



Bear in Mind: Human-Bear Coexistence with Brown Bears in Parque Natural Somiedo (North-West Spain)

Daan Disco
Student number: 1049392

Wageningen University and Research
Chairgroup: Forest and Nature Policy
Supervisor: Koen Arts
February 2023

Acknowledgements

The thesis you have in front of you is the culmination of a year's worth of research and personal growth. I have once again experienced that in the process of writing, highs and lows are inevitable. Now that I have come to write this salutation however, contentment is the overwhelming emotion. Finalizing this thesis closes another chapter and in reflecting on the 22 years of my educational career, I can only say that it has been a wild ride. Although the days of school desks are now behind me, I hope to never stop learning!

I would like to express my gratefulness to Koen. Without your insight, trust, and witty bear-jokes this thesis would have been much less adventurous. Thank you for allowing me to think creatively. Thank you, people of Somiedo, for making me and Ellis feel at home; Thank you, Ellis, for rather being outside then inside and dragging me to places and peaks I would have never explored on my own; Thank you, mama and papa, for your curiosity, clarifying discussions and care, I won the lottery; Thank you, housemates, for the much-needed distractions; and thank you, friends and family for your support.

Table of Contents

ABSTRACT.....	4
1. INTRODUCTION.....	5
1.1 GENERAL INTRODUCTION	5
1.2 PROBLEM STATEMENT AND RESEARCH QUESTIONS.....	7
2. THEORETICAL FRAMEWORK.....	8
2.1 DEFINING ROBUST COEXISTENCE	8
2.2 POSTHUMANISM	9
3. METHODOLOGY	12
3.1 METHODOLOGICAL APPROACH	12
3.2 DATA COLLECTION METHODS AND ANALYSIS.....	12
3.3 METHODOLOGICAL JUSTIFICATION.....	14
4. RESULTS.....	15
4.1 COEXISTENCE IN SOMIEDO	15
4.1.1 <i>Coexistence in Somiedo, an exemplary case at first sight</i>	15
4.1.2 <i>Doubting successful coexistence</i>	17
4.1.3 <i>Fragile: the false promise of development</i>	18
4.1.4 <i>Fragile: Instrumental approaches to conservation</i>	21
4.1.5 <i>Fragile: Wolf Coexistence</i>	22
4.1.6 <i>Closing remarks on coexistence in Somiedo</i>	24
4.2 ETHICAL POSTHUMANISM IN SOMIEDO	25
4.2.1 <i>Seeds of ethical posthumanism in Somiedo</i>	25
4.2.2 <i>Thus, a bright future ahead?</i>	28
4.2.3 <i>Closing remarks on ethical posthumanism in Somiedo</i>	32
5. DISCUSSION	33
5.1 DISCUSSING RESULTS	33
5.2 DISCUSSION OF METHODS	38
5.3 RECOMMENDATIONS.....	39
6. CONCLUSION	41
7. REFERENCES.....	42

Abstract

Nature conservationists face enormous challenges. Anthropocene extinction and other environmental crises frequently keep feeding into a reinforced separation between humans and nature, even though this dichotomy seems to be a root cause of the issues at hand. Increasingly though, conservation efforts – including many expressions of rewilding – embrace co-existence models, but they are difficult to realize in practice. Somiedo (Spain) has been noted as an exemplary case of coexistence with large carnivores. Bear populations have increased steadily, and human perceptions of bear presence are generally positive. Employing an ethnographic approach, I investigated how coexistence can become robust by researching the practicality of coexisting with wildlife and exploring if ethical post-humanist thinking is an impetus of this seemingly successful coexistence. Ethical posthumanism repositions humans as one of many species, thereby bridging the nature-culture dichotomy. The results of this thesis show that although the ontological openings towards ethical posthumanism are discernable, it lacks manifestation as the foundation of coexistence with large carnivores portrayed by the lack of ability to successfully coexist with wolves. It seems then, that human-bear coexistence in Somiedo, is in large, attributable to the instrumental value of this coexistence. The openings towards ethical posthumanism this thesis found did prove valuable, as it is herein people coexisted with both the bear and the wolf without enduring conflict and retaliation. Pursuing a coexistence based on the promises of ethical posthumanism however, seems both unpractical and unattainable. Robust coexistence would therefore be anthropogenic, in that the non-human other is deserving of consideration in our human ethics, but not anthropocentric, with humans at the center of the benefits.

Keywords: coexistence, posthumanism, nature – culture dichotomy

1. Introduction

1.1 General introduction

Conservation catastrophe

It is difficult these days to find inspiring examples of conservation successes. The news, as well as academic scholars are often realistic and thereby worried about the status of planet earth and the biodiversity it supports. The Living Planet Report 2020 provided us with another blow, showing that wildlife population experienced an average drop of 68% since 1970 (Almond et al., 2020). Some scholars even suggest, that with the current extinction rate, we have entered the sixth mass extinction (Ceballos et al., 2015). Because human impact seems to be of large influence, it is often called the Anthropocene extinction, associated to the idea that we have entered the Anthropocene; where humans have influenced earth its systems so extensively that it is worthy of its own geological epoch (Lewis & Maslin, 2015).

This idea, that humans have a devastating effect on biodiversity is something that also recurs in many conservation policies and strategies. The dominating conservation strategy, what Lele et al. (2010) call mainstream conservation, has promoted the use of protected parks in which human activity is minimized, creating an idea of pristine wilderness untouched by human activity. The relation between humans and nature is thereby portrayed as a conflictual one, where the key objective is to protect nature from human influences. This form of conservation is thereby embedded in a dualism wherein nature is ontologically and epistemologically different from humans and their society or culture (Büscher & Fletcher, 2019), meaning that nature and culture are not regarded as the same thing.

Righting the ship: emergence of coexistence and posthumanism

The idea to separate nature from people has received plenty of critique. Uggla (2010) articulates that nature and culture cannot and should not be experienced as separate entities. This holds especially true if we acknowledge the idea of the Anthropocene, where human encroachment is increasing (König et al., 2020) and human activity influences all ecological systems, thereby discarding the idea that pristine wilderness could still exist. It is claims such as these that have led scholars to focus on the relation between humans and nature and how to alter the conflictual relations that can occur. Much of the academic work according to Pooley et al. (2020) has focused on conflict, and conflict resolution which does not seem strange as Frank et al. (2019) deem it one of the most urgent issues within wildlife conservation. Conflict resolution is in line with a larger goal in conservation, namely coexistence (König et al., 2020; Pooley et al., 2020; Veríssimo et al., 2019). As coexistence is becoming a prominent term in the conservation sciences it is useful to clearly define. The Cambridge Dictionary (2023) gives us two definitions of the word coexist: a) "to live or exist together and b) "with special reference to peaceful existence at the same time or in the same place. Within the conservation sciences, the second definition is more commonly employed as evidenced by Harihar et al. (2013) their paper challenging Carter et al. (2012) their claim that tigers and humans coexisted based on co-occurrence as coexistence is about living together peacefully. In this thesis I would like to adopt the definition found in Pooley et al. (2020): *"a sustainable though dynamic state, where humans and wildlife co-adapt to sharing landscapes and human interactions with wildlife are effectively governed to ensure wildlife populations persist in socially legitimate ways that ensure tolerable risk levels"* (p. 785). This

does not mean conflict is not part of coexistence, but that it is managed to ensure tolerable risks (Pooley et al., 2020). Within the different approaches to conservation, the relation between nature and culture varies from conserving nature by separation to tolerating the damage nature inflicts on humans.

The effort to coexist and thereby tolerate the conflicts nature might bear on humans is slowly shifting away from the nature-culture dichotomy, but there is still a divide between what is human and what is nature. The argument here is that coexistence as defined by Pooley et al. (2020) still seems based on anthropocentrism and human-centeredness as it is up to us humans to manage nature in such a way that it becomes tolerable. This then, seems problematic as Weldemariam (2017) states: *“disregarding the agency of the more-than-human in today’s Anthropocene era means that humanity remains stuck in its own myth of exceptionalism, at the political cost of the continued human dominance over the environment and other entities”* (p. 112). A way out of this is articulated in the idea of posthumanism, where the human species is repositioned as only one of the many natural species (Wolfe, 2010), with the added intention to *“disrupt absolute human-animal binaries”* (Fox, 2006, p. 527).

Robust coexistence

It is clear then, that anthropocentrism is problematic for conservation of the environment and our efforts of overcoming the nature-culture dichotomy. This thesis is therefore concerned with what would be a better and more sustainable form of coexistence, with regard to the non-human other and with regard to overcoming the problematic dichotomy between nature and culture. It is here I would like to propose a term for a sustainable coexistence that succeeds in both: robust coexistence.

Parque Natural Somiedo

In order to explore robust coexistence, researching a seemingly successful case of coexistence is a necessity. Therefore, this thesis will research human-bear coexistence in the human-dominated landscape of Parque Natural Somiedo (Zarzo-Arias et al., 2018). Although bears have gone almost extinct due to hunting practices in the last century, conservation efforts and the creation of a natural park have brought forward more stable bear populations (around 200 bears in the Western sub-population, with Somiedo being the epicenter of this population) (Naves et al., 2018). Even though human practices have changed significantly (from hunting bears to not hunting bears), local people their perception of living in close proximity to the bear shows us that there seems to be peaceful coexistence (de Bondonia, 2019). De Bondonia also points out, that above all else, local communities value a productive landscape and a nature that is maintained by human activity. In addition, she mentions that the perceptions of the bear are more precarious now that compensations for loss of livestock have been reduced, and that the attitude towards bears has changed now that the bear is an ally by generating revenue through tourism. This seems a frail basis for coexistence. What if tourism declines, what if subsidies plummet? Would there still be relative peace between locals and the bear? De Bondonia (2019) mentions ideas of post-human relations very shortly by stating that some respondents have emotional attachments to individual bears, by referring to them as friend or neighbor (p. 181). This thesis thus proposes to further examine the coexistence in place, potential seeds of posthumanism and assess if the coexistence in Parque Natural Somiedo is robust or can become robust.

1.2 Problem statement and research questions

With the now anthropocentric extinction shaping up as the sixth mass extinction, academia has focused on rethinking how to preserve nature and has identified a need for overcoming the nature-culture dichotomy. This thesis indicated the concepts of coexistence and posthumanism as interesting concepts to explore in this debate on conservation. By exploring a case of seemingly successful coexistence in Parque Natural Somiedo, this thesis aims to understand if anthropocentric coexistence is sustainable and if the exploration of posthuman seeds could lead to a robust coexistence alternative. Because literature on posthumanism is more of a depiction of which competing views on human exceptionalism are played out (Miah, 2007), it must be noted that this research does not set out to find a perfect example of post-humanist coexistence. Contrary, this thesis is interested in what makes up robust coexistence and explores if seeds of posthumanism are part of what I have named robust coexistence.

The research questions this thesis is thereby trying to answer are:

General research question:

What is robust coexistence and to what extent does ethical post-humanism contribute to it in Parque Natural de Somiedo?

Specific research questions:

1. How is human-bear coexistence experienced in Parque Natural de Somiedo?
2. Are seeds of ethical posthumanism recognizable in Parque Natural de Somiedo, and what is its potential?

The exploration of these questions brings insight into how a seemingly successful case of coexistence is experienced and if this success is attributable to post-humanist thinking. Thus, exploring how posthumanism could play a role in coexistence.

What follows in this thesis is a theoretical framework in which the theoretical problematic nature of anthropocentrism in coexistence is reiterated in detail, in addition to how this research fits within the dialogue of existing literature on posthuman relations with wildlife. This chapter will be succeeded by a presentation of the chosen methods. Hereafter I will present the results of the empirical fieldwork I have carried out in Parque Natural Somiedo. A discussion of the results will follow, before I bring forward the final conclusions of this thesis.

2. Theoretical framework

I'll start this theoretical framework by more clearly defining the need for robust coexistence and work towards an understanding of robust coexistence and why posthumanism is an interesting concept to study with regards to robust coexistence. Subsequently, this chapter will dive into the complex and rather abstract philosophical concept of posthumanism and ethical posthumanism with the intent to present the reader a dialogue between the concepts of this thesis and existing knowledge.

2.1 Defining robust coexistence

Problematic identity of anthropocentrism

Anthropocentrism is *"the belief that value is focused on human beings and that all other beings are means to human ends"* (Kopnina, 2019, p. 9). It thus excludes all nonhuman nature of moral standing, as there is no value to it, except for human use (Washington et al., 2021). Hayward (1997) articulates that it is not anthropocentrism that is 'bad', but human chauvinism and speciesism. His main argument being that because humanity is so intertwined with nature, if we are human-centered, we would also take care of the environment and the non-human other. Crist (2012) rejects this separation of chauvinism, speciesism and anthropocentrism and argues that chauvinism and speciesism are integral parts of anthropocentrism. She further articulates that human supremacy is anthropocentrism its *"most virulent strain"* (p. 143). Kopnina et al. (2018) joins this position and states: *"Although anthropocentrism has many meanings, at its core it involves the planetary-scale subordination of nonhuman organisms that denies they have value in their own right"* (p. 115). The argument that Hayward (1997) makes regarding the survival of the human species through conserving nature proves insightful, but also comes with questions. Washington & Ehrlich (2013) for instance argue that the question of what keystone species should be preserved is unknown and will likely remain unknown. In a world where not all biodiversity loss affects humankind (Crist, 2015), this is an especially important question. It seems then, that when anthropocentrism would not be overturned, species loss is inevitable. Kopnina et al. (2018) name anthropocentrism: *"a powerful explanation for society's current environmental unsustainability and unethical treatment of nonhumans"* (p. 115). This shows that in trying to bridge the gap between nature and culture by coexisting, exploring alternatives to anthropocentrism would be a necessity.

A start in defining robust coexistence

If we acknowledge that anthropocentrism is 'bad' and unsustainable in terms of its potential for nature conservation and we start to define robust coexistence, robust coexistence should thus move away from anthropocentrism and its premise that value is focused on humanity. Instead, robust coexistence should be about peaceful coexistence with wildlife without wildlife providing services for humans. Vannini & Vannini (2020) articulate this strongly: *"treating non-human others as deserving of a full life lived not for the sake of ecosystem services, symbolic heritage capital, species tokenism, or scientific value"* (p. 136). The idea of robust coexistence would therefore be reliant on a more-than-human approach; in this manner coexistence may become more equitable for both wildlife and humans as the playing

field starts to level. Thereby opening possibilities to bridge the gap between nature and culture.

A role for posthumanism?

Now that robust coexistence is cautiously defined, I would like to propose the idea of posthumanism as a foundation on which robust coexistence can be shaped. Posthumanism differs from humanism in that it repositions humans as only one among the many natural species (Wolfe, 2010), thereby making no exception of what is human. Being human in this framing is being part of nature and putting the human above the natural therefore becomes an unattainable goal. Posthumanism thus breaks with anthropocentrism, which is effectively formulated by Kopnina (2019), who articulates: *“post-humanism exposes anthropocentrism as an attempt to ignore behavior in which humans focus on themselves at the expense of all other species”* (p. 9) and later *“post-humanism exposes anthropocentrism as an inadequate basis for environmental action as it criticizes anthropocentrism as ethically wrong as well as pragmatically ineffective”* (p. 9). The theoretical notion of posthumanism thus shows similarities to what I argued robust coexistence should be in practice in moving away from anthropocentrism as it is problematic and work towards an appreciation of nature not for human benefit.

Although it is the Anthropocene, with its premise that humans alter ecosystems worldwide, that has bluntly reopened the debate on how humans and nature should relate to each other, this question has kept scholars busy for quite some time. Aldo Leopold, whose collected essays were published in a posthumous book called *A Sand County Almanac* (1949), has advocated for an *“ethic dealing with humans’ relation to land and to the animals and plants which grow upon it”* (Leopold, 1989). In his essays, Leopold rejects the American utilitarian approach, where natural resources are conserved solemnly for their economic purposes (Ndubisi, 2014). The latter resonates with what Paterson (2006) calls the instrumental value of wildlife, whereby wildlife is conserved for the value it brings humans. However, Paterson (2006) argues that Leopold’s biocentric approach can be seen as a prioritization of the non-human over the human. It is in this debate that we again begin to see defining features of what robust coexistence can be. We need to not separate nature and culture, but rather to live together, to coexist. And we should not morally place human above non-human, or vice versa: posthumanism. Some amalgamation of these two, I would argue, begins to define robust coexistence.

2.2 Posthumanism

A starting point in discussing posthumanism will be to define posthumanism as an ethical position that extends moral concern to others and most specifically to those others that we, as humans, cohabit the earth with. Although all posthuman ideas tend to be ethical in their nature, the term ethical posthumanism is explicitly chosen to create a divide between what I argue here and what some argue posthumanism is: the fusing of technology and humans, and thereby creating a posthuman future (Kurzweil et al., 1990).

The idea of ethical posthumanism that this thesis will use is well articulated in Haraway her work *When Species Meet* (2008) in which she sketches a posthuman future in which humans create room for non-human others. Haraway her work encourages us to think outside of human interests, to be less narcissistic, and to take the interests and rights of different lives seriously. From this idea it becomes apparent it considers the relation we humans have with

other non-human entities and our environment and thus, it challenges the notion of how humans ethically relate with wildlife and thereby coexist.

Ethical post-humanist relations with companion species

The literature on posthuman relations with animals is extensive. Most of this work, however, has focused on animal species that are close to us, and that we depend on, companion species and cattle. Although this is not the exact scope of this thesis, I do believe the theoretical insights can prove very beneficial in understanding how post-humanist human-wildlife relations might take form. I would like to commence with the notion that scholars view these multispecies domestic entanglements as the first whispers of posthumanism (Charles, 2014; Fox, 2006). However, Charles (2016) argues for being careful in the usage of the term posthumanism in describing relations between humans and animals. He argues that an emotional closeness to an animal, does not break the human-animal dichotomy. Extending this idea, Irvine & Cilia (2017) argue that a close connection between pet and human can disrupt human exceptionalism, but the way that sometimes people refer to their pets as furry humans, might be strengthening the human-animal divide, as it values only what is human in the non-humans. This will exclude animals that do not exhibit human qualities or that show a close connection to humans. It might seem counterintuitive, but it shows the difficulty of defining what exactly is a posthuman relation as it could be seen as an anthropocentric act that most work on posthuman relations is with animals that are close to us. This illustrates that it is difficult to see how posthumanism narratives actually play out in daily life (Fox, 2006). Valera (2014) also articulates the difficulty of cataloging what makes up posthumanism. She accounts this to the elusiveness of the philosophical system. Because using philosophical and elusive concepts in a real-life case is difficult, the concept of posthumanism is used to identify seeds of ontologies that counter human exceptionalism.

I would then like to discuss how post-humanist relations with companion animals can be lived without strengthening the human-culture dichotomy. *The Companion Species Manifesto* (2003) from Haraway serves as a great starting point. Herein she talks about an intersubjective embedded relation with her dog in which she says it is important to see both dog and human as a subject. The relation she endures is one of trust and respect that eventually formed through an ontological choreography. This ontological choreography is something she later refers to and calls becoming-with. Becoming-with is an alternative way of relating to non-humans. In this relation, beings “*are neither whole nor part*”, but made up in the flesh. Becoming with is therefore not becoming one, “*becoming is always becoming with, in a contact zone where the outcome, where who is in the world, is at stake*” (Haraway, 2008, p. 244). It thereby surpasses the human-animal, as the process of becoming-with is one of letting go of the bounded human identity.

From discussing human-animal relations with companion species we have learned that it is far from easy to find a perfect form of posthumanism in human-animal relations. Ascribing human values to an animal, as an affective form, might even enhance the dichotomy between what is human and what is animal. Haraway, in trying to steer towards posthumanism argues that post-humanist relationships with animals are formed through interaction where people lose their humanness, but the animal might also lose some of its defining features. It is herein Haraway says that you become something else altogether and thus that there are no individual subjects in the meeting of each other, in becoming with.

Ethical post-humanist relations with wildlife

Meeting with wildlife is something humans tend to avoid, as this is exactly where harm and conflict for both humans and non-humans can arise. How then, do ethical post-humanist relations with wildlife form? A good place to start is the work of Tschakert (2022) who asks the question *“how do we enact more-than-human solidarity and multispecies justice that stretch beyond what is familiar?”* (p. 279). Tschakert proposes four types of encounters; visual, embodied, ethical and political, that can lead to *“ethical responsibility and co-existence”* (p. 281). According to Tschakert, if we want to create ethical relations, we must question our entanglements and obligations to non-human others, not just out of compassion, but because earth is a shared world (Tschakert, 2022). Haraway (2018) calls this cultivating responsibility for each other by making ontological room for others. Although this relates to the becoming-with theory as described earlier I would like to introduce the idea of becoming-world (Braidotti, 2013) as it is more encompassing of non-companion species. The idea behind becoming-world, just as with becoming-with, is that we are not in the world, we become with the world. It considers the process of redefining the connection of humans to appreciate the shared world as a whole. It is a post-human process which works towards an ethical appreciation of what human and non-human entities (fauna, flora and abiotic elements) can do together (Houston et al., 2017). In this sense, it also moves away from speciesism, as it does not only focus on companion species but tries to incorporate all beings into this idea of becoming.

This theoretical framework stressed that anthropocentrism is problematic in conservation efforts and therefore that an alternative form of coexistence could be preferable. This thesis reasons that ethical posthumanism is an attractive alternative as it can *“help us rethink the tenets of our interaction with both human and non-human on a planetary scale”* (Braidotti, 2013, p. 4-5) for coexistence and will thus explore how humans and bears in Somiedo coexist together and how this contribute to robust coexistence.

3. Methodology

3.1 Methodological approach

How coexistence is experienced and how post-humanist seeds could contribute to a robust form of coexistence with wildlife remains largely unstudied and therefore this research has been exploratory in its set-up. To identify unstudied concepts and theories in a real-world case, I chose an ethnographic approach which provided 'thick' and 'in-depth' qualitative descriptions of the phenomenon through interpretation by the researcher (Bernard, 2017). Ethnographic research helps to understand the context of real-world knowledge through studying behavior and social interaction of a group in their native environment (Hammersley & Atkinson, 2007). Because of the exploratory set-up of this thesis and the possibility of gaining new information about the case during fieldwork, this thesis was iterative of nature, meaning that my research questions and methods could change (Mack, 2005).

3.2 Data collection methods and analysis

Approach

As this is an ethnographic thesis, I used approaches common in ethnographic research. Hammersley and Atkinson (2007) write: *"ethnography usually involves the researcher participating, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts – in fact, gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry"* (p. 3). This resonates strongly with how I collected data in Somiedo in that all the experiences I had were a part of my data. It was therefore difficult to define a strict plan for collecting data, except for making notes during conversations and interactions I thought proved insightful. The primary source for data came from participant observations and relative informal conversations with the inhabitants of Somiedo. I immersed myself within local context and community for a span of three months (April 23rd to June 28th) to be able to study the local practices and cultural environment with the idea to better understand how coexistence with wildlife was experienced and to see if post-humanist ontologies were recognizable.

I engaged with the local community in a mostly overt role, meaning that I chose to tell people that I was in Somiedo for the purpose of writing a thesis. This helped me in gaining trust and asking for consent, although this was not always possible. Therefore, I chose to record data solemnly by writing, and not recording. This helped me greatly in reducing suspicion from locals and helped me to engage with the inhabitants of Somiedo more actively. The engagement with participants happened in many forms. I often had lengthy walks where me and a participant would talk and discuss coexistence, and I would write down the key messages and insights into my field diary. Additionally, I also had short conversations with people in shops or café's where again, I would jot down the most important aspects of these interactions so I could later translate and rewrite these in my field diary. Kumar (2018) calls these narrative recordings and this way of creating a field diary is in line with the traditional recording means for ethnographic research (Hammersley & Atkinson, 2007). Other times I chose a more passive role, in that I observed how others spoke about the bear. This was often done when I felt it was not my time to actively engage. This often depended on the situation and if I felt comfortable enough interrupting conversation others were having.

This ties back nicely to the overall role of the researcher in ethnographic research in that the researcher – in this case me – is the research instrument (Hammersley & Atkinson, 2007). Through immersing myself in the local community of Somiedo, I am aware that I have had an influence on the outcome of the results of this thesis. Although my enthusiasm for the topics of coexistence and posthumanism have generally been positive, it also asked me to stay reflective to make sure my position on these topics did not remain fixed (Holmes, 2020). In order to stay reflexive, I have added a column in my field diary called: *own reflections/positionality*, which I used to write down my own stance and thoughts during the observation or conversations with others. Although positionality is not something that changes, it led me to be aware of my own role and behavior throughout my fieldwork and throughout jotting down my narrative recordings, which are susceptible to subjectivity (Kumar, 2018).

Sampling

The group I chose to study were the people located in the council of Somiedo (Asturias) in North-West Spain, with specific interest to people who lived in the area, as they are often more immersed in local culture than visitors. The group was open and accessible. However, because I was new to Somiedo, and I needed a way in, I started by approaching people working in the offices of the Fundacion Oso Pardo (FOP) and the Natural Park Center (Centro de Interpretacion del Parque Natural de Somiedo). I explained the aim of my research and asked if they had contacts valuable for my research. The contacts I received became vital and can be addressed as so-called informants. I used these informants for their network and to identify subgroups. Subgroups were important as I deemed it valuable to hear different opinions on coexistence with the bear. Through the use of informants this thesis thus largely depended on snowball sampling and purposive sampling, which are both non-probability sampling methods that are ideal for exploratory research (Taherdoost, 2016). I also used aspects of accidental sampling, as it often occurred that I had meaningful interaction with a participant without having made an appointment for this specific interaction.

I also observed material objects such as documents, paintings, statues, and other artifacts that became part of my data, which is validated in ethnographic research (Hammersley & Atkinson, 2007). The collection of this data was not structured, and completely relied on whenever I, as the researcher, found the object to be interesting enough to include in this thesis.

Methods of analysis

Hammersley and Atkinson (2007) write that the analysis of data in ethnographic research is not a distinct phase in the research, "*In many ways, it begins in the pre-fieldwork phase, in the formulation and clarification of research problems, and continues through to the process of writing reports, articles, and books. Formally, it starts to take shape in analytic notes and memoranda; informally, it is embodied in the ethnographer's ideas and hunches*" (p. 158). I recognize this in the way data was analyzed in this thesis as it was often a new thought that surfaced, which I would then explore, both in literature and in the field. This form of 'recursive analysis' led me to explore topics I did not think of before conducting field research. Useful herein was my field diary in which I had created a column called *emerging questions/analysis* in which I was able to identify themes and link events to one another already during fieldwork.

When I got back from fieldwork I re-read my field diary multiple times, cleaned it up and put specific attention to the column *emerging questions/analysis*. Throughout the

process of fieldwork, I had already identified themes, but re-reading the diary from front to back helped in connecting certain events. It is through inductive analysis of this column and looking for linkages that a narrative based on the events in Somiedo appeared. Kumar (2018) identifies the development of a narrative as a suitable way of processing data in qualitative studies and recognizes that there is no further analysis per se, except from thinking of the sequence of how to best illustrate the narrative. This narrative is mainly built on “*verbal descriptions, explanations, and theories*” and the “*interpretation of the meaning, function and consequences*” hereof (Hammersley & Atkinson, 2007, p. 3). It is in the writing of this narrative I chose to anonymize the respondents their name, as I had mentioned to the participants, I would not portray their personal data in this thesis document.

3.3 Methodological justification

The internal validity of ethnographic research is often quite high as the observations are carried out in a natural environment that reflect the realities of daily-life and the phenomenon of interest are studied for a lengthy time (Lecompte & Goetz, 1982). Also, because I included a positionality column in my field diary, I remained open to questioning my thoughts and I could easily re-evaluate if I noticed my position was of great influence on the outcomes. During the data analysis and creation of a narrative, I remained close to the data I had gathered during fieldwork, thereby staying true to the reality of daily life in Somiedo. It must be noted however, that because the creation of a narrative was subjective to what I interpreted as important and a linkage of events, the reliability (the consistency of results) of this research is rather low.

The external validity of this research is also low, which is common in ethnographic research. With a limited amount of time and resources it would be impossible to collect ‘thick’ and ‘in-depth’ qualitative insight of a large population or phenomenon. The study population is therefore small, which makes the external validity low. By focusing on Somiedo, a singular case is selected. And although interesting insights and theories from a case could emerge through induction, the validity is low, as the collected data is very case-specific.

4. Results

4.1 Coexistence in Somiedo

In my introduction and theoretical framework, I raised questions about conservation schemes and introduced coexistence as a possible model for conservation in human-dominated landscapes. Additionally, I raised questions about what coexistence should entail, and if coexistence as usually defined in academics circles is sustainable. This chapter explores these questions by looking into the case of Somiedo. At first, a superficial understanding of coexistence in Somiedo is given to show how the relation between people and bears seems to be experienced. Afterwards, a more in-depth and maybe pessimistic section will follow where concerns about the current-day mode of coexistence are presented.

4.1.1 Coexistence in Somiedo, an exemplary case at first sight

It will be useful here to reiterate the definition of coexistence as defined by Pooley et al. (2020): *“a sustainable though dynamic state, where humans and wildlife co-adapt to sharing landscapes and human interactions with wildlife are effectively governed to ensure wildlife populations persist in socially legitimate ways that ensure tolerable risk levels”* (p. 785).

It is clear from academic literature that the bear population in the Cantabrian mountains, with Somiedo as heart and center of the western sub-population is not only growing but also enjoying better dispersal to other sub-populations (Zarzo-Arias et al., 2018). From literature it can thus be concluded that although bears live in a human-dominated landscape (Chapron et al., 2014), they have adapted successfully. Likewise, studies about how local residents perceive bears, all conclude the same: perceptions of living with bears are rather good, with Somiedo often outperforming other councils in the Cantabrian mountains. In the research of Palomero et al. (2021), the question: *“do you like the bear?”* was answered with an average of *“very much”*. When asked if an individual was afraid of encountering a bear, the average results corresponded with: *“not at all”*.

During my time in Somiedo I have found the bear to be a conversation starter, an emblematic icon representing the council. The most frequently asked question in Somiedo: *“Has visto un oso?”*, which translated means: *“have you seen a bear?”* also indicates a permanent awareness of the bear. From my field notes:

It is the easiest conversation starter in this town. It might just be what Martín told me: “It is like you talk about football in the city. Everyone knows the bear is here, so we talk about it. And when we see a bear, there is a sense of pride, and we ask people: “Hey have you also seen the bear that was in La Peral this morning?” (Personal Reflection, June 10th)

It seems that both bears and people have adapted quite well to living together. The bear population is increasing, local people are not afraid and even feel a sense of pride regarding the animal. The conflicts that do arise, which are mainly attacks on apiaries, fruit-trees and livestock are mostly mitigated through the implementation of electric fences carried out by

the *Fundacion Oso Pardo* (FOP) (translated: Brown Bear Foundation). If a bear causes damage this is routinely compensated by the municipality (Palomero et al., 2021).

Besides compensating damages, there are also efforts to avoid conflict. Through a network of tour guides, the FOP and the local authority, it is sometimes decided to close down hiking trails. This happens in cases where a female bear with cubs is spotted. Although these measures might not be perfect, they seem to work rather well, as 90% of the locals agree with the statement that rural life and bears are compatible (Palomero et al, 2021).

Before addressing the rise of tourism, some historical relevance is beneficial. The status of the bear as an emblematic symbol piggy-backed on conservation efforts during the latter half of the 20th century. These conservation efforts; focused on fighting illegal persecution, habitat improvement and increase in social acceptance were backed by the idea of rural development (Palomero et al., 2021). Although tourism has been rather small-scale, Somiedo has garnered increased interest from tourists because of bear watching opportunities. Palomero et al. (2021) questioned how important the bear actually is for tourists and concluded that 40% of the tourists plan their stays in Somiedo based on whether they might get a good opportunity to spot a bear. The bear has thus become an ally in rural development and thereby a badge of regional identity.

Although my initial thoughts were that tourism as development would mostly serve the people who actually work in the tourism sector, this turned out to be a misapprehension as these field notes show:

It pains me, but it is true; everybody here earns because of the bear. I questioned this and asked: but not everybody right, what about farmers? She responded: Everybody earns, the price of local meat is increasing, farmers have barns they are constructing Airbnb's in, people are selling their land because prices are increasing. Everybody earns (Lucia, June 17th).

Besides economic gain, development also produces opportunities. When I spoke with Martina, she said:

Somiedo has changed a lot, but only for the better. Tourists bring in money, and the cafés make this town lively (Martina, June 1st).

As if to say that development is not just about money, but also about the liveliness of the area. Besides, tourism was also mentioned to be good for the following reason:

"I think that the tourism here is very good. It lets us to believe that we have a treasure that is worth conserving" (Paula, April 23rd)

This narrative was later shared by Carlos:

Tourism is good. It is through tourism that the locals again see how beautiful it is here (Carlos, June 1st).

The above paragraphs show us that coexistence in Somiedo can indeed be understood as successful. People and bears have co-adapted and live together in relative harmony. Bear

populations are increasing and the immediate conflicts that occur are either managed or avoided in such a way that complaints – from humans at least – are limited. Steering towards bear conservation as an effort to increase development has led to the bear becoming a true emblem of regional identity as imagery or conversations about the bear are truly inescapable. If we put these findings in line with the definition from Pooley et al (2020), it becomes clear that Somiedo does indeed exhibit precisely that which academia has coined coexistence and can thus be considered an exemplary case.

4.1.2 Doubting successful coexistence

At first sight then, coexistence in Somiedo seems to be an admirable construct. However, I also noticed people were suspicious or shy when I approached them about the subject of coexistence illustrated by the following encounter where me and my companion spoke to Stella, illustrating what I encountered on multiple occasions.

Stella acted like she didn't really know us. Then when her husband walked in, she said: "these are the Dutch people that live in Llamardal". He responded with "ah the people that study the bear" and he walked away immediately, as if he didn't want anything to do with us. I found this curious as Stella had told me he had been studying the bear for 15 years. When I said: "I'm also interested in hearing what you have to say about living with the bear" and asked if we could maybe talk about the subject more extensively, she reacted with: no, no, no, not with me (Stella, May 27th).

These occasions led me to rethink my approach. "Apparently", I wrote down: "the subject is quite delicate" (personal reflection, May 31st). These occurrences made me think about my approach, and why people would shy away from me. In looking back at the weeks prior to this occurrence I found a passage in my fieldwork that I felt was worth exploring: *I notice that I feel worried about the future of Somiedo. It feels so authentic, so real. It has the feeling of one of those untouched places. Although tourism is still relatively small-scale, I'm worried tourism might destroy this. The disturbance you feel when a tour bus arrives in Pola, or when a group of people walk by my house on their way to the Brañas de Mumián makes me think. Is this what the future holds? Is this what development looks like, and is this what we want from coexistence? (Personal reflection, May 25th).*

Within two weeks I had managed to feel worried about the future of Somiedo. If I already felt this, as an outsider, how do people that live here feel? From here on out I started chatting more about the future of Somiedo in relation to tourism and the presence of the bear. This resulted in an exploration of coexistence as I had not yet encountered in my readings. The next sections shed light on the aspects of coexistence in Somiedo that seem fragile. It could be the explanation for why people would sometimes shy away.

Worry in itself might not lead to bad outcomes or a fragile state of coexistence, but situations that create worry and which are already discernable do. In all my conversations I never heard direct worries about living with the bear, further strengthening the idea that people are able to live in harmony with the bear. The worries I did hear were similar to mine: feeling overwhelmed by tourism, especially since the industry has recently exploded, in large part due to the COVID-19 pandemic. The reason I bring up tourism and wanted to further explore the development and concerns hereof is because the tourism industry is inherently linked to

the presence of bears and could be a large part of coexistence success due to the value of development. This raises a couple of questions. First, could tourism harm bear conservation due to obnoxious behavior by tourists who know little about what it means to coexist with wild bears? And secondly, what happens when locals no longer yearn for development, and the monetary benefit of coexistence disappears? Is coexistence then still worthwhile?

4.1.3 Fragile: the false promise of development

Concerns regarding tourism

When I interviewed Paula, who was born in Somiedo and who founded the first bear-watching company in 2015 (Somiedo Experience) about the subject of tourism she said the following:

“For me the tourism is good, but I think it is very important that the tourism in Somiedo is not massified. If that starts to come, the rest will go. I don’t want it to be crowded year-round and I don’t want people to go into the bush and chase bears just for a picture and put it on Instagram. But, this is almost where we are going.” (Paula, April 23rd).

What Paula mentions here is that when tourism becomes massified, it puts an end to what Somiedo is now, a still largely authentic region where most people are still involved in traditional rural activities and where bear conservation efforts are noted a success. In her daily work she also notices that visitors become more obnoxious to the bear, wanting to take pictures. This is an obvious concern, as visitors are unaware of the consequences this might have. Raphaël, who is also involved in providing tourists with opportunities to see the bear acknowledges this and thinks about setting up a very short nature-education course for visitors. From my fieldnotes:

He has a lot of ideas about how tourism should be developed, and that tourist should learn what it is to be in nature. Not just take a picture of a bear and go again. One of his ideas on this topic is to have tourists follow a course on how to engage with nature, how to behave in nature so they better understand how to behave in an area occupied by wild animals. (Raphaël, June 7th)

Touristic infrastructure

The council of Somiedo does recognize the problem of mass-tourism and has thus created bear-viewing platforms in places where bears are easily visible, without being close-by. These platforms are located in the smaller villages of La Peral and Gúa. To keep tourism minimized, these viewing platforms are only accessible by foot, as it is prohibited for visitors to enter these villages by car. Nonetheless, I have found these observations platforms to be very popular and the road along these villages would often be crowded. I wondered what people in these villages think of the number of tourists passing by their village every day as I had read in Mihalic & Kuščer (2021) that overcrowding of tourism can irritate residents and affect their quality of life and that overcrowding can lead to unsustainable forms of tourism. I thus asked Martín, who lives in La Peral, if he knew of problems locals experienced with tourists. From my fieldnotes:

Martín was not worried about the impact of tourism in La Peral. He mentioned that farmers might sometimes get angry because people step in their field or chase their cows away. But other than that, not many problems occur, at least not in La Peral (Martín, June 6th).

This is contrasting to situations in other villages, such as La Pineda. When I talked to Raphaël, he was quick to complain about the lack of infrastructure to accommodate both tourists and locals:

In La Pineda there is room for only 4 cars. When the rutting season starts, our village is a very popular destination because it is so close to where the deer are active. Can you imagine the situation? There is no space for more cars, so we get irritated, as well as the tourists. It is really quite stupid that the government does not invest in better infrastructure. (Raphaël, June 7th).

He then shifted his focus from La Pineda to the viewing platform in Gua, about which he said:

For instance, the bear viewing point in Gua. It is only a 30-minute walk from Pola de Somiedo, but there is no clear walking trail, so everybody goes by car. I think the government should invest in better infrastructure, so the flow of tourists is better regulated (Raphaël, June 7th).

The problems that Gúa faces has been noted in many of my conversations. The problem being that it attracts voluminous amounts of tourists but does not facilitate them well enough. In my talk with Lucia, she mentioned that beside poor infrastructure, the behavior of tourists is also problematic herein. From my fieldnotes:

People have a feeling they are in a rural area and can do everything they want. Cars are parked in the middle of the street, people don't behave, walk off trail and all of those ignorant things really (Lucia, June 17th).

Concluding thoughts on tourism in Somiedo

When further discussing the implications of tourism and development on bear conservation, she said:

We have finally managed to have local people coexist with the bear successfully, in large through the positive aspects of tourism and now we kind of have to refocus our efforts and make sure to steer this development as it might cause conflict, instead of mitigating it (Lucia, June 14th).

It is through these conversations I understood there are worries about the future of Somiedo. Although these worries have not yet led to negative consequences, massified tourism would increase the potential hereof. In Picos de Europa, a national park in the same Spanish region, López & Pardo (2018) already speak of new challenges to the conservation efforts due to the pressures exercised by tourism, especially when concentrated in certain times and places, just as in Somiedo. López & Pardo (2018) mention that this massified tourism has already nurtured social conflict.

Concerns regarding cultural authenticity

Another concern that came to my attention is the loss of authenticity. One thing that I heard often is the increase in land prices through development. Although this could also be considered a benefit for local people, Paula (May 25th) mentioned that it makes it hard for local people that have left Somiedo to come back to the place where they were born and raised. On top of that, the people that do have the means to buy land in Somiedo are often from nearby cities and are looking for a second home. This means that a lot of the houses in Somiedo are empty for a large portion of the year. In the village of Llamardal this was visible where my companion and I were in fact the only inhabitants. Occasionally there would be someone from Oviedo in search of peace and tranquility. These people do not engage in traditional activities or take part in local culture and that is part of the reason traditional practices are disappearing. When I talked to Antonio, a local farmer, about the future of his business, and if maybe one of his daughters would like to become a farmer, he mentioned:

They like to be outside, that is why I bring them along. But [he emphasized], I don't want them to become farmers. It is a really hard job, and we don't get paid that much. I'd much rather have them do well in school and become something else. (Antonio, May 27th)

An hour before I would leave Somiedo, another matter regarding the authenticity of Somiedo surfaced in my conversation with Paula:

"What do you think? There is conversation among the restaurants if they should open earlier to accommodate tourists, would that work for you?" [Spoken in a tone of disapproval] (Paula, June 28th).

The development of tourism in Somiedo thus seems to lead to a disappearance of the traditional practice of farming, which according to Roberts & Hall (2004) happens in rural tourism as rural economies are "in transition to diversified, service-based economies" (p. 261). This is also visible in the landscape as the traditional farmer huts (teito's) are mostly in an abandoned and dilapidated state. Through tourism however, there is also a renewed interest in these teito's, and some teito's are being restored. This ties back to the idea that people in Somiedo are more appreciative of what they have because people from the outside appreciate it.

Final remarks on the false promise of development

Although coexistence in Somiedo is rather successful, we must acknowledge that this form of coexistence, which is in part a development scheme, harbors problems. The issue of potential mass tourism becomes visible and could have serious negative impacts for bear conservation when visitors start trespassing into bear territory. The issue of visitors misbehaving or disregarding the local rules and culture is also discernable, which could potentially be bad for bear conservation as bears are the main draws of tourism and could thus be seen by locals as the source of these disruptions.

Another aspect is that traditional local culture is affected by this development. However, where we see a loss of traditional practices, there are also positive aspects as there

is a renewed interest in local heritage. Tourism can thus actually be a good thing for the appreciation of local heritage as is argued by Ashworth (2009) who mentions that it is often the visitors who discover and rediscover local heritage that was previously unappreciated by locals.

I would like to stress that the concerns about coexistence do not make coexistence in Somiedo unsuccessful, at least not yet. What these concerns do show however, is that coexistence, even successful coexistence, has fragile aspects to it. When these fragile aspects become manifest and critical, problems with coexistence could occur. As a result, this mode of coexistence may turn out to be somewhat less than stable and sustainable. A rather logical conclusion would be that to avoid these concerns from growing into insurmountable problems, better management could impose more control on visitors and their behavior. The next section will argue however, that even though better management might reduce negative effects, anthropocentric coexistence – in its core – remains inherently unstable.

4.1.4 Fragile: Instrumental approaches to conservation

Development thus brings human benefit but also creates doubts regarding the sustainability within coexistence. This section will show that the implementation of anthropocentric management instruments reinforces the unsustainability of anthropocentric coexistence.

As mentioned earlier, the conflicts that do occur are financially compensated by the government. Concerns regarding these compensations are nonetheless present. Farmers claim that the time it takes to be compensated is too long, and others claim that farmers use these compensations to their advantage by claiming damage that a bear could have never caused (Palomero et al., 2021). When I asked Paula about these subsidies, she explained very well the frustration some people have regarding farmers and these subsidies:

“These subsidies are focused on conserving the environment. They pay farmers to have their cows graze in the forests because grazing keeps the forest clear and prevents wildfires. In exchange, the farmers get compensated for damage to their livestock. But farmers have to see the value of the bear and wolf to achieve coexistence. Farmers now just claim that money and they don’t think about it. If you are against the wolf or the bear, then don’t take that help, because the money is meant to help achieve better coexistence. The aids are now used to buy cars, instead of enclosures for the animals” (Paula, April 23rd).

Later she recapped:

“The new generations, often with a lot of subsidies and a lot of money. They also need help and that’s fine, I am not against it. But they don’t use the help for what they should really use those grants and those resources for” (Paula, April 23rd).

Besides irritation, the lack of interest in coexistence is mentioned. In a sense, subsidizing farmers creates the opposite of the desired effects as farmers become sluggish as they will get paid either way. This strongly resonates with the idea of motivation crowding theory, where Frey & Jegen (2001) argues that *“under particular conditions, monetary (external)*

rewards undermine intrinsic motivation” (p. 589). Bulte & Rondeau (2005) mention that compensating farmers *“can lead to a decrease in efforts to prevent damage and exacerbate conflicts with wildlife”* (p. 14). Are farmers in Somiedo then not interested in minimizing conflict and the idea of coexistence? Paula furthered her argument and concluded:

“We have a coexistence model between quotation marks. It is a model of coexistence, but not along a good line. It will not be good in the long term” (Paula, April 23rd).

The reason she gives:

“If the bear were not an economic resource and even if it did very little damage, even if it only killed very little, there is going to be hatred. Why is it that we only want cows or what gives us immediate money, why can’t we see beyond that?” (Paula, April 23rd).

This resonates strongly with what I have argued throughout; coexistence based on anthropocentric values is unsustainable, which the next section on wolf coexistence further confirms.

4.1.5 Fragile: Wolf Coexistence

Already in the initial stages of my research, I came to hear about wolf coexistence, and how this is different from coexistence with bears. One of the first questions I got asked was: *“It is only about the bear, right?”* Which I answered with *“yes”*. My respondent then said: *“oh easy, the wolf is difficult, the bear, no problem.”* (Paula, April 23rd).

Or later, when I was in a conversation about coexistence and the wolf came up, the barman from Castillo del Alba said: *“coexistence with the wolf is really not good.”* (Lucas, June 9th). Paula later illustrated what it is that is not going well when she explicitly mentioned: *If you see a wolf, don’t tell anyone. There is a chance they will then look for it and kill it.* (Paula, May 18th).

My conclusion was that to fully understand bear coexistence, understanding the relation between people and wolves would also be crucial. The important questions of course being; what constitutes the difference and does that say something about the coexistence with bears? The following anecdotes and quotes are the result of exploring these questions.

As I argued in former sections, coexistence with bears in Somiedo is intricately intertwined with rural development. This is in stark contrast with wolf coexistence, as not a single respondent mentioned human gain from coexistence with wolves. The development obviously centers on tourism, and wolf tourism is non-existent in Somiedo, or as Lucia stated: *tourism here really hasn’t focused on wolves yet* (Lucia, June 7th). This is also clearly visible when walking through Somiedo and especially Pola where there are images and statues of bears everywhere, contrary to imagery of the wolf, which is nowhere to be found. Where the bear has become an icon, the wolf is not.

Although there is no wolf-tourism, the wolf is protected under Annex V of the EU habitat directive (Trouwborst, 2014) and the state of Asturias does try to accommodate farmers by financially compensating those who have lost livestock due to wolf attacks

(Fernández-Gil et al., 2016), just as they do with bears. But this raised the question of why bears are more accepted than wolves? Apparently, the financial arrangements do not tell the whole story. Fear, justified or not, seems to play a big role. People are more afraid of the wolf than of the bear. In one conversation I had about the bear, I asked a farmer who visited Llamardal: “*are you afraid of the bear*” and he responded with:

“As a farmer I am not afraid of the bear, a lot more of the wolf who can kill my calves” (Hugo, May 24th).

Even in talking about the wolf, people seem to get afraid. When I talked to Lucia, something curious happened.

I asked about the wolf, and it was strange to see but her whole appearance changed. Where she used to be orating about the bear, she was now significantly quieter, and it seemed she was looking around to see if people were eavesdropping. (Lucia, June 17th).

It seems that people are not only afraid of the wolf and the possibility of conflict, but also about confronting each other with their beliefs. In my fieldnotes I wrote down: *I herein recognize one of the things Redpath et al. (2015) mention in their articles. Human-wildlife conflict is not only a conflict between humans and wildlife, but more so between humans and humans (Personal Reflection, June 7th).*

In exploring the foundation of this fear, I encountered a video of Paula where she talks about her past and her upbringing. She says the following:

“I have hated the wolves; I have been scared of them and I have suffered because of them. I have had nightmares about the wolf as I grew up with stories like Little Red Riding Hood, that my mother told me, but for real. It leaves marks that help you to hate the wolf a bit more, to be afraid and see it as your enemy” ((WWF España, 2020).

That this fear is often an ungrounded and emotional feeling, is also reiterated in literature. Fernández-Gil et al. (2016) come to the conclusion that: *“compensations for wolf complaints were fivefold higher than for bears, but media coverage of wolf damages was thirtyfold higher”* (p. 1). Also, it is noted that *“media coverage of wolf damages was unrelated to the actual costs of wolf damages”* (p. 1).

What then, does this say about the coexistence with bears? To begin with, it is clearly noticeable that the bear brings economic gain whereas with wolves this is non-existent.

It is difficult to pinpoint the dynamics and interplay of human benefits, culture, media and the ability to coexist. But it seems to be a case where the local community can see the wildlife species as an annoyance when they do not benefit from their presence or if the costs of coexistence outweigh the benefits, just as Hohbein & Abrams (2022) articulate. The bear carries a lot of benefit, while the wolf does not. The benefits not only being the economic advantages, but also the cultural representation or maybe familiarity with the bear – think of Little Red Riding Hood versus Winnie the Pooh – are important. This would mean that the

sort of wildlife that carries the least risks and brings the most benefit is the sort of animal humans can more successfully coexist with. It seems then, that there are co-arrangements and that these co-arrangements depend on the human value of a species. If the benefits change, or disappear, so will the co-arrangements.

4.1.6 Closing remarks on coexistence in Somiedo

Although this chapter started on a positive note about the coexistence with bears in Somiedo, my results show that this coexistence also entails negative consequences for people, and possibly for the conservation of bears. From the beginning I have placed question marks about what it is to coexist, and if coexistence in its present form is actually sustainable. Throughout my introduction and theoretical framework, I have argued that the starting point of coexistence might be based on the wrong foundation, one of human exceptionalism and anthropocentrism. My results on coexistence in Somiedo further strengthen these concerns as my results shown that coexistence is in part the result of an analysis of costs and benefits, and that tourism, which I have called a false promise, might actually cost more than what it offers. There is reason to believe then, that present day coexistence is unstable and the search for an alternative form of coexistence is valuable.

What then would another form of coexistence look like? I have argued that ethical posthumanism could be used to explore a more stable form of coexistence. The following chapter will further delve into this idea and explore if seeds of ethical posthumanism can be found, how they materialize, and if they could indeed lead to a revamped construct of coexistence.

4.2 Ethical posthumanism in Somiedo

The previous chapter confirms the idea that anthropocentrism in conservation and coexistence is fragile. This thesis, however, not only focusses on coexistence as it presently exists, but seeks to explore if robust coexistence could form through a foundation of ethical posthumanism. This foundation would reposition humans as one of the many natural species and thereby asks humans to be less self-centered in their conception of the world. The obvious question is if ontological openings towards ethical posthumanism are recognizable and if these openings have a way of materializing into a broader societal context. This chapter tries to explore and answer these questions by first addressing the ontological openings of human exceptionalism that I have found in Somiedo before exploring if these seeds show possibilities of flourishing within local society.

4.2.1 Seeds of ethical posthumanism in Somiedo

In returning to the Netherlands, it struck me that seeds of ethical posthumanism are mostly embodied by people through their behavior and attitude. It is through these people that seeds can grow and possibly flourish. Because ethical posthumanism is an abstract concept which is hard to operationalize, the power of using this concept is to see if there are ontological openings. The worth of this thesis might then be to create room for others to rethink their ideas on conservation and open up the debate on conservation and coexistence. This chapter will therefore reveal seeds of these ontological openings.

In my theoretical framework I commenced by stating that ethical posthumanism is about viewing humans as only one among many species, emphasizing that being human is being a part of nature. In a talk with Martín, he mentioned the following:

Well look at my father, he never saw a bear here when he was young. And the concept of nature didn't exist here. The concept of nature is really something from cities maybe, it used to just be part of life, you lived with it (Martín, June 6th).

Although this quote is about the past in Somiedo, Martín and I were able to identify differences regarding how people relate to nature. I found this very valuable as he was one of the few people in Somiedo I was able to have this conversation with, the others not really being concerned with their relation to nature possibly indicating that these academic concepts carry little value in an embedded case.

When I addressed the ideas of posthumanism and the contrast between ethical posthumanism and the instrumental or utilitarian approach, Martín indicated:

It is more something in my heart that speaks to me about the bear. I don't really care about the income the bear brings. I feel free here and I like to live here more than any other place (Martín, June 6th).

This line of reasoning was reiterated by Lucia:

She said she just really loved nature, and that the other things don't really matter then (Lucia, June 17th).

Even when I confronted her with what she had said earlier, i.e., that everybody in Somiedo earns from the development the bear brings, she reiterated that for her it was not about the money. From my fieldnotes:

I think Lucia mentioned four or five times that for her it was different. She just respected nature and wanted to be around it all the time. She just really likes to go out and be where the bear is (Lucia, June 17th).

Although these are examples where people counter the instrumental approach, and it is difficult to pin-point what exactly is ethical posthuman thinking, I do see this as a starting point as their love and respect for bears is not accountable to human benefits, but to a feeling they have always felt within themselves. Above I argued that ethical posthumanism is not just an emotional relation to the animal, it is about intersubjective embedded relationships which takes shape through a choreography, or meeting in the flesh. The following passages refer to people who have met bears in the flesh repeatedly and indeed show openings toward ethical posthumanism.

Liam has a hut in the mountains and often encounters bears. He has seen bears many times and said that in those encounters he has always felt really appreciative of nature. "The bears are my friends. I don't try to be their friend per se, but they are (Liam, June 1st).

This quote struck me as Liam clearly mentions that the bears that he meets close to his hut are his friends. Although I have argued that an emotional closeness does not break the human-nature dichotomy, and could even strengthen it, when an animal is addressed as a furry human friend, this quote from Liam can be regarded as an opening towards ethical posthumanism. He is not afraid to mention that his friends are bears, and in no way is he applying human characteristics to the bears he meets. What he means with "*I don't try to be their friend*" is that he lets the bears be, he is not actively looking for them, but once he encounters them, he experiences it pleasantly and appreciates the bears like he appreciates his human friends.

Another person I have met who, in contrast to Liam, is actively looking to be around bears is Raphaël. In the times I have run into Raphaël in Pola de Somiedo he was almost always on his way into the mountains to draw. From my fieldnotes:

When again asking Raphaël about his experiences with the bear he said that he spends most of his free time in the mountains observing bears and other animals. He likes to draw bears and says he can sit there for hours and just draw, observe and feel (Raphaël, June 7th).

It is clear that Raphaël is in tune with the bears as he enjoys their proximity when he is in the mountains. Although hard to operationalize, this could be recognized as what Haraway (2008) calls 'becoming with'. Although Romain is not losing his human identity herein, he is trusting

and respecting the bears in these encounters, thus maybe beginning the choreography of 'becoming with.'

Besides engaging with the mountains and the wild animals in Somiedo in his free time, Raphaël is also attuned to wildlife in his work as he brings small groups of people into the mountains to look for wildlife. Paula does much the same work. When I asked her about her job, she said:

"This is the one [job] I love. Looking for bears, walking in the bush, binoculars, I love it all." (Paula, April 23rd.)

Although on its own this might not seem like an expression of ethical post-humanism, when placed in context, which we will get into, it is clear that these meetings in the flesh can lead to the fading of a bounded human identity. In a talk with Martín about his experiences with bear interactions:

Martín explained that he really loved the bear. He was always in awe when he saw the bear and loved that whenever he was walking around his village he would find bear excrements and tracks of bears. When I asked him what he thought when he sees those tracks and what he feels he grabbed his heart and said: "I always think of where the bear went, where did it go, why is it here and how does it feel (Martín, June 6th).

Paula iterated similar feelings, albeit with the wolf.

"I also began to sympathize with the wolf and imagine that wolf mum with its puppies looking for food to feed them. I find them the most fascinating animals we have in Somiedo, nowadays" (WWF España, 2020).

I strongly felt that Paula imagined how this wolf mother feeds her puppies and deals with the struggle of raising her puppies. Paula is hereby relating her own life to that of the wolf.

Raphaël articulated similar feelings and expressions, making me believe that without maybe knowing it, he shows signs of losing a bounded human identity. From my fieldnotes:

One of the things Raphaël said is that he really lives with the animals and the animal calendar a lot more than the human calendar. Whenever a certain animal comes out, he is also out (Raphaël, June 7th).

Raphaël hereby shows seeds of ethical posthumanism here inasmuch as he is unafraid to say that he lives on the animal calendar sometimes. This is the direct opposite of a narcissistic human view. An interesting note, however, is that hunters also participate on the animal calendar, as there can't be a successful hunt when the animals are not out. Although the intent of the interaction is different, it must be questioned if meeting in the flesh, or living on the animal calendar is working towards robust coexistence. In the continuation of our conversation Raphaël went a step further. From my fieldnotes:

We also talked about Raphaël his plans for a documentary, which will be called something like: el oso Cantabrio: mi vecino. Roughly translated. The

Cantabrian bear, my neighbor. He wants to do this in two parts. The first is how he came to live in Somiedo and how he experiences his life with the bears. The second part would be called something like: "My life as a bear" as he spends so much time in the mountains and tries to learn from the bears as much as he can" (Raphaël, June 7th).

Here, Raphaël goes beyond his previous acknowledgement of living on a bear calendar. In this moment, he refers to himself as a bear and thereby, again, letting go of the bounded human identity. It must be said that in this moment, Raphaël is still human. But naming himself to be a bear ontologically challenges the notion of human-centeredness and can thus be seen as an expression towards ethical posthumanism.

Although there are openings of ethical posthumanism are discernable in Somiedo, I have not witnessed posthuman creatures. My respondents all remained within their humanness, but they did work towards an ethical appreciation of what human and non-human can accomplish together, not just out of compassion, but because it is a shared world. The following quotes from Paula illustrate just this:

"Everything and everyone is essential here" (WWF España, 2020).

"Bears and wolves are part of it, they make Somiedo even more magical" (WWF España, 2020).

The above section illustrates that within Somiedo, seeds of ontological openings towards ethical posthumanism are visible as there are people who are not narrowly focused on being self-centered humans and gaining benefits for their human selves. What struck me in these people is that they not only share these partially post-humanist relations and emotions with the bear, but also with other animals, such as the wolf. This sharply contrasts my results in section 4.1.5 where I indicated that wolf coexistence is problematic as people make a sort of cost-benefit analysis and that the costs outweigh the benefits when it comes to living with the wolf. For the people who harbor seeds of ethical posthumanism, this is not the case. In their humanness they have a moral concern for the animal, and this thus demonstrates that ontological openings towards ethical posthumanism could indeed be beneficial in defining robust coexistence as it rejects a certain speciesism based on human benefit.

4.2.2 Thus, a bright future ahead?

It appears then, that openings towards ethical posthumanism are recognizable in Somiedo and that these openings work toward overcoming the nature – culture dichotomy by not showing human centeredness and thus also working towards this idea of robust coexistence. But is it possible that these openings or seeds form the foundation for coexistence? This section explores the ideas and present openings in Somiedo towards a more ethical post-humanist worldview, and questions whether these seeds show possibilities of expansion within a broader societal context.

Possibility of enhancing ethical post-humanist seeds

Whenever I started a conversation about bears, people would often direct me to Paula and Raphaël and explicitly mention that the ideas of these two would interest me, and that I therefore should talk to them instead. Although it could show that people were indifferent about interacting with me, my fieldnotes also show that people directed me towards Raphaël and Paula because their view also interested them. From my fieldnotes:

When I entered the Agrolab, I ran into Raphaël and some friends of his that I had seen before but never spoken too. When Raphaël introduced me to them, they first asked me if I had seen a bear yet, the usual. But once immersed in the conversation, they were pleasantly surprised to hear that I had spoken to Raphaël extensively. One of the older men, slightly tipsy, touched me on the arm and said: "He [meaning Raphaël], has a beautiful vision regarding bears" (Personal reflection, June 9th).

Outsiders settling in Somiedo

Another aspect of what I observed is that people who come from outside of Somiedo and settle in Somiedo are often people who show respect for the bear, the wolf, and nature in general. It is as if the people who make an active decision to live in Somiedo are very aware they are to live in an area where wildlife is present. For some people, such as Raphaël and Lucia, the presence of wildlife is a large part of the decision to come live in Somiedo. For instance, Raphaël mentioned:

Wildlife makes a place so much rawer, and that is what I was looking for. We don't have places like this in France (Raphaël, June 7th).

In addition to this, Paula's neighbors, who originally came from a town close to the sea, drew praise from Paula herself. She mentioned:

"These people are true pioneers. They were the first from outside to come live here, but they are so in love with the place and also the nature" (Paula, April 23rd).

That said, I also met people who come from outside of Somiedo who do not seem to care that much about wildlife. When I met Elena, she asked:

"Have you seen a bear yet?" After saying no, I asked her for how long she had been here and if she had seen bears yet? She answered with: I have been here for almost a year now, but haven't seen a bear yet, but I also don't go looking for it (Elena, May 27th).

Most of the outsiders that settled in Somiedo gave me the impression that they were quite aware of where they were settling. Some show true appreciation for the non-human world around them, but others do not really seem to care. It is therefore not said that an influx of new people in Somiedo could mean a change towards a more ethical post-humanist worldview.

Nature education

Another idea to change the way people relate to nature is what I found in a booklet by the Fundacion Oso Pardo (FOP) is that of nature education, which was indicated by others to be a possible route for achieving a better form of coexistence. The FOP is mainly educating visitors in Somiedo and people in the regions around Somiedo, where the bear will likely migrate towards. This is necessary as Camila mentioned:

Somiedo is different from the regions around it, [in Somiedo] they are much more aware of how to coexist with the bear. Here [in Proza] we really have to educate people on how to better coexist with the bear (Camila, June 26th).

When I asked Paula about how she thinks her thinking could be enhanced and materialized, she also mentioned education, albeit of different sorts. Paula for instance mentioned education in schools:

“We do not value what we have and that makes me very angry, and I think that can only be done with education” (Paula, April 23rd).

The idea of education can be linked to what Raphaël is trying to do by creating a course for visitors where they can learn about appropriate behaviors vis a vis a wild animal. Education thus seems to be a thing these people believe in to create more respect and appreciation for nature. Although this would not involve directly teaching an ethical post-humanist view, it would educate people on how to behave regarding wildlife and maybe thereby create more understanding and respect for the non-human other inasmuch as it is about coming into contact with each other. Clark (2021) argues for the notion of increased education regarding nature and articulates that our context and society condition an individual their reality and that we can educate our consciousness to notions of care (“*sympathy, empathy, identification, and responsibility*”) towards the non-human other (S. G. Clark, 2021, p. 19).

Connecting to nature

Coming into contact with nature was also something that Martín iterated, who spoke of connectedness to nature as an important aspect of learning to appreciate nature. From my fieldnotes:

I then tried to bring the conversation back to him and his connectedness with nature and asked him how we could expand this view of being part of nature and being connected. Martín said that it is really in everyone’s heart, you just have to live it. You have to come to nature to understand that you are part of it (Martín, June 6th).

For Martín, the crux here is that you have to engage with nature to feel connected. Martín states that everyone has a soft spot for nature, everyone loves it. But, to really feel connected, one must be in and around nature or start looking for it. With, as mentioned earlier, respect and trust to ensure that human presence does not mean harm to the natural environment and wildlife. In literature, connectedness to nature is also portrayed as important for fostering conservation and tolerance of carnivores, although this could also be done through emotional and cognitive exercises regarding nature (Expósito-Granados et al., 2019) It shows that

concepts often iterated in literature on how to engage people to be more respecting towards the environment are also shown in Somiedo where the ideas of nature education and connectedness to nature were mentioned.

Ethical posthumanism in a broader societal context, a drawback.

However, when asking how to actually engage other people herein, the conversations often ended with: “*well I don’t know*” (Paula, May 25th). I had already understood that conversing about these topics was quite difficult, as it was only with some people, I was eventually able to discuss differences in how people relate to nature. I decided to explore how these people themselves experienced the embodiment of these seeds and if this is indeed limited to a certain group of people in Somiedo.

I had already understood from Paula that the way she was raised, is very different from how she feels about nature nowadays. For Paula, the most important thing is to experience other ideas and other ways of living. She had always lived in Somiedo and had always helped her parents as a farmer. She explained:

“I have been very lucky because I have had many ingredients that are important. Apart from having the opportunity to travel, I also had the opportunity to experience other ideas and other ways of thinking. I imagine that the first thing you have to be willing to do is wanting to accept the ideas of others” (Paula, April 23rd).

It is clear that Paula mentions herself lucky as there are experiences, she has lived, that changed her outlook on nature. Where she earlier referred to the need of engaging with nature, here she iterates that an open mind is of importance. Being able to see, but also understand other opinions and outlooks.

I asked Martín about his upbringing and if that had to do anything with the way he viewed his relationship with non-human others. Martín shared a story about his brothers as he brought up that his brothers experience nature in Somiedo quite differently. According to Martín, this change has come mainly due to his brothers moving to the city. As Martín said:

My brothers are completely different from me. They come here, walk a little bit, take a picture of a bear and go back to the city. [almost frustrated he then said]: “It is something I don’t understand” (Martín, June 6th).

These quotes, along with the other quotes throughout this chapter indicate that a loving and trustful relationship with nature is not something that is easily transferable or something that can easily be learned. The people in Somiedo that inhabit these seeds of ethical posthumanism have all had experiences that slowly evolved their view regarding the non-human other. It is therefore difficult to understand how this worldview is attainable.

A thing that must be noted is that the people that inhabited these seeds were sparse in Somiedo and not only showed to have had experiences that most people did not share, but also showed capabilities that the majority of people did not inhabit. These seeds exist in people that have time to engage with nature, think about their relationship with nature and were able to express their ideas on this. For instance, Lucia mentions that the FOP is often criticized by others who for instance say: *what is it that they do, they look around for bears in*

very big cars (Lucia, June 17th). It shows that a large part of the people in Somiedo are not concerned with the bear or the environment and show to be derogatory of people that do inhabit these seeds. When I asked Paula about her relationship to other people in Somiedo she said *that she often feels like the odd one out* (Paula, May 31st) further solidifying this argument.

An ethical post-humanist worldview is thus not just for the taking, and this would harm its potential for contributing to robust coexistence as robust coexistence should be able to rely on a broad social grounding. I would like to address this as a downfall of ethical posthumanism. The concept proves to be vague and abstract to pinpoint not only what it exactly is, but also shows difficulty in possible materialization. Haraway (2008) articulates similar feelings as she calls thinking about encounters a ‘trackless territory’, where there are no guides for ‘best practices’, illustrating that there are indeed no guides on how to encourage this worldview.

4.2.3 Closing remarks on ethical posthumanism in Somiedo

Seeds of ethical posthumanism that show rethinking of our human relation with the non-human other are present in Somiedo. These openings show possibilities of bridging the nature – culture dichotomy and possibilities of overcoming anthropocentric thinking and thereby the valorization of animals on their human benefit. Although hopeful, the second section of this chapter addresses that although some ideas and concepts on how to broaden this worldview among a broader societal context were shared, the people this worldview belonged to was limited, which shows that the expansion of these seeds is not easy, and thus a downfall of ethical posthumanism.

5. Discussion

5.1 Discussing results

This thesis aimed to critically look at coexistence as brought forward by the academic community as a means to reach conservation goals. The aim of this research was to explore if ethical posthumanism could be a means to create a robust form of coexistence and thereby providing an answer to the general research question: *What is robust coexistence and to what extent does ethical post-humanism contribute to it?*

My results showed that although seeds of ethical posthumanism are visible, and some germination of these seeds seem plausible, doubts about the sustainability of the current state of coexistence weigh heavily. The post-humanist seeds in Somiedo are discernable but there is not an ongoing discussion about the germination of these seeds or alternative ways of coexisting with the non-human other. The discussions that are being held focus more on how to accommodate tourism, thus re-enforcing the business-as-usual approach which heavily relies on the principles of instrumentalism and anthropocentrism. This chapter will explore the meaning of an unrobust anthropocentric coexistence, the difficulties of a fully post-humanist coexistence and finally conclude with what robust coexistence would be in Somiedo.

Business-as-usual

The empirical research carried out in Somiedo confirms that the theoretical debate on alternative ways of coexisting with wildlife as depicted in my theoretical framework is an important debate, as a seemingly successful case of coexistence has shown to come with fragile aspects. Although it is difficult to generalize the findings of Somiedo, it is beneficial to understand how anthropocentric thinking and an instrumental approach to conservation could be unsustainable, especially in times where ideas such as coexistence and rewilding are increasing in popularity among conservationists (Carver et al., 2021).

The results of this thesis show that tourism in Somiedo is in large attributable to the presence of bears and that it leads to economic development. Nature--based tourism is often portrayed as a win-win, in that it can resolve the contradiction between continued growth and finite natural resources (Fletcher, 2011) and that it can help preserve threatened species (Buckley et al., 2012). However, tourism does commodify nature as Duffy (2013) articulates: “[nature is] drawn into the global economy where they enter the realm of commodities that are priced in monetary terms” (p. 616). When valuing animals according to the services they provide, their value changes with the rapid changes of markets. Extending this argument would imply that animals are only worth saving when they are profitable (McCauley, 2006). This argument is something that is inelegantly visible in Somiedo as the bear seems to be worth more to humans than the wolf, and thus worth saving. Why the bear is worth more could be attributable to different factors. First of all, some species, or the interaction with those species are more interesting for tourists. Orams (2002) mentions that mostly unusual or endangered species are targeted for tourist interaction. Why these encounters are more easily commodified is partially attributable to the time when a species is visible (Dou & Day, 2020), which could explain the difference between bear tourism and wolf tourism in Somiedo, as bears are easily visible during dusk and dawn while wolves are almost never seen.

Another reason could be that humans in general prefer some non-human species over others. Batt (2009), for instance found a clear relationship between the similarity to humans

of a species and the human preference towards that non-human species. Humans are thus susceptible to value a species on the bases of shared behavioral traits. Among others, Higgs et al. (2020) found that phylogenetic position is not the only determinant of attitudes to animal species and Dickman (2010) argues that cultural depiction is also of importance in valorizing non-human species as he uses the example of jaws and the increased fear of sharks that this movie evoked. Kavitha & Sudhalakshmi (2022) do not only ascribe the differences in how humans value different species of the non-human other but argue that popular culture enhanced the dichotomy between nature and culture as it is full of anthropocentric principles. They use the example of Harry Potter and the Philosopher's Stone wherein the magical animals are exploited for the wizards gain, as is the case with unicorns whose blood is believed to have healing capacities. Thus, not only cultural depictions of different non-human others are an issue to consider, but also the cultural depiction of the relation between humans and non-human others in general is something to consider when trying to overcome the nature-culture dichotomy as robust coexistence becomes unattainable with species that do not inhabit these qualities.

An extension in this discussion on culture would be to say that bears in Somiedo carry significant cultural value as the bear has become a badge of regional identity (Palomero et al., 2021), and thereby qualifying as a cultural keystone species. The idea of cultural keystone species, as brought forward by Garibaldi & Turner (2004) is that species which are culturally important for a society are easier to preserve. Most of the cultural keystone species are species that are important for indigenous people by supplying nutritional needs. However, Clark et al. (2021) argue that also non-consumptive species, such as grizzly and polar bears, could function as cultural keystone species because society earns benefits through their existence. This closely resembles what I have showed is the current case in Somiedo. The concept of cultural keystone species is insightful but reiterates that conservation success is depending on the animal species as it is easier to protect species that have cultural and economic value. Coexistence with non-cultural or non-economically valuable species is therefore difficult and anthropocentric coexistence is thereby not in line with robust coexistence.

Besides the problematic commodification of nature through tourism, the concerns of overcrowding of visitors also became discernible in the results of this thesis where the concerns for both wildlife and local residents was iterated. Although efforts are made in Somiedo to minimize human-wildlife encounters, tourist interaction with wildlife is potentially harmful (Doe & Day, 2020). Roe (1997) shows that human proximity through tourism can increase stress which affects breeding success. This being in stark contrast with what conservation is trying to accomplish, protect biodiversity. Besides, this thesis has also found that overcrowding can lead to annoyances for local residence when tourist infrastructure is not used appropriately or when the industry adheres to the wishes of tourists and thereby disregards local cultural authenticity. Although this insight is not new and iterated before by Lai & Hitchcock (2017), I would like to stress that the support of locals for conservation is of importance, and annoyance from tourism could potentially change locals their attitudes when the costs of tourism start outweighing the benefits.

The above shows that the doubts of anthropocentric coexistence I have come to explore in my results have also been extensively iterated in scientific literature. Tourism leads to the commodification of species, thereby vulnerable to human needs that could change rapidly, and the possibility of overcrowding also shows that coexistence based on anthropocentric

thinking where tourism brings benefit to people is unrobust. The anthropocentric constructs on which this coexistence is thus built enforces speciesism. In a business-as-usual approach we can thus only coexist successfully with species that have value to humans.

A posthuman future and the implications thereof

This thesis has also explored if ethical posthumanism contributes to a more robust form of coexistence. The results show that if the seeds of ethical posthumanism in Somiedo would be the dominant ontology, a more respecting and trustful relation with nature would be present. The divide between certain animals – in this case – between the bear and the wolf would disappear. The idea to position humans as one of the many species is a promising thought, but, a fully ethical post-humanist worldview might confront humanity with unforeseen (ethical) challenges that could be important to consider before deciding to call ethical posthumanism the holy grail to which we model future coexistence.

The idea of speciesism, whereby certain species are treated unjust because of their individual species membership (Horta, 2010) would be rejected in an ethical post-humanist future, where humans have been relegated to be one of the natural species. There would be no difference of importance between species, no matter their size, form or function. The results of this thesis show that speciesism, to a degree can be avoided as people that expressed ontological openings have lived in harmony with the wolf without benefitting from its presence. There are species however that humans tend to dislike, and the rejection of speciesism has consequences for the posthuman human species. Nagy & Johnson (2013) enunciate: *“We [meaning humans] like to imagine that we are in control of our homes, gardens, forests, parks, landscapes, and urban spaces, and we are determined to serve as gatekeepers, or wardens, adjudicating which species are allowed and which are banned, which are prized and which are denigrated.”* Although it is clear that high diversity of species is of importance to healthy ecosystems (Tilman et al., 2014) anthropocentric thinking has constructed the “disgusting other”, which is a range of nonhuman animals the human animal despises. Post-humanist ethical relations with non-human others does not stop with emblematic, cultural or ecological keystone species, it continues with the often-denigrated critters. There are many authors who reject this insect speciesism and argue for the inclusion of critters in our lives (Gunderman & White, 2020; Horvath et al., 2013). However, these authors also reflect on their personal issues with valuing the “disgusting other” (Gunderman & White, 2020), indicating the difficulty of fully embracing the rejection of speciesism, especially with the ‘disgusting other’.

When we relegate humans as one of the natural species, we become entrenched in natural systems. I would like to argue that natural systems are quite ferocious and unforgiven, and that this is something we should take into consideration when asking if an ethical post-humanist future is something to pursue. When we then say that in an ethical post-humanist future, we reposition ourselves to become more animal and operate under the same circumstances as the other natural species, with the ferocity and unforgiven aspects of the natural world included, some issues arise. Would a future of ethical posthumanism then maybe support more conflict, and thereby harm coexistence? But what about ethics? Isn't the ethical aspect of ethical posthumanism the solution to a possible posthuman domination over the other species? If we follow the articulation of Aristotle his notion of ethics, who says that ethics are bound to the human identity, because animals do not possess *logos* (Mesaros, 2014), ethics will not exist in a posthuman future where humankind loses its human identity

and becomes just one of the many natural species. Although the ideas on ethics have changed considerable, *“the dominant trends in Western moral thought seldom questioned Aristotle’s restriction of ethics to biological humans”* (Gomel, 2011, p. 343). Singer (1973) has provided a rejection of this human centered approach by saying that the *“capacity to suffer”* should be enough to have the right for equal consideration. But Singer is also unable to avoid speciesism and boundaries of living things, as what about human embryos that lack a nervous system (Gomel, 2011). It is thus important to ask what kind of ethical being the human is, especially in a posthuman future for which the most suitable ethics have yet to emerge (Gomel, 2011). It could be that it is the human ethic that is useful in engaging with the non-human other peacefully and respectfully.

Although the seeds of posthumanism that I have found in Somiedo, only show openings towards a different relation between nature and culture and are therefore not so deeply engrained in post-humanist thinking to have to deal with the issues above, the materialization of these seeds still seemed difficult as they pertained only to a certain group of people and did not enjoy broader social acceptance. There are, however, indigenous communities who share beliefs that offer similar traits as the promising seeds of ethical posthumanism in Somiedo. In discussing these indigenous ontologies, possibilities of how the promising seeds in Somiedo can materialize into a broader societal context might be found.

Rarámuri anthropologist Enrique Salmón talks about kin-centric-ecologies, based on the indigenous views of the Raramuri, where *“there is no need for categories of thought that separate humanity and wildlife”* (Vannini & Vannini, 2020), which shares similar thoughts with ethical posthumanism. They argue that this kinship depends on respect, and that approaches to respecting wildlife can be found among indigenous people. In extending their argument, Vannini and Vannini (2020) articulate that respect hinges on the idea of trust. Ingold (2021) articulates: *“to trust someone is to act with that person in mind, in the hope and expectation that she will do likewise”* (p. 69-70) thus stating that trust demands dependency and autonomy. It is clear that just like ethical posthumanism, these indigenous ontologies challenge problematic western thinking. However, just as what I have argued with ethical posthumanism, it is difficult to see these ontologies materialize within western society as Muir et al. (2010) argue that these indigenous ontologies are not a toolkit for management, but an ethic for live.

Robust coexistence

I started this thesis with the notion that in times of the 6th mass extinction, called the anthropocentric extinction, we need to rely on successful coexistence models to secure a sustainable planet for all. In a rejection of coexistence based on anthropocentric values; the ones that have caused the extinction of so many species, this thesis decided to look into the possibility of posthuman relations and see if this could contribute to a robust form of coexistence with wildlife. The results of this thesis showed that coexistence based on anthropocentric values is indeed not ideal and also that seeds of ethical posthumanism work towards an alternative reality, one where differences between nature and culture, and between natural species fades. As much as I applaud this, I have also shown that a fully ethical post-humanist ideology has its downfalls and is difficult to realize in practice. How then, do the promising ontological openings work towards robust coexistence, and what is robust coexistence in Somiedo?

There are multiple aspects that I have focused on that show that coexistence in Somiedo is hinging on an anthropocentric worldview, and that this makes it unrobust. I have negatively spoken of tourism being a threat to local livelihoods through annoyances and loss of cultural authenticity, economic incentives that displace intrinsic motivation, and a lack of peaceful coexistence with the wolf which shows that coexistence is based on the human benefits a species carries. Other than these negative aspects, I have found human-bear coexistence in Somiedo to be quite promising, and openings towards robust coexistence are present in the people that inhabit seeds of ethical posthumanism. A fully robust coexistence may never be attainable, but a more stable form of coexistence should be possible to realize by addressing the negative aspects of the business-as-usual approach and adhering to the positive seeds of ethical posthumanism. These promising seeds accepted accidents with wildlife, made no distinction of wildlife species based on the human gain, and respected and loved nature. It must be noted that these people remained people. They sometimes stretched the limits of what it means to be human, but they all identified as human, and not post-human. Their worldview often not anthropocentric, but with respect towards the non-human other. In this sense they are human but acknowledge that they are not the only ones that matter. It can be argued for that these people may not have shown seeds of true posthumanism, as they remained human, but more over what Clark (2021) calls '*a deep simpatico with non-human life of the planet*' (p. 22). These seeds are therefore not post-humanistic, but rather post-hegemonic, in that these people portray a human that is less dominant over the environment or wildlife species.

This *deep simpatico*, I argue, is of vital importance to achieving more stable coexistence in Somiedo. However, I have also shown that this *deep simpatico* is not shared among all inhabitants of Somiedo and that the expansion of this frame-of-mind is difficult to establish. When we acknowledge that this *deep simpatico* comes from humans, we can conclude that a little humanism is key to robust coexistence, and that this could possibly help in the broader embodiment of robust coexistence. For instance, the subsidies handed out to farmers for the enclosure of their pastures could be beneficial in making sure that the people that do not inhabit this *deep simpatico* get something in return for their efforts of helping achieve coexistence. However, a subtle notion of this frame-of-mind should always be present, otherwise subsidies will get wasted on the wrong things, as is currently the case in Somiedo. This strongly supports a post-hegemonic worldview towards nature.

Theoretically then, robust coexistence could be what Clark (2021) argues: "*The dominant, conventional way of thinking now in place sees wildlife as a material "resource" to have ready and on hand so that we can use it in our economy (e.g., ecotourism, photography, viewing). Instead, I argue that wildlife should be about our concern to let things be as they are in themselves. It should be about safeguarding, preserving, and conserving wildlife as other living beings deserving of consideration within our ethics and ethical lives*" (p. 22). Zapf (2022) provides a similar conclusion and says: "*For this aim, an ecologically redefined humanism rather than an eco-centric posthumanism appears to supply a suitable conceptual framework*" (p. 15). Herein these authors reject the problematic ideas of anthropocentrism; nature and wildlife are not for the sake of human benefits and the world does not center around the human species. Whereas Zapf articulates that there is no need for posthumanism, but that humans should play a role better understanding the non-human other to create a more equitable and sustainable society through human ethics. We can thus stay human, but we have to ecologically redefine our humanism. We must learn to respect and trust nature. Not

only because of the intrinsic value of nature, but also because of the idea that we are inextricably intertwined with nature (Brennan, 1988), which solidified the argument that all damage done towards non-human life further complicates human life and the survival of the human species. Taking care of the non-human other in a responsible matter is in that sense also taking care of ourselves. Robust coexistence can thus be anthropogenic, in that it is instigated by humans, but should not be anthropocentric, with humans at the center of the benefits.

What it means to practically redefine our humanism is that human benefits are part of a robust coexistence, it might actually be needed to successfully broaden the will for coexistence and have coexistence be widely accepted socially. Underlying these human benefits should, however, always be a frame-of-mind or an ethics that appreciates the non-human other not only for their human benefits. The results of this thesis acknowledge a role for education, which is something Clark (2021) agrees upon as she articulates: *“we can educate ourselves to a whole new kind of existence or frame-of-mind ... such is a necessity, if we are to flourish. This is our educational imperative, and it is urgently needed now”* (p. 22). Thus, besides openly engaging in discussions about the role of tourism and the role of wildlife in Somiedo, it is imperative to not only educate visitors in Somiedo through nature education, but also the local inhabitants. That way robust coexistence can achieve its premises in that it should be non-anthropocentric, thereby partially rejecting speciesism; broadly supported socially; and an effort in bridging the nature-culture dichotomy.

5.2 Discussion of methods

Through the rich amount of data I collected, I can confidently state that the use of methods for this thesis have been adequate and sufficient for answering my research questions. Through understanding the limitations and dangers of using an ethnographic design I structured my field guide in such a way that I was aware of my positionality at all times and avoided an observer bias. The structure of my field guide also helped me in collecting data in such a way that I was able to create a deep understanding of the local culture, the relationship between people and nature, and the coexistence with brown bears. By extensively updating my field guide at the end of each day, I could identify overarching themes and relations between themes that helped me explore topics that eventually helped me to frame my research questions.

However, the empirical results of this study should be seen in the light of some methodological limitations. I have always found the process of ethnography ‘awkward’ by default, as it concerns researching others. The task of the researcher herein is to understand the participants better and being comfortable asking the uncomfortable questions. During my time in Somiedo I was sometimes very aware of my difference in cultural background, and thereby not fully fitting in. This made me even more uncomfortable in asking uncomfortable questions and people not wanting to talk to me only intensified this feeling. This resulted in heavy reliance on the people that did want to engage with me. I thus mostly relied on informants and snowball sampling which in theory has the potential to create a sampling bias.

By using informants, I also trusted their opinion on what would be best for this research. Although I am satisfied with the data collected it could be that my informants had a secret agenda in order to manipulate the results (Hammersley & Atkinson, 2007). The manipulation of results could have also happened by respondents only giving socially acceptable answers, especially since I used an overt approach in engaging with people. I hope

to have solved this by the rich amount of people I have spoken to and the diverse responses I got to the questions I have asked, but it could be called a limitation of this research. However, as Hammersley and Atkinson (2007) argue, it can also be exploited: *“how people respond to the presence of the researcher may be as informative as how they react to other situations”* (p. 16). In this research this has been of vital importance as it is the people that did not want to engage with me that led me to explore doubts of the existing coexistence in Somiedo.

Another limitation that I encountered in collecting data is that of language. Although I have had meaningful conversations in Spanish, some aspects must have been lost in translation as Spanish is not my native tongue. In order to address this, I often checked my data with local people who did speak English, this also led to a triangulation of data as I was to sort of check data with other people and see if they agreed.

Because I have only been able to live in Somiedo from end of April to the beginning of June, I have not been able to study the case of coexistence year-round. I have missed the months with the greatest and least number of visitors, of which I have heard are the most difficult for local society. For this thesis it would thus have been valuable to have had an extended stay in Somiedo to not solemnly converse about these other phases of the year but witness them, in order to combine conversations with observations.

A final limitation is that of the time-consuming collection and analysis of the data in ethnographic research. By embedding myself in the culture of Somiedo, it became apparent that everything I did or saw in Somiedo became part of my data. With the usage of a rather vague and philosophical concept of ethical posthumanism that is hard to operationalize. As Ulmer (2017) articulates, *“posthumanism provides openings to think differently about the challenges of present day”* (p. 4). But what these openings precisely are is left unknown. Finding openings took a while and a clear operationalization of ethical posthumanism would have helped this thesis as it would give the opportunity for more structure in the process of data collection.

5.3 Recommendations

For the case of Somiedo, I would recommend further research into the social aspects of coexistence. Studies have mainly focused on the ecological aspects of bear populations and bear habitat. This thesis has shown that the social aspects of coexistence are not just important, but crucial to successful and robust coexistence scenarios. I would therefore advise to strengthen the findings of this research by conducting extended research on the impacts and possibilities of tourism, the usage of subsidies and the social context within which coexistence is embedded.

To the conservation sciences in general I would like to advise to shift focus in research topics. Where academia has until now mainly focused on human-wildlife conflict and the resolution hereof in the context of coexistence, I would argue that a specific interest in the successful aspects of coexistence could prove beneficial and would bring new insight.

In line with this, I would like to argue for a broader and more interdisciplinary exploration of the so-called ‘larger questions’ surrounding conservation. Where conservation is often associated with ecological frameworks and methods, the challenges of the Anthropocene ask for more encompassing and interdisciplinary research. Ethnographic research could be a great way of understanding how local communities in Europe deal with wild nature. This is a welcome addition in the wake of increased rewilding and reintegration projects, where local communities ought to re-learn how to live with nature. It is within this

kind of research I think academia should not shy away from philosophy. Although philosophical thought might be difficult to translate into practice, it can help us re-think the larger questions of conservation and ask us what our human role is within the natural world.

6. Conclusion

This thesis aimed to answer what robust coexistence is and how ethical posthumanism contributes to it. This thesis finds that the current day human-bear coexistence is quite successful, but that the anthropocentric basis of this coexistence brings forward fragile aspects. These aspects are: tourism, which leads to annoyances for local people and causes harm to bears; extrinsic motives which cause intrinsic motivation to disappear; and speciesism which leads to poor coexistence between humans and wolves. Furthermore, this thesis coined ethical posthumanism as an attractive possibility for providing openings to think differently about the human interaction and engagement with the environment and specifically wildlife. Although promising seeds show openings and a more respectful and trustful relationship with wildlife species, it should be questioned how much benefit the term ethical posthumanism brings, as it is hard to define and difficult to materialize in a broader societal context. It is therefore not a legitimate foundation for robust coexistence.

Robust coexistence is therefore not anthropocentric or post-humanistic, but rather anthropogenic. It should be based on an ecological refinement of what it means to be human, where we as humans become less dominant over the environment and take the lives of the non-human seriously. Efforts to achieve robust coexistence will bridge the nature – culture dichotomy and reject problematic speciesism.

7. References

- Almond, R. E. A., Grooten, M., & Peterson, T. (2020). *Living Planet Report 2020-Bending the curve of biodiversity loss*. World Wildlife Fund.
- Ashworth, G. J. (2009). Do tourists destroy the heritage they have come to experience? *Tourism Recreation Research*, 34(1), 79–83.
- Batt, S. (2009). Human attitudes towards animals in relation to species similarity to humans: a multivariate approach. *Bioscience Horizons*, 2(2), 180–190.
- Bernard, H. R. (2017). *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman & Littlefield.
- Braidotti, R. (2013). Becoming-world. *After Cosmopolitanism*, 8–27.
- Brennan, A. (1988). Ecological Humanism. *Biopolitics, The Bio-Environment: Bios in the next Millennium*, 2.
- Buckley, R. C., Castley, J. G., Pegas, F. de V., Mossaz, A. C., & Steven, R. (2012). A population accounting approach to assess tourism contributions to conservation of IUCN-redlisted mammal species.
- Bulte, E. H., & Rondeau, D. (2005). Why compensating wildlife damages may be bad for conservation. *The Journal of Wildlife Management*, 69(1), 14–19.
- Büscher, B., & Fletcher, R. (2019). Towards Convivial Conservation. *Conservation and Society*, 17(3), 283–296. https://doi.org/10.4103/cs.cs_19_75
- Cambridge Dictionary. (2023). *coexist definition: to live or exist together, esp. in peace, at the same time or in the same place*: <https://dictionary.cambridge.org/dictionary/english/coexist>
- Carter, N. H., Shrestha, B. K., Karki, J. B., Pradhan, N. M. B., & Liu, J. (2012). Coexistence between wildlife and humans at fine spatial scales. *Proceedings of the National Academy of Sciences of the United States of America*, 109(38), 15360–15365. <https://doi.org/10.1073/PNAS.1210490109>
- Carver, S., Convery, I., Hawkins, S., Beyers, R., Eagle, A., Kun, Z., van Maanen, E., Cao, Y., Fisher, M., & Edwards, S. R. (2021). Guiding principles for rewilding. *Conservation Biology*, 35(6), 1882–1893.
- Ceballos, G., Ehrlich, P. R., Barnosky, A. D., García, A., Pringle, R. M., & Palmer, T. M. (2015). Accelerated modern human-induced species losses: Entering the sixth mass extinction. *Science Advances*, 1(5), e1400253.
- Chapron, G., Kaczensky, P., Linnell, J. D. C., von Arx, M., Huber, D., Andrén, H., López-Bao, J. V., Adamec, M., Álvares, F., & Anders, O. (2014). Recovery of large carnivores in Europe's modern human-dominated landscapes. *Science*, 346(6216), 1517–1519.
- Charles, N. (2014). 'Animals Just Love You as You Are': Experiencing Kinship across the Species Barrier. *Sociology*, 48(4), 715–730. <https://doi.org/10.1177/0038038513515353>
- Charles, N. (2016). Post-human families? Dog-human relations in the domestic sphere. *Sociological Research Online*, 21(3). <https://doi.org/10.5153/sro.3975>
- Clark, D., Artelle, K., Darimont, C., Housty, W., Tallio, C., Neasloss, D., Schmidt, A., Wiget, A., & Turner, N. (2021). Grizzly and polar bears as nonconsumptive cultural keystone species. *FACETS*, 6(1), 379–393.

- Clark, S. G. (2021). Educational Policy and Ethics for Human-Nature (Wildlife) Coexistence: An Inquiry, a Case, and Recommendations. *Journal of Multidisciplinary Research*, 13(1), 5–29.
- Crist, E. (2012). Abundent Earth and the Population Question. In P. Cafaro & E. Crist (Eds.), *Life on the Brink: Environmentalists Confront Overpopulation* (pp. 141–153). University of Georgia Press.
- Crist, E. (2015). *I Walk in the World to Love It*. https://doi.org/10.5822/978-1-61091-551-9_10
- de Bodonia, A. M. T. (2019). *Coexistence with large carnivores in the north west of Spain*.
- Dickman, A. J. (2010). Complexities of conflict: the importance of considering social factors for effectively resolving human–wildlife conflict. *Animal Conservation*, 13(5), 458–466.
- Dou, X., & Day, J. (2020). Human-wildlife interactions for tourism: a systematic review. *Journal of Hospitality and Tourism Insights*.
- Duffy, R. (2013). The international political economy of tourism and the neoliberalisation of nature: Challenges posed by selling close interactions with animals. *Review of International Political Economy*, 20(3), 605–626.
- Expósito-Granados, M., Castro, A. J., Lozano, J., Aznar-Sanchez, J. A., Carter, N. H., Requena-Mullor, J. M., Malo, A. F., Olszańska, A., Morales-Reyes, Z., & Moleón, M. (2019). Human-carnivore relations: conflicts, tolerance and coexistence in the American West. *Environmental Research Letters*, 14(12), 123005.
- Fernández-Gil, A., Naves, J., Ordiz, A., Quevedo, M., Revilla, E., & Delibes, M. (2016). Conflict misleads large carnivore management and conservation: brown bears and wolves in Spain. *PLoS One*, 11(3), e0151541.
- Fletcher, R. (2011). Sustaining tourism, sustaining capitalism? The tourism industry's role in global capitalist expansion. *Tourism Geographies*, 13(3), 443–461.
- Fox, R. (2006). Animal behaviours, post-human lives: Everyday negotiations of the animal-human divide in pet-keeping. *Social and Cultural Geography*, 7(4), 525–537. <https://doi.org/10.1080/14649360600825679>
- Frank, B., Glikman, J. A., & Marchini, S. (2019). *Human–wildlife interactions: turning conflict into coexistence* (Vol. 23). Cambridge University Press.
- Frey, B. S., & Jegen, R. (2001). Motivation crowding theory. *Journal of Economic Surveys*, 15(5), 589–611.
- Garibaldi, A., & Turner, N. (2004). Cultural keystone species: implications for ecological conservation and restoration. *Ecology and Society*, 9(3).
- Gomel, E. (2011). Science (Fiction) and Posthuman Ethics: Redefining the Human. <https://doi.org/10.1080/10848770.2011.575597>, 16(3), 339–354. <https://doi.org/10.1080/10848770.2011.575597>
- Gunderman, H., & White, R. (2020). Critical posthumanism for all: a call to reject insect speciesism. *International Journal of Sociology and Social Policy*.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in Practice*, 3rd edn Routledge. London. [Google Scholar].
- Haraway, D. (2003). *The Companion Species Manifesto: Dogs, People, and Significant Otherness*.
- Haraway, D. (2018). Staying with the trouble for multispecies environmental justice. *Dialogues in Human Geography*, 8(1), 102–105.
- Haraway, D. (2008). *When Species Meet*. <https://books.google.nl/books?hl=nl&lr=&id=RXSq8sZ9nsEC&oi=fnd&pg=PR5&dq=whe>

- n+species+meet+haraway&ots=d99jVt_aLC&sig=mqZg1zX_o_bVPwxDon2QXltf0ZE&re
dir_esc=y#v=onepage&q=when%20species%20meet%20haraway&f=false
- Harihar, A., Chanchani, P., Sharma, R. K., Vattakaven, J., Gubbi, S., Pandav, B., & Noon, B. (2013). Conflating “co-occurrence” with “coexistence.” *Proceedings of the National Academy of Sciences of the United States of America*, 110(2).
<https://doi.org/10.1073/PNAS.1217001110>
- Hayward, T. (1997). Anthropocentrism: A Misunderstood Problem. *Environmental Values*, 6, 49–63.
- Higgs, M. J., Bipin, S., & Cassaday, H. J. (2020). Man’s best friends: attitudes towards the use of different kinds of animal depend on belief in different species’ mental capacities and purpose of use. *Royal Society Open Science*, 7(2), 191162.
- Hohbein, R., & Abrams, J. (2022). Conservation, Human-Wildlife Conflict, and Decentralised Governance: Complexities Beyond Incomplete Devolution. *Conservation & Society*, 20(4).
- Holmes, A. G. D. (2020). Researcher Positionality--A Consideration of Its Influence and Place in Qualitative Research--A New Researcher Guide. *Shanlax International Journal of Education*, 8(4), 1–10.
- Horta, O. (2010). What is speciesism? *Journal of Agricultural and Environmental Ethics*, 23(3), 243–266.
- Horvath, K., Angeletti, D., Nascetti, G., & Carere, C. (2013). Invertebrate welfare: an overlooked issue. *Annali Dell’Istituto Superiore Di Sanità*, 49, 9–17.
- Houston, D., Hillier, J., MacCallum, D., Steele, W., & Byrne, J. (2017). Make kin, not cities! Multispecies entanglements and ‘becoming-world’ in planning theory: (2), 190–212.
<https://doi.org/10.1177/1473095216688042>
- Ingold, T. (2021). *The perception of the environment: essays on livelihood, dwelling and skill*. routledge.
- Irvine, L., & Cilia, L. (2017). More-than-human families: Pets, people, and practices in multispecies households. *Sociology Compass*, 11(2).
<https://doi.org/10.1111/soc4.12455>
- Kavitha, M., & Sudhalakshmi, P. (2022). Anthropocentrism in JK Rowling’s Harry Potter and The Philosopher’s Stone. *Literature & Aesthetics*, 32(1).
- König, H. J., Kiffner, C., Kramer-Schadt, S., Fürst, C., Keuling, O., & Ford, A. T. (2020). Human–wildlife coexistence in a changing world. *Conservation Biology*, 34(4), 786–794.
- Kopnina, H. (2019). Anthropocentrism and Post-Humanism. *The International Encyclopedia of Anthropology*, 1–8. <https://doi.org/10.1002/9781118924396.WBIEA2387>
- Kopnina, H., Washington, H., Taylor, B., & J Piccolo, J. (2018). Anthropocentrism: More than Just a Misunderstood Problem. *Journal of Agricultural and Environmental Ethics*, 31(1), 109–127. <https://doi.org/10.1007/S10806-018-9711-1/METRICS>
- Kumar, R. (2018). *Research methodology: A step-by-step guide for beginners*. Sage.
- Kurzweil, R., Richter, R., Kurzweil, R., & Schneider, M. L. (1990). *The age of intelligent machines* (Vol. 580). MIT press Cambridge.
- Lai, I. K. W., & Hitchcock, M. (2017). Local reactions to mass tourism and community tourism development in Macau. *Journal of Sustainable Tourism*, 25(4), 451–470.
- Lecompte, M. D., & Goetz, J. P. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research*, 52(1), 31–60.
<https://doi.org/10.3102/00346543052001031>

- Lele, S., Wilshusen, P., Brockington, D., ... R. S.-C. O. in, & 2010, undefined. (n.d.). Beyond exclusion: alternative approaches to biodiversity conservation in the developing tropics. *Elsevier*. Retrieved January 2, 2023, from https://www.sciencedirect.com/science/article/pii/S187734351000014X?casa_token=KiCKxhp_N_oAAAAA:hlARdxSNLrKQO3NbGXJvG5i9dAT41qlo6JfR78YiSqmFkLtLNdD_Xf1X08Qe2lL98gOiAlOnhag
- Leopold, A. (1989). *A Sand County almanac, and sketches here and there*. https://books.google.com/books?hl=nl&lr=&id=LICERWI0YJYC&oi=fnd&pg=PR15&dq=a+sand+county+almanac&ots=4v4KqyLAtE&sig=Jonq6glBZjnB7ibN5_OQOrSdnhk
- Lewis, S. L., & Maslin, M. A. (2015). Defining the Anthropocene. *Nature*. <https://doi.org/10.1038/nature14258>
- López, I., & Pardo, M. (2018). Tourism versus nature conservation: Reconciliation of common interests and objectives—An analysis through Picos de Europa National Park. *Journal of Mountain Science*, 15(11), 2505–2516.
- Mack, N. (2005). *Qualitative research methods: A data collector's field guide*. http://repository.umpwr.ac.id:8080/bitstream/handle/123456789/3721/Qualitative%20Research%20Methods_Mack%20et%20al_05.pdf?sequence=1
- McCauley, D. J. (2006). Selling out on nature. *Nature*, 443(7107), 27–28.
- Mesaroş, C. (2014). Aristotle and animal mind. *Procedia-Social and Behavioral Sciences*, 163, 185–192.
- Miah, A. (2007). Posthumanism: a critical history. In *Medical Enhancements & Posthumanity*. https://doi.org/10.1007/978-1-4020-8852-0_6
- Mihalic, T., & Kuščer, K. (2021). Can overtourism be managed? Destination management factors affecting residents' irritation and quality of life. *Tourism Review*, 77(1), 16–34.
- Muir, C., Rose, D., & Sullivan, P. (2010). From the other side of the knowledge frontier: Indigenous knowledge, social–ecological relationships and new perspectives. *The Rangeland Journal*, 32(3), 259–265.
- Nagy, K., & Johnson II, P. D. (2013). *Trash animals: How we live with nature's filthy, feral, invasive, and unwanted species*. U of Minnesota Press.
- Naves, J., Ordiz, A., Fernández-Gil, A., Penteriani, V., del Mar Delgado, M., López-Bao, J. V., Revilla, E., & Delibes, M. (2018). Patterns of brown bear damages on apiaries and management recommendations in the Cantabrian Mountains, Spain. *PLOS ONE*, 13(11), e0206733. <https://doi.org/10.1371/JOURNAL.PONE.0206733>
- Ndubisi, F. O. (2014). *The ecological design and planning reader*. Springer.
- Orams, M. B. (2002). Feeding wildlife as a tourism attraction: a review of issues and impacts. *Tourism Management*, 23(3), 281–293.
- Palomero, G., Ballesteros, F., Blanco, J. C., & López-Bao, J. V. (2021). *Cantabrian bears. Demographics, coexistence and conservation challenges*.
- Paterson, B. (2006). Ethics for wildlife conservation: overcoming the human–nature dualism. *Academic.Oup.Com*. <https://academic.oup.com/bioscience/article-abstract/56/2/144/274023>
- Pooley, S., Bhatia, S., Biology, A. V.-C., & 2021, undefined. (2020). Rethinking the study of human–wildlife coexistence. *Wiley Online Library*, 35(3), 784–793. <https://doi.org/10.1111/cobi.13653>
- Redpath, S. M., Gutiérrez, R. J., Wood, K. A., & Young, J. C. (2015). *Conflicts in conservation: navigating towards solutions*. Cambridge University Press.

- Roberts, L., & Hall, D. (2004). Consuming the countryside: Marketing for 'rural tourism.' *Journal of Vacation Marketing*, 10(3), 253–263.
- Roe, D. (1997). *Take only photographs, leave only footprints: the environmental impacts of wildlife tourism* (Issue 10). Iied.
- Singer, P. (1973). Animal liberation. In *Animal rights* (pp. 7–18). Springer.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Tech-nique for Research. *International Journal of Academic Research in Management (IJARM)*, 5. <https://hal.archives-ouvertes.fr/hal-02546796>
- Tilman, D., Isbell, F., & Cowles, J. M. (2014). Biodiversity and ecosystem functioning. *Annual Review of Ecology, Evolution, and Systematics*, 45, 471–493.
- Trouwborst, A. (2014). *The EU Habitats Directive and wolf conservation and management on the Iberian Peninsula: a legal perspective*.
- Tschakert, P. (2022). More-than-human solidarity and multispecies justice in the climate crisis. *Environmental Politics*, 31(2), 277–296. <https://doi.org/10.1080/09644016.2020.1853448>
- Uggla, Y. (2010). What is this thing called 'natural'? The nature-culture divide in climate change and biodiversity policy. *Journal of Political Ecology*, 17(1), 79–91.
- Ulmer, J. B. (2017). Posthumanism as research methodology: Inquiry in the Anthropocene. *International Journal of Qualitative Studies in Education*, 30(9), 832–848.
- Valera, L. (2014). *Posthumanism: beyond humanism?*
- Vannini, P., & Vannini, A. (2020). What Could Wild Life Be? Etho-ethnographic Fables on Human-Animal Kinship. *GeoHumanities*, 6(1), 122–138. <https://doi.org/10.1080/2373566x.2020.1717979>
- Veríssimo, D., Sadowsky, B., & Douglas, L. (2019). Conservation marketing as a tool to promote human-wildlife coexistence. *Human-Wildlife Interactions: Turning Conflict into Coexistence*, 335–354.
- Washington, H., & Ehrlich, P. R. (2013). Human dependence on nature: How to help solve the environmental crisis. *Human Dependence on Nature: How to Help Solve the Environmental Crisis*, 1–166. <https://doi.org/10.4324/9780203095560>
- Washington, H., Piccolo, J., Gomez-Baggethun, E., Kopnina, H., & Alberro, H. (2021). The Trouble with Anthropocentric Hubris, with Examples from Conservation. *Conservation* 2021, 2, 285–299. *Nrl.Northumbria.Ac.Uk*, 2, 285–299. <https://doi.org/10.3390/conservation1040022>
- Weldemariam, K. (2017). Challenging and Expanding the Notion of Sustainability Within Early Childhood Education: Perspectives from Post-humanism and/or New Materialism. *Ethical Literacies and Education for Sustainable Development: Young People, Subjectivity and Democratic Participation*, 105–126. https://doi.org/10.1007/978-3-319-49010-6_7
- Wolfe, C. (2010). *What is posthumanism?* (Vol. 8). U of Minnesota Press.
- WWF España. (2020, February 11). *En Tierra de Todos. Historias de coexistencia con grandes carnívoros en España*.
- Zapf, H. (2022). Posthumanism or Ecohumanism? Environmental Studies in the Anthropocene. *Journal of Ecohumanism*, 1(1), 5–17.
- Zarzo-Arias, A., Delgado, M. del M., Ordiz, A., García Díaz, J., Cañedo, D., González, M. A., Romo, C., Vázquez García, P., Bombieri, G., Bettiga, C., Russo, L. F., Cabral, P., García González, R., Martínez-Padilla, J., & Penteriani, V. (2018). Brown bear behaviour in human-modified landscapes: The case of the endangered Cantabrian population, NW

Spain. *Global Ecology and Conservation*, 16, e00499.
<https://doi.org/10.1016/J.GECCO.2018.E00499>

