Gatekeepers of Fulufjället National Park

– Nature Interpreters' Perspectives on Communication & Human-Nature Relationships

Rianne de Bakker

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Abstract

National parks are natural environments where humans and nature actively come together and shapes our understanding of and behavior in nature. The relationship between humans and protected nature however, can be complex and is influenced by different elements, one of which communication. In this thesis, we take the perspective of nature interpretation: a communication tool to foster the human-nature relationship, used by nature interpreters in national parks. The aim of this thesis is to understand the role of nature interpreters as gatekeepers of a Swedish national park – Fulufjället National Park - and to bring light to the experiences and challenges they encounter within their communicative situations. The theoretical foundations are based on the social construction of nature and symbolic interactionism. Qualitative semi-structured interviews and observations were used to gain knowledge and insight in the national park.

The findings offer an insight into the link between communication and human-nature relationship through nature interpretation from the perspective of nature interpreters. The interviewees experience positive associations when using active nature interpretation and the way it influences visitor's perspectives of the environment. However, the challenges of passive communication, limited feedback and minimal resources are difficult for them to manage and hinder their impact on visitors. Furthermore, the ways Fulufjället National Park is communicated can affect people's behavior to take unsustainable turns with the use of (social) technology. All in all, this thesis provides a multi-perspective view on communication in, about and with nature from its interpreters.

Keywords: nature interpretation, national park, Fulufjället, symbolic interactionism, social construction of nature, communication, human-nature relationship

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Abbreviations

CAB	County Administrative Board
FNP	Fulufjället National Park
IUCN	International Union for the Conservation of Nature
NAI	National Association for Interpretation
NI	Nature Interpretation
SCNI	Swedish Centre for Nature Interpretation
SEPA	Swedish Environmental Protection Agency

1 Introduction

1.1 Problem Formulation

There have always been tensions between humans and nature in the ways we coexist. One way in which these actively come together is in national parks. The relationship between humans and protected natural areas can be complex, as unsustainable behaviours that come with a growing tourist infrastructure are at odds with nature conservation efforts.

In national parks, nature is resolutely bounded by national park borders and negotiate a certain way of access for people. These ways of access are communicated by nature interpreters, who can be viewed as gatekeepers of these natural environments. I argue that nature interpreters in one Swedish National Park – Fulufjället National Park - feel they can influence visitors with the use of active communication, but are constrained by factors out of their control, such as limited feedback, money and time.

The global interest and demand in natural experiences and nature-based tourism is increasing. Sweden is no exception. More and more international tourists have discovered Swedish landscapes and even domestic nature-based tourism has grown over the past twenty years (Wall-Reinius & Bäck, 2011; Fredman & Margaryan, 2014). More people want to explore the "*last true wilderness of Europe*" (p. 318, Imboden, 2012). These wilderness areas are protected through the establishment of national parks and nature reserves. Currently, Sweden has 30 national parks and almost 4,000 nature reserves, ranging from the Arctic mountains in the north to the deciduous forests in the south (Sveriges Nationalparker, 2019). Over 2,5 million people visit the national parks annually, which puts pressure on natural environments due to overcrowding, waste, and loss of biodiversity, amongst others (SEPA, 2019). Nature-based tourism can also pose many challenges involving local, often indigenous, communities, natural resource management and infrastructure (Fredman & Tyrväinen, 2010).

The Swedish government is aware of these challenges, but at the same time sees nature-based tourism as a vital element in nature protection and tourist economy: "*nature tourism and nature conservation should be developed for their mutual benefit. Swedish nature in general, and protected areas in particular, comprise an asset with great potential for development*" (p. 5, Fredman, Friberg & Emmelin, 2006). Through visits to natural environments, people come to interact directly with these environments, and can positively influence the relationship between human beings and nature. The question rises if and where we draw the line between people and nature, as nature-based tourism puts the demands for growth at odds with the sustainability of the planet.

In the current climate situation, protecting valuable areas has become increasingly important, as they help maintaining ecosystems (Martin & Watson, 2016). When it comes to Swedish nature conservation, national parks have the aim to educate visitors about natural environments and the conservation efforts of these areas (Fredman et al., 2006). One strategy to achieve this is nature interpretation. Nature interpretation is a communicative tool to develop relationships between humans and nature, both through disseminating knowledge but also by experiencing nature in an active way (Swedish Centre for Nature Interpretation, 2017). Through communication within natural areas, whether direct communication between individuals and nature, or mediated through nature interpretation in the form of guided tours, information signs or nature museums, the relationship between humans and nature is actively fostered. Whilst there are many studies surrounding the experience of visitors and reception of interpretive messages, there is a need to address people working with communication within national parks, as they are in charge of creating and spreading messages regarding the natural environment (Derrien & Stokowski, 2017).

In the field of environmental communication, this study can be valuable addition to existing literature on both nature interpretation, as well as national parks, with the focus on the perspective of nature interpreters, as there has not been much academic research on this in Sweden (Caselunghe, 2018). Furthermore, researching the connection between nature and people through protected environments and nature-based experiences and representations is important for making sense of the conservation debate and the societal values regarding a healthy life, in which reconnecting to the natural environment is desirable and important. Personally, this thesis is relevant for me because it develops an understanding in an area I want to work in and gives me critical tools and perspectives to reflect and evaluate the way society influences wilderness and nature in terms of mediated experiences.

1.2   Research Aim & Questions

The aim of this thesis is to understand the role of nature interpreters as gatekeepers of Swedish national parks. Nature interpreters actively work with communication and education regarding the natural world, as they try to create and nurture the relationship between humans and nature (Ben-ari, 2000). Additionally, they are the ones operationalizing national parks through their communication to visitors. As a case for Swedish national parks, I have chosen Fulufjället National Park (hereafter FNP) as the location for this study. By focusing on this national park, I hope to bring light to the experiences and challenges nature interpreters encounter within their communicative situations.

It is important to realize, regarding the research questions, that I cannot talk with FNP directly, but I can talk with the actors representing the national park, which are those working with nature interpretation in the park itself and in the County Administrative Board.

The questions that this study will explore are the following:
- RQ 1: How does Fulufjället National Park communicate nature to its visitors?
- RQ 2: How does this communication construct the relationship between nature and human beings?

2 Literature Background

To understand the academic background of this study, it is important to explain these thematic ideas with the help of relevant literature. This in turn helps the interpretations of the results in later chapters of the study. The following themes will be discussed: the environment of national parks and nature interpretation.

2.1 The Environment of National Parks

2.1.1 The History of National Parks

The creation and concept of national parks came from the United States, where in 1872 the first national park, Yellowstone, was created for the public to enjoy (National Park Service, 2018). But the founding father of national parks is John Muir, whose efforts led to the creation of Yosemite National Park and served as foundation for following legislation on nature conservation and national parks in the country. Through the International Union for the Conservation of Nature (IUCN), national parks are described as: "*large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities*" (IUCN, 2019). This means that protecting biodiversity and eco-system processes go hand in hand with the encouragement of nature education and nature-based recreation. The national park model has been adopted around the world; more than 4000 national parks exist in the world with different values prescribed to the different landscape elements that make it worth protecting (Soon, 2012).

In 1909, Sweden became the first European country to establish national parks. According to the Swedish Environmental Protection Agency (SEPA), national parks are clusters of nature that used to be abundant in the whole of Sweden, which is the main reason for their protected status (SEPA, 2019). The purpose of preserving nature through establishing a national park is to protect "*a large contiguous area of a certain landscape in its natural state or essentially unchanged*" (p. 29, Swedish Government, 2000). The Swedish parliament takes the decision in creating new national parks, therefore these protected lands are state-owned. SEPA deals with planning and designing processes whereas the physical and practical management of the parks is done by the County Administrative Boards (CAB) of the region. Nature has played an important role in influencing the creation of modern Swedish society and the forming of the Swedish national identity, with the typically Swedish standards of allemansrätten (freedom to roam) and friluftsliv ("outdoor life") (Sandell, 2007).

2.1.2 Negotiating Space in National Parks

As can be seen from the different definitions and connotations that are connected to the term national park, preservation and accessibility go hand in hand. The idea is to preserve pristine nature for present and future generations, but also to make national parks inviting for tourism and outdoor activities. These instrumental and intrinsic values affect each other and brings up the reflection whether national parks are created for people or for nature. The inherent connotation of national parks is that nature needs management to preserve natural environments. This comes directly from human action – who decides what is worth protecting, who is involved in this protection and how is it done (Fauchald, Gulbrandsen & Zachrisson, 2014).

Nature-based tourism in national parks increases as a result of the conservation of the area (Lundmark & Stjernström, 2009). This means as more people visit a protected area, the value of that area and the conservation efforts go up. This shines a positive light on environmental protection in general. However, this should not be taken too lightly, as more factors are

involved. The increase in demand can cause commodification of nature and nature-based tourism, in which cultural and natural features (including adventures and experiences) are more and more being sold as a product ready to be consumed (Imboden, 2012). As tourism is a commercial endeavour, nature-based tourism can reduce the relation to natural places (Lundmark & Müller, 2010). However, at the same time, there is a positive connection between environmental concern and outdoor activities, meaning that those who enjoy being out in natural environments, are not keen on the structural, human-made changes within them (Wolf-Watz, Sandell & Fredman, 2011). Dahlberg, Rodge & Sandell (2010) mention the perception of the separation between humans and nature with the creation and expansion of natural areas. Nature increasingly becomes a social commodity which can be transformed at will. This commodification is aided by socially constructed concepts like 'national park'. In a sense, these environments are managed to look natural, though often staged through the man-made infrastructures within the park, such as boardwalks and trails (King & Stewart, 1996).

The concept of a national park leads both the expectation of visitors as well as the interpretation of natural environments (Schmitt, 2015). National parks are inherently a human product and a product of communication, as it defines the perception and relationship we have with each other and with the natural world (Cox & Pezzullo, 2016). Vogel (1996) strengthens that way of thinking by describing that what humans consider as nature is an outcome of our actions as human beings. It is based on language, as we talk about nature in certain ways, which socially (re)produces the constructions of nature. The dynamic connection between humans and nature is and always has been essential, especially for human society as humans are dependent on the natural world, mainly in terms of resources (Vogel, 1996). This separation can be seen in language: culture is generally considered the opposite of nature. Within national parks, this is seen as the need to create a natural environment outside cultured society (Mels, 1999). This social construction of nature will be expanded in the next chapter as a theoretical framework.

2.2 The Interpretation of Nature Interpretation

The concept of nature interpretation (hereafter NI) is quite new and can be defined in many ways. First and foremost, it is part of heritage interpretation, and can be referred to as environmental interpretation or environmental education. It is generally described as a communicative method to "*mediate knowledge about and evoke feelings for nature and the cultural landscape*" (SCNI, 2017). Nature interpreters help people make connections and build personal relationships between the meanings of nature and visitors, rather than conveying purely facts (Gross & Zimmerman, 2002; Ham, 2013). This is also reflected in the definition of interpretation by the National Association for Interpretation (NAI): "*a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource*" (NAI, 2019). The aims of NI are built around elements of education, positive experiences and reflections (SCNI, 2017). John Muir acknowledged the importance of communication and fostering direct contact with nature in the form of experiencing it first-hand (Gross & Zimmerman, 2002).

According to Caselunghe (2018), NI in Sweden is based on the American model, and hence on Freeman Tilden's principles. Tilden was one of the first authors establishing the basis of NI through his ethic of relating to nature, revealing rather than informing, and provoking rather than instructing. The core base of interpretation through communication is enhancing visitors' experiences (Ham, 2013). Two other outcomes are facilitating positive awareness and recognition, and affecting behaviour (Ham, 2013).

Newsome, Moore & Dowling (2013, in Mitchell & Ryland, 2017) consider three important factors in NI: education, recreation and conservation. These factors are further divided as follows:

Table 1 The Interpretation of Natural Areas. Adapted from Newsome, Moore & Dowling (2013)

Education	-	Information
	-	Knowledge
	-	Skills
	-	Understanding
Recreation	-	Enjoyment
	-	Experience
	-	Physical & mental health
Conservation Behaviour	-	Awareness of environmental problems
	-	Encourage behaviour
	-	Support for environmental protection

NI can be done in several ways, though it mostly relies on communication flows between the audience and interpreters (Kuo, 2002). The most common techniques are defined by Mitchel & Ryland (2017):

- Publications (physical e.g. brochures, online e.g. website)
- Visitor centres
- Roles of rangers and guides
- Self-guided trails
- Electronic tools

By using tools from NI, it is possible to manage tourist impacts on the environment (Kuo, 2002). It can also address and communicate climate change issues by relating them to experiences and visual elements. However, it is important to note that relationships between natural experiences and environmental concern are complex and cannot be simplified in a single connection. Rather, it is multifaceted and depends on deeper circumstances to which NI could apply (Sandell & Öhman, 2012).

3 Theoretical Framework

Before discussing the theories, I intend to argue for my theoretical decisions regarding epistemology. The conceptions of terms such as nature, environment and wilderness differ greatly between people, time and space. The abstract terms of nature and nature interpretation, and the different symbolic relationships human beings have with nature are discernible within this study through two theoretical approaches; social construction of nature as the dominant macro theory and symbolic interactionism as a micro-level social theory. Symbolic interactionism deals with the process of meanings, whilst the social construction of nature involves the diverse possibilities of giving meaning, understanding and talking about nature. The combination of the concept of social construction of nature and the theory of symbolic interactionism is a suitable way to explore what different meanings nature has for different people and how they are connected through social interaction.

3.1   The Social Construction of Nature

As touched upon in the previous chapter, the terms nature and national parks are human conceptions which are reproduced through language. This guides people's actions and understanding of the terms and immediately raises questions such as: what is nature and is nature a symbolic environment, a physical one, or both? One scholar went so far as to call nature the most complicated word in the English language (Williams, in Demeritt, 2002). We, as humans, are faced with different, sometimes conflicting definitions of nature, including myself. In this section, I use nature, landscape and environment interchangeably, regardless of the slightly different definitions these may have. Additionally, I do not favour one definition of nature over another, rather I attempt to present the different ways of constructing nature. There is no one truth within these highly contested concepts. However, I am influenced by my own personal construction of it and view it as an undefined and unrefined natural space with few human influences.

The macro theory of social construction of nature essentially leads back to the theory of social construction of reality of Berger & Luckmann (1966). Landscapes are human social constructs, built on common shared social beliefs and regulate our understanding of experiences, and consecutively affects the way we communicate about them (Gifford, 1996). This represents both material as well as symbolic landscapes. They can be "natural", which is usually understood as untouched by humans, "unnatural", created by humans, or a combination between the two (Senda-Cook, 2013). For example, within FNP, Njupeskär waterfall is a natural landscape, but the boardwalk and trails around it are clearly human made. In its symbolic sense, Greider & Garkovich (1994) describe how nature is a created environment, since humans negotiate meaning to it. They mention: "*attention is directed to transformation of the physical environment into landscapes that reflect people's definitions of themselves*" (p.1).

As argued earlier, the same landscape can carry more than one symbolic meaning, depending on the person's cultural definitions, visions, values and beliefs. Senda-Cook (2013) considers landscapes to be a powerful concept in the sense that it serves as a physical place, but also as a way of seeing, representation and interaction. These meanings can be influenced through e.g. media, laws, literature, myths and customs (Greider & Garkovich, 1994). Mels (1999) calls this construction of nature the "*culture of nature*" (p.5), in which our encounters with nature are always mediated within a social dimension.

How we talk about nature is constantly changing. Even now, questions of what nature is, whose nature it is and what we are allowed to do with it roam national and international debates, especially when it comes to protection, exploitation or transformation (Mels, 1999). Throughout time, nature has been considered many things; wild, dangerous, something to be conquered, but also romantic, spiritual, and unspoiled. However, the anthropocentric view

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since the Industrial Revolution has pushed the perception of human dominance over nature, in which nature is merely a part in the ecosystem (Caselunghe, 2018). Even in the 21st century, any mention of the word automatically has certain ideologies connected to it, whether aesthetically, politically or economically (Gifford, 1996). These ideologies are bestowed upon constructions of nature through symbols (Garkovich & Greider, 1994). Different groups of people who assert different meanings to the environment can clash over this construction and the implications that come with this. It is important to understand this concept today, as it can aid us in recognizing the power we have to shape environments through the way we conceptualize nature and through the behaviours that come from those conceptualizations (Demeritt, 2002).

A critical note on the use of this theory is that the term nature can easily be diminished in an anthropocentric way; to a stark dichotomy between human and nature, where nature is conceived as something opposite and separated from humanity. However, it can also go the other way, which reduces the idea that nature is universal and shifts the responsibility away that humans are the root of environmental problems (Caselunghe, 2018).

3.2   Symbolic Interactionism

The previous theory provides a perfect gateway into the micro theory of symbolic interactionism. In a nutshell, symbolic interactionism is built on the foundation that humans make sense of objects and each other through symbols, meanings, and social interaction (Blumer, 1969). This social theory has been influenced by many scholars, but I will draw predominantly from Blumer's framework, because his assumptions connect best to the issue under study. The research questions are based upon communication and the way these interactions influence a relationship between the symbolic concepts of nature and humans. Therefore, symbolic interactionism is deemed suitable to study these questions, as we look into the relationship between society and the self (Carter & Fuller, 2015).

The world around us is comprised of different elements or symbols, most notably material, social and abstract elements. The combination of these elements makes it possible for humans to make sense of the world around them. It is about meaning-making and how that shapes action and structures human behaviour (Blumer, 1969). Humans make meaning through what they see, but also through the precondition they carry with them for seeing or noticing objects. These objects can be physical, social or abstract. The following premises are the basis of symbolic interactionism: (1) human beings act based on the meanings objects have them for; (2) these meanings emerge from social interaction, communication and the use of significant symbols, with other individuals and society; and (3) these meanings are continuously established and recreated through an interpretive, interactive process (Blumer, 1969). These assumptions are reflected into the social world, as this world is socially constructed through these meanings.

Meanings can be ascribed to objects, experiences, phenomena; anything that is observable in the world (Blumer, 1969). People reinvent and reconstruct the meaning of the world around them through practices, or acts (Mels, 1999). Therefore, it is considered a social process based on interaction (Blumer, 1969). The meaning of social objects depends on the way a person views it, acts towards it, talks about it and emerges essentially out of the way they are construed by other social actors with whom they interact (Blumer, 1969). In this way, environmental problems are also understood differently, depending on people's worldview. Through daily interaction, every social group mediates "*a shared repertoire of meanings or a shared perspective*" (p. 411, Oliver, 2012). These common meanings are anything but static; they transform when social objects change in meaning. When two individuals ascribe the same meaning to an object, they have an understanding between each other, and this influences their acts and behaviour. This social interaction comes through the use of significant symbols, which Mead (in Blumer, 1969) identifies as symbolic interaction, as well

as the "*conversation of gestures*" (p.8) which is described as non-symbolic interaction. The latter one refers to action without interpretation (e.g. automatic responses), the former to action with interpretation. A second important part of symbolic interactionism is the social interaction with other individuals. To communicate with others, you interpret each other, their actions and take the role of the other to understand one another.

Symbolic interactionism takes the self as a social object as well. Blumer (1969) stresses the fact that a human can be an object of their own action. The self-object develops from shared and interactive action, but also from role-taking by looking or action to themselves from the position of others (Carter & Fuller, 2015). In this way, humans can also interact with and respond to themselves (Blumer, 1969). This is a highly reflexive process.

Within the natural environment, symbolic meanings influence the physical environment of nature, but also the development of the self. The way of interpreting nature affects the way you talk about, feel and behave in such environments. Furthermore, natural environments reflect the definitions we take of ourselves. Greider & Garkovich (1994) mention that the way humans look at nature and the relationship they have with nature are cultural terms to define who we are in the past, present and future. In other words, human beings are an object themselves, leading themselves through actions towards others based on the type of objects they are to themselves (Blumer, 1969). This is called role-taking.

Any type of environment, amongst which natural environments, determine the meaning human beings give to it. However, these meanings can vary amongst actors and this in turn influences their behaviour in said environments, as Charon (2010) considers the practice of meaning making the foundation of people's actions. This can be illustrated with the example of a national park. Social actors agree on the meaning that the environment is special, which is then transformed to a national park, which again influences the meaning, and so on. This is a reciprocal and continuous process, as can be seen in figure 1. In this way, we can extrapolate this example to a bigger societal viewpoint that society is always in flux, as are the interactions and experiences individual actors have with themselves and with others (Carter & Fuller, 2015).
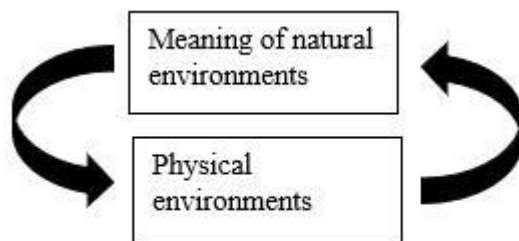
Figure 1 Continuity of Symbolic Interactionism

Symbolic interactionism presents a theoretical perspective to analyse how social actors interpret objects and other actors and how this interpretation causes certain behaviours in certain situations through social interactions. It can accordingly be applied to learning process, as meaning-making is at its core developing a certain understanding about something (Caselunghe, 2018). Language is key, which can be traced to the different definitions, values and qualities that are attributes to objects, which in turn influences the development of the self, other and the social interaction between these social actors, as well as objects, through the use of significant symbols.

The theories are then the building blocks and framework for the subsequent analysis and are used mostly to guide the understanding through the several stages of the research. The social construction of nature and symbolic interactionism have helped me understand the positioning of the context of the research questions and aid in interpreting the data and findings. More specifically, the theoretical lens of symbolic interactionism helps me in uncovering how social actors interpret social interactions, both with other actors but also with "non-social objects", such as nature. The social construction of nature brings perspective in how communication about natural environments is shaped and related to.

4 Methods & Materials

In this chapter, the methodological points of departure, methods and materials are described. Furthermore, important notes about validity and reflexivity are made, to contribute to the transparency of the study.

4.1 Methodological Approach

The posed research questions call for a qualitative research design, which entails a subjective, narrative and interpretive approach. Qualitative methods are most suited for interpreting and describing certain phenomena (Creswell, 2014). I aimed to obtain a rich understanding of the experiences and meaning-making of NI through interviews and observations as my research methods. The decision to use a multi-method approach came from the intention to get a holistic view of communication from multiple perspectives. This is also in line with the theories, as both the social construction of nature as well as symbolic interactionism favour a method which would explore an understanding of the "*processes individuals use to interpret situations and experiences*" (p. 3, Carter & Fuller, 2015) and which would recognise the human complex world.

4.2 Fulufjället National Park

Choosing Fulufjället National Park (FNP) as my research location had multiple reasons. It was surprisingly difficult finding people working directly with or for FNP when it comes to NI. First and foremost, it is an interesting national park in terms of its ecosystems and has specific tourist attractions. Furthermore, the representatives of FNP were the only ones positively answering my emails and accommodating my interview requests with putting me in contact with other possible interviewees working with NI in FNP.

FNP is a relatively new national park located in the southern Swedish mountain range, in the Dalarna province. Established in 2002, it is Sweden's 28th national park, receiving over 50,000 visitors annually (Fredman et al., 2006). The main reason for the national park status was to preserve a pristine mountain region with distinctive vegetation (especially mosses and lichens) and natural value (Raadik, Cottrell, Fredman, Ritter & Newman, 2010). The park is famous for Sweden's highest waterfall *Njupeskär* and one of the world's oldest trees *Old Tjikko*, estimated to be 9550 years old. The aim to combine wilderness with accessibility came with the introduction of zones (Wallsten, 2003). There are four zones in the park, marked on a scale from wilderness area to more development, as seen on figure 2 and table 2.
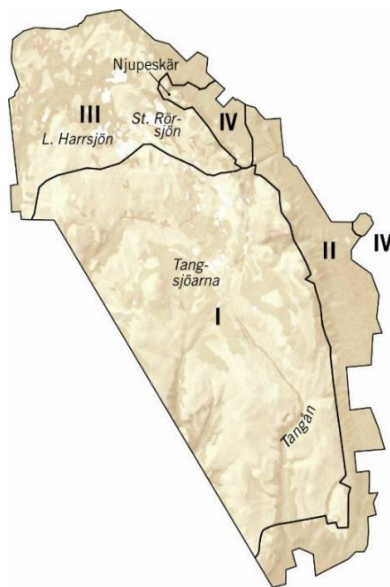

Figure 2 Map of Fulufjället National Park Zones

Table 2 Zones in Fulufjället National Park

Zones	Name	Coverage	What is allowed
1	Wilderness	60%	Camping + hiking + making a fire
2	Low-intensity activity zone	15%	The above + snowmobiling on marked trails + hunting
3	High-intensity activity zone	25%	The above + fishing
4	Facility zone	<1%	Hiking + starting a fire in designated places

4.3 Interviews

During my fieldwork, I conducted three formal semi-structured interviews, which were recorded and transcribed. The interviewees were all made aware of my process, the recording and anonymization, to make it more comfortable for both me and them to speak freely. All the interviews were conducted in English. I gave them the opportunity to switch to Swedish if something was difficult to name or explain in English. Even though all the interviewees were fluent in English, they did make use of this opportunity and this created a good relationship, trust and rapport. The interviews consisted of open-ended questions related to their personal narrative and aimed to prompt real examples from their work with NI. One interview was done with two respondents, which proved to be very useful as they bounced knowledge and ideas off each other.

With time and travel restrictions, I settled on four interviewees that expressed interest and availability in participating. Even though I could have scheduled more interviews, I chose to go for quality and focus on these participants. One interview with two people was conducted in the CAB in Falun; one interview was conducted in Gävle, and one in the Naturum (visitor centre) of FNP. The advantage of doing the interview in the Naturum was including visual cues from exhibitions, the building and the surrounding environment. Some of my observations prior to the interview were used as prompts. The Naturum is often the first space visitors enter in the national park, where they can engage with people working there and where exhibitions about the local environment are shown, intended for learning purposes (SEPA, 2018). All the interviewees work or have worked with NI in FNP and had extensive knowledge about the area. I used a map of FNP as a tool to expand our mutual interpretation of the area. Additionally, the interviews can be used as a learning experience when it comes to different communication efforts within NI in FNP.

Aside from these semi-structured interviews, I had several informal conversations whilst exploring the national park. However, these interviews were not recorded, as they were happening while walking outside in the cold, and I took notes from memory after the conversations. Therefore, I treat this data as supplementary and use them to strengthen my recorded data.

In the next sections, the material is coded, sorted and used as follows:

Table 3 Research Data Information

Sort of data	Code	Position	Length	Recording method
Interview	NI 1	CAB Dalarna	1h 50m	Voice recorded & transcribed
Interview	NI 2	CAB Dalarna	1h 50m	Voice recorded & transcribed
Interview	NI 3	Fulufjället National Park Naturum & nature guide	1h 25m	Voice recorded & transcribed
Interview	NI 4	Fulufjället National Park Naturum & nature guide	1h 7m	Voice recorded & transcribed

Observations online	-	Researcher of current study	± 4h	Notes, screenshots
Observations communication in-situ	-	Researcher of current study	5 days	Field notes, field diary, photos, brochures

4.4 Observation Online & In-Situ

To complement the data obtained from the semi-structured interviews, I found that observations are essential to recognize how communication is done and how this constructs and visualises the human-nature relationship in the park. The observations through online research was done in preparation for my field trips to the national park, but also after being there to confirm or double-check my thoughts and observations. The situational observations were done in two periods. The first trip was for three days in April 2019, when snow still covered the park and there were few visitors. During this trip, I was mostly in zone 4 around the Naturum and zone 3. The second trip was for two days in June 2019 and was spent hiking and camping in zone 1 and 4.

This way of collecting data allows to give a different perspective and express the reflexivity that is central in this thesis. The observations helped me actively understand the role, thoughts and experiences of nature interpreters and helped me critically develop these different perspectives. The transparent reflexivity is a tool to enhance interpreting the research process (Punch, 2012). I have documented these observations through a comprehensive field diary, but also with qualitative visual material, such as photos, to support my written notes, which can be helpful for analysis and interpretation within many methodological disciplines (Mason, 2005). Especially as the communication stemming from nature interpreters is often visual in the form of information signposts, exhibitions and other visual, sometimes unconscious, cues.

Added to the observations are qualitative documents such as brochures and maps, but also online observations (e.g. homepage), as these can be regarded as commonly used tools for nature interpreters to communicate information to visitors before their trip.

4.5 Thoughts on Reflexivity

It is important to direct attention to the influences I am bringing within the study. During my two trips to FNP, I saw different things, in two different seasons, in many different eyes, as I took on different roles. I was invading the research site as a student, researcher, tourist, foreigner, woman and environmentalist. All these identities construct the perception I have towards the concept and have shaped the interpretations I have made. This reflexivity is important in research from a theoretical, methodological and ethical standpoint and I have continuously attempted to clarify and reflect upon these elements. Through critical reflection, the research process is continuously and carefully followed, which adds to the transparency and validity (Finlay, 2002).

Qualitative research is highly interpretive, where the researcher is engaged in an experience with respondents (Creswell, 2014). Symbolic interactionism as a theory demands for the researcher to be committed within the world of the respondents, in this case nature interpreters (Schwandt, 1998). By having a self with whom I continually interact, this reflexive process mirrors the different roles I have assumed throughout this research process. I have taken on and interpreted different roles ranging from nonparticipant (observing from the side lines) to complete participants (joining activities, "being the tourist") in which I have spent time and gathered fieldnotes (Creswell, 2014). It is also important to note that I am studying something I am familiar with. I can be considered an "insider" in this field, as I have shared experience with the study participants. This adds certain advantages, as Berger (2015)

explains: easier accessibility, knowing the topic and a better understanding from the participants' perspectives. Though, it is worth mentioning that my own interpretations and understandings of concepts such as nature and national park have changed over the course of this study.

4.6   Coding for Analysis

The interviews and observations were coded through a content analysis, which is a research method used to categorize textual data and systematically make inferences and interpretations (Stemler, 2001). Both a priori as well as emergent codes were used to capture a holistic understanding of the data. This means that I actively used my theoretical and thematic framework to determine coding categories before looking at my material, as well as constructing categories whilst analysing my material (Blair, 2015). Two overarching categories were chosen, which are both drawn from my previously posed research questions, as well as the material from my interviews; communication and human-nature relationship. I started with looking at the interviews in its entirety before breaking it into several different categories. These categories are influenced by my presence, the chosen theories, questions asked during the interviews and the perception the interviewees had of me with the knowledge I provided (e.g. field of study, background, purpose of study). Hence, it can be said the categories are a construction of my own interpretation. These categories can then be used to identify patterns in the communication and therefore made it easier for me to analyse which ones were prevalent across and within the interviews. All the interviews were coded through two dimensions, communication and human-nature relationship, which were broken down in sub-categories to facilitate analysing the different themes within nature interpretation.

5 Analysis

This chapter presents the analysis of my obtained material and gives an account on how nature interpreters communicate to visitors and how this constructs the relationship that is developed.

5.1 Communication

With communication, I mean the written, visual and spoken communicative efforts and processes undertaken by nature interpreters. They have the understanding and mission on what they need and want to communicate to visitors. The aim of NI and communication within FNP according to the interviewees is to convey an understanding about nature and why the nature in the park is protected.

> *"We are actually here to talk about nature and to give them advice and give them knowledge, try to make them aware of the natural nature"* (NI 4)

This is not only applicable within the specific communicative efforts, but even in the establishment of the national park itself, which communicates that this area is worth the highest protection possible. As seen from the previous section on the social construction of nature, the idea of a national park is constructed through language, how we as social beings define it and how it is symbolized through interactions. All nature interpreters were very positive on the creation of national parks.

> *"National parks are for display [...] if you have some areas that you can show people that this is why we do this, can you see the special features in nature here, then they have more understanding [...] they understand better why we have to protect certain areas."* (NI 3)

The goals of their communication intentions can be boiled down to a few keywords found in my data: creating awareness, experience, fascination, making people think and reflect:

> *"[...] the most important issue is to try to get people to **be aware**"* (NI 4)

> *"[...] help people explore more in the park and get to know more and get them to be a bit **fascinated and amazed by nature**"* (NI 3)

> *"a limitless **experience**"* (FNP brochure)

The use of this language was ubiquitous over many communicative situations and falls in line with the approach nature interpreters take. They are focused on making NI challenging, emotional, face-to-face, relating, simple, and based on a narrative:

> *"you can explain these really biological mumbo-jumbos in **an easy way**"* (NI 3)

> *"we need to **challenge** and play with people's **emotions**"* (NI 1)

> *"because they have never heard these **stories** before"* (NI 4)

In this section, I look at the specific communication methods nature interpreters use and the communication loop that is created through it.

5.1.1 Communication Methods

In the effort to communicate nature, nature interpreters use several tools and methods regarding NI. In this analysis, I have distinguished between experiences and nature information.

5.1.1.1 Experiences
With experience as a communication tool, I mean engaged and direct participation when it comes to communication efforts. Through experiences, nature interpreters try to involve visitors in the construction of knowledge and meaning of nature.

Naturum

The first experience offered to visitors when arriving at the main entrance of FNP is the visitor centre, or Naturum. Organically built to work within the natural environment, the Naturum stands between the pine trees and made me feel closer to the surrounding nature. It is easily accessible for strollers and wheelchairs, supporting the premise of "*a national park for everyone*" (NI 3). These are significant symbols through which communication and meaning are established and construct the idea of who nature is for and how this reflect the development of the self when regarding natural environments. The experience and access to nature includes everyone.

The Naturum displays exhibitions, another tool used to communicate nature. In FNP there are both permanent as well as temporary exhibitions. The permanent exhibitions are made by SEPA and have a more general content regarding Swedish national parks. There are posters specifically related to FNP with information and pictures, mostly about the biggest attractions in the park (Njupeskär, Old Tjikko). However, some of the photos were not taken in FNP, according to the staff. This hinders the connection and relation visitors will make in this park. Temporary exhibitions are created by the Naturum staff and therefore feel more connected to the sense of place and time in the national park, and the experiences of nature interpreters.

Figure 3 Naturum

Figure 4 Inside Naturum

The visitor centre and the staff members are considered to be of essential value in the national park, according to all interviewees. It was expressed as a resource for information, especially through face-to-face meetings where practical information is communicated, and experiences are exchanged. All interviewees agreed that this results in a better and bigger experience for the visitor:

"*It's super important to have it* [Naturum] *and I think for those who come into Naturum and talk to the people working there and both to look at the exhibition but also meet people who know the area and they can talk to them. I think it makes the visit even better*." (NI 1)

Their presence alone is a communication tool, with whom visitors socially interact with. Meanings about FNP and nature emerge from interactions with nature interpreters as social actors. The conversations nature interpreters have with visitors and with colleagues also actively constructs the definitions they have of themselves and aids in the development of their role on a larger scale:

"*We really think now that we have an important role in doing this system change for a more sustainable society*" (NI 3)

Activities

The nature interpreters working at FNP plan activities and are certified tour guides. In the summer season, there are guided tours to Old Tjikko and the old growth forest. Connected to

the activities, the power of experience and narrative were repeated multiple times throughout all interviews. One interviewee recalled multiple moments where they actively saw people's perspectives change through the meeting of the Siberian Jay, a bird and the symbol of FNP.

"*I had an old woman here, in a wheelchair, so I helped her to feed the birds and she was so, so glad. She was so happy. You can see that, when people get connected with nature, by this bird [...] you can almost see the tears in their eyes*" (NI 4)

These experiences and narratives are highlighted in guided tours. The nature interpreters explain that the tours are an excellent approach to the mission of the NI of creating awareness about nature and nature protection, as they engage directly with visitors. They all mentioned specific things they try to communicate when guiding a tour, such as the forest ecosystem, the life cycle of trees and biodiversity. These mostly apply to putting nature into a bigger picture and teaching visitors about natural processes going on in front of them. In this way, nature interpreters can have direct conversations with visitors, spark questions and provide answers on things they see and experience at that moment, appeal to their emotions and give more meaning to their visit. They can influence the constructions and meanings visitors ascribe to nature and can also let the visitor interact with themselves, each other and nature. This creates shared perspectives and could result in a change in meaning of social objects, both for nature interpreters and for visitors, as a communicative process is continuous and reciprocal. Through immediate positive responses, nature interpreters experience that active NI boosts the understanding and awareness of nature.

"*It is quite amazing to see when people get aware about nature and they start to understand the complex system of ecology [...] I think they are landing somehow with their feet on the ground and maybe think twice next time they do something.*" (NI 4)

5.1.1.2   Nature Information

Nature information in this analysis is described as the visual and written information that is found outside in the park, but also on the FNP website.

<u>In the Park</u>

Nature information within the borders of FNP can include many different things, but for the sake of this analysis, I will only focus on educational nature information signs, as seen on figure 5. These were chosen because they are easily identifiable and important for communication intentions as they guide people's minds and bodies.

Figure 5 Nature Information Sign

According to the interviewees, nature information is very important, and a lot of effort is put into this practice. The informational posters communicate different things depending on the intended NI. However, many of the interviewees feel like the amount and quality of information on the educational and regulation information signs have been lacking:

> "*It has been really scarce information on what you can do in the park and what you are not allowed to do [...] We have the same posters as they were made in 2002 when the park was formed. They are quite small, we have to blow it up a lot more*" (NI 2)

This lack of quality comes from a dichotomy between the CAB and people working in the Naturum. This is expressed multiple times regarding what people want to inform about and how this can be contrary to what the visitor wants to know or learn.

> "*Before the signs were written by these academic people sitting in CAB and going: 'oh we have to tell them about this very small lichen which is red-listed.' No one is ever going to see that, because they don't know where to look*." (NI 3)

This clarifies several important aspects of nature information – the visitor needs to understand, relate and immediately spot the process, wildlife, or flora the information sign is conveying, which also helped remembering the different species. In this way, they try to bring nature information closer to people:

> "*The crested tit is like a willow tit who dressed up for a party, fixed the hair and then put on a necklace [...] Then we have the nut hedge, who can walk face-down along the tree and it has a back stripe across the eye, so that's Zorro, sneaking around in the trees*." (NI 3)

Unified Communication Profile

FNP and the other national parks in Sweden are collected under the online hub of "Sveriges Nationalparker", managed by SEPA. The unity of the different parks is established through the implementation of the Golden Star profile to "*strengthen, clarify and communicate the national parks as an idea and attraction*" (SEPA, 2019). This unified communication profile is conveyed by the interviewees to be an important factor in the increase of visitors in FNP, but also as an improvement on the work of nature interpreters, who now have a strictly regulated common graphic profile. This profile applies to the web, brochures, visitor centres and signposts. The unified communication methods create a symbolic landscape that mediates visitors' constructions of what a national park is and reinforces specific ideas of nature. Through my own observations and data collection to aid in my own visit to FNP, both as a researcher and as a tourist, the Golden Star profile gives off an impression which shapes the perception of national parks and in the bigger picture, the perception of natural environments. The construction of meaning toward nature beings long before any visit to nature and the information and images available online influence the picture of nature in FNP.

5.1.2 Communication Loop

Nature interpreters are the middle ground in the communication loop between the CAB and the visitors to the national park. They are the gatekeepers and mediators between these social actors and nature. The CAB creates communication in and around the park, which is often done together with nature interpreters.

Figure 6 shows the communication flows between the social actors engaged in communication in FNP. There is a lack of feedback from the visitors both to the nature interpreters but also to the CAB.
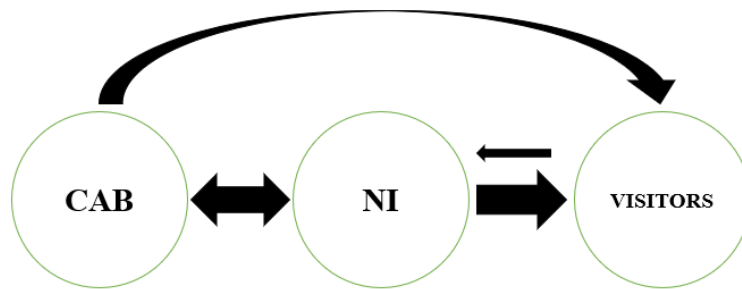
Figure 6 Communication Loop

"We have no control on how many people are reading the signs or not [...] Because sometimes we put a lot of effort into the signs. We don't know how they respond to it. It would be nice to have a follow-up to see. Do they actually see this that we put up?" (NI 2)

Since the park opened, there has been one visitor survey in 2014, an interviewee recalled, so the effort in receiving feedback is low. This can create a gap in communication between nature interpreter and visitor and it becomes difficult to find out if their mission to connect visitors to and educate about nature is reaching the visitors. NI is a two-way interactive communication process in which both parties continuously construct, develop and learn from each other and the social objects they interact with. However, often it seems to be a one-way process in which nature interpreters do not receive feedback from visitors, even in guided tours. This can create a discrepancy in information, on what the CAB wants to tell visitors, what nature interpreters want to tell visitors and what the visitor assumes or wants to know.

"I think maybe a lot of people think it is protected because of the waterfall [...] not because we have this old growth spruce forest up to the waterfall. I am not sure they are reflecting upon that." (NI 1)

By focusing on specific natural spectacles, such as Njupeskär or Old Tjikko, nature interpreters create an assumption around the importance of these natural elements. A spectacular waterfall is one thing, but a delicate ecosystem that supports biodiversity is more valuable for the nature that is protected and the nature they are trying to connect with. Without visitors understanding the delicate balance and importance of natural elements, such as old growth forests, it is difficult for nature interpreters to establish that connection.

The quote used earlier (p.24) illustrates this gap in communication between the CAB and nature interpreters. The CAB creates nature information but is not actively present in FNP the way nature interpreters are and do not have interactions with visitors. These interactions are important to get a sense of what visitors want to know and do. However, these interactions are limited even for nature interpreters due to the small number of staffs working with NI in FNP. It deepens the gaps between different actors, especially with visitors increasing, yet the number of nature interpreters staying the same.

5.2   Human-Nature Relationship

As mentioned before, communication influences the relationship visitors have with nature, as interactions with social actors and objects shape the constructions we have of nature. Nature interpreters target this changing relationship with communication. As a reminder, the second research question I posed was *"how does this communication construct the relationship between nature and human beings?"* In general, the nature interpreters found that communication is of vital importance to construct a relationship. The following section is divided in two cases I encountered during my trips in FNP, supported by my interview data. These cases are relevant to understand this research question, as it explores the tensions that are visible in the park between humans and nature. What can be learned from these cases

is that nature invites for different experiences which are mediated by communication but constructs different relationships between humans and nature.

5.2.1 Old Tjikko & Njupeskär

> "*Old Tjikko is a good example of what happens with wear and wear actually. Because when it was discovered, the ground was kind of covered with lichens that are very important to keep the moist in the ground, but [...] now the whole area around the tree is kind of just worn down, all the lichens are gone*." (NI 1)

Old Tjikko and Njupeskär are two attractions in FNP and the destination of some guided tours in the park. The above quote perfectly shows the difficulty in keeping the balance between humans and nature. The trail towards Njupeskär is the most popular trail, complete with boardwalks and viewing platform. Old Tjikko is another story however. Because of the number of tourists visiting the tree, the pressure on the area has been significant with deterioration, but also with uncertainty on the effect on this deterioration and what visitors might do to the tree.

> "*They just put a small role around the tree [...] people just step over it and it is very popular to go up there and take a selfie with the tree.*" (NI 1)

This practice of taking selfies with natural phenomena is increasingly common today (Kohn, 2018). The infiltration of technology in the environmental sphere can have many consequences on the relationship between humans and nature (Hitchner, Schelhas, Brosius & Nibbelink, 2019). Above all, the question is if this reduces nature to single elements – one tree, one waterfall – and how this influences the way nature is portrayed, constructed and talked about (Yudina & Grimwood, 2016). The difference between experience with active and passive NI is encountered by nature interpreters and also by me during my time in the park. During my field trips, I also took photos of these singular elements, for example Njupeskär. Even when mentioning my fieldwork before or after my trip, many people know it as the park with the highest waterfall of Sweden. These interactions strengthen the way FNP is talked about and socially construct the reproductions of nature, and the way humans relate to nature.

There is a contrast between the way people experience nature when being supplied with valuable NI through active, face-to-face interaction, like guided tours, rather than a self-guided hike where little to no NI is provided. When tourists are there without a guide, they could experience a feeling of being their own agent, doing whatever they want, as they have not comprehended the delicate natural systems that are in place. However, when tourists are there with a guide, they are experiencing nature and looking at it from a different perspective:

> "*When you have told them along the way about the tree and the forest and the ecosystem and everything and they come up here, then they are like wow! A moment of quietness*" (NI 3)

This is what is experienced by nature interpreters, and they understand the way this fosters a human-nature connection, yet also do not want to force people to join these tours. Especially with the huge drop in tours in the summer of 2019 compared to the year before, it is hard to do this active nature interpretation.

5.2.2 Snowmobiling

The monotonous drone of snowmobiles is prevalent in the wintertime in FNP. The steady increase in snowmobile tourism has been noted by interviewees and it means both an income for the local tourism industry, but also a disturbance of natural environment and personal experiences of nature. During my time in FNP, the noise of the snowmobiles bothered my own experience of nature, wilderness and solitude. This has become an issue not only in FNP, but across Dalarna. One interviewee compared FNP, where the zoning system only allows

people to drive snowmobiles in zone 2 and 3 on marked trails, with Drevfjället Nature Reserve, northwest of FNP, where driving snowmobiles is allowed almost everywhere:

> "*If you go on skis up here and you come down here, it's just a huge difference. Here* [FNP] *it's totally silent and then you come here* [Drevfjället]*, immediately you hear the noise of the snowmobiles.*" (NI 2)

Figure 7 Snowmobiles on FNP Plateau

However, this did not comply with my encounters in FNP, where there were many snowmobiles on the mountain plateau and the noise carried far. Not only is the noise a problem, it is also extremely difficult enforcing the rules in the park. It is forbidden to go off-trail, to protect vulnerable areas and not disturb wildlife. There are special snowmobile trails. Unfortunately, some interviewees said that about 80% of the snowmobiles coming into FNP are rented or sold to tourists who can be inexperienced and have little to no knowledge or regard for the rules inside the park. This again ties back into being your own agent and the feeling of freedom this kind of technology gives visitors. The sensation of going wherever you want and not being within the constraints of what people say you should or should not do is easily felt on a snowmobile, speaking from own experiences. Whilst being driven back to the Naturum on the back of a snowmobile in FNP, we stopped and saw snowmobile tracks going off-trail. I asked the driver what they could do about it. They experienced that they could not do anything against it, as they are not patrolling up and down the mountain, nor should they be the ones doing that. Another interviewee thought rangers should be the ones checking if visitors were respecting the rules. This not only expresses the trouble that nature interpreters face in their own role as gatekeepers in the national park, but also implies a communication gap, as it is not defined whose role it is to enforce rules.

Another interesting observation regarding snowmobiles was a party on the mountain plateau that was being arranged. All the supplies and people were coming in on snowmobiles. It actively disrupted my experience, which made it clear what my expectations and norms regarding a national park are. It also does not match what nature interpreters want to achieve in the park, as a completely different relationship is fostered with snowmobiling – a relationship of possible domination of nature.

6 Discussion

The discussion section aims to review and expand the main findings and how the case of FNP relates to other cases in research. I look at the examples that were described in the previous section apply to the communication efforts by nature interpreters in constructing the relationship and by doing so, go back to the research questions stated at the beginning of this study: *how does FNP communicate nature to the visitors* and *how does this communication construct the relationship between nature and human beings.*

6.1 Communication

Communication of nature is done in many ways. Nature interpretation, and by extension communication, builds visitor's social meanings of nature and are directed in certain ways (Derrien & Stokowski, 2017). The general construction of nature as communicated by nature interpreters in FNP is as a holistic ecosystem, highlighting different aspects of the natural environment as a whole in the national park. The interactive feature of NI, like in guided tours, is a highly effective tool to communicate nature to audience, as seen from the experiences. This is found in several studies (Preston, 2004; Orams, 1996), but it also applies to the nature interpreters, as they find their place, role and value in the sustainability debate through these interactions. Nature interpreters understand how they affect people with their work and their presence in the national park and feel like they are contributing to a higher purpose. However, they are constrained and frustrated by the lack of feedback that we have seen in the communication loop in the analysis. This is apparent in the communication between visitors and nature interpreters, but also between the CAB, nature interpreters and visitors. There is a discrepancy between "*people in offices*" and "*people out there*", especially in terms of passive and active consumption and interaction of information (Preston, 2004). It is a one-way process in which nature interpreters and the CAB rarely receive active feedback from visitors. Orams (1996) argues for the critical importance of feedback techniques to manage human-nature relationships and improving the effectiveness of NI programmes, in terms of impact and effects regarding the human-nature relationships. Furthermore, Preston (2004) suggests that the facilitation of communication and nature experience is essential, but also needs sufficient guidance before, during and after the experience to maintain the development of the relationship even after leaving a natural environment. In this way, nature interpreters are truly gatekeepers. Their role as gatekeepers and the communication processes they strive for reflect on their own construction of knowledge, but also of the broader social world (Sowards, 2012). This makes them feel empowered and actively feel they are making a difference. It also applies to the visitors, as found in several studies (Sowards, 2012; Hitchner et al., 2019) and can foster better connections both with nature, but also with the nature interpreters.

NI is about communication and communication processes, rather than information. It is a two-way interactive process in which both parties continuously construct, develop and learn from each other and the social objects they interact with. Not only are they constrained by this, but also by limited resources, such as time and money, and the inability to manage the whole park by themselves due to the small number of employees. This is also seen in the preparations to do this research, when approaching different national parks and the difficulty in finding interview participants.

The way that nature is communicated in FNP is in line with how NI, its intentions and methods are defined and successfully tested in many scholarly articles (Ben-ari, 2000; Derrien & Stokowski, 2017; Sowards, 2012; Wall-Reinius & Bäck, 2011). However, there are also studies where NI programs are found to hinder a connection to a place (Dickinson, 2011) or can be selective, overly simplified and too adapted to visitors' expectations (Bramwell & Lane, 1993). I argue however, that from a nature interpreter perspective active

NI increases the experiences of visitors and enhances the relationship and connection to nature. The practice of naming species (whether flora or fauna) can be a powerful identification practice (Milstein, 2011). These significant symbols can in turn help visitors make sense of nature and of themselves as the social object changes meaning. Especially when combined with specific experiences, e.g. feeding birds, and targeted information that challenges the visitor, it provides a space for reflection, learning and wonder.

6.2   Human-Nature Relationship

The relationship between humans and nature is difficult to define, construct and understand. It is presumed that NI can aid in fostering a human-nature connection (Preston, 2004). In this part, I discuss the human-nature relationship from the perspectives of nature interpreters and how they reflect on the experiences in their work. I have divided it in two subcategories; experiences to enhance human-nature connections; and commodification and technology, to highlight and relate the examples posed in the analysis in a bigger picture.

6.2.1   Experiences to Enhance Human-Nature Connections

Active experiences were seen as great instigators and glue for connecting humans with nature. Experiencing nature first hand, through interactions with wildlife for example, is related to positive benefits, both in terms of nature awareness, appreciation and conservation, but also in terms of interpersonal relationships, personal development and intellectual capacity (Curtin & Kragh, 2014; Soga & Gaston, 2016; Kellert, 1998). My data shows a strong positive view towards the visible connection between humans and nature, e.g. the feeding of the birds in FNP, as memorable emotional experiences that can be used to engage people with the significance of nature. Even within these experiences, nature interpreters are the gatekeepers for providing access and opportunities to do so.

The experiences however, need to be put into context of the local natural environments to make a meaningful impact on the visitor. This facilitates inclusion and connection with the nature around them, instead of alienating people from nature (Hawkins, 1987). From the perspective of nature interpreters, these experiences are most sought after, yet are also limited in FNP due to lack of resources. In both data and literature, tour guides and nature interpreters play a crucial role in enhancing visitor experiences and are considered gatekeepers, storytellers, experts, experience broker and facilitator (Rokenes, Schumann & Rose, 2015). Weiler & Walker (2014) add that nature interpreters have to be relevant and competent in mediating experiences and communicating stories to foster the relationship between humans and nature. Especially since NI goes beyond this one-way communication flow.

There is worry that these experiences can become linear and automatic, where assumptions that NI leads to understanding and action will stay what they are – assumptions (Russell, 1999). Furthermore, Russell (1999) questions the legitimacy of the term 'nature' and 'experience'. The example whether driving a snowmobile can be considered a nature experience comes to mind. Here we come back to the different meanings people assign to nature and what is means to 'experience nature' in a world where the constructions to this abstract term are vital for the type of relationship is formed between humans and nature.

6.2.2   Commodification & Technology

Visitors to national parks are tourists to a natural environment, and consumers at the core (Imboden, 2012). The information that is disseminated for tourists should make the place desirable (Uggla & Olausson, 2013). The way Old Tjikko and Njupeskär are portrayed – as "*the oldest*" and "*the highest*" – creates an air of nature as a spectacle, a specifically mediated or socially constructed view of nature as something provided to meet the expectation of and to be enjoyed by humans (Yudina & Grimwood, 2016). By focusing on these spectacular

landscapes or experiences, visitors can often miss the ordinary ecological processes that lie beneath (Bramwell & Lane, 1993). The commodification of spectacular experiences translates into an aesthetic ideology, which is a vital element on our perceptions of, behaviour in and connection to nature and to ourselves (Sowards, 2012). Even concepts such as 'national park' or 'virgin forest' are products from this process of commodification, as they seem to exist separately from man and culture (Barna, Epure & Vasilescu, 2011). Regarding FNP's example, nature interpreters actively see that it strains the relationship between humans and nature, as tourist opt to do unsustainable behaviours (e.g. going off-trail) to construct natural environments as a commodity (e.g. recreating the spectacle of Old Tjikko by taking a selfie). This is even more apparent when people only stay in the park for a few hours and tick off the natural attractions, which is what the nature interpreters see most in FNP. They want to cross it off their bucket lists, so to speak. This does not promote a holistic understanding of ecosystems and a deeper connection to nature that nature interpreters in FNP want to achieve. Here we can see the internal conflict in constructions of nature in terms of what nature interpreters try to communicate, e.g. the rich diversity of old growth forest ecosystems, and what visitors want to see, e.g. the spectacles FNP is famous for. Both examples highlighted in the analysis can be found on the intersection of commodification of nature and (social) technology. Kohn (2018) muses about the practice of talking selfies where people are looking at their phones with their backs to the attraction. The inclusion of technology in natural environments invites for different activities and hence influences the way we communicate and behave in these environments.

However, there are also benefits connected to this, as visitors generate money which can in turn be used for nature protection (Marafiote, 2008). Additionally, Hitchner et al. (2018) found that social technologies can improve hikers' experiences and establish a more meaningful connection to the landscape. The self-reflection and sharing of experiences create significant social interaction that in a way are NI by itself, with a reflexive storytelling at the heart. In my data, the view of technology was quite negative, yet electronics in the wild is inescapable, whether it is snowmobiles or mobile phones. Nature interpreters accept this with an air of "what can you do about it", however they can instead work with it to provide another experience.

6.3 Fulufjället and Beyond

It is important to state that the described experiences and observations do not only apply to FNP but are global phenomena that nature interpretations and national park managers struggle with in their work. Regarding FNP, the wear and tear as a result of the number of visitors is visible on the most popular trails, but the nature interpreters believe the nature in FNP is big enough for an increase in visitors. From informal conversations, the numbers say something different though, as approximately 90% of the visitors stay in zone 4, whilst the other 10% venture (close or far) in the wilderness beyond. This indicates that zone 4 will be under more pressure in tourism to FNP increases. Visitors engage in different ways in natural environments and catering NI for this increasing group of people with different backgrounds, constructions, ideas and expectations is hard, as Ben-ari (2000) mentions that nature interpreters need to speak to the public's minds and hearts.

7 Conclusion

All in all, this thesis has showed that nature interpretation is an important element for fostering human-nature relationships. Nature interpreters are the gatekeepers of national park in their work with nature interpretation. Their efforts influence the human-nature relationship in a positive way through active experiences. They face different challenges within their communicative work, both internally as well as externally. The lack of communication between social actors can bring about frustration and misconceptions surrounding the environment. The way Fulufjället National Park is communicated, can recreate different meanings of the nature, some of which can encourage unsustainable behaviours. It is important to keep a balance within nature interpretation, with active and passive communication, but also with human and natural elements.

At the end of this thesis, I want to share some thoughts that came up during the process. I have drawn a sharp line between humans and nature. Inherently, humans are a part of nature and using a division can degrade the qualities, relationships, connections and interdependencies between them (Caselunghe, 2018). In the current Western societal anthropocentric boundaries, this division is widespread and has been taken as a possible critique upon the findings of this thesis. An important reflection that came up during the interviews was that the nature interpreters were already discussing how to make the experience better in FNP with nature interpretation within the boundaries of Swedish nature conservation and culture.

The demands for growth regarding nature protection, for natural environments to accommodate more visitors and a more sustainable planet have a delicate equilibrium. Recognising how nature interpretation shapes our experience and construction of nature might aid us in understanding who we are and how we impact the world around us.

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