The Compromises of Rewilding in Swedish Laponia: Implications for Nature Reconciliation

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Abstract: *Rewilding is a nascent, controversial, but in post-modernity also an appealing conservation model that is increasingly implemented and aims to reclaim nature, restore damaged ecosystems and unleash the autonomy of the natural environment. In the following paper, we go beyond this ecological rhetoric to examine the human element to rewilding. Indeed, we ask what happens when rewilding projects have to depart from their lofty premises on rehabilitating degraded ecosystems with a hands-off approach and compromise by on the one hand making rewilded nature into a commodity, and rewilding into a business enterprise and, on the other hand, involving citizens generally in the project. This study is examined in the context of an upcoming river-based rewilding project in Swedish Laponia undertaken by Rewilding Lapland. The case reveals tensions with indigenous Sami reindeer herders, in particular over the role of predators in serving as exotic keystone species, and more generally conflicts in environmental aesthetics over what wilderness is supposed to look like.*

Keywords: rewilding, environmental aesthetics, sublime, reconciliation, reindeer, indigenous

1. Introduction

Rewilding has emerged in recent years as a post-conservation model where ecosystems are restored through the reintroduction of large fauna in the role of keystone species, creating trophic cascades that change the dynamics of the environment (Pereira & Navarro 2015, Ceauşu, et al. 2015a, Soulé & Terborgh, 1999). Many rewilding projects have proven successful in creating areas where humans have progressively withdrawn to leave place for a thriving nature (Cossins 2014). Its premise is to leave nature, to a certain extent, self-managed (Soulé & Noss 2014, Cohen 2014). Rewilding could embody an alternative or a complementary method to classic conservation practices since it creates an autonomous wilderness that in theory will require very little human management (Pereira & Navarro 2015) while bringing back wilderness in underused, degraded or abandoned areas (Ceauşu, Hofmann, Navarro, Carver, Verburg, & Pereira 2015). This, indeed, is the principal argument of the network *Rewilding Europe* in their conservation projects across Europe (Rewilding Europe 2015a, Jepson

2016). But as the concept of rewilding has gained popularity amongst scholars as well as amongst conservationists, it is in itself a concept with multiple and often contested definitions (Corlett 2016). More importantly, perhaps, rewilding is contested also in practice, inasmuch as trade-offs between competing schools of restoration ecology are made on the one hand (Hilderbrand et al. 2005), and on the other hand the project involve compromises with local communities, their histories and relations with wildlife and their attachment to the landscape designated to be rewilded (Light 2008).

Given these practical and conceptual problems, in this study we explore how rewilding projects today explicitly or implicitly compromise on different aspects in their conservation practice to reach an improved ecological state and biodiversity for nature. By compromise is meant a reciprocal promise to settle a conflict (Fumurescu 2013). It aims at creating a mutual understanding of a solution based on an oral contract between parties. This is particularly so, when the compromise entails still allowing humans to live in, use, or make an ostensive business out of rewilded nature. Indeed, this may in some ways be seen as paradoxical to the premises championed by rewilding enthusiasts which are about valuing nature for its own sake, phasing out human involvement and making amends to ecosystems for past harms done unto them through e.g. industry and development (Hobbs & Cramer 2008). In particular, making a liveable business out of rewilding entails reconciling multiple and typically competing visions for what the wild landscape is supposed to look like on an aesthetic level.

In what follows, we engage with this problem and with the practical and conceptual compromises of rewilding by exploring a case study region: rewilding in the context of Swedish Lapland. Using a framework of environmental aesthetics, we examine rewilding as a way to explore the sublime wilderness of nature while making it compatible with the practical, economic and cultural realities facing this kind of conservation practice. Ultimately, we explores how rewilding could be a way to reconcile humans with nature in post-modern society, but this reconciliation does not come without compromises inasmuch as reconciliation means different things to wildlife managers and local people. In addition to this, not all people would argue they are in need of nature reconciliation to begin with. A potentially offensive notion, they interpret this as a construct mainly aimed at urban residents who have lost ties with the countryside for several generations (von Essen & Allen 2017).

The research adds an empirical and qualitative investigative dimension to the field of restoration ecology, imparting insight to rewilding practitioners seeking to implement these projects in lands designated as 'marginal', but not necessarily abandoned. Finally, we propose recommendations, through the identification of the compromises of rewilding, on how to couple conservation of nature with economic and social development to provide nature reconciliation. Our research questions are as follows:

- What are the compromises of Rewilding a landscape such as Swedish Lapland?
- What are the implications of these compromises for the aesthetics of rewilding?

In what follows, this study will first explore the different meanings of rewilding and previous examples of rewilding practices. After this, a brief method section presents the empirical field study in Lapland, including interviews with managers and local partners. In the context of environmental aesthetics, the case study of Rewilding Lapland will be analysed through a thematic analysis of qualitative interviews to identify compromises of rewilding in the present case study.

2. Background

2.1 Rewilding in Theory

Soulé, to whom rewilding is generally credited together with Noss, has defined rewilding as restoration projects that have the following characteristics: "*large, strictly protected, core reserves (the wild), connectivity, keystone species*" (Soulé & Noss 2014). Keystone species can either be carnivores or engineer species that modify the landscapes, such as megaherbivores – a more common direction in Europe (Vera 2000).

Another aspect of rewilding that is particularly relevant to our study is the wilderness. A common

critique is that rewilding is "fake nature" pretending to bring back wilderness, and posing *some ethical issues since it is human-made*,

> *"Just as the aesthetic value of forged artwork, even if seemingly indistinguishable from the original, is radically lower due to lack of authenticity, so restored nature has radically lower ecological value due to lack of naturalness"*
>
> (Cohen 2014, p. 167).

Wilderness, to most nature managers, used to be perceived as nature that had to be tamed because it was unfit for human activities. It was linked to unexplored territories and untamed wildland that not yet, had been exploited or colonised by humans (Hall 2014). Wilderness has progressively started to be associated with nature conservation as an element that has to be protected, even enhanced or brought back, following industrialisation, urbanisation and development by humans in modernity. Protection and restoration of wilderness is linked both with ecological aspects but also aesthetics (Ceaușu et al. 2015b).

Aestheticism is contingent on someone valuing the result, like an audience admiring a work of art, in imparting value to it. The aesthetics of the wilderness is thus intrinsically linked to humans, and the emotions that we associate with experiences in or of nature (Sandler & Cafaro 2005). Ecocentric or deep ecology theories would ascribe intrinsic value to nature's beauty independent of human preferences but in the current paradigm, we suggest aesthetics in nature remains highly tied to our appreciation of it. According to Monbiot (2013), the modern human has disrupted his links with nature and lives in some artificial landscapes shaped by agriculture practices (now becoming post-agricultural), and rewilding could be an answer to reconnect with our lost ties to nature and the wilderness. At least, this is how rewilding frequently markets itself. Indeed, the relevance of rewilding as means of reconciling with nature is manifest in ideas such as the nature-deficit disorder, the extinction of experience and ecological boredom on the part of increasingly urban, alienated humans (Dickinson 2013, Fletcher 2016). Loss of regular contact with nature can create change in well-being and health, emotions, attitudes and behaviour towards nature (Soga & Gaston 2016). Rewilding then becomes a way for urbanised humans in particular, but also society as a whole, to reconcile with a lost paradise through the experience of a restored nature. An environmental aesthetic argument for rewilding hence departs somewhat from the lofty rhetoric around unleashing a self-willed nature for its own benefit, championed by many rewilding scholars. Instead, more instrumental takes on rewilding consider it as an enterprise that serves humans and delivers them nature reconciliation.

Rewilding projects are subject to different discourses. They can aim at restoring a lost nature; reconnecting humans with wilderness; or optimising abandoned farmland to deliver ecosystem services (Pereira & Navarro 2015). In some cases human perceptions of how wilderness looks can be different from the achieved results of rewilding, insofar as these outcomes are beginning to appear in ecosystems (Hall 2014). Especially when animals are used in rewilding projects, to serve as ecosystem engineers delivering a suite of ecosystem services, the open-endedness and relative unpredictability of such experiments means that the projects may not necessarily produce the desired outcome in the view of managers'. This, in turn, can impact upon ethical or animal welfare issues where the wildlife is culled, removed, relocated or otherwise interfered with to 'correct' the course of rewilding (Jamieson 2008, Von Essen & Allen 2016a). Below, then, we briefly review rewilding practice.

2.2 Rewilding in Practice

Major rewilding projects that have been undertaken in the past decades illustrate the different applications in practice of the concept of rewilding. In Europe rewilding has first been put in practice by Dutch conservationist Franz Vera (2000) with the Oostvaardersplassen project (Lorimer & Clemens 2013). In Europe, the network Rewilding Europe has been conducting several projects in different European countries partnering with national or local conservation organisations as well as with local businesses (Pellis & de Jong 2016). It has coined its definition of rewilding as following:

> *"Rewilding ensures natural processes and wild species to play a much more prominent role in the land- and seascapes, meaning that after initial support, nature is allowed to take more care of itself. Rewilding helps landscapes become wilder, whilst*

also providing opportunities for modern society to reconnect with such wilder places for the benefit of all life"

(Rewilding Europe, 2017).

Importantly, it presents rewilding also as an opportunity to make a "business case for the wild" (Rewilding Europe, 2015b), and to spread rewilding as a new model for conservation. This aspect of the rewilding agenda of Rewilding Europe is especially important for several reasons. First, partnering with local entrepreneurs like wildlife watching activities or outdoors sports allows Rewilding Europe to offer an alternative to activities linked to the exploitation of resources, and that could be more linked to the aesthetic qualities of the areas they work with. Second, making a business out of a rewilding project is also a way to promote it to the broader public and to engage a breath of stakeholders: indigenous communities, consultants, NGOs, ecotourism businesses and visitors.

Regarding landscape change, rewilding can raise issues when there is a fear that rewilding could cause the loss of cultural value of landscapes, and a feeling of estrangement from a new nature (Drenthen 2009), given many rural people associate the countryside with cultivated pastoral landscapes and not necessarily with wilderness. As Miller (2006) explains it, and as we will return to under environmental aesthetics, people tend to take as a baseline for what an ideal state of restoration their childhood reference, which refers, in most places in the Western World to a landscape shaped by agriculture or production forestry (Storie & Bell 2017, von Essen & Allen 2017). Above all, it denotes an 'open' pastoral landscape which may run counter to the dense primeval forest approach of prominent rewilding streams, some of which expressly seek to restore the lost 'Serengeti of Europe' (Taylor 2005)

3. The Lapland Region as a Case Study

In this study, rewilding will be examined in a Swedish context, especially the organisation Rewilding Europe applies the concept and practice of rewilding in different sites in Europe. Rewilding Lapland presents a compelling case study for compromises for rewilding in practice inasmuch as it is in its early stages. It is particularly interesting to explore the compromises necessary to implement rewilding in a region with multiple stakeholders and extremely different interests at stake. The local community is an indigenous population of semi-nomadic pastoralists who have a particular relationship with both the landscape and how it should look like, and with the wildlife in it. It contrasts with traditional pastoral landscapes that are perceived as more tame and with less wildlife.

Importantly, like other indigenous people (see Loo 2017), the Sami have a complex relationship with the state telling them how nature and conservation should look.

The area that Rewilding Lapland is planning to work with is situated in the North of Sweden, covering the Laponia region and slightly past the Norwegian border. It has a core area of more than 3 million hectares but populated only by 1000 people permanently. The juxtaposition of different levels of protection makes it a particularly interesting region and creates a sharp contrast between the protected areas and the ones that are not and that are usually used for less or more intensive forestry activities. It includes the Laponia region, an important UNESCO World Heritage Site since recently co-managed by Sámi communities. (Green 2009). The new management model of the Laponia World Heritage area is described as a milestone in the struggle of the Sámi community to gain political influence and land rights (Reimerson 2016)

Lapland has been populated by the Sámi for several thousand years and reindeer herding is an essential component of their culture. The Sámi immemorial rights give them the possibility to let their reindeers graze in all of the Laponia area. (Nilsson Dahlström 2009). Conflicts arise since reindeer herding is possible both on privately owned land and on state-owned land, the right of reindeer herding is independent from any contract with the property owner (Torp 2013). Conflicts are also especially aggravated between the actors of forestry sector and the Sámi reindeer herders (Widmark 2006). It is important to note that Sámi people are a minority population in Sweden as they are in the other countries where they traditionally live (Norway, Finland and Russia). The Sàmi right to land is also reserved for the reindeer herding community while non-reindeer herding Sàmi who are a majority of the Sàmi, do

not have any specific land rights (Reimerson 2016).

The specificity of the area studied due to its high cultural value makes the aesthetic dimension of nature and landscapes particularly important: it is a battleground for nature conservation, cultural human rights, alternative energy development and tourism. A battle that inevitably involves compromises across competing aesthetics. Therefore, it is relevant to explore the Rewilding Lapland case study through environmental aesthetics and to see how it relates to the value of nature and to how people can reconnect to nature through rewilding.

4. Theoretical Framework: Environmental Aesthetics

4.1 Environmental Aesthetics: definition

A central element in the concept of rewilding is the aesthetic aspect (Prior & Brady, 2017); the beauty and enchantment it brings to the world as Brady explains. But rewilding, by having as a principle to let nature be, may produce a result that is not necessarily aesthetically palatable to everyone's standards. The use of animals as agents for transformation and the relative open-endedness and unpredictability of ecosystemic interactions contribute to an uncertain outcome of rewilding projects both in the 'success' dimension (in terms of achieving autonomy without human help) and in the aesthetic dimension in terms of producing a landscape that satisfies various preconceived aesthetic standards for what wildness is supposed to look like (Jepson 2016, Svenning 2016, Oliveira-Santos & Fernandez 2010). Differentiating wilderness and wildness is important in this study because Rewilding Europe proposes to bring back some kind of wilderness to Europe, while it is actually a state of wildness that it draws on in this specific context. Where wilderness invokes an area that is devoid of human presence, wildness can be defined as

> *"the autonomy of the more-than-human world where events such as animals moving about, plants growing, and rocks falling occur largely because of their own internal self-expression"*
>
> (Woods, 2005)

In this sense, wilderness and wildness differs not in kind but in degree.

The problematization of such dimensions of wildness and wilderness can be elucidated in the ideas of environmental aesthetics. The latter stems from modern Western philosophy developed throughout the 18th century and the Enlightenment period. Kant notably developed the idea that the beauty of nature surpasses art in all its aspects and requires disinterested delight to appreciate the aesthetics of nature without having any interests linked to it. This idea is even more significant when it comes to the appreciation of the sublime. According to Kant, the sublime can inspire fear and dread as well as admiration of how mighty nature is. The beautiful, contrary to the sublime applies in the case of nature to the more tamed, human-shaped landscape (Kant,2007).

Furthermore, the classical conceptualisation of the aesthetics of nature endorsed by Kant in the 18th century gave way to different concepts of nature aesthetics. If environmental aesthetics have different interpretations, we will focus on two different views on the appreciation of nature. First, there is the cognitivist approach to environmental aesthetics represented amongst others by Allen Carlson (Carlson 2010) that links environmental aesthetics and scientific knowledge where all wild nature is essentially beautiful. This approach can be extended to knowledge from indigenous traditions and folklore, and that it can be a guide to appreciating landscapes' histories and specificities (Saito 1998). In this sense, valuing a work of art is enriched by knowing about the author, his or her life, motivations and inspirations behind the painting. This is important in the light of the current study, where landscapes shaped by the Sámi people give a strong identity to the area. Second, there is the non-cognitivist approach that focuses on the emotions linked to the appreciation of nature, for example the one of Emily Brady (Brady and Prior 2017). She considers that aesthetics appreciation draws upon perceptual and imaginative capacities. It has in common with a Kantian theory in so much that it includes a certain notion of disinterestedness in the appreciation of natural objects (Brady 2003).

For the purposes of the present research, then, it is interesting to consider what aesthetic values are present, to what extent they are recognised or

internalised by the nature managers of the Rewilding project, and how they inform the practice of rewilding on the ground, as in Swedish Lapland. As noted, aesthetics for nature have been found to follow a logic of 'generational amnesia' (Miller 2006) in which humans tend to use the environment they grew up in as the baseline for conservation and optimal aesthetics for 'health'. At other times, aesthetic preferences vary on cultural levels (Howley 2011) for example, living environment can affect aesthetic landscape preferences as well as education level (Yu, 1995). Aesthetics may be said to become inextricably bound with tradition and naturalness for how things are supposed to be or look. This means that a significant portion of generational amnesia involves atavism and the invention of tradition (Hobsbawm & Ranger 1992): that is, people's aesthetics change, undergo 'revivals' in light of threats to landscapes or land use they once cherished or otherwise become activated in new constellations of what the landscape is supposed to look like today. Because empirical evidence suggests that people unreflexively invent and re-activate old aesthetics, this dimension also raises the ethical question of recreating an artificial or neo-constructed nature for humans to enjoy on the basis of nostalgia and reconciliation with past states. Thus different visions and interests linked to nature co-exists in rewilding projects, which can create tension or require compromises between them and to the premise of rewilding itself, which we will look at in this paper.

5.Methods

5.1 Case Study

The case study method (Yin 2014) was employed to explore the compromises necessary in the premises of Rewilding in the context of Swedish Lapland, and how these affect the aesthetics and the perception of nature. A field study to Lapland was conducted in April 2017 including 7 semi-structured interviews with key actors from different backgrounds working in or partnering with Rewilding Lapland. An overview of the seven respondents and their affiliations is provided in Table 1. The Rewilding Lapland team leader was used as a contact person for purposive snowball sampling to find other respondents. This was a limitation inasmuch as he may have refrained from recommending contrary persons to the project, but it was also a necessity to navigate the region. The limited number of people as yet associated with the just-beginning Rewilding Lapland also meant that there were only a few people that had any direct knowledge, attitudes or experience of the project and hence were valuable to interview.

The interviews were done either in person, over the phone or using video conference, they were conducted in English and Swedish. The interview questions were structured to get an understanding of the relation of the interviewee with Rewilding Lapland as well as to get an idea of their worldviews concerning nature, animals and the wilderness. Themes were abstracted from an inductive analysis of the results and allowed to identify recurring patterns.

The results of the interviews were open-coded in a thematic analysis in several iterations (Braun & Clarke, 2006); a preliminary categorization of themes was subsequently used to code responses into 'compromises' in the discussion to respond to our research question.

Table 1: List of Interviews

Interview N°	Role in Relation to Rewilding Lapland
(1)	Interim Executive Director of Rewilding Lapland Foundation
(2)	Project Manager at Dalvvadis Ek (Economic association representing reindeer activities in Jokkmokk), Rewilding Lapland partner
(3)	Chairman at Degerselsbygdens Samfällighetsförening, Project manager for river restoration of Abramsån (Tributary of the Råne River)
(4)	Rewilding Lapland Team leader
(5)	Manager at Sörbyn Tourism, Rewilding Lapland partner
(6)	Piteälv Ekonomisk Förening, project manager for Pite River restoration project
(7)	Director of the Sámi Museum of Jokkmokk, Ájtte

6. Results

Throughout our interviews and informal talks with actors of Rewilding Lapland recurring themes have been identified.

6.1 Lapland Cultural Landscape before Wilderness

The first observation made during our research in Swedish Lapland is that this rewilding area differs significantly from other areas where Rewilding Europe has overseen or initiated projects. There is a dichotomy between the perceptionan external visitor has of the landscape and how indigenous Sámi perceive it. As a respondent from the association representing Sámi reindeer herders says,

> *"I have difficulty using the concept of "wild nature" here in Norrbotten. This so-called wilderness is a cultural landscape that has been used by the Sámi for millennia".* (R2).

This important element that the area is a millennial Sámi territory implies Rewilding Lapland has to come in particularly cautiously to achieve projects in harmony with the activities that Sámi are living on. A word that came up during the interviews with the project manager was "humble" (R1) while describing the importance of showing humility in conducting projects with Rewilding Lapland while respecting Sámi livelihood and customs. "*I think it's wrong to come in from the outside and dictate and tell people you shouldn't do this and that.*" (R1)

6.2 Reindeer territory

Reindeer herding is an extremely important component of Sámi culture and livelihood. Rewilding Lapland is aware of the significance of reindeer in the area, and that the Sámi have a "special situation" regarding the use of landscapes (R1). Reindeer herding depends largely on natural systems and especially old growth forest. One of the aspects that Rewilding Lapland would like to focus on is the shared interests in conserving old growth forest that are diminishing with the intensive forestry activities (R1). Conserving as much old growth forest as possible, where reindeers can eat the hanging lichen (hänglav) off trees is key to a sustainable reindeer husbandry where reindeers do not need supplementary feeding especially in winter (R2). The interviews showed that cooperation and shared interests were crucial for the successful activities of Rewilding Lapland, and that there was a potential for tension, especially linked to how predators are considered within the parameters of the project:

> *"It's a huge challenge, it puts a lot of demands on the people who work with it so they really use the right methods to get people together."* (R5)

6.3 Predators as a Potential Source of Tension

Even if many Sámi have other activities, reindeer herding is still deeply anchored in their culture, subsistence and livelihood. Since reindeer roam freely, it is crucial for Sámi herders to have predator numbers under control or to have sufficient compensation for the loss of animals since predators can cause considerable damage (R2).

Reintroducing predators is not on the agenda of Rewilding Lapland

> *"…we are not introducing wolves up here. If you are going into the Rewilding Europe website you can get an idea that we are doing the same thing as they are doing in Holland[1] here but there is a big difference in what rewilding means depending on what land we are talking about"* (R4).

Rewilding Lapland is still attempting to create a better acceptance for predators. They occupy a central role in regulating ecosystems:

> *"If you want to maintain some of those semi-open systems which we had before man started to farm nature in Europe, then you need to bring back some wildlife that keeps those systems half open. But then in a way you also need some carnivores to regulate the systems and if people don't accept that you probably need some kind of hunting or so."* (R1).'

In interviews with Sami reindeer herders, the carnivores were the only aspect they were reluctant about from the proposed Rewilding Lapland initiatives (2). However, solutions suggested are to combine maintaining viable levels of predators alongside of sustainable Sámi livelihoods, as for example developing more wildlife watching operations for Sámi or using bait to keep predators away from calving areas. (R4). All interviewees thought existing compensation mechanisms for the Sámi were insufficient,

"that system is not tuned in to today's prices so we need to work really hard with the government to increase the fees for those calves that get killed by the predators" (R4).

Thus we have identified predators as a potential point of tension in the premises of rewilding in this case that has required so far a considerable amount of work building relationships and trust with Sámi to get the project off the ground.

6.4 Aesthetics, Nature and Animals

One of the reasons that Rewilding Lapland ascribes importance of top predators, outside of the ecological benefits they bring, is for what they bring aesthetically to the area. As Lorimer argues, aesthetic charisma the more-than-human world refers to its potential to trigger particular emotions in human encounters. He distinguishes "cuddly charisma" of creatures resembling baby humans from the "feral charisma" of animals that "perform wildness" (Lorimer, 2007). Wildlife, and in particular large predators, as landscape engineers and as charismatic creatures impart aesthetic value to the landscape to the public: As Rewilding Lapland's team leader observes the pragmatic function of having predators, "*if we don't have those fantastic animals, predators as well as other animals then no one will come here. So that's a travel reason for many people to come up here.*" (R4).

In this case, rewilding definitely had a romantic dimension of reconnecting to nature, the wild and the animals which echoes Emily Brady's approach to environmental aesthetics with the emotional link to nature it includes, as in the team leader's concession:

"it's not much about rewilding nature as such, although you need to do some rewilding, but it's more to rewild people's concept" (R1).

It was also pointed out by interviewees that people nowadays were living further away from nature and that there was a general tendency toward urbanisation, where they had no direct contact with nature anymore. (R7) This illustrated a longing for a lost connection with nature from urbanized people, an atavistic will to reconnect humans with their environment.

In a more cognitivist approach of the environmental aesthetic framework, in this case rewilding could be a way to reconnect people with nature in a way so that they would gain more knowledge on nature and therefore have more will to protect it:

"efforts can be made to restore relationships between man and nature in order to work sustainably and in the long term and to create respect for nature and not just mining, chopping down and consuming important habitats for animals and humans" (R2).

On this argument, it is connection that galvanizes support and not 'empty beauty' devoid of history.

6.5 Commodification of Nature, Tourism

Another reason that aesthetics are central in Rewilding Lapland is that tourism is a pillar for the development of their activities such as wildlife watching or outdoor activities. Indeed, tourism may be, in part, an enterprise in which aesthetics are a commodity. These activities rely on experiences where people get to be surrounded by nature and experience the wildness, for example by observing wild animals. These activities are largely dependent on commodification of nature to an urban public:

"It (aesthetics) is super important because the tourism industry is one of the biggest industries here, if we are counting how many people are employed and how much money they are making. It's bigger than most traditional big industries up here." (R4).

This tourism component fits into a more general idea of commodification of nature and the services it has to offer. Nature becomes a "product" for visitors to enjoy, a word that was in fact used by a managing partner:

"all the products are here, we do not need to do anything. In fact, we only need to take people out and show them, let them experience. Thus, the product, nature, with all that it has, already exists so we just need to be very careful when using it" (R5).

Making a business out of nature is also a way to make the area more dynamic and to reverse the current trend of people moving to larger cities. As Rewilding Lapland's team leader explained:

"if we can create green economy, such as catch and release fishing, nature guiding tours, canoeing, water sports such as river rafting and that kind of stuff that will be something that can make the area better for different types of uses, both environmental and business wise as well. We can make people stay up here in villages. Such an enterprise", he argues, means "they don't need to move down to the big towns and coastal towns" (R4).

6.5.2 Rewilding vs. Business as Usual

Rewilding Lapland's ambition is therefore to create a win-win situation with nature restoration coupled with local nature entrepreneurship and value creation. As the reindeer herding representative conceded, the coupling

"…is an effective way to protect our nature in the long term while providing local people with opportunities for employment. It makes it economically and ecologically worthwhile". (R3).

This ambition of coupling entrepreneurship with nature conservation was seen by our interviewees as both an opportunity and a challenge. It appeared to them that rewilding could offer a promising and competitive alternative to the traditional industries in the area. Whether it is forestry or hydropower activities, interviewees agreed that those activities were often harmful to the environment and unsustainable, especially when talking about intensive forestry and clear-cutting of trees.

"I was a bit shocked to see how rough and unecological the forestry is in the North, (…) below a certain line, the cultivation line, the forestry has more or less free hands". (R1).

6.5.3 Uncertainty and Funding

One of the challenges that was raised with rewilding activities, is that, like restoring in general, the time frame and the outcome can be uncertain and the results of restoration projects can take a long time and not appear as a good investment when it comes to nature. Our interviewees stressed that ecological processes are slow and that the visible result of the restoration, the "real" impact that people will actually witness, can take several years.

7. Discussion

7.1 The Virtues of Compromise

From the interview findings, the study has gleaned a series of compromises that are necessary for rewilding to be possible and compatible with the context of Swedish Lapland. This following section aims at showing the basic features and relevance of compromises in nature conservation and more specifically in Rewilding. In this sense, we explore the justification of compromising for reaching common agreement in nature conservation.

Returning to the concept of compromise aforementioned, compromising designates reciprocal promise to settle a conflict; it originally designated a verbal contract between two parties aiming at avoiding a trial and settling a dispute thanks to a verbal understanding (Fumurescu 2013). In the case of rewilding Lapland, the compromise may pertain more to giving up some integrity around project goals for practical implementation that satisfies local interests around cultural preservation, livelihood and ecotourism. Compromises in nature conservation in general have been described as a way to find the "least worst" option to conserve nature while satisfying as many stakeholders as possible (MacDonald & Willis 2013).

7.2 Collision in Aesthetics and the Experience of Wilderness/ Cultural Landscapes

When talking to different actors, it appeared that the area of Lapland was different to any previous rewilding projects since it is so extensive, and not densely populated. At the same time, we have witnessed that there is a romantic idea of getting back to nature, both internalised by the rewilding initiative's leaders and something which is attributed to the public at large, and that is one of the reasons for tourists to visit. Indeed, this collective imagination is omnipresent and is one of the elements on which Rewilding Lapland bases its work. The concept calls out to an imaginary wilderness coupled with nostalgia and evokes reconnecting with nature among those alienated from it, geographically, cognitively or emotionally. As contended, people tend to take for a baseline an ideal of nature as they remember creating a shifting baseline for what the restoration work should aim for (Miller 2006). In this case, the restoration projects of rivers use for baseline

the ecological state of the 19th century, before the area was intensively used for extraction of natural resources. It appears that even if the area is a place where Sámi live, their livelihood is close to nature and contrasts sharply with the activities of forestry and hydropower. Thus in this case the wilderness of the area is coupled with traditional livelihoods that are put in opposition to large companies' activities. Therefore, one of the pillars of Rewilding Lapland is to encourage Sámi to be as involved as possible.

From our results we have observed that there were differences in perception of the area in terms of aesthetics and landscape. While to an undiscerning eye the area is full of wildness, it is doubtless an inhabited area for the Sámi, both historically and in the present. Even if large parts of the area are used for natural resources such as forestry, there is still quite extended areas of old growth forest with rich biodiversity. Thus the first compromise we have identified from our study lies in the difference of aesthetic experiences of landscapes.

The activities that Rewilding Lapland focus on are linked to the experience of the wilderness through outdoor activities, and wildlife watching, while Sámi communities have a different utilitarian view of the landscapes, with a focus on reindeer herding. In our case, in reference to our theoretical framework, we draw on Allen Carlson in arguing that an understanding of ecological processes is necessary to apprehend the beauty of landscape, but that in our case it should include local ecological knowledge of the area detained by the Sámi people. In his Natural Environmental Model, Carlson (2010) argues that the appreciation of the aesthetics of natural elements come from its relationship with the environment and our knowledge of the processes and the scientific characteristics of it. This echoes Saito's theory on indigenous knowledge as part of the necessary appreciation of aesthetics (Saito 1998). Indeed, the case studied revealed that Lapland landscapes are shaped by the millennial Sámi presence, and that the landscapes acquire aesthetic value principally from understanding of Sámi history and connection with these ecosystems. As Roué suggests through her studies of Sámi landscapes:

> *"Instead of understanding landscape as a virgin space that is objective rather than subjective, we must grasp its significance as a place, somebody's place, a place that can only be understood through that person's own experiences and memory."* (Roué, 2012, p. 45).

On this argument, relationship bestows beauty and appreciation.

Encouraging Sámi communities to invest in tourism operation may appear one way to couple the wilderness with the deep cultural meaning of the area, and to do wilderness tourism on the terms of the Sámi, since from our interviews we took away that Sámi communities were rather against intensive tourism. Indeed 'deep cultural meaning' may be difficult to commodify as a product and market to tourists from cities. Going back to Saito's positive aesthetics and indigenous knowledge it seems that this gap between the Sámi vision of the area and the one that can be perceived by an external visitor can be bridged through the meaningful involvement of Sámi community in the project. This resonates with Saito's vision of positive aesthetics where indigenous knowledge and perception brings value to the aesthetics of a place through historical and cultural understanding (Saito 1998).

This is not to say the historicity aspect is totally ignored by rewilding today. Especially, when managers appeal to ecological baselines of yesteryear and ancient species compositions as part of a collective ecological history (Hilderbrand, Watts, & Randle, 2005), but there is always a risk of wanting to create a blank slate on which nature can be unleashed. It is an element of rewilding that abandons history to only focus on the future (Keulartz 2016). There could potentially be an attachment from the local population to the landscapes as they are in reference to a "rurality frame" that could create reluctance to restoration projects with a historical-ecological baseline (Buijs 2009). Thus there could be an attachment for the landscapes as they are presently and reluctance for restoration projects that could change the landscapes that local people have developed an attachment to.

Promisingly, Rewilding Lapland appeared at least in rhetoric to focus its strategy on what interests Sámi communities and the initiative have in common. Those common goals include the preservation of old growth forest and natural systems of forest, which present them with a common enemy: forestry. The

reindeers depend completely on the state of the ground for feeding, and clear cutting forestry activities affect considerably the state of the soils (Roturier & Roué 2009).

The as yet seemingly humble attitude displayed by Rewilding Lapland consisting of a bottom-up approach of partnering with local projects and involving as much as possible Sámi communities seems to be an opportunity to achieve this compromise. However, it can become challenging when some more "traditional" or fundamentalist elements of rewilding collide with Sámi cultural interests and livelihoods. The main element we identified was the predator presence: a legacy of the 'cores, carnivores and corridors' approach that characterised early rewilding and restoration ecology (Buck 2014).

7.3 Compromise 2: Reindeer not Wolf

As results previously showed, predators embody an actual and potential element of tension between Rewilding Lapland and the Sámi community. Rewilding Lapland is conscious of the disruption caused by predators on reindeer herding, when conditions are already challenging because of intense forestry activities and degraded environment. Predator presence represents a major issue amongst pastoralist because of the important loss they cause in the reindeer herds, especially amongst calves. (Sandström et al. 2009)

Insofar as rewilding relies, in the words of our respondents, on marketing 'fantastic' animals to the public to get off the ground, predators clearly have a role to play on a purely aesthetic level (de Pinho et al. 2014). Perhaps they are not the only species that can perform this role. It seems that in our case the charismatic animal could be the reindeer instead of the predator – with some caveats. By the fact that they shape landscapes and influence their surroundings by foraging, eating, and trampling on the ground, reindeers could be considered a keystone species – in an alternative appreciation. There are different definitions of what a keystone species is exactly, but it mostly refers to a species that stands out from the majority of other species in their effects on ecosystems (Mills, Soulé, & Doak 1993), or "one whose impact is large, and disproportionately large relative to its abundance" (Power, Tilman, Estes, Menge, Bond, & Scott Mils,1996, p. 609). This makes reindeer as such a keystone species, not a foregone conclusion.

This compromise in rewilding practice may be a way to gain public support and community approval while still benefiting from ecosystem services provided by a keystone species. Considering the reindeer as a keystone species could be legitimate as a baseline for rewilding since reindeer and reindeer herders have been living together since the end of the last Ice Age, when the inland ice melted humans arrived probably at the same time as wild reindeer and started to hunt and later domesticate them (Suominen & Olofsson 2000). It has historicity, anarcho-primitivist appeal (Buck 2014) and is at least partly in line with the more grazing-friendly streams of Rewilding in the Netherlands.

There are clear obstacles to and compromises contained in marketing the reindeer in such a way. For one, while reindeer has a positive impact on landscapes if it remains extensive, since intensive reindeer grazing can cause depletion of certain plants, most specifically reindeer lichen (Olofsson, Rautiainen, Stark, & Oksanen 2001). Second, respondents as well as literature agree on the fact that there is to a certain extent, a conflict between some powerful economic actors and reindeer husbandry practices (Widmark 2006). The diverging interests when it comes to the use of forest between Sámi herders and forestry companies have been discussed in consultations for many years, but it appears that the outcome is usually favouring forestry companies over reindeer herders while settling issues. Thus it seems that the current trend tends to show that landscapes are becoming less favourable for reindeer husbandry (Kivinen, Berg, Moen, Östlund, & Olofsson 2012). Using reindeer as a keystone species could put more value on the ecosystem services the reindeers are providing and could create an incentive to keep as much as possible the right conditions for reindeer herding, but clearly faces challenges in going forward.

Third, in designating the reindeer as a keystone species in the Rewilding project in the area, one faces the inevitable wild vs. domestic tension. Rewilding as Rewilding Lapland envisions it emphasizes wild animals. However, reindeer are semi domesticated and have lost some of their wildness since they depend on humans for their survival (complementary feeding, breeding grounds, care, etc.). Yet it is clear

that reindeer do not occupy the same domestic niche as for example cows, nor do they incur the same resentment of rewilding scholars as do sheep (see, Monbiot 2013) and they may be sufficiently "exotic" to appease rewilding managers. As Corlett (2016) notes of rewilding practitioners, however, these "*tend to be more conservative than the writers of academic articles*" (p. 460). Additionally, one may seriously question the signifier 'wild' as it figures in much rewilding practice. Indeed, researchers routinely charge the charismatic and allegedly 'wild' keystone species, like the wolf, for being de facto domesticated and managed to a great extent today (Beach, 2004 ; von Essen & Allen 2016b). It has the appearance and disposition of wildness, but it is no longer constitutively wild (Palmer 2010)

The use of reindeer as keystone species may additionally present an attractive way of reconciling culture and nature in the area. Rather than surgically 'extracting' culture from a landscape, This approach will inject culture into rewilding (Hall 2014).This may strike fundamentalists as idiosyncratic or too great a compromise. At the same time, in Rewilding Lapland's strategic objective of attracting ecotourism and nature-related entrepreneurs, making a keystone animal out of reindeer seems a relevant and minimally respectful compromise to make. Rewilding Lapland puts significant emphasis on communications of their partner projects, both for potential investors and for the public. Valorising the reindeer can be a way to cast a light on the animal that is at the heart of Sámi livelihood and potentially represent an incentive for tourists to visit the area

On the other hand, it is exceedingly important to explore solutions and alternatives considering the presence of predators in the area since they are valuable both as ecosystem engineers and as charismatic animals in a flagship capacity. Encouraging more Sámi people to have wildlife watching operations for example is a proposition that seems like a step in the right direction. This relates to the last compromise we have identified in our case study, where we look at the compromises of commodifying nature.

7.4 Compromise 3: Conservation with Business

The last compromise that we have identified in order to make rewilding possible in our case is to combine nature conservation with business opportunities. This compromise goes through finding a business model that is compatible with nature conservation.

There are several reasons as to why this compromise may be necessary in our case. First of all it seems that Rewilding Lapland does not have a choice but to try to offer an alternative to the existing businesses in Lapland, thereby competing on a market level. This alternative to traditional businesses of natural resources exploitation allows using the existing aesthetics of the nature and landscape to create economic value in modernity. But using market-based mechanisms in the field of conservation is not without its problems (Keulartz 2013, Ericsson & Hammer 2006). It can create a win-win situation where people thrive economically thanks to the protection of natural resources, but we can expect that unfortunately traditional industries like forestry and hydropower will always have more economic appeal in the short term. Indeed, the open-ended, unpredictable and long-term nature to rewilding initiatives make it profoundly difficult for the enterprise to compete economically with these developments, even if the ecosystem services framework is applied generously to convert nature goods into "natural capital".

Rewilding Lapland presents in its model a way to reconnect people with nature while being an economic development for the area. But as said earlier, nature in this case seems to fall under the sublime, unpredictable nature, which makes its commodification a complex process. Moreover the expectation for the aesthetics can vary depending on different stakeholders' perceptions. If one crucial ecosystem service of rewilding is in its delivery of aesthetic appreciation, well-being and nature reconciliation, it is difficult to adapt this service to the vagaries and nostalgia of different people with different ideal states in mind in diverse post-modern societies (see von Essen & Allen, 2019, this issue). On a broader level, commodification is difficult to reconcile with the reconciliatory goals of rewilding insofar as it "involves externalization of its qualities, separation of role of humans from the environment and the re-alignment of humans as consumers of a disconnected commodity." (Swales 2014, p. 65)

8. Conclusion

From our research it appears that rewilding may become an element of reconciliation between people and nature, and possibly also between Sámi people and their vision of landscapes.

It seems like the projects of Rewilding Lapland, like other rewilding projects before aspires not only to restore ecological functions but also to restore a lost connection between people and the environment they live in, especially the wilderness. The aesthetics of the rewilding projects in this case are central in the fact that they are a way to create or strengthen people's connection to nature by sparking amazement, awe, or curiosity. Emphasizing restoration through rewilding seems to also be a way to affirm humans as a part of nature rather than asserting dominance on anthropocentric landscapes. Restoration in this case seems to be more than restoring ecological functions of landscapes but more so of a "Restoration of Inner and Outer Landscapes" (Conn 2008) to look at it through a lens of eco-psychology, in which relation to natural landscapes are associated with contemplation, intuition and imagination. This framework fits into Emily Brady's vision on environmental aesthetics and emotions (Brady 2003) and makes us think that aesthetics are a crucial element in the process of reconciling people with nature and most specifically wilderness.

But an important element to take in consideration in exploring the possible reconciliation between people and their environment is the place of Sámi people and especially those involved with reindeer herding, because of their shared interest in protection of old-growth forest and natural forest systems. It is central to wonder whether nature reconciliation could be undermining a political or cultural reconciliation with the Sámi. To the Sami, nature reconciliation is not the kind of reconciliation that is needed but rather a political one following alienation from the state. The place given to Sámi communities in nature conservation has been questioned when it comes to the actual involvement of Sámi people and not solely the inclusion of their culture as part of heritage element (Reimerson 2016). Two elements are important in answering this question of a possible reconciliation undermining other types of reconciliation. It appeared that in this case rewilding is a rather bottom-up way, in form of a network rather than implemented in a top-down manner. Therefore in this case, nature reconciliation through rewilding seem to be a possible path to reconciliation and an alternative way of correcting moral wrongs in the history of relation with the Sámi. By compromising on crucial points of tension (predators) and putting Sámi knowledge at the heart of nature and landscape perception.

Further research would be relevant in exploring how nature as an entity can be included as a stakeholder in a compromise. For examples, scholars may explore alternatives to the classic dichotomy nature/culture, as Bruno Latour conceptualizes "Gaïa" (Latour 2015) designating nature not as a whole but as a multitude of heteroclite elements standing for their power to act. Following this, Latour's idea is to give a voice to nature by giving it direct representation in political instances. Linking that to the compromises of rewilding, it would be interesting to explore on what terms nature could be a stakeholder in the compromises of rewilding, and how this participation could make rewilding even more relevant in the practice of nature conservation.

Endnotes

1 The cultivation line is meant here to define the area where there is little agriculture in comparison to forestry activities due to the extremely short growing season. It refers here to thesub-arctic climate of Swedish Lapland.

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