Ecotourism as a learning tool for sustainable development. The case of Monviso Transboundary Biosphere Reserve, Italy

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ABSTRACT

The dichotomy of conservation vs. sustainable development has generated numerous debates since the introduction of the latter in the late 1980s. In the recent past, many initiatives to address the issue gained ground worldwide, such as ecotourism, a form of tourism that takes place in natural areas, sustains local communities, and involves a learning experience. Even though it might look like the perfect tool to strengthen the link between conservation and sustainable development, ecotourism faces many challenges. Through a case study of Monviso Transboundary Biosphere Reserve, this research aims at understanding local stakeholders' perspectives on the matter. A series of interviews were conducted to explore the possibility for ecotourism to act as a learning tool. Results show that ecotourism had some positive effects, such as the creation of a network for collaboration between various stakeholders. However, negative perceptions still play an inhibiting role. It is discussed that this might be a consequence of one main factor: a lack of proper environmental education. Adjustments in the language and methods used in the educational system and a change of course at higher governmental levels might support ecotourism as a learning tool and a catalyst for sustainable development.

1. Introduction

Ecotourism initiatives encouraging development compatible with nature conservation are gaining ground across Europe (Nepal, 2002). Given that the approach merges conservation with sustainable development, ecotourism fits well within the context of UNESCO Biosphere Reserves (BR), which, since their first introduction in the early '1970s, raised the debate on the potential coexistence of objectives such as conservation and sustainable development (Schultz, Duit, & Folke, 2011). In 1987, the UN World Commission on Environment and Development (Bruntland Commission) defined sustainable development as 'development which meets the needs of current generations without compromising the ability of future generations to meet their own needs' (United Nations World Commission on Environment and Development, 1987, p. 16). Nature conservation can

be defined more narrowly as 'the management of human use of organisms or ecosystems to ensure that such use is sustainable' (UNSD, 2017). Nature conservation is an important part of sustainability and the conservation function of the BRs, however, sustainability must also consider human development. Agreement is found in the literature regarding the need for future research to consider how the 'learning sites' designation will help BRs to combine conservation and sustainable development objectives in ways that support both simultaneously (Coetzer, Witkowski, & Erasmus, 2013; Ishwaran, Persic, & Hoang Tri, 2008; Nguyen, Bosch, & Maani, 2011; Schliep & Stoll-Kleemann, 2010).

A number of BRs across the world have employed ecotourism to provide conservation awareness as well as sustainable local development (Hearne & Santos, 2005; Maikhuri, Rana, Rao, Nautiyal, & Saxena, 2000; Nolte, 2004; Yuan, Dai, & Wang, 2008). This is also the case of Monviso Transboundary BR (MBR), in Italy. The area was designated in 2013 by UNESCO, and was recently awarded with the European Charter for Sustainable Tourism in Protected Areas (ECST). This research provides an opportunity to consider the question: Can ecotourism in MBR act as a catalyst in strengthening the link between conservation and sustainable development?

2. Background

Ecotourism is understood as a sub-category of sustainable tourism restricted to the natural environment (The International Ecotourism Society, 2015). A series of researchers pinpoint Ceballos-Lascurain's definition as one of the most widely embraced (Chiutsi, Mukoroverwa, Karigambe, & Mudzengi, 2011; Coria & Calfucura, 2012; Jacobson & Robles, 1992), defining ecotourism as 'travelling to relatively undisturbed or uncontaminated natural areas with specific objectives of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas' (Ceballos-Lascurain, 1987). Jacobson and Robles (1992) also note that ecotourism necessitates high-quality maintenance of resources such as landscapes, rivers, forests, and wildlife. Chiutsi et al. (2011) underline the fact that, however satisfactory such a definition of ecotourism is, it falls short in defining the impacts that this form of tourism can have on the cultural and ecological environment of the destination. Another factor that was also neglected in the previous definitions is the economic aspect. However, a number of scholars filled the gap by suggesting that, while there has to be a balance between the socio-cultural and environmental sustainability, there must also be economic stability (Buckley, Pickering, & Weaver, 2003; Fennell, 2001; Goodwin, 1996; WWF, n.d.). Relatedly, one critique of ecotourism is its reliance upon market-based conservation. McCauley (2006) argued that market-based conservation strategies do not always offer guidance on how to protect aspects of nature that conflict with, or are neutral to human interests. Indeed, he believes that if the goal is to make significant and long-lasting gains in conservation, ethics and aesthetics must hold a paramount position in conservation. He highlighted how, while conservation of nature should be perpetual, the market forces that would regulate it are certainly not. Considering all the above-mentioned factors, the most inclusive definition of ecotourism was eventually proposed by the IES as 'responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education' (The International Ecotourism Society, 2015).

The practice of pairing a learning experience, usually delivered to small groups by small-scale businesses, and stressing local ownership, particularly for rural people, (The Global Development Research Center, n.d.), theoretically makes ecotourism a potential catalyst in strengthening the link between conservation and sustainable development. Previous research shows it is possible, and Tortuguero National Park, Costa Rica, (Jacobson & Robles, 1992) and the Amazonian regions of Ecuador, Peru, and Bolivia (Stronza & Gordillo, 2008) serve as good examples. In relation to this, training people with local knowledge as guides and interpreters is an important sustainable development strategy (Harris, Griffin, & Williams, 2002).

Two decades after the Biosphere Reserve concept was first introduced by an international expert panel, in the early 70s (UNESCO, 1996), the Second International Congress on Biosphere Reserves was held in Seville (UNESCO, 1996), and three main complementary functions of BRs were highlighted:

- *conservation function*, to preserve genetic resources, species, ecosystems and landscapes;
- *development function*, to foster sustainable economic and human development;
- *logistic support function*, to support demonstration projects, environmental education and training and research and monitoring related to local, national and global issues of conservation and sustainable development (UNESCO, 1996).

Coetzer et al. (2013) stress that substitute economic activities – such as ecotourism – can be the means to support both the conservation function and the sustainable development function. In fact, ecotourism theory suggests that economic development and natural resources conservation are compatible goals (King, 2009), and this is particularly relevant in the context of BRs. However, outcomes from earlier studies reveal that the introduction of ecotourism in a BR context is not without challenge. Previous research analysed the effectiveness of ecotourism approaches and practices and show consistency between results (Hearne & Santos, 2005; Maikhuri et al., 2000; Nolte, 2004; Yuan et al., 2008), even though BRs investigated by these studies are found across different continents, such as Europe, Asia, and Central America, with different socio-economic conditions and culture. BRs such as Sumava-Czech Republic, Aggtelek-Hungary, Slovensky Kras and Polana-Slovakia, Maya Biosphere Reserve-Guatemala, Nanda Devi Biosphere Reserve-India, and Changbai Mountain Biosphere Reserve-China all showed a common trait: Ecotourism can be a game-changer, but it has not reached its full potential yet. Local communities are often sceptical towards this form of tourism, as they do not feel they could gain anything from it (Hearne & Santos, 2005; Maikhuri et al., 2000; Nolte, 2004; Yuan et al., 2008). This confirms that ecotourism represents a potential substitute economic activity as well as providing a learning opportunity for stakeholders in the area, matching the third complementary function of a BR. At the same time, they stress how ecotourism can only be defined as such if it implies a financial revenue for local residents. The issues remain how and why local residents can be motivated to participate in ecotourism projects.

2.1. Parco del Monviso and Monviso Transboundary Biosphere Reserve

The Park was first established in 1990, with the name of Parco del Po Cuneese. In 2015, the Regional Law n. 19 reorganised the protected areas management system in Piedmont, and

Parco del Po Cuneese turned into Parco Naturale del Monviso. The new Parco Naturale del Monviso spreads over 8334 hectares, and it includes the territories of the previous denomination plus the Alevè forest, in Varaita valley, and the Prà-Barant oasis, in Pellice valley. (Parco del Po Cuneese, 2015).

In 2013, the Monviso area became the first Transboundary Biosphere Reserve in Italy, as, at the same time, the 'twin' French reserve had also been approved by UNESCO (Monviso Piemonte, 2013). Monviso Transboundary Biosphere Reserve (MBR) is the ninth BR in Italy, and the country now counts fourteen BRs in total (UNESCO, 2016). UNESCO describes MBR as follows:

> Monviso encompasses a mosaic of ecosystems ranging from the arid and rocky landscape found in the high altitudes of the Monviso massive (at a maximum elevation of 3 841 m) to the unusual forest ecosystem, which hosts, among others, *Pinus cembra*. The Alevè forest, which follows the whole length of the Western Alps, is the most unique and intact part of the reserve, while a continuum of different riparian environments can be found along the Po River, from its springs at Pian del Re (at an elevation of 2 020 m) to the Casal-grasso municipality, and then downstream towards the Torino Province – all of which are related to the permanent presence of the water stream. (UNESCO, 2013)

Together with a joint programme between the University of Turin and Turin Polytechnic University, CED-PPN (European Centre of Documentation on Natural Parks Planning), and the International Academy on Sustainable Development, the administrative authority drew a management plan where they analysed existing best practices and designed action plans in the framework of the UNESCO MaB programme (DIST, 2015). The second section of the document is particularly relevant because of the analysis of good local practices, based on an awareness that culture and the necessary positive relationship between people and the environment provide a foundation for sustainable development. Such practices were identified and analysed according to five branches of analysis: Agribusiness, Craftsmanship, Environment & Renewables, Tourism, and Cultural Heritage. (DIST, 2015). Strengths, weaknesses, and development opportunities were then identified for every branch, and those relating to tourism are reported in Table 1.

In 2015, MBR accepted the European Charter for Sustainable Tourism in Protected Areas (ECTS), seeing it as methodological tool to improve the management of the protected area with the ultimate goal of developing a sustainable form of tourism (DIST, 2015). In fact, the Charter was introduced by the EUROPARC Federation with the purpose of promoting care to park lands as well as the people who live and work in

Table 1. Strengths, weaknesses, and opportunities of the tourism branch. (DIST, 2015).

Strengths	Weaknesses	Opportunities
Variety and diversification of services Mainly high tourist package quality On average adequate and innovative accommodations Sustainable tourism as a widely shared concept	Low level of local promotion integration Weak coordination of touristic initiatives among different areas	Using MaB UNESCO brand as an added value Integrated and coordinated tourism promotion Integration with other sectors Strengthening the partnership between private and public sector Creation of new services for visitors Greater valorisation of study tourism and sport tourism Integration with international circuits

them (EUROPARC Federation, n.d.). For MBR, it was a logical consequence of the MaB UNESCO recognition, and it represented a way to turn such recognition into an economic advantage.

3. Methods

The aim of the research, as presented above, is to explore whether ecotourism could act as a catalyst in strengthening the link between conservation and sustainable development inside a UNESCO Biosphere Reserve. This aim will be investigated using qualitative methodology with semi-structured interview methods.

3.1. The case study

By choosing to focus on the Monviso Transboundary Biosphere Reserve, the research project turned into a case study (Thomas, 2011). In fact, it represents a local knowledge case, with the purpose of exploring local stakeholders' opinions on ecotourism and eventually assessing whether ecotourism could act as a learning tool to link conservation and sustainable development objectives. The approach followed here is phenomenological and descriptive. The objectives of the paper do not test a theory and neither help build one, but rather aim at providing an insight on the phenomenon. The time boundary is limited from the start of the European Charter for Sustainable Tourism application process to the present. Therefore, this case study falls within the single-snapshot category.

3.2. The interviewing process

Potential interview participants were initially identified using key principles from the ECST. Three key principles highlighted as critical for identifying the appropriate participants: preparing a strategy, protecting the area, and promoting local products. These specific three principles were chosen because they are closely aligned with the three complementary functions of a biosphere reserve, as shown in Table 2.

After a process of identifying potential participants and outreach to assess availability and willingness, seven interviews were eventually set up, amounting to the 50% of the identified target group. Interviewees represented a diverse group in terms of occupation with 7 different occupations represented by the 8 participants; for example, farmer, teacher, government representative, tourism professionals, etc. Consent for recording was obtained from all participants. Semi-structured interviews were determined to be most appropriate given research questions and methodology. The interview protocol consisted of 6 sections, in the following order: icebreaker, project/initiative, ECST, BRs, ecotourism. Each section includes a broad question on the topic with potential follow-ups and prompts.

Table 2. ECST principles taken into account and their related BR function.

ECST Principles	Biosphere Reserve complementary functions
Protecting the area	Conservation function
Promoting local products	Sustainable economic and human development function
Improving the knowledge of the PA	Logistic support function

The interview data was analysed using a qualitative phenomenological analysis. For every interview, the coding process followed a specific progression. The first step was listening to the interview to have a sense of the whole. Hycner (1985) stresses the fact that listening to the whole interview sets the context for an understanding of specific units of meaning. Each interview was then manually transcribed, and during the transcription process, units of general meaning were identified. The next step consisted in delineating units of meaning relevant to the research question. It was then considered whether the units of relevant meaning could be clustered together, i.e. if there were commonalities that brought together different units. Themes were determined from clusters of meaning, i.e. themes that can represent the clusters (Hycner, 1985). Finally, the identification of general and unique themes for the interviews was considered. If a theme was delineated in a majority of the interviews, it was determined to represent a general theme.

3.3. Limitation

The BR taken into account is a transboundary one, meaning it exists on both Italian and French territories. However, given time constraints and language barriers, the French side was excluded from the case study. Losing opinions and worldviews of stakeholders from a different cultural environment might have negatively affected the results of this research.

4. Results analysis

In this section, the general themes from the analysis process will be presented. They have been arranged in Table 3 in a decreasing order, starting from the themes most frequently noted. Note, in the text below interviewees will be referred to by I1, I2, I3, etc. The two interviewees from #6 will be referred to as I6a and I6b.

4.1. Knowledge of BRs objectives

The majority of interviewees have a partial understanding of Biosphere Reserves' objectives. All of them refer to the conservation objective. I1 explains that he 'shares the same values the Monviso Transbounday Biosphere Reserve has' and he later adds that 'I know the MBR well and all its biodiversity […] My main focus is biodiversity'. I2 admits that 'if I am asked about details regarding the Park's goals I struggle [to give an answer], apart from managing terrestrial and aquatic biodiversity'. Similarly, I7 admits

Table 3. General themes emerged from the interviews.

Themes	Emerged from						
	I1	I2	I3	I4	I5	I6 a, b	I7
Knowledge of BR objectives	X	X	X	X	X	X	X
ECST	X	X	X	X	X	X	X
Ecotourism as a learning tool	X	X	X	X	X	X	X
Appreciation for the place	X	X	X		X	X	X
Education		X		X	X	X	X
The importance of networking	X			X	X	X	X
International comparisons	X	X	X			X	X
Perspective on monetary revenue	X		X	X	X	X	

knowing them in general, 'but obviously not in detail'. I4 talks only about 'biodiversity conservation objectives'. Both I6a and I6b affirm that they are aware of the BR objectives, but they do not communicate them. I3, when asked about his knowledge of the BR, replied asking for clarifications, 'explain it to me again because I do not have a clear idea about it'. I5 is the only interviewee who refers to both conservation and development, stating that 'there is the matter of the land, of the land restoration, [and] trying to make it coexist with intensive agriculture'. The other interviewees never referred to the sustainable development objectives, and none of them mentioned the logistic support function.

4.2. ECST

Overall, the majority of interviewees seem to be satisfied with the European Charter for Sustainable Tourism experience, and have a positive perception of ecotourism. One positive note references collaboration with the Park administration. I1 reports that 'we had many meetings with the Park authorities where they trained us on the ECST'. Three interviewees expressed their pleasure in working with the Park´s authorities and highlighted the ease of collaboration. The Park has also been reported to 'believe in what they are doing'. I6a and I6b perceives the ECST as a great opportunity and they see it as a way for the Park to abandon off its 'restrictive authority' label. They also think it is 'a modern way to attract tourists from abroad and at the same time offering chances to such a rich land'. According to I4, the ECST is 'a chance to guarantee that our effort is oriented in a certain direction […]'

While I3 believes that, in fact, ecotourism can be a catalyst, he also thinks that by itself it will not be enough. He explains that 'tourism only is not perceived as a valid resource by locals'. He also stresses the fact that locals would first like to have the same services the cities have, such as schools, for instance. I5 believes that the ECST is good as a principle, as he thinks that ecotourism allows the area to be self-sufficient, 'if you are in a territory and you just exploit it, it ends up dying. There is a risk it will lose all its characteristics. So … I believe in this self-sufficient system'. On a negative note, I2 complains about a generally inhibited system 'we have to find a way to unravel the bureaucratic system'.

4.3. Ecotourism as a learning tool

Ecotourism as a learning tool generated positive remarks as well as uncertainties. I2 believes that ecotourism can help shift the balance by focusing on the [land] treasures, and he agrees with I1 when stating that it can 'absolutely' help reaching the MaB and the ECST objectives. I1 sees the ECST, and more generally ecotourism, as a means to sustain disadvantaged areas, such as mountainous areas where agriculture is hard to practice, believing that 'it can be an alternative path'. Also, he thinks ecotourism can help both the tourists and the locals to become aware of conservation and sustainable development objectives, and he adds that '[The ECST] is difficult because it tries to do something new […], to bring people back to walking, or other means, and still enjoy the journey'. He believes that ecotourism can be a learning tool 'as long as you catch people's interest with something attractive'. I4 believes ecotourism 'is a golden opportunity to learn'. She believes ecotourism lets the tourist go home with 'a larger cultural awareness'. According to I7, ecotourism can be a learning tool. For instance, he recalls staying in hotels in other

areas where, together with the room key, he was provided with information regarding garbage collection for recycling.

I3 still thinks that 'there is a delay in understanding in the administrations'. I6a thinks that ecotourism can be a learning tool, but she is sceptical as 'it is still at an early stage, I do not really see it as a developed tool, but … it can be, I mean, surely it is an opportunity'. I6b connects to I6a's stance and she adds that first 'we have to understand how to intercept this kind of tourism'. Later, I6a argues that ecotourism and conservation present some difficulties too. Following up, I5 believes ecotourism could be a tool to reach the BR objectives, but 'it has to coexist with the industrial development, […] with agriculture, industries, and trades'.

4.4. Appreciation for the place

It is a shared opinion among interviewees that the ECST area they live in presents remarkable features. Particularly, they refer to Monviso, the mountain that dominates the landscape. I1 talks about a 'beautiful area' and adds that people in the area are so used to see it every day that they do not appreciate it anymore. I2, who lives up in one of the valleys, expresses similar feelings 'I told myself 'we have [such places] here and we don't know them and we look for them somewhere else'. The same concept is recalled by I3. I5 believes that ecotourism should be promoted through the valorisation of 'land treasures'. I6b stressed how privileged they are to live in this area and she also believes that being MaB might help the locals to realise what they have. I7 believes that both old town centres and the natural landscapes are 'absolutely intact from an environmental point of view', and this, in turn, might imply an economic opportunity. In opposition to this concept, there is the one of the Park as a negative entity. Four interviewees pointed out how locals do not appreciate having a park. In general, they believe that people living in the park area do not understand its mechanisms and are often sceptical about it. I1 witnessed it first-hand, stating that 'parks are still seen as […] activities where everything is restrained'. I3 reinforces the fact that protection measures include human beings too, not only the environment in which they live.

4.5. Education

Related to the idea of ecotourism as a learning tool, education is one of the themes that were discussed with passion. 'Education' to distinguish from the 'learning tool' idea, mainly refers to the process of raising awareness on environmental matters in formal education settings. It is believed by all the interviewees who mentioned education that there is a need for addressing environmental-related issues starting from an early age. However, I2 and I4 express their concern about the lack of a knowledgeable teaching staff. '[…] it is a matter of educating the teaching staff' (I2). I4 believes that 'the teachers' training is the problem […]. Kids get interested and passionate about everything if one teaches it in a smart and passionate way'.

According to some of the interviewees (I2, I4, I6a), the quality of environment-related education still depends on individual teacher's sensibility, thus not offering a continuum through different stages of the educational system. According to I4, this happens because, in Italy, 'nature is not taken seriously' and 'in high-school, science and biology are not

considered primary subjects'. An explanation for the phenomenon is provided by I2, who refers to a 'generational gap', i.e. a total lack of education on environmental matters for the past 20–30 years. I4 reinforces this concept by stating that, only recently have environmental themes started to be addressed in schools. The majority of those interviewed believe that it is necessary to start raising awareness and educating new generations at an early stage. Both I2 and I4 refer to the fact that children can learn a lot and will share what they learned in the future. As stated by I2, '[ecotourism] pass through [education]', and both I6a and I7 already noticed a higher environmental awareness among younger people.

The important thing, I5 believes, is to create a culture among youths, to 'make them understand that some things need to be done […], that it takes an effort to do it, but you'll have a return'. I2 thinks, '[…] we have to work on the human material that we have in order to educate to a different form of tourism and consideration of nature'. I7 noticed that, since they started raising awareness about recycling in schools, the percentage of people who recycle at home is higher among people in the 20–25-year-old range. He also believes that ecotourism can be a means to raise awareness, both for locals and for visitors. In fact, the garbage disposal company he presides over usually has information points during local fairs and manifestations to sensitise local citizens and 'temporary citizens' (i.e. tourists) on the importance of recycling.

4.6. The importance of networking

The majority of those interviewed agree on the fact that networking is important. It helps both businesses and tourists, as the former have the 'occasion to get to know other activities in the area' and share best practices, as pointed out by I6a, while the latter are offered a diverse set of options among which they can choose (I1, I4). It was stressed how, by networking, it is possible to provide visitors with a complete touristic experience. I1 believes that 'if you walk around the biosphere for fifteen days, you'll go back home with something'. Similarly, I4 thinks that presenting options to the tourists is important using the example of the castle in her town, the first and foremost touristic attraction,

> if people stay on after visiting the castle, they will visit the town. […] the municipality complains about the fact that tourists [who visit the castle], do not stay in town. Well, […] you need two or three permanent tourist attractions, […] when one gets out of the castle the question is always "what now?".

She says that her activity is alive thanks to the castle tourism. It seems like the idea of networking is promoted by the Park authorities, who also suggest to those with similar actions to collaborate to reach better results (I6a, I5). I5 believes that being a part of a comprehensive itinerary is 'a good vehicle to getting ourselves known'. I7, whose business is not directly related to the tourism industry, asserts that 'connecting with the Park and the other actors has been interesting and positive' and that 'by constantly working together, good results are reached'.

4.7. International comparisons

The theme, mentioned in 5 of 7 interviews, sheds light on the perceived differences between Italy and other countries concerning sustainability and the environment in

general. I6a explains how 'sustainable tourism is well established in [other countries in] Europe, but not here in Italy' and I1 reinforces the concept by stating that 'a project for eco-sustainable tourism is a big gamble in this area'.

4.8. Perspective on monetary revenue

All interviewees who refer to economic factors (5) agree on the fact that ecotourism is not perceived as a value-creating business by the majority of stakeholders in the ECST area. I1 points out how his fellow farmers 'do not see [ecotourism] as something that can bring money, […] an immediate profit'. I5 believes that 'touristic operators did not see in the ECST a potential profit, […] [the ECST] is not understood because you cannot see an immediate (economic) revenue', in general, 'it is not seen as a business'. This can be related to the overall disillusion expressed by some interviewees regarding the current economic situation in Italy. On the other hand, some interviewees think eco-tourists represent a great source of income. I6a explains that 'an eco-tourist surely has a higher spending potential, also because more often than not he/she is an already retired tourist'. I4 points out that a tourist 'has to sleep, to eat, to spend time', and adds 'in the agricultural environment tourists are perceived as an annoyance, but tourists are an opportunity, not an annoyance'. I7 aligns with the previous when he suggests that

> ecotourism is a great hand to play. […] This kind of activity can only bring benefits even at an economic level, because we can promote ourselves at a European level without fearing competitors such as the Dolomites, or Mont Blanc, or situations similar to ours, with the advantage of not being too well known yet.

A tourist is perceived as someone who indirectly supports satellite businesses, e.g. agri-foods, 'a tourist who hangs around in here then buys something' (I1), '[an eco-tourist] then buys locally produced honey' (I6b). I3 stresses the fact that 'the Park should be seen as an economic resource [too]'.

5. Discussion

The details of this case study as presented in the results contributes to a better understanding of the challenges of the idea of ecotourism as a learning tool for sustainable development. One of the most significant aspects that stands out is that local inhabitants are generally sceptical towards ecotourism as they do not see any profit coming out of it. This matter emerged in previous studies as well (Hearne & Santos, 2005; Nolte, 2004; Yuan et al., 2008). In addition to being sceptical, people living in the area tend to have a negative perception of tourism itself, partly because of the above-mentioned reason, partly due to the association of parks with restrictions. This might be a direct consequence of two main factors: a lack of environmental education, and the effects of the current economic crisis the country is facing.

5.1. The role of environmental education

Previous research indicated that the less knowledgeable local communities are about Biosphere Reserves' principles and ecotourism, the less conscious their approach is to the matter (Yuan et al., 2008). In the case of Monviso Transboundary Biosphere Reserve

and other Europeans BRs investigated by Nolte (2004), namely Sumava-Czech Republic, Aggtelek-Hungary, Slovensky Kras, and Polana-Slovakia, inhabitants often do not know they live inside a BR, and even if they do, their understanding of it is not comprehensive. More generally, results from the MBR case study show how knowledge regarding BR objectives is limited to biodiversity conservation, not acknowledging the fact that it is only one out of three complementary functions. Unfortunately, besides representing a fragmentary knowledge, this has a potential negative side effect too: if biodiversity conservation is the only known objective, people might be led to believe that it will entail only restrictions and obligations towards the environment and the promoting authorities. Indeed, this is happening in the MBR. Some interviewees reported their experience talking to local inhabitants who decided not to take part in the European Charter for Sustainable Tourism project due to a fear of new limitations to their activities. The direct consequence is a negative perception of the Park. This leads to confusion over the concept of park – which in the case of MBR represents only the administrative authority – and the BR concept; in fact, this issue is nothing new and it had already been noted by Nolte (2004) in his research on East Central European BRs.

A part of the problem may be a lack of education on the BR concept and, more generally, a lack of environmental education in schools. Many interviewees complain about the fact that, in Italy, schools do not take environmental matters seriously. A more comprehensive environmental education in schools might result in pupils getting acquainted with nature and the importance of protecting it. As long as nature is not considered important, defending it will inevitably be seen as a bothersome task, or as something that interferes with business. Furthermore, the introduction of the BR concept in schools could help pupils understand that a BR is not only about nature conservation, but rather about how people fit into a place. As emphasised by Beery (2014), the nature-culture dualism has a long history and it has influenced the educational systems. Beery stresses the need for a change in language in education to address this separatist approach: for example, substituting the term *nature* with the term *landscape* can provide a more comprehensive approach. Using the European Landscape Convention's definition, '"Landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Council of Europe, 2000, p. 9). Undeniably, human beings are an inseparable part of nature, and it is even more noticeable in areas where human presence has been traced back to many centuries, like in the Alps. It is therefore not surprising that the Canadian tourists encountered by I3 referred to the Italian Alps as 'mountains with history'.

Under Article 6 of the Landscape Convention, Section B, 'Awareness-raising', and D, 'Education', are particularly relevant. In the former section, the Council underlines that, even though there are existing sensitivities to the matter, the civil society, the private sector, and public authorities do not always recognise the link between landscape and their daily lives. Raising awareness is therefore a way of making clear the relations that exist between people's day-to-day lives and the characteristics of the natural environment they live in. (Council of Europe, 2000, p. 49). In section D, signatory countries promote 'school and university courses which, in the relevant subject areas, address the values attaching to landscapes and the issues raised by their protection, management and planning' (Council of Europe, 2000, p. 12). The importance of environmental education is therefore reinforced. School curricula at various levels should promote a sensitisation to

relations between everyday life and landscape, and to social, environmental and economic questions (Council of Europe, 2000, p. 53). School curricula could draw from place-based environmental education to support learning about the world via the MBR as a unique local classroom. This approach to education increases academic achievement, helps students develop stronger ties to their community, enhances students' appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens (Sobel, 2004).

Increasing knowledge about the BR could help locals have a positive approach to initiatives such as the ECST and to ecotourism in general. To reach this goal, however, educators must also be aware of and understand the BR concept. Now, the quality of environment-related education still depends on each individual educator's understanding and passion about the subject, thus it does not serve as a satisfactory support function – the third complementary function of a BR. Given this situation, BRs such as the Kristianstad Vattenrike BR can serve as models for how the BR organisation can support environmental education for school aged students and the public (Beery & Jönsson, 2015).

5.2. Ecotourism as a learning tool for change

Networking is one of the positive experiences of the ECST and MBR. This theme emerged in the majority of interviews and it is reported as being not only helpful for tourists, but for touristic operators alike. Visitors gain from a network among touristic operators via the possibility of choosing from a wide variety of activities that can be linked together to make the most out of a visit. Indeed, presenting the tourists with a set of options helps them plan their stay and eventually supports an enriching trip. For touristic operators, networking means enjoying the possibility of sharing best practices and tips with other operators and stakeholders. This concept is not new, and was already noted by Stronza and Gordillo (2008). The two authors reported how an expanded network for support has been one of the positive changes detected after the introduction of ecotourism in the Amazonian region. A practical example of the benefits of networking is represented by the thematic working groups introduced in one of the ECST forums. Observation of the forum resulted in a clearer understanding of networking activities. Collaborating in groups can give the participants a chance of sharing challenges and problems they faced when carrying out their respective actions. Moreover, they will be able to discuss their own self-evaluation with their peers and therefore their analysis will be enriched by other participants' perspectives. The thematic work group could also be an opportunity for making suggestions on how to improve the different activities.

As for awareness raising, Parco del Monviso has already taken some steps in the right direction. For example, the project carried out in schools with the purpose of creating the Park's motto was successful. As pointed out by I2, this project had a positive impact because, in order to design a motto, the pupils had to get acquainted with the Park and its elements. An increased knowledge of what is inside the MaB area may help younger students understand what is at stake. A study conducted in the Vattenrike Biosphere Reserve, in Sweden, underlines how outdoor experiences in nature have the ultimate goal of supporting the direct relationship between people and the landscape (Beery & Jönsson, 2015). However, the authors warn that providing a direct experience in nature is not enough: specific outcomes of such experience need to be provided as well. In the

case of MBR, the outdoor experience had the outcome of designing a motto for the Park. The winning motto 'A frame for your emotions' stresses once again how the human dimension cannot be detached from the landscape. This concept helps build a strong place identity, as pupils realise the beauty and the special characteristics of the place they live. In turn, this gives them an understanding of the place's value and of the reasons why it is a suitable ecotourism destination.

Many interviewees refer to the fact that other countries have a higher attention to the matter, pointing out how Italy still needs to work on raising awareness on such themes. I6a explained how more sustainable forms of tourism are well established abroad, and in this regard, some interviewees brought up the concept of travelling in order to gain knowledge. Placing themselves as tourists could help touristic operators offer a better experience to the visitors coming in the area. As one of the interviewees pointed out, when the touristic operator turns into a tourist, they understand what they are expecting and that helps them realise what a potential tourist may expect from them. This learning experience, besides being enriching for the person's cultural background, could help improve their business and inspire new tourists.

All the above-mentioned factors lead to the main finding of this research. Ecotourism has the potential to act as a catalyst by being a learning tool. Placing oneself as an eco-tourist is a direct learning source, while networking and awareness raising are indirect outcomes of the ECST and ecotourism experience in the area. Ecotourism involves a learning experience by definition, but the complementary activities necessary to its development in the MBR area are themselves a source of knowledge and learning for every stakeholder. These play a crucial role in fostering the success of the BR, and represent a noteworthy example of how the third complementary function of a BR allows the first two to coexist.

6. Conclusions

Through an analysis of stakeholders' perspectives, the research shows how ecotourism can become a catalyst by being a learning tool for all ages, and for locals as well as for visitors. However, many factors still prevent ecotourism from reaching its full potential in strengthening the link between conservation and sustainable development in the Monviso Transboundary Biosphere Reserve. A more conscious approach to a place based environmental education in schools would inevitably play a vital role in the Italian context. Unfortunately, this kind of policy-making is not a direct responsibility of local administrative authorities and stakeholders, and a change of course at higher governmental levels is required.

Nonetheless, Parco del Monviso seems to be on the right track. The promotion of projects in schools regarding MBR is of utmost importance, and shows that it helps in building a stronger culture in younger generations. However, these projects should be paired with outdoor activities too, which, if carefully designed to have specific outcomes, embody a learning experience and at the same time provide a chance to spend time in the actual landscape of the MBR. Such place-based education will potentially allow a deeper understanding that comes with authentic experiences. In addition, these activities help strengthen the logistic support function of the BR, which in turn assists both conservation and sustainable development objectives. To this regard, investing in research in the MBR, especially from a social-science perspective, might support local policy-makers.

Further studies regarding the current level of awareness on the MBR might lead to an improved design for future initiatives, as they may present the Park with new opportunities to consider. Moreover, studies including the French side of the MBR might shed light on best practices worth adopting in the Italian side too, encouraging a tighter transboundary collaboration.

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Disclosure statement

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