our communities (notes taken during the Swedish MAB committee breakfast meeting in 2017).

Conclusions

We set out to explore how the biosphere concept is applied in a local and place-specific context that is regarded as a site for exploration and a demonstration of sustainability through tourism. In doing so, we have investigated how sustainable development is interpreted in the BR, the kind of role that tourism plays in sustainability efforts in the BR and the kind of sustainable development that has been practised in the studied BR between 2004 and 2017. As is outlined in the paper, sustainability is a contested concept. There appears to be major differences in the views of whether it is possible or not to combine sustainable development with a continued large-scale – global – 'functional' specialisation and division of space and time according to the modernisation paradigm. If this is judged as impossible,

alternative strategies in line with small-scale 'territorial' adaptations to the local landscape may need to be considered. Therefore, one way of illustrating and discussing the content of sustainable development is to study place-specific cases. The Lake Vänern Archipelago Biosphere Reserve is of special interest because it encompasses tourism in its sustainability efforts. In the history of the BR concept, it is possible to see the imprints of previous phases in the evolution of environmental commitment. This is mainly evident in the shift in the 1990s from the tradition of protecting exclusive nature areas for research and long distance tourism, to a broader and deeper perspective on local engagement for sustainable development of landscapes, where nature and culture are seen as integrated (UNESCO, 1996). Another shift can be seen in the Lake Vänern Archipelago Biosphere Reserve in Sweden presented in this article, from a small-scale and local understanding of sustainable development to a focus on large-scale tourism initiatives and the subsequent marketing of nature and attractions for international tourists as a destination ready for export, and a later about turn. However, the time-based shifts in strategy do not imply a total change of strategy; rather that political priorities, economic solutions and general strategies in the BR generate impressions that become typical for that specific stage.

Our findings indicate that a study of BRs is a good way of uncovering official and underlying perceptions and interpretations of sustainable development due to the evolution of the BR concept and how this influences local applications. In our case, it is easy to see how the more 'territorial' sustainability intentions of the BRs after UNESCO's Seville Strategy in 1996 have been put under severe pressure by large-scale tourism strategies linked to fossil fuelled transport and more 'functional' views of sustainable development. We can also see the inbuilt tension in the concept of sustainable development in terms of how much 'alternative' (Figure 1) and 'territorial' development was considered necessary. For example, the initial ideas about the BR emphasise the local and small-scale aspects with a dependence on exchanges amongst local actors and environmentally benign modes of transport. This contrasts with the third stage of the historical process of establishing an international destination ready for export to increase the growth of economic value from tourism in the BR and for the three included municipalities. It is interesting to see how small-scale local tourism entrepreneurs thrive at times of a more 'territorial' development and how this is followed by a period of larger scale 'functional' development that favours the municipalities and larger tourism companies. Even though no-one argues for a non-sustainable development, the important question remains – which sustainable development?

The role of tourism in a BR is a reflection of the more general ambivalence to tourism and sustainable development. For example, we can see that the bottom-up objectives of the ecotourism network were designed to increase sustainable development through the locally focused lifestyle orientation of many of the small tourism companies. However, what actually happened was that increased revenue and marketing focused on international exposure in line with the conventional modernisation paradigm featured in the municipal plans. A striking illustration is the shift from an initial focus on environmentally-friendly local transportation, e.g. trains, buses and bicycle trails for regional visitors to the BR, to a focus on international guests and economic revenue. Using the conceptual framework of Figure 1, plus the concepts of 'territorial' vs. 'functional' development strategies, we can see a change over time in favour of the prioritisation of a less radical view of sustainable development in line with a 'functional' development strategy, which is then reversed. Using the ecological, social and economic elements of sustainable development (Ciegis et al., 2015; Redclift, 2005), this could be described as a prioritisation of the economic perspective at the expense on the other two perspectives during stage 3.

To summarise:

- There are striking parallels between the general evolution of environmental commitment during the 20th century and the changing profile of BRs in general over a much shorter period of time.
- The studied Swedish BR illustrates an ambivalence with regard to which approach to sustainable development is preferred.
- The issue of geographical scale is here of the utmost importance and the conceptual framework of 'territorial' vs. 'functional' development strategies is a valuable tool that shows that the studied BR starts with a more 'territorial' approach, which is later followed by a period of a more 'functional' development approach which is then reversed.
- The shifts in the interpretation of the concept sustainable development in terms of 'territorial' vs. 'functional' development linked to the 'alternative' perspective in Figure 1 is hidden when only using the conventional understanding of a straight evolution of modern environmental commitment from protection to sustainable development.
- The possibility of studying concrete examples of situated cases of environmental sustainability efforts in terms of BRs has great potential in the necessary ongoing discussion about which development approaches are seen as more or less sustainable.

For the future, we suggest it would be necessary to further scrutinise the practical and concrete manifestations of the concept of sustainable development in place-specific cases and the role of tourism in terms of learning sites for exploring and demonstrating this. If arguing in line with a more radical, 'alternative' and 'territorial' sustainability perspective, a reasonable role for tourism in a BR could be the promotion of recurrent non-fossil fuelled visits by local and regional residents for an exploration and demonstration of sustainable development, and the provision of virtual reality shows for international tourists.

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