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How the rarity of species influences our duties

A thesis investigating whether we have special or stronger duties towards individuals of a rare species than towards individuals of a common species

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Abstract

This essay investigates whether we have special or stronger duties towards individuals of a rare species than towards individuals of a common species. Three approaches are discussed: the species approach, the individual approach, and the collective approach. It is found that we do not have special or stronger duties towards rare individuals if we adopt a species or individual approach. In contrast, we do have special and stronger duties towards rare species under the collective approach. Three requirements must be met for this to be true: a) rare individuals must be vitally dependent on the continuation of their collective, b) their collective is in danger of extinction, and c) their rarity is caused by historical unjust treatment by humanity.

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Chapter 1: Introduction

Since the 1970s, the extinction of animal species has attracted not only the attention of scholars of several disciplines but also of policy makers and conservationists. Humans are thought to play a big role in bringing this about and it is generally thought that we have a duty to protect rare species from going extinct (Wienhues et al., 2023). Joint effort led to the successful preservation of many rare species, but the amount of species threatened with extinction is higher than ever before (IPBES, 2019). Faced with so many species that are in need of protection, the question about the extent of our duties towards them is more important than ever.

Notably, the only difference between rare and common species is the number of individuals that exist on this world. Seemingly, it is this difference that determines how the species are treated by humanity. Even when two species are similar in their characteristics, it is thought that we have stronger duties towards a rare species to preserve it than to a common species (Waltz, 2020). An example of such a difference in treatment is that killing an individual of a rare species is often prohibited, while under certain conditions the killing of individuals of common species is allowed. It seems that doing harm to a rare individual is something that is morally unacceptable, while doing harm to a common individual is allowed (Regan, 1983). As said, the only difference between the two individuals is whether they are rare or not. How can this influence of rarity on our duties towards them be explained? Do we have stronger or special duties towards individuals of a rare species than towards individuals of a common species?

This essay investigates whether, how and on what levels rarity influences our duties towards rare individuals. Specifically those rare individual animals that are 'truly wild'. Such truly wild individuals are animals who try to maintain their own independent and isolated existence. Contact with humans is preferably avoided, especially in the context of human settlements (Donaldson & Kymlicka, 2011). In a world with many conflicting interests, it is important to understand clearly what we owe to such rare individuals and how far we are

allowed to go in fulfilling our duties towards them. For instance, is therapeutic culling (sacrificing several individuals of a species for the protection of another species) allowed? Does humanity have a duty to preserve all rare species, or only a few? How many sacrifices can be made under the name of species protection? But also, can we compare endangered species to endangered human cultures?

It is argued that there are three ways in which special duties towards rare individuals may arise. Accordingly, this essay investigates them by dealing with them separately and thus consists of three main parts, the species approach (chapter 3), the individual approach (chapter 4), and the collective approach (chapter 5). The species approach investigates whether a species *qua* species is of moral relevance. This could explain why we have special duties towards rare individuals as rare individuals might derive special rights from the moral relevance of their species. Four possibilities for moral relevance will be discussed. The possibility that rare species are more valuable, that they have special interests, that they play a special role in contributing to biodiversity, and the possibility that they are of special relevance because they are a natural system. Before these approaches are discussed, chapter 2 (framework and definitions) will define certain concepts and sketch the framework.

In the individual approach, it is discussed whether rarity can influence the rare individuals directly, which would evoke special duties in us. Such duties can possibly arise from the fact that a rare individual has special rights because it has special interests, because it is (intrinsically) more valuable, or because rarity is a consequence of historical injustice.

After dismissing the first two approaches, the third one is argued to be able to show why we have special duties towards rare individuals. To explain how, an analogy is drawn between (endangered) human cultures and collectives of rare individuals. Rare individuals that are vitally dependent on their collective for survival are shown to have a special interest in the continuation of their collective and all the individuals of the collective together have a right to the continuation of their collective. When the endangerment of a collective is a result of historical injustice executed by humanity, humanity has a duty to repair this historical

injustice (under certain circumstances). This duty is a duty to restitution and it is argued that this can best be fulfilled by adopting a sovereignty approach.

Eventually, it is argued that this collective right evokes a duty in humanity that is not targeted at the collective, but at the rare individuals of this collective. Hence, we sometimes do have stronger duties towards individuals of rare species than towards individuals of common species.

Chapter 2: Framework and definitions

This chapter aims to clarify some terms that are used and it gives an outline of the framework that is used. It will firstly be discussed what the terms 'rarity' and 'endangerment' mean, after which I will elaborate on the meaning of duties and rights. Then, it will be explained how the interest theory is incorporated in my framework and what this entails. In what follows, I will explain how the value of individuals ties in with a rights framework. Specifically, I will show that beings who are selves, are also of ultimate value, which entitles them to basic inviolable rights. This chapter will be concluded with a discussion on the meaning and the attribution of basic inviolable rights.

2.1 *The rarity and endangerment of species*

Although the terms rarity and endangerment are often used interchangeably, they are different concepts in the context of species. Rarity refers to the scarce amount of individuals that exist on the planet, it is a quantitative statement. If a species is rare, it can very well be the case that a scarce number of individuals is typical for that species. Or it can be the case that the species used to be comprised of large numbers of individuals, but that it is currently relatively stable with lower numbers. Strictly speaking, however, a *species* cannot be rare. A species is a binary concept, it either exists or does not exist. We use the phrase '*Canis lupus* is rare' to indicate that there are not many individuals of the species *Canis lupus*. Thus, members of a species can be rare, but species cannot. It is, therefore, important to realise that when we are discussing the rarity or endangerment of a species, we are actually talking about the individuals that make up the species. The importance of this difference between focusing on an individual of a species or a species itself will become clear in a later section.

Endangerment, on the other hand, refers to the fact that there is a low abundance of individuals of said species and that there is a high probability that the species will go extinct if nothing is done to reverse this low abundance. A species can, therefore, only get rid of the label 'endangered' when it reaches a certain number of species members and when it

independently succeeds in keeping the population stable. Thus, a species that is endangered is always rare, while a rare species is not necessarily endangered.

Unless indicated otherwise, I will use 'being rare' or 'being endangered' interchangeably in this essay. By both terms, I mean that there are not many individuals left of a species, and if we do not intervene the species will go extinct.

2.2 Duties, rights and the interest theory

As we are investigating whether we have stronger duties towards rare individuals than towards individuals of a common species, it is important to outline what is understood by a duty, a right and the connection between the two. Moreover, I need to explain what I mean by 'stronger and special duties'.

Typically, duties are associated with a certain type of rights: claim rights. When someone has a right that is a claim right, then it is always the case that this person has a claim *to something* and *against someone*. An example of a claim right is the right to life. The fact that I have a right to life means that I (the right holder) have a claim to something, my life, and a claim against someone else, that they will let me live. Consequently, the entity against which this claim right is directed (the duty-bearer), has a duty to do (positive duty) or not to do something (negative duty). In this case, there can be a duty to refrain from taking away my life (negative duty), but also a duty to save me when I am in danger or feed me when I am starving (positive duty) (Stucki, 2020; Wenar, 2023).

This essay is mainly concerned with the basic rights of individuals of which nearly all are claim rights (Council of Europe Portal, n.d.). Basic individual rights for humans are formulated in national constitutions but also in the Universal Declaration of Human Rights (United Nations, 1948). They include but are not limited to, the right to life and liberty, the freedom from slavery and torture, and the right to self-determination. This means that almost all basic rights give rise to corresponding duties.

We are focused on animal individuals in this essay, but since there is no such thing as an internationally acknowledged Universal Declaration of Animal Rights¹, we cannot turn to an acknowledged document for reference. Accordingly, we first need to discuss how rights function to investigate whether and when animals are entitled to (claim) rights.

One of the theories describing how rights function is the interest theory of rights. It argues that rights function (among other things) to protect the interests of individuals. The essence of one's interests is that a fulfilment does them good. For instance, you will be better off with a roof over your head, which is why you have an interest in living in a house or something similar to a house(Wenar, 2023).

It is not the case that every interest is sufficient for having a right. For example, even though I have an interest in never having to pay for my groceries anymore, it does not automatically follow that I have a right to stop paying. To determine which interests are sufficient grounds for rights, I follow a prominent version of the interest theory that is provided by Joseph Raz (1986). He states:

“X has a right if X can have rights, and, other things being equal, an aspect of X's well-being (his interest) is a sufficient reason for holding some other person(s) to be under a duty” (Raz, 1986, p. 166)

An interest, then, can only lead to a right when it severely affects the well being of the right holder. That is what Raz means by 'sufficient reason'. Some interests are clearly sufficient, such as my interest to not have my arm cut off, but others exist in a grey area. Which and when interests are sufficient reasons is largely context-dependent. This makes it impossible

¹ There have been several attempts to formulate something like a Universal Declaration of Animal Rights. For instance, the Declaration of Animal Rights (2018), the Universal Declaration on Animal Welfare (2007), and the Universal Charter of the Rights of Other Species (2000). But since these documents are not formally acknowledged (Declaration of Animal Rights), are not focused on individuals (Universal Charter of the Rights of Other Species) or lack the acknowledgement of basic inviolable rights (Universal Declaration on Animal Welfare), there is up until today no document to which we can turn to say that animals have basic rights similar to humans.

to give an exhaustive list of sufficient reasons, which is why I will discuss the context and the sufficiency of the interests where needed.

The meaning of 'stronger and special duties' is related to the fact that interests, rights and duties exist in hierarchy. For instance, I have a duty to help my roommate who has been locked out. But when I encounter a situation on my way home in which someone else's life is in danger, the duty to help this stranger overrules the duty to help my friend. The stranger's interest in living overrules my roommate's interest in getting into the house as soon as possible. In other words, the duty towards the stranger is of greater moral significance than the duty towards my roommate. Examples of rights that are highest in hierarchy are basic rights. They are the consequence of primary interests (interest in living, interest in freedom, etc.) that need protection. It may also be the case that we have duties towards rare individuals which we do not have towards individuals of a common species (or vice versa). For instance, when one claims that we have a duty only towards rare individuals to assist them in finding food. Such duties are referred to as 'special duties'.

Therefore, with 'stronger duties towards rare individuals', I refer to the situation in which rare individuals have interests that are higher in hierarchy than the interests of non rare individuals. With 'special duties towards rare individuals' I refer to duties that are only held towards rare individuals *because* they are rare.

2.3 *Value of individuals and selfhood*

Following Raz's approach also entails that not every X can have rights. According to Raz (1986), only beings of ultimate value can have rights. Since only humans are of ultimate value, they are the only beings who are right holders. This means that animals do not qualify as right holders. I disagree with the idea that only humans are of ultimate value because it entails a commitment to speciesism.

What Raz (1986) exactly means by being of ultimate value, is that a being is of non-derivative intrinsic value. Being intrinsically valuable means that one is valuable independent of one's use for another, which we call instrumental value. The chair I am

sitting on is of instrumental value because the fact that I can sit comfortably on it (which is a consequence of how the chair is designed) is valuable. Would the chair have a broken leg, making it unable to sit on, it would lose its instrumental value as a chair². Being intrinsically valuable, then, means that something is valuable despite its instrumental value. If some hypothetical person does nothing to contribute to society in any way, is in no contact with anyone and produces no beneficial consequences for anyone, i.e. it is a person without any instrumental value, this person would still be intrinsically valuable. An example is a comatous patient or someone who lives alone in the woods. We value persons regardless of their contribution to the world.

Animals, according to Raz, can be of intrinsic value, but not the non-derivative kind (ultimate value). He gives as an example a strong and loving relationship between a man and a dog. The man's life is significantly better because the dog is a constitutive part of his life. In this example, the dog derives its intrinsic value from how the relationship between her and the man contributes to the well being of the man (Raz, 1986)³. If a dog does not contribute to the well being of humans in some way, the dog would not derive any intrinsic value from such a contribution and hence would not be intrinsically valuable.

This is the point where Raz is committing to speciesism. That is, being of non-derivative (and thus ultimate) value is based on the premise that only humans reach a certain threshold to count as a being of ultimate value. Yet, there is no threshold which includes all human beings while simultaneously excluding all other animals (Donaldson & Kymlicka, 2011)⁴.

² Losing its instrumental value as a chair does not necessarily mean it loses all its instrumental value. The chair might have become instrumentally valuable as firewood or as a bunch of recyclable components for a new chair.

³ Here, one might wonder what the difference is between this form of intrinsic value and instrumental value. The difference lies in the fact that the relationship between the dog and the man is valued as "being a constitutive part of a valuable form of life" (Raz, 1986, p. 178). In contrast, an instrumentally valuable thing derives its value from the direct consequences it produces or is likely to produce. In the dog-man-relationship, the value is not in the direct consequences the dog brings about (Raz, 1986).

⁴ Kant argued that only humans reach the threshold of being able to use reason and therefore only humans are of ultimate value (Kant, 1997). However, this excludes a huge amount of humans, since it could be said that severely handicapped people and infants lack this capacity. Other, less demanding thresholds, such as being an experiencing subject of life, would be, on the other hand, too inclusive (Stucki, 2020).

Rather than trying to find a threshold that would qualify only humans to be of ultimate value, I adopt the threshold of being a 'self' as proposed by Donaldson and Kymlicka (2011). When one has a 'distinctive subjective experience of their own life and of the world' then one is a 'self'. It is a conscious or sentient being (Donaldson & Kymlicka, 2011). Such beings have an experience of their life from within themselves and they have a life that can go better or worse for them. These experiences are experienced by an "I". As Gary Francione (2000) puts it: "there is someone home". This being does not need to be able to reflect on herself or on the things that happen to her. All that is needed is that this being experiences life from within and for whom the struggle for life and flourishing matters (Steiner, 2008). The possession of selfhood as threshold includes all human beings and at least a large part of the rest of the animal kingdom⁵.

It might be difficult to determine whether an animal is a self. Everyone will probably agree that dogs have subjective experiences of their lives, but what about fish? Or slugs? Do they have conscious experiences? Rather than dismissing selfhood as a threshold because it cannot (yet) help us in various (borderline) cases, we should remain curious about finding other selves. We might never be able to draft a complete list of all animals that are selves, but that should not keep us from trying and it does not say anything about the applicability of this criterion.

In conclusion, one commits to speciesism when arguing that only humans are of ultimate value. A better approach is to hold that all beings that possess selfhood are of ultimate value. Since all beings of ultimate value are potential right holders, it is possible for every animal that is a self to be a right holder.

⁵ A huge part of the animal kingdom is likely to not reach this threshold. For example, 80% of all animal species are insects and it is generally thought that they cannot feel pain (Kras, 2023). For a recent review study which argues contrary to this thought, namely that some insect species are plausibly capable of feeling pain, see Crump et al. (2023). Other investigations take flourishing as a possible threshold. This would mean that also plants and ecosystems might be considered right holders. Even though this approach might be over-inclusive, it is an interesting line of thought. See for instance Offor (2020).

2.4 Basic inviolable rights

Being a self not only qualifies one for being entitled to rights, it also qualifies one for having *basic inviolable* rights. Beings with selfhood are vulnerable beings, as their lives can go better or worse for them. To protect every vulnerable being against things such as torture, enslavement or hunger, each of them is entitled to basic inviolable rights.

The inviolability of these rights is of special importance for this essay because it is the degree of inviolability that determines whether one's right can be sacrificed for the greater good or other beings (Donaldson & Kymlicka, 2011). For instance, the degree of inviolability determines whether it is allowed to kill several deer (and violate their right to life) for the survival of a rare species (a greater good). But it also determines whether a doctor is allowed to sacrifice one healthy person to save five patients by donating her organs.

Even though the inviolability of basic rights suggests that they may never be violated, inviolability is conditional, not absolute. When the right circumstances are present, i.e. 'the circumstances of justice', everyone must respect the rights of others if they are able to do this without jeopardising their own existence (Rawls, 1971). The circumstances of justice are present most of the time, which is when the inviolability of rights is strong. In contrast, inviolability is severely weakened when the circumstances of justice are absent. These are situations which are also called 'lifeboat cases'⁶. There are many examples of such lifeboat cases. For instance, when you are attacked by a bear, you are allowed to defend yourself, even when that means killing the bear and violating his right to life. As you are not in the position to respect the bear's right to life without jeopardising your own existence, you are allowed to kill the bear.

The extent of inviolability, is referred to as 'degree of infringeability' by Saskia Stucki (2020). The higher the inviolability, the lower the infringeability, and vice versa. She investigated the current inviolability of animal rights and found that, even when the

⁶ The term 'lifeboat cases' refers to the famous lifeboat thought experiment. In this thought experiment, a variable group of living beings is floating on the sea without food. The question, then, is whether it is allowed to kill one or several beings for the benefit of others. And if so, who should be killed (Alexander & Moore, 2021)?

circumstances of justice are present, the infringeability is disproportionately high (Stucki, 2020).

Stucki argues that the strength of a right depends on the substance and the normative power of the right. Substance refers to the fundamentality of the protected interest. The interest in living is a more fundamental interest than the interest in owning a house, which is in turn more fundamental than the interest in marrying. The fundamentality of the interest is an indicator for the normative force, which is measured by the degree of infringeability. Usually, fundamental rights, such as the basic human rights, have a low infringeability. That is, it requires strong reasons to be overridden in the case of conflicting interests. For example, in order to take another's life, a person must have committed serious injury to other beings. The police will not shoot someone with the intention to kill, but if that person is a mass shooter, the person's fundamental interest in living might be overridden by other people's interests in living and not being harmed.

Based on this distinction, Stucki finds that animal rights can be fundamental or simple. Fundamental rights are characterised by their high fundamentality and low infringeability. In contrast, simple rights can be simple for two reasons. The first is that it is non-fundamental and highly infringeable. This is perfectly fine, because the right protects an interest of rather low importance. The second way a right can be simple is when the fundamentality of the right is high, but when the infringeability is high as well. An example is the fundamental right of a cow not to be slaughtered. Even though we would expect a low infringeability, the opposite is the case. It is highly infringeable because the less fundamental interest of humans to include meat in their diet overrides the fundamental interest of the cow to live. When fundamental interests are violated within the circumstances of justice without proper justification, unjust violations of rights are taking place.

In the remainder of this paper, I will take selfhood as the appropriate threshold for qualifying as a right holder. All animals that are selves are intrinsically valuable in a

non-derivative way, they are of ultimate value. Consequently, I will hold that all animals that are selves are entitled to basic inviolable rights. These basic inviolable rights are fundamental and not simple, just as they are fundamental for humans.

Chapter 3: Species approach

The purpose of this chapter is to investigate whether species, as an entity, are entitled to certain rights. If this is the case, it might follow that rare species are entitled to special rights, which might point at special or stronger duties towards rare individuals. Three possible arguments are discussed. Firstly, species are morally relevant because they are individuals, which justifies attributing intrinsic value to them (value approach) or it allows for the acknowledgement that species have morally relevant interests (interest approach). Secondly, species are important for biodiversity, which is what makes them worthy of protection and evokes duties in us to preserve them. Thirdly, species are natural systems and since natural systems are intrinsically valuable, they must be protected which evokes duties in us. I will show that all three arguments are defective, which leads me to the conclusion that we do not have duties towards species and no special or stronger duties towards rare individuals that are derived from special or stronger rights towards rare species.

3.1 Introduction

In nature conservation practices, the basic rights of wildlife individuals are often violated (both of the rare and non rare species) when dealing with rare species (Bekoff, 2013). These practices and policies are justified by claims that the interests of rare species are at the top of the hierarchy or because it is claimed that it is of utmost importance to protect rare species. This has several consequences. Individuals of species that are not rare often lose the battle when their interests conflict with the interests of rare individuals (e.g. therapeutic culling⁷ or favouring rare species in policies). But rare individuals also lose as, for instance, their fundamental right to liberty is violated by captivating them for breeding programs or research. Furthermore, individuals of all species and their habitats are managed by humans

⁷ Therapeutic culling is when several individuals of a species are sacrificed for the protection of something else, for instance other species. An example is the killing of red deer in the Oostvaardersplassen in the Netherlands. Several individuals are killed to protect the environment and to prevent excessive death of red deer due to lack of food sources if the population does not decline (Rechtbank Midden Nederland, 2021).

in such a way that they become dependent, i.e. they have lost their autonomy. The validity of aforementioned approaches is important if we care about implementing policies that are just.

These approaches can be valid. For instance, one can hold that the near extinction of a species pulls us out of the circumstances of justice. Preserving a species is of such importance, that it justifies the violation of basic rights of individuals. Indeed, some scholars argue that this is the case. Importantly, what is needed to make this claim, is that it must be possible for the entity 'species' to be worthy of such protection. These scholars are not claiming that we have direct duties towards the individuals of the rare species, but to the species itself. Although the underlying argumentation differs, these scholars all agree that this is possible. They deem a species, as one entity, morally relevant.

Coming back to the main question of this essay, if species are indeed entitled to such protection, it might be the case that we have special or stronger duties towards individuals of rare species because they are a member of rare species. Maybe there are derivative rights for rare individuals that are grounded in the moral relevance of the species as an entity⁸.

3.2 Argument I: species as individuals

This first position justifying that a species is morally relevant argues that it is because species are individuals. Viewing species as individuals either justifies attributing intrinsic value to them (value approach) or it allows for the acknowledgement that species have morally relevant interests (interest approach). Scholars adopting the value approach argue that species are individuals and hence intrinsically valuable. We should protect intrinsically valuable things. Hence, we should protect species that are on the verge of going extinct. Scholars adopting the interest approach, hold that species have an interest in existing or

⁸ If individuals of rare species indeed have such derivative rights, we must also show that the moral relevance of a species is higher than those of the individuals of that species. How else could it be justified that we violate basic rights of rare individuals (for instance by captivating them for breeding programs and thereby violating their right to liberty) to preserve the species they are a member of?

evolving. Letting them go extinct would be a violation of their right to exist or evolve, which is why we have a duty to prevent their extinction.

In this subsection, I will show that it is impossible to view species as individuals. Not only is the definition of a species and its ontological status unclear, a species also lacks selfhood and is thus not of ultimate value, nor can it have interests.

3.2.1 *Defining a species*

The first problem with viewing species as individuals originates from the difficulty of defining what a species is. It does not necessarily have to be a problem that the definition of species is not set in stone. If one is a pluralist⁹, for instance, one can consider context and does not have to commit to just one definition (Ereshefsky, 2022). However, if one holds that species should be seen as individuals, it is necessary to reach consensus on who these individuals are. If the distinctions are context-dependent, this poses a problem.

It might seem unclear why defining a species is a problem. It is quite clear, for instance, that the human (*Homo sapiens*) is a species, as is the raven (*Corvus corax*). We can all name several of them and easily distinguish them from each other. But, as always, the devil is in the details. Can you, for instance, easily identify the distinguishing factor between a red wolf (*Canis rufus*) and a coyote (*Canis latrans*) (figure 1 and 2)?

⁹ Pluralists are scholars who do not think there is only one 'truth'. They are the opposite of monists, who argue that there can be only one. In this case, a pluralist holds that it is not necessarily a problem that we cannot find one definition of a species, because it might be the case that there are several plausible definitions of a species.



Figure 1. The red wolf (*Canis rufus*)



Figure 2. The coyote (*Canis latrans*)

Those who don't know the answer cannot turn to biologists for help. They have not agreed on whether the red wolf is an ancient or recent hybrid of the grey wolf and the coyote, or whether it is a distinct species that has only recently been mating with coyotes. Different methods have been used to determine its lineage, but there is no consensus (Nowak, 2003). That is because biologists differ in their opinion on whether to use genetics, morphology, history, phylogenetics or other characteristics to make a distinction. In fact, they use over twenty different definitions to define species (Hey, 2001).

It seems that boundaries between species are somewhat arbitrary (Bradley, 2001). Which is actually what Charles Darwin already said. He did not consider species as clear-cut separate entities, but rather as varieties of natural selection: "I look at the term species, as one arbitrarily given for the sake of convenience to a set of individuals closely resembling each other, and that it does not essentially differ from the term variety" (Darwin, 1859: 52).

We will discuss the position of Darwin in more detail later. For now, it suffices to understand that it becomes increasingly difficult to see species as separate individuals when

the definition of a species is unclear and the boundaries between them are arbitrarily chosen.

3.2.2 *The ontological status of species: species-as-classes or species-as-individuals*

The second problem with viewing species as individuals regards the ontological status of species. If we can define what a species is, then *what kind* of entity is it? Two relevant definitions are firstly that the term ‘species’ functions as a name for a class or category, while the second definition holds that the term ‘species’ is a name for an individual. We need the second definition to be true if we want to conclude that we have special duties towards species.

Regarding the first definition, viewing species as names of classes amounts to saying that there are identifiable properties unique to a species which makes the distinction between species possible (Ereshefsky, 2022). It would mean, for example, that the black and white stripes of a zebra are unique for the species zebra. The black and white stripes are an identifiable property which can be objectively investigated. It is thought that we can discover such properties.

Opponents of the species-as-classes view formulate their arguments in at least two ways. The first is by denying the objectivity of the distinction. They argue that the objective properties we identify are based on subjective human choices (Chessa, 2005). Most biologists would argue that a zebra without the characteristic black and white stripes still counts as a zebra because there might be other properties which make a zebra part of the species zebra. But this makes the statement that ‘a zebra has black and white stripes’ no longer an objective fact, because it is not always true. John Dupre (1993) puts it as follows: “Rather, while humans do classify animals into species based on real differences between organisms, the differences on which the classifications are based do not mark significant natural or biological differences between members of different species”. The distinguishing factors are based on context, which runs into the risk of objective facts being arbitrary human choices.

Moreover, as species are subject to evolutionary pressure, they change. And so might their objective property, i.e. their essential trait. It is not possible, then, as opponents argue, to identify a trait that includes all members of one species, excludes all other organisms while also accounting for the changes due to evolutionary pressure. We cannot define an essence, so to say (Quarfood, 1999).

The second way scholars argue against the species-as-classes view is by referring to the fact that viewing species like classes precludes the possibility of viewing them as discrete and separate entities, which means that we cannot have duties towards them. Just as we do not have duties towards other taxonomic categories, such as families or genera, which should be seen as classes. It is argued that while species are also a taxonomic category, they are so in a significantly different way. They are discrete entities in time and space with sharp boundaries (and not arbitrary ones), which makes them more like individuals than classes (Rolston, 1985).

Scholars who hold that species are individuals, defend the species-as-individuals thesis (SAI thesis). First formulated by Ghiselin (1974) and Hull (1978) this thesis states that species are individuals because they are spatially and temporally restricted. Compare this to yourself. Your body cannot be scattered around the universe with you remaining an individual, your different parts must be causally connected. Neither can you be partly living now, and partly living in a thousand years. You would cease to be an individual in both cases. Species, it is argued, are similar to individuals in those spatiotemporal properties (Ghiselin, 1974; Hull, 1978). Spatially, because the parts and processes of which the species-individual is built are *causally* connected. There is a certain level of internal cohesion (Quarfood, 1999). That is, the parts of a species (the organisms) are causally connected because they all exist in the same genealogical branch. Belonging to the same genealogical branch is of specific importance for proponents of the SAI thesis. In fact, the SAI thesis implies a full commitment to the relevance of the genealogical lineage. Being of a certain lineage is both necessary and sufficient for belonging to a species associated with that lineage. Other distinctive features of species, to which the species-as-classes view commits, are not sufficient to be regarded as

belonging to a species. Two animals may look alike, or have similar genetic make-up, as long as they are not part of the same genealogical lineage, they do not belong to the same species (Ereshefsky, 2022).

Species are also temporally limited. At a certain point in time the distinct species evolved and at another point in time they will go extinct, either by the death of all the individuals of the species or by merging with or diverging into other species. These are the two points in time between which the species, the individual, 'lives'. In other words, a species has clear cut boundaries (Ereshefsky, 2022; Quarfood, 1999).

3.2.3 The plausibility of the species-as-individuals thesis

Although the SAI thesis comes with several benefits, not the least that one does not have to identify a general criterion for identifying a species, it also comes with its own difficulties. First and foremost, it seems impossible to adhere to a Darwinian approach to evolution while simultaneously accepting the SAI thesis. Although Darwin readily acknowledged the spatiotemporal aspects of species, he denied the clear spatiotemporal bounds. Instead, what mattered to Darwin was the modifiability of species. With this modifiability, Darwin refers to the principles of natural selection that influence how the species evolves. Indeed, the genealogical aspect is important, but the genealogical aspect must always be discussed within the framework of his theory of natural selection. And within this framework, there is no need to abandon the notion of class. In fact, determining a species is done by constructing a class. It is an assessment of different individuals in which it is determined whether a form is not mere variety but actually consolidated into a class, which we call a species (Darwin, 1859; Gayon, 1996).

Another argument against a full commitment to the SAI thesis is that species can be very different in kind. One only has to compare microbiological species (Protista) with animal species (Animalia). The species of these different kingdoms differ in many aspects, but one of the most important differences is their reproduction. As such, the concept of

species used for microbiological species cannot be applied to animal species. In other words, the way we determine their genealogical lineage is completely different (Ereshefsky, 2022).

As the SAI thesis commits fully to determining species with genealogy, how do we deal with these differences? Some suggest that it might be the case that species can be individuals in some cases and classes in others (Reydon, 2003). But this does not solve anything, since we need species to be individuals in such a way that we can have duties towards them. For that to be possible, it is minimally required that species can be seen as full fledged individuals, and not only partly (Chessa, 2005).

The ontological debate is not settled, but it is clear that there is no consensus on the individuality of species, which significantly complicates the possibility of having duties towards species.

But even if it would suffice that species can only sometimes be viewed as individuals, we run into problems with attributing interests to them. Consider for instance the following similarities suggested by Rolston between species and individuals that should explain why species have some interests: both protect a specific form of life, resist dying (natural selection and survival instinct) and regenerate through time without losing their normative identity (species evolve through time, but remain one species, such as the fact that I change from a toddler into an adult but remain myself) (Rolston, 1985). What Rolston seems to be doing here, is trying to ascribe some kind of consciousness to species which makes it possible to have interests. But species are not subjectively experiencing the world. For instance, a species does not *actively* resist death, this happens by accident. No species-self consciously considers possible future actions. Instead, the species only responds according to the principles of natural selection. It might seem that there is some goal in hindsight, but it is simply a response to evolutionary pressures.

Moreover, a species does not necessarily protect a specific form of life. Even more, it would adapt its form of life when necessary. That is the whole survival mechanism of a species. Species occupy niches in ecological systems in which they have specialised in living a certain way. This might make it seem like it wants to maintain this way of living. However, if

we go years into the future, it might as well be that some species have adopted a completely different way of life.

Finally, it is difficult to maintain that a species actively tries to maintain a normative identity. A species as such does not remember what it was like a few hundred years ago and does not intend to remain the same species in the next few hundred years. If individuals of different species can mate together and produce fertile offspring, the species is not actively preventing this to preserve its identity.

Rolston (1985) also writes that species can be better or worse off, such as individual beings can be better or worse off. This should explain certain interests in improving or evolving. For instance, when variation in genetic load causes harmful effects for the individuals who carry the genes, but which is beneficial for the species. Here it is implied that “the individual is subordinate to the species, not the other way around” (Rolston, 1985: 724). But this is a fallacy. Although variation might be beneficial for the species in the sense that it is better equipped to persist on this planet, and although a species cannot exist without its individuals dying and carrying the detrimental effects of genetic variation, this does not mean that there is a purpose. It is not as if the species is trying to reach a certain goal, such as ‘improving itself’. Instead, it is nothing more than piled up coincidences that happen to be beneficial. Natural selection happens and species do not follow a plan, there is no *telos* (Chessa, 2005; Ereshefsky, 2022).

In conclusion, if we adopt a Darwinian approach we should view species as classes that occupy a definite place in the genealogical tree and which are linked in a genealogical order (Guyon, 1996). And even though it might sometimes be useful or appropriate to consider species as individuals, it does not follow that species are individuals in the sense that they can have interests. Species are not conscious selves that can have interests. Consequently, we do not have a duty towards the species itself to keep the species alive based on it having an interest existing.

3.2.4 *Species as intrinsically valuable entities*

The other view building on the premise that species can be seen as individuals is that we have special duties towards rare species because they are of intrinsic value (Chessa, 2005; Ereshefsky, 2022). The world would be a worse place when things of intrinsic value are lost. Species are of intrinsic value and thus we must protect species from going extinct.

When faced with the dilemma between choosing to kill a rare individual and an individual of a common species, it is often argued that killing the individual of a common species is the better choice because killing a rare individual causes double-value destruction. That is, both the valuable individual and the valuable species are lost (Chessa, 2005). I do not deny that species are valuable, but we must be careful with such dilemmas because it matters what is meant by 'being valuable' for the validity of this approach. Consider two versions of the argument:

1. A species has intrinsic worth and it is considered a bad thing when it goes extinct. That is why we have a duty to protect the species.
2. A species has intrinsic worth and it is considered a bad thing when it goes extinct. That is why we have a duty to protect the species, *and* why we are justified in sacrificing individuals to realise this protection.

The first argument holds that we have duties to protect the species because it is a valuable contribution to the world. This can be either grounded in the fact that we consider a species as something intrinsically valuable, or in the fact that a species has extrinsic value(s). For instance, it could be a keystone species that is of key importance for the health of an ecosystem. In this case, our duty to protect the species implies that we try to help individuals of the species to flourish. Importantly, it does not necessarily imply that we view the species as an individual with equal moral status to individuals such as human beings. Instead, with this formulation we can have duties towards a species by which we mean not the entity species, but the individuals of that species.

The second argument, however, does imply that the entity species is intrinsically valuable as an entity, as an individual. As it is an entity with the moral status of an individual, it is justified to sacrifice individuals to save the species from going extinct. For instance, therapeutic killing is accepted as a tool to preserve rare species. The rare species has an interest in survival, which is taken to be of higher importance than the interest in survival of the individual members of common species.

But this argument is unsound as it rests on a confusion about the earlier discussed distinction between intrinsic value and ultimate value. While the two individuals (both the rare and non rare) are beings that are considered selves, and thus of intrinsic value of the non-derivative kind (ultimate value), a species can only be considered to be of intrinsic (derivative) and/or extrinsic value. It is unjust to sacrifice beings of ultimate value for the sake of the survival of something of intrinsic or extrinsic value, because beings of ultimate value are morally more significant.

In other words, choosing to protect the rare individual over the common one *because* we need to preserve rare species, is violating the basic rights of an individual without proper justification. Species are not individuals with a self, they are not entitled to basic rights, and rarity does not suddenly make a species of ultimate value, which is required to overrule the interests of individual beings. Although species might be valuable, we do not have special duties towards them because they are rare.

3.3 Argument II: species are important for biodiversity

The second argument states that species are important for biodiversity, which is what makes them worthy of protection and evokes duties in us to preserve them. But I will show that such duties are not directed at the species. Instead, the preservation of biodiversity is mainly justified on the grounds of benefiting humanity. Even though many animals and other living things can benefit from biodiversity, the ultimate reason for preserving biodiversity is the

flourishing of humankind. We believe that people currently living on this planet and future generations have a right to an ecologically robust planet, for which we need a certain level of biodiversity. This means that the rare species and their individuals function only as a means to an end. Thus, we do not have special duties towards rare species on the grounds of biodiversity.

That humanity is the actual target of preserving rare species for biodiversity can be found in the Habitats Directive of the European Union (Habitats Directive, 1992). This directive describes what is required of European member states to conserve wild flora and fauna. It targets the protection of areas which are rich in biodiversity, and therefore of high importance for maintaining a certain level of biodiversity. Also species who are threatened with extinction are included in this directive (Habitats Directive, 1992).

This directive seems to be in the interest of rare species: they are protected against extinction. However, we have seen before that species do not have an interest in survival. Instead, the protection of species ensures a certain level of biodiversity which in turn should protect the human species. Maintaining a certain level of biodiversity prevents the loss of ecosystem services, secures a future in ecologically robust ecosystems, and ensures that future human generations will live in a world that is not completely exploited. The duties we seem to have towards rare species are thus not directed at the species or the individuals thereof. Rather, they are directed at humanity, leaving the rare species as a means to an end.

Nevertheless, it seems that rare species have rights in the Habitats Directive. Article 12 states that:

“Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV¹⁰ (a) in their natural range, prohibiting:

¹⁰ Annex IV lists all animal and plant species that are “of community interest” and which are “in need of strict protection” (Habitats Directive, 1992:44).

- (a) all forms of deliberate capture or killing of specimens of these species in the wild;
- (b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;
- (c) deliberate destruction or taking of eggs from the wild;
- (d) deterioration or destruction of breeding sites or resting places.”

(Habitats Directive, 1992:10)

In this article, one finds that Member States have duties to protect the interests of the species, such as their interest to hibernate or to migrate. Following the interest theory of rights, we find that these interests are sufficient to hold Member States under a duty and, thus, that these species listed in Annex IV are entitled to claim rights (Schoukens, 2021). However, Veerle Platvoet (2023) shows that these rights are only of the derivative kind. Specifically, they are derived from the right of humanity to a certain number of individuals of a species to ensure an ecologically robust planet in which we can live relatively safely¹¹.

It could be the case that the goal of protecting species is twofold, protecting species is beneficial for individuals of that species and for individuals of other species. After all, the Habitats Directive does mention that ecosystems and species are of intrinsic worth (Habitats Directive, 1992). For instance, there is a regulation in the Netherlands that prevents the insulation of houses when bats live inside the walls. A bat is a protected species and the individuals die when the walls are filled with insulating material. Driving them out beforehand means displacing them and leaving them homeless, which would be a violation of their rights¹². The more trivial interest of humans to have an insulated building does not have the same weight as the primary interest of the bats to remain in their home.

This is an example of how interests are prioritised in the right hierarchical order. In many cases, however, trivial interests are given more weight than primary interests.

¹¹ A similar example can be found in the Endangered Species Act. John Baird Callicott found that the worth of threatened species mentioned in the European Species Act is mainly instrumental (Callicott, 2005).

¹² We would not force people out of their homes without good reason, we should not do this with bats.

Therapeutic culling is often an example: the interest of animal individuals in living is a primary interest, the interest of humans in biodiversity is not. Captivating individual animals to preserve a species is another example. The primary interest of the individual in freedom, is put below the less relevant interest of humans in biodiversity. While it is a pity that species go extinct, it is immoral to violate their basic rights without proper justification.

On top of all this, maintaining biodiversity to create favourable circumstances for humanity does not imply that *all* rare species should be protected and can thus not explain why we have duties towards all rare species. Not only might it be wiser to invest time and money into other, more common species that have higher chance of survival or are more important for healthy ecosystems, it could also be the case that we are better off with some rare species extinct. They can make room for other species, or maybe they are or will become of negative influence on humanity, e.g. poisonous or disease-carrying animals. There is only a specific kind of biodiversity we want, and not every (rare) species fits in into this.

Besides, appealing to biodiversity as justification for special duties towards rare species seems to be based on some contradictions. That is, if the quantitative aspect of biodiversity would be a goal in itself, it would not matter whether there are only a few individuals of a species or many. The big influence a species exercises on her environment is when many individuals are behaving in a species-typical way. But the influence of one individual of a species is usually extremely low^{13,14}. Even though an extra species on planet earth means a +1 on the species list, the species is often no longer an integral part of the ecosystem (Callicott, 2005; Ehrenfeld, 1988). The actual goal of preserving an ecologically robust planet cannot be reached by captivating a species in a zoo and preserving it there.

¹³ Indeed, it could be the case that a species only lives in a small area. But my argument would still hold. If only a few of a species are left, the influence the species has on the environment is minimal. For instance, a rare frog influences the environment directly and substantially on a small scale, but this influence is negligible on a large scale. The influence of this rare species of frogs is negligible because there are only a few individuals left living in the species-typical way.

¹⁴ Some individuals do have a rather large influence on the ecosystem on their own. For instance top predators or individuals of keystone species. However, this is more an exception than a rule.

In conclusion, arguing that we want to protect rare species because they are important for biodiversity is an anthropocentric argument that does not take the interests of individuals into account. Instead, it often violates basic rights for the fulfilment of trivial human interests. Moreover, biodiversity as a goal does not make sense because then you could just fill up a zoo with only a few individuals of every species. What we are looking for is a specific version of biodiversity, the one that allows humanity to flourish. Although there is nothing wrong with trying to make the world a better place, it is wrong to violate basic rights of individuals to reach that goal. In conclusion, the argument from biodiversity can not explain why we have special duties towards rare species.

3.4 Argument III: rare species are valuable natural systems

This third argument views species as some kind of natural system. Since natural systems are intrinsically valuable, they must be protected. Yet again, this argument relies on the implicit assumption that being intrinsically valuable can be equated to being entitled to basic inviolable rights. In other words, it is equated to being of ultimate value. Even though natural systems might be valuable, they do not possess selfhood. Hence, they are not the kind of entities that can hold rights within our framework. This approach cannot explain that we have special duties towards natural systems such as species. Neither can it justify the violation of basic rights of individuals.

Scholars arguing for this position believe that our current focus on 'just animals' is too narrow. We must expand our focus to acknowledge that natural systems, such as rivers, ecosystems or forests, have moral status that is comparable to some of the rights human beings have (Donaldson & Kymlicka, 2011). The rights for nature movement is an illuminating example. This movement argues that nature and her systems have intrinsic value, which is why they should be entitled to rights. Just as companies have rights, forests, ecosystems and species should also get rights (Rechten voor de Natuur, 2023).

However, their argument is unsound. Remember that we were investigating whether rare species have special rights because they are rare. If this is the case, this position should be based upon an argument that is something like the following:

1. Things of intrinsic worth have basic rights.
2. Natural systems have intrinsic worth.
3. Species are natural systems.
4. Species have rights.

Premise 3 is correct and the conclusion (4) follows logically from the premises 1, 2 and 3. The question is whether premise 1 and 2 are correct.

To figure this out, let us return to our starting point: justice exists, among other things, to protect vulnerable individuals. We determined that this vulnerability is characterised by being an “I”, by being a self. In other words, someone who cares for her well-being by and for herself. Her vulnerability makes her better or worse off, and justice is utilised to protect her from certain harmful actions by other people. Basic inviolable rights reflect this protection (Donaldson & Kymlicka, 2011). If the rights for nature movement means by premise 1 that having intrinsic worth is equal to being a vulnerable person, and if they mean basic inviolable rights by rights, then premise 1 would be correct.

However, if we turn to premise 2, the intended natural systems are entities like rivers, forests and ecosystems. Such systems are not conscious. They are not aware of themselves, there is no “I”. We say that a river can be worse off, but not for itself. For instance, we like rivers to be filled with water and we say the river is in a bad state when it is completely dry, but it is not the conscious river itself that is worse off. It is a matter of speech. On the other hand, it can be argued that plants or other living entities are vulnerable. They are not aware of their vulnerability, but they can be better or worse off. For instance, when a plant is cut off from water supply. When a river dries out, we do not say it dies, but a plant dies from dehydration. Even though plants are vulnerable in this sense, they

are not aware of their vulnerability which rules out that they are entities that have intrinsic worth as is required in premise 1, nor are natural systems. Thus, natural systems are not the entities we should be treating as entities that have basic inviolable rights (Donaldson & Kymlicka, 2011).

The following example illustrates what the consequences are of granting natural systems basic rights. Imagine that we want to shoot some deer to keep an ecosystem in balance. This is justified by the interest of the ecosystem (a natural system) in remaining in balance trumps the interest of deer species. After all, the species deer will remain and the ecosystem will be in balance again. But what actually happens, is that *individual* deer are killed, i.e. beings with a self and basic inviolable rights. The interests of an ecosystem trump the primary interests of several individual deer. But ecosystems cannot have interests, they are not selves. This means that killing individual deer is a violation of their rights. Compare it to a situation in which we would have to shoot humans because it would help the ecosystem remain in balance. We would never even consider this as an option.

Some scholars try to solve this by arguing that natural systems do have moral standing, but that it is lower in hierarchy than the moral standing of human beings and higher than or equal to the moral standing of animals. It is thought that this avoids killing people to keep an ecosystem in balance, while simultaneously allowing for the possibility of killing other animals. However, this will bring us back to the immoral position of speciesism as it implies that only human beings have inviolable basic rights.

Thus, even though we might have duties towards natural systems, natural systems do not have moral standing similar to beings with a self⁵. There are thus no special duties towards rare species *because* they are a natural system. Nor do we have special duties towards the individuals of the rare species because there are no special rights we can derive from rare species being a natural system.

⁵ Plants and inanimate nature do not possess selfhood, but this does not necessarily mean that we do not have duties towards them, nor that they lack intrinsic value (Donaldson & Kymlicka, 2011).

3.5 Interim conclusion

This chapter discussed four possibilities for rare species having special moral relevance. The first two possibilities followed from the view that species should be considered individuals, which could explain that species have morally relevant interests or that they are of ultimate value. I have argued that one cannot view species as individuals that are capable of having interests because species are not conscious beings. They are classes that occupy a definite place in the genealogical tree linked in a genealogical order. Since they are not sentient beings, species are neither of ultimate value. They might be intrinsically valuable, but this does not grant them special rights which could overrule the rights of individual beings.

The third possibility was that we have special duties towards species because they contribute to biodiversity. However, preserving biodiversity is eventually directed at the flourishing of humankind. Species are used as a means to an end. Moreover, the preservation of not every rare species is desired. For we have specific ideas of how biodiversity should look like. Arguments from biodiversity can not explain why we have special duties towards rare species.

The final possibility rests on the idea that species are natural systems, which are intrinsically valuable, which is why we have special duties to rare species to preserve them. This argument breaks down on the incorrect implicit assumption that being intrinsically valuable is equal to being of ultimate value. Species are not of ultimate value and we have no special duties towards individuals thereof to protect them because they are rare.

In conclusion, we do not have any direct duties towards species as an entity. This entails that there are also no special or stronger duties towards rare individuals derived from rare species having certain rights.

Chapter 4: Individual approach

This chapter investigates whether the rarity of individuals entitles them to special rights, which indicates that there are special or stronger duties towards them. Three possibilities are discussed. The first approach investigates whether rarity influences the value of rare individuals and the second approach investigates whether it influences the interests of a rare individual. I will show that both approaches do not work. The last possibility that will be discussed is whether we have special or stronger duties towards rare individuals when humankind has caused the rarity of the species. It will be concluded that rarity can be of moral relevance when it concerns individuals who are vitally dependent on their group.

4.1 Introduction

We have seen that it is impossible to have direct duties towards species. This entails that we cannot have special duties towards rare species, because they are rare. Nor can we have special duties towards individual members of rare species based on rights derived from the rarity of rare species. Still, we do think rare species must be preserved. Another possible explanation for this intuition is that it is the rarity of individuals that evokes special duties in us.

This explanation can take three different forms. The first is that a rarity makes an individual more valuable and the second is that rarity evokes special or stronger interests. The third explanation describes how rare individuals are entitled to special rights when their rarity is a consequence of historical injustice.

I will argue that none of these explanations work. Firstly, the ultimate value of a rare individual cannot be affected by rarity since rarity is a necessary relational concept and ultimate value is non-derivative. Moreover, rarity does not cause a rare individual to gain a new type of value. Rather, it functions as an amplifier of already existing values. Secondly, rare individuals do not gain special interests because they are rare, for there is no interest that is only held by rare individuals. Besides, they are not aware of their rarity. Thirdly, even

though the rarity of an animal individual often indicates a history of injustice caused by humanity, the rarity itself does not evoke special duties in us. Animals are not aware of the historical injustice, which would make rarity morally relevant (as it is for humans whose ancestors have been treated unjustly). Instead, animals are only aware of the current circumstances. If these circumstances are unjust, there are duties to help the suffering animals. However, this is the case for any suffering animal, not only the rare individuals. Finally, it seems that for rare individuals who are vitally dependent on their group, rarity can be of moral relevance. But this possibility is necessarily collective and will therefore be discussed in the next chapter.

4.2 The influence of rarity on intrinsic or extrinsic values of individuals

When discussing the influence of rarity on the value of individuals, it is important to distinguish between different kinds of values. If one argues that individuals have ultimate value, then rarity cannot influence this. One is born as an ultimate valuable being, or it is not. Since all animals we are discussing here are selves, they are all of ultimate value. Hence, the only way in which rarity can influence the value of an individual is by affecting values that are intrinsic in a derivative way or extrinsic and relational.

If we go back to what we mean by 'being rare' these relational and derivative components make sense. Being rare means that an individual lives on this planet without many conspecifics, which illuminates the fact that an individual is always rare in relation to its environment (James, 2023). A rare individual can thus only possibly derive values of rarity from such relations.

These values can be of different kinds, of which the most well-known is probably instrumental value. Instrumental value in the case of rare individuals would for example mean that we want to protect a certain individual because they help us achieve some goal, such as preserving biodiversity. Even though rarity might influence the instrumental value

of an individual, I will not discuss it any further since it would not evoke a duty in us that is directed at the rare individual.

4.2.1 *Lifeworld value*

According to Simon James (2023) the only non-instrumental extrinsic value that is affected by rarity is what he calls 'lifeworld value'. Lifeworld value is the value one has because of the unique way an individual experiences the world. According to James, individuals of the same species have comparable lifeworld experiences because their senses and hardware are similar. This amounts to saying that dogs, for instance, have more similar lifeworld experiences compared to each other than compared to another species. Every individual, however, has a unique lifeworld experience. When an individual dies, the lifeworld is lost. This is not necessarily a bad thing, maybe the individual had a horrible life. However, when it is a bad thing, rarity can influence the severity of the loss of lifeworld experience (James, 2023).

James focuses specifically on endlings¹⁶. If the loss of the lifeworld of an endling is a bad thing, then the endling typically acquires a lot more lifeworld value compared to when it would not have been an endling (James, 2023). An illuminating example is when only a few humans of a certain culture are left, for example the last members of a small indigenous tribe. If one person dies, then the other few still have a lifeworld experience comparable to the one who died. But as there are now fewer individuals left with this specific experience, their lifeworld value increases. When only one person is left, the lifeworld value of this person converges into this endling. With the death of this person, the whole lifeworld experience of this specific culture will be lost forever. We typically consider this to be a bad thing (James, 2023).

In this example, both the individuals of the culture and the people outside the culture consider the loss of a lifeworld a bad thing. However, in the case of animals it is only humans who determine whether a specific type of lifeworld experience is worth preserving. The rare

¹⁶ An endling is the last living individual of a species.

animal individuals will probably not mourn the loss of lifeworld experiences, since they are most likely not aware of the existence of it. A dog is aware of her personal experience of the world, but it is very unlikely that she realises that her experience is of a specific type, while at the same time realising that her experience is a representation of the lifeworld experiences of the species dog. As the lifeworld value of rare animal individuals increases with their rarity, it only does because humans attach value to the existence of their unique experience. Saying that we have a duty to preserve a certain lifeworld experience will thus be a duty to humans and not the rare individuals themselves.

Moreover, making a distinction between lifeworld experiences based on species membership is too arbitrary. It might be the case that lifeworld experiences of different species are highly similar or that lifeworld experiences of two individuals of the same species differ greatly. For instance, the experiences of dogs might be highly similar to experiences of wolves or dingoes, while the lifeworld experience of a rabbit living in Australia might be very different from a rabbit from Russia. In other words, why would we base the distinction for increasing lifeworld value at species membership?

In conclusion, rarity does influence the lifeworld value of individuals, but it cannot explain why we have special or stronger duties towards rare individuals because preserving certain lifeworlds is to satisfy subjective human preferences.

4.2.2 Rarity as amplifier

How rarity affects the lifeworld value of individuals is an example of how rarity generally functions as some kind of amplifier of value. Another example is how rarity affects already existing value of works of art, but does not create a new kind of value. A rare painting of my little sister is worth nothing more than what my grandma would pay for it. However, a rare painting by Picasso is worth millions. We value the artworks by Picasso, and rarity amplifies this already existing value (Gunn, 1980). No one, except for my grandma and my parents, value the painting by my sister. Since there is not much value in the beginning, rarity can only scarcely amplify this value.

Regarding species and rare individuals, Lilly-Marlene Russow (1981) reached a similar conclusion. She argued that the things we value about individuals of certain species is their esthetic value. Moreover, we have a moral duty to protect things that are of esthetic value. Then, when a species is rare, the chance that we run into an individual with its characteristic esthetic appearance decreases, which increases its esthetic value and with this our duties to protect the species increase as well.

The counter-intuitive result of rarity functioning as an amplifier is that rarity cannot explain why we would want to preserve species that we do not value positively or find esthetically pleasing. There is no positive value that is amplified by its rarity. It might even be the case that we are happy for some species to go extinct, e.g. disease-carrying mosquitoes¹⁷. Thus, rarity as an amplifier cannot explain why we want to preserve rare species as a general principle. If it only serves as an amplifier we would need an independent reason for every species we want to preserve. An endangered status is no longer sufficient (Gunn, 1980).

On top of that, comparing rare species to rare objects is an incorrect comparison. Objects, such as stamps and pokémon cards are worth thousands of euros and their value often increases with rarity. Common stamps and cards are worth only a little. Hence, people specifically collect *rare* objects and have an interest in them remaining rare. Only then their value will remain large. However, in the case of rare species we are doing the exact opposite. By preserving species, we intend to make the species flourishing again. We do not collect rare individuals to keep them as things of value. In other words, the market for rare objects is different from the way rarity influences the preservation of rare species (Gunn, 1980).

4.2.3 *Rarity is not a quality*

According to Alastair Gunn (1980), rarity cannot be the basis for any special value at all. He argues that the mistake that is made in approaches that identify the rarity of individuals as the reason for preserving rare species is that rarity is treated as a quality, which it is not.

¹⁷ Russow writes that when species have no aesthetic value, “lacking any alternative, we might be forced to conclude that such species are not worth preserving” (Russow, 1981, p. 110).

Rarity cannot be 'possessed' by an individual. Instead, rarity is a description of a state of affairs. That is, a cougar (figure 3) is not essentially different when it is rare from when it is common. Rarity does not give her a special feature. The only difference is the percentage of how much the species is composed of her. Therefore, Gunn concludes, if we ascribe rights to rare individuals based on certain qualities - which is what we do, a being must be an "I" to be entitled to basic inviolable rights - then rarity cannot be grounds for rights. Rarity is not a quality (Gunn, 1980).



Figure 3. An individual of the species Puma concolor.

4.2.4 Contributory value

There is one more possibility in which an individual can acquire value if we accept an approach formulated by Ben Bradley (2001). Bradley claims that an individual can contribute to the overall good of the world by adding variety, which he calls the principle of *bonum variationis*. Killing the last member of an endangered species not only diminishes the overall

good of the world by losing a valuable individual, but also by having less variety. Endlings, specifically, are more valuable because with their species-property, the fact that they belong to a certain species, they contribute to variety and this is intrinsically valuable to the rest of the world. Accordingly, such individuals have contributory value.

We have discussed the notion of biodiversity before, and dismissed it as a good reason to give species special rights. Bradley's account will also not escape this criticism. For a start, Bradley himself immediately acknowledges that we must determine what kind of variety we value. For this he relies on biologists which can, he claims, properly identify which sort of variety is important. However, this would leave us with the difficulty of objectifying something subjective. Although to a certain extent biologists and ecologists can agree on which variety is good or bad, the devil is in the details and there are two problems we must address. Firstly, we need to define when species are distinct. Secondly, there is much dispute on which or when variety is good.

Firstly, the focus on variety becomes a tricky statement in combination with the earlier discussed problem of defining species. An argument often used in debates on biodiversity is that variety is good. But this shifts the focus from the species itself to variety. Logically, Bradley's account would leave us with an obligation to choose a definition of species which contains the greatest number of species. This is an absurd conclusion. He counters this objection by arguing that there are other valuable things in the world, which prevent a neverending duty to create new species. Nevertheless, even if this is a solution, we are still left with the second problem of defining which variety we prefer, which comes down to subjective preferences which are hard to objectify. Take two different ecosystems: a desert and a rainforest. Let us assume that both ecosystems are valuable in this world. An extra species in the rainforest might indeed make the world a better place, because one of the reasons we appreciate a rainforest ecosystem is because it is so rich in species. However, a desert is an ecosystem in which only a few highly adapted species can thrive (or survive). We partly value a desert as an ecosystem because it is so relentless and we admire the few species who can live in such extreme circumstances. An extra species in this ecosystem,

then, is not per se a good thing. It might contribute to a better world, but we might as well not care. Or even worse, if many species would be introduced into the desert we might even say that the desert has lost one of its key features: the emptiness. The principle of *bonum variationis* does not hold in this case. Or maybe it only does for someone who thinks that deserts are more beautiful with more species. On top of this, the relative contribution of an extra species in the desert is much larger than the contribution of an extra species in a rainforest. Bradley's approach cannot explain this difference. The point is, the preferred variety is subjective.

Even if Bradley's account would explain something about how rarity influences the value of individuals, his approach can only explain why killing endlings is worse than killing non rare individuals. But we are interested in whether rare individuals evoke special duties in us. If we would focus on endlings only, it would mean that there is no difference between killing *one of the last* members of an endangered species versus a member of a common one, because there will be other members left of that endangered species to uphold the biological variety.

Finally, why would variety only matter on the species level? As we are well aware of the striking differences between human beings, should we not also acknowledge the striking differences between animals that belong to the same species? Take for instance an albino tiger and a 'normal' one. I would say that such a rare (!) albino tiger also adds greatly to the variety in the world. As I would also say that two lions with a completely different hunting technique both add greatly to variety. In other words, the focus on species variety is too arbitrary.

We can conclude that rarity does not influence the value of individuals in such a way that they evoke special duties in us. We saw that the increased lifeworld value is only based on the value humans attach to it and will thus eventually only serve humans if we preserve it for that reason. Besides, rarity generally functions as an amplifier of existing values. It does not add a specific type of value for individuals. Moreover, rarity cannot be grounds for special

rights, because rarity is not a quality. An individual cannot ‘possess’ the quality of being rare. Rather, it is a description of the situation in the world. The notion of contributory value can also not explain how we can have special duties towards rare individuals. This approach concerns only endlings and is inherently subjective.

4.3 *The influence of rarity on the interests of an individual*

The second way in which rarity might influence our duties towards rare individuals is when rare individuals acquire interests that weren’t there before they were rare. A first candidate is a special or stronger interest in survival¹⁸. Special, because the individual might acquire an interest in the survival of the species and not only in her own survival or that of directly related family members. Stronger, because a rare individual might have always been interested in the survival of her species, but is aware of the increased importance of her own survival for the prevention of extinction.

If rare individuals would have such special or stronger interests, this would imply that all rare individuals are consciously aware of the fact that they are rare and that they are consciously aware of the fact that they are at risk of going extinct. This means that they a) must have an understanding of the future, b) know that they belong to a species, c) are aware of their own role in the continuation of their species and d) are aware of their relation to their conspecifics.

Humans have long regarded themselves as the only animal with a perception of time. However, studies that investigate this ability to mentally time travel found evidence which indicates that more animals possess this ability (Roberts, 2012). But even though some animals might be able to mentally time travel, it is something different to combine this perception with an awareness of them being part of a species. They might know which other animals are ‘theirs’, but it is unlikely that for example wolves are aware of the fact that they

¹⁸ I am referring here to a *subjective* interest in survival, which is an interest that an organism experiences consciously. This is in contrast with an *objective* interest in survival, which is an interest that is experienced unconsciously. Objective interests can also be held by plants, for instance. As this essay is concerned with interests that are experienced consciously, I will not discuss objective interests any further.

have conspecifics on another continent. As it is unlikely that Bengal tigers in India are aware of the fact that there were only a few of them left some years ago, but that their numbers have greatly increased (WWF, n.d.). Not being aware of the numbers of your species and not being aware that you belong to a species at all, entails that it is unlikely that animals have an interest in the survival of their species beyond their own survival (Korsgaard, 2018).

Nevertheless, some animals show behaviour which seems to indicate that they are aware of the fact that their conspecifics or offspring will live and survive. Take for example the migration of a Monarch butterfly. While the migration going south is done by one big group of butterflies, it takes several generations to complete the return going north. The individual butterflies going north have a lifespan of about 2 to 5 weeks, while the butterflies going south have a lifespan of about 8 to 9 months (Active Wild Admin, 2019). It could be said, then, that butterflies have some interest in the survival of their offspring to finish the whole migration¹⁹. Even though it is tempting to draw such a conclusion, there is an interplay at work between the human tendency to attribute a *telos* and simple instinct-driven behaviour. The fact that Monarch butterflies need several generations to complete their migration is not evidence for any interest in the completion of the migration, because they are most likely not aware of the fact that there will be generations completing their cycle after them²⁰.

Another phenomenon that seems to indicate a conscious interest in species-survival is semelparity, which is death after mating. There are male spiders who are being eaten by the female after mating, male *Antechinus* (figure 4) who have so much sex that they die, female snakes who bite off their partner's head, and many more examples of such behaviour (Yong, 2013). These acts can be interpreted as some sort of self-sacrifice, as if the animals know that their species will only continue when they die (Bittel, 2022; Langley, 2017). It

¹⁹ There is much debate on whether insects can be considered animals with a 'self'. New research shows that even insects are capable of nociception, which enables them to detect and respond to injury. This seems to point at some perception of pain. At least, it cannot be ruled out that insects are capable of feeling pain (Crump et al., 2023). As long as we do not understand the lives and lifeworld of insects, it is premature to say they do not have any interests at all. Yet, if one does not agree, this example serves as an illustration for similar cases with animals of whom we are certain that have a self.

²⁰ If butterflies are animals that can be considered beings with selfhood at all.

might seem as if their interest in the survival of their species trumps their own interest to live. Although this sounds like the highest form of altruism, researchers found that there are better and less heroic explanations for such behaviour. It turns out to be just a consequence of a form of sexual selection (Fisher et al., 2013). These animals do not have a special interest in species-survival, they are rather the unfortunate ones in the evolutionary race.

One could also say that rare individuals struggle significantly more than non-rare individuals. Maybe because it is harder to find a mate or to effectively hunt. Or maybe because small numbers require mating with close relatives which has detrimental effects on the health of individuals. Consequently, it could be argued, the rare individuals have a stronger interest in finding a mate or finding food. Even though these struggles are more apparent in rare individuals, they are not unique to rare individuals. We might have special duties towards these individuals because their vital interests are being frustrated, but such frustration of interests can also occur in a group of individuals that is not rare but has difficulties finding food because their habitat is being destroyed. Their struggles are real and call for intervention, but it is not rarity that does the calling. Rather, rarity illuminates the already existing interests.



Figure 4. An individual of the species Antechinus (Antechinus stuartii). The male individuals of this species put so much energy and effort into their reproduction that they die of toxic levels of cortisol within a year or so (Edmonds, 2016).

The second candidate for explaining how rare individuals acquire interests that weren't there before they were rare is not an interest of already existing rare individuals, but the interests of future generations. Specifically, the interests of future individuals of the rare species. Robin Attfield (1987) has argued that killing the last member of a species is a bad thing because it prevents future generations of that species from coming into existence. However, even though there are good reasons for bringing future generations of a species into existence, these are not grounded in the interests of the potential individuals. Potential offspring does not have any interests by definition²¹ (Chessa, 2005; Parfit, 1986).

²¹ If potential future children would have an interest in coming into existence, that would mean we have an obligation to bring as many individuals into the world as possible, which is dubbed the 'repugnant conclusion' by Derek Parfit. This would lead to an overpopulated world in which no one can live a normal life anymore (Parfit, 1986).

Only when extinction causes less individuals to live in the future in total this would make a difference²². Less individuals in the future might mean that certain food cycles are disturbed or that ecological niches remain empty (Bradley, 2001). Yet, these are the interests of *others*. They are not the interests of the rare individuals themselves. This would mean we have certain duties towards others, but these are not the duties we are looking for.

Nicholas Agar (2001) argued for a third candidate of special or stronger interests held specifically by rare individuals. Namely, the interest of a rare individual in the survival of its conspecifics. He argues that individuals need their conspecifics to satisfy their own interests. Reproduction is an example of such an interest. He writes that an individual is not “a function only of its own goals. Its demise affects the other-directed and other-requiring goals of its conspecifics, depending on how plentiful its species is” (Agar, 2001: 150). Rare individuals, then, have a greater interest in the survival of their relatives than non rare individuals because there are only a few left to satisfy these interests.

Indeed, individuals have interests in the survival of their conspecifics, especially when they live in groups. But it is not the case that all rare individuals or only rare individuals have increased interests in the survival of their conspecifics. Imagine a school of fish. This school is one of the last ones of this species. The individual fish are all strongly dependent on their fellow fish, because the bigger the school, the higher their chance of survival (Godin, 1997; Marras et al., 2015). Even though the individuals are dependent on their kin, they are not any more dependent on their fellow fish than they would have been if there would be more schools of fish in the sea²³. Or imagine solitary animals who are rarely in contact with each other and who occupy a large territory by themselves. Only when they are looking for a mate do they need their conspecifics. But if their species is rare and there are only a few left in one area, they might not even notice the difference from when their species is abundant and is also scattered around a large area. In fact, if less conspecifics

²² We need an independent reason to show why the world is better with the rare species than without.

²³ It would be a different story, however, when these fish are in a special predator-prey relationship. If they have only one predator which feeds solely on this particular fish, then it would be better for them to be more abundant. The chance that their predator will feed on their school decreases. The question remains, however, if this situation leads to a conscious desire for more fish of their kind. It would seem that a change in the preference of their predator would also solve this issue.

means more opportunities for them to find food or to live in the best habitat, it might even be beneficial for them.

This argument does not reveal an interest that only rare individuals have. Rather, it is another example of rarity functioning as an amplifier. The interests were there already, being rare just makes the fulfilment of the interests more complicated in some cases, but so does a deprivation of habitat or a disproportionately high abundance of predators.

Nevertheless, it does seem to be the case that animals who live in groups and are vitally dependent on their groups for their survival *are* affected by the rarity of their species²⁴. I will discuss this possibility in the next chapter, as such a dependence on a group does not evoke any rights that are held independently and our focus in this chapter is on the effects of rarity on individuals. Moreover, other criteria must be met for rarity to evoke any duties.

It can be concluded that even though some animals behave as if they are aware of the fact that they are part of a species and that they consequently have a special interest in species-survival, this is not the case. Animals are not aware of the fact that they belong to a species, nor are they aware of their role in the preservation of their species. It is neither the case that future generations of rare species have an interest in coming into existence, which would justify the preservation of rare species. Since future individuals do not yet exist they cannot have an interest in coming into existence. Finally, the proposal by Agar (2001) that rare individuals have a special interest in the survival of their conspecifics only reveals that rarity can function as an amplifier for the strength of interests. It does not give rise to a special type of interest. Yet, it seems that for rare individuals who are vitally dependent on their group, rarity can be of moral relevance. But as this possibility necessarily relies on the influence rarity has on a group and because other requirements must be met, it will be discussed in the next chapter.

²⁴ Note that in the example of the last school of fish, the individuals still had plenty of conspecifics in their group. There were just no other schools of fish left in the sea.

4.4 Historical injustices

The last possible explanation for why we can have special duties towards rare individuals that originate from the individuals themselves, is that rarity matters morally because it is an indicator for historical injustice. We have exploited and expelled many ancestral individuals of many species and the low abundance of their offspring is a consequence of this behaviour (Wienhues et al., 2023). Indeed, humans are known to be direct and indirect drivers for putting species into danger of extinction (European Commission, 2023a; European Commission, 2023b). Could it be the case that we have special duties towards rare individuals because we are the cause for their rarity²⁵?

We can compare the historical injustice done to animals with the colonisation of human groups. Donaldson and Kymlicka (2011) argue it is analogous to injustices suffered by various human communities whose self-government and sovereign control of their territory have historically been denied. Justifications for colonising wild animal habitat are strikingly similar to the 'terra nullius' justifications for the colonisation of indigenous lands. Land not occupied by humans is seen as empty and underdeveloped (Wolch & Emel, 1998). It becomes developed only when we 'improve' it. Even when there is acknowledgement of wild animals, they are often relocated. In the human case, international human law forbids such relocation and taking away of property because it is a violation of their basic rights. Relocating animals or depriving them of their property without approval is also a violation of their rights, as they are also individual beings with basic rights.

Colonised human groups care about the fact that their ancestors have been treated unjustly and that they are still suffering from the consequences. Take for example an endangered human culture, such as the Barasana people in the Colombian Amazon. These people are aware of the fact that their culture will disappear if they all die, and they do not want this to happen. They are also aware of the unjust treatment their ancestors have received which had their endangerment as a consequence. The Barasana people care about

²⁵ Notice that I am addressing the question whether we have duties towards individuals, and not towards species.

the fact that they are endangered, inasmuch that they want their culture to survive, they want to be outlived by their culture.

The question is whether individual animals of endangered species care about their rarity in a similar manner. As discussed before, it is highly unlikely that they are concerned with the fact that their species might go extinct, as they most likely are not aware of the fact that they are part of a species²⁶. It is also highly questionable whether animals are aware of the fact that their ancestors have been treated unjustly which has put the survival of their species into danger. Although it is the case that their starting point is disadvantageous due to historical injustice, it seems unlikely that they are aware of this fact.

What does matter to these individuals are the factors which influence their quality of life *right now*. And this is often under pressure for individuals of endangered species. If humanity is the cause of a seriously bad quality of life, we might have duties to improve it. But this is not the case for rare animals per se. Some rare individuals might be thriving, while individuals of common species are suffering. If we are the cause of suffering, it does not matter whether the animal is rare or not. Rarity is often an indicator for historical injustice, but an unjust treatment does not always lead to endangerment. Consequently, rarity does not automatically lead to a duty to improve the lives of rare individuals. Moreover, not every species that is rare is rare because of human actions. Arguing that we should protect rare species because of historical injustices would then exclude 'naturally' endangered species.

Thus, if not every species is endangered because of us, and if the duties are targeted at individuals who are rare because of historical injustice, then what we are saying is that these animals are not suffering from the fact that they are rare, but from the consequences of unjust treatment of their ancestors that are present *right now*. Compare two hypothetical species. Species A has been exploited in the past and is now rare. There used to be many places in the world where this species lived, but now they live in only one place. The

²⁶ The fact that they might not care about species survival, does not mean they do not care about the survival of their group. It might very well be the case that elephants, for instance, deeply care about the survival of their group. But this is a different approach, which will be discussed later.

population in this place is stable and the individuals are living a relatively good life. Species B has also been exploited in the past and is now rare as well. The species is slowly going extinct and the individuals are suffering from the loss of their conspecifics because they are dependent on each other. Both species have been treated unjustly and both species are rare. The difference is that species B is *currently* suffering from the historical injustice and species A is, according to ecological definitions, stable and independent.

If we were to conclude that we should help both species because we have treated them unjustly in the past, then we have a duty to make sure that individuals of species B can live relatively good and independent lives. I do not see a problem here and this would be the morally right thing to do.

But what would such a duty imply for population A? As the individuals are living relatively stable and independent lives, it does not make sense to say that their rarity is something that must be mended if they are not experiencing any detrimental effects from it. Just because their numbers were different in the past, does not mean to say that this is the desirable situation for today. It is probably better to focus on the facts on the ground instead (Donaldson & Kymlicka, 2011). Restoring things to what they used to be implies that everything used to be better in the past, which is not necessarily the case. In fact, it might do more harm than good. For instance, reintroducing a species into an ecosystem that is no longer adapted to this species runs into the risk of having detrimental effects on the individuals of the species itself as they might not be able to adapt or thrive at all in the new environment, or it can have detrimental effects on individuals of other species, causing their extinction or forcing them out of the environment (Mack et al., 2000).

Our past behaviour matters morally for both species. If we have acted unjustly towards ancestors, this always matters morally. The duties in response to this injustice, however, are determined by present conditions: the current well being of individuals. To change current situations into how they were before just because a species is rare is thus not a sufficient reason on its own. Only when the facts on the ground give reason for improvement it becomes something to consider. The motivation is the well-being of the

individuals, not their rarity (Donaldson & Kymlicka, 2011). This leads to the conclusion that rarity, when it is a result of historical injustice, is not a solid justification for special duties towards rare individuals.

4.5 Interim conclusion

This chapter analysed whether we have special duties towards rare individuals that originate from the individuals themselves. Possibilities were that rare individuals gained more or specific values due to their rarity, that they acquired special or stronger interests, or that when their rarity is a consequence of historical injustice executed by humanity entitles them to special rights. It was argued that rarity does not evoke special duties on the grounds of specific added value because rarity is not a quality that can be acquired. Rather, it serves as an amplifier of already existing values. The notions of lifeworld value and contributory value were dismissed as evoking special duties, because they are respectively targeted at humans or could only subjectively explain why endlings acquire more values, not all rare individuals.

It was argued that rare individuals do not have special interests because they are rare, as they are not aware of their role in the extinction of their species, nor of the fact that they are rare. The argument of special interests of future generations of rare species was also dismissed as they cannot have interests since they do not (yet) exist. The proposal by Agar (2001) that rare individuals have greater interest in the survival of their conspecifics can only explain a greater interest in some cases. Moreover, an individual does not necessarily have to be rare to have such greater interest.

Finally, historical injustice matters morally and rarity is often an indicator for it, but it does not lead to special duties per se because animals are not aware of the historical injustice. Instead, what matters to them are current situations. Yet again, this is not exclusively reserved for rare individuals.

One final note concerns the proposal by Agar (2001). It seems that for rare individuals who are vitally dependent on their group, rarity can be of moral relevance. However, this

possibility is necessarily collective and a rare individual can thus not evoke a special duty in us by herself. Moreover, being rare and vitally dependent on your group alone does not suffice for special duties, other requirements must be met. In the next chapter, I will discuss this approach in more detail.

Chapter 5: Collective approach

The purpose of this chapter is to investigate in which cases a collective approach can explain how and why we have special or stronger duties towards rare individuals. Firstly, it will be discussed what a collective of rare animals is, after which a comparison is drawn with endangered human cultures. This leads to the interim conclusion that endangered animal collectives have special rights and that we have special and stronger duties towards them. This will be followed by a discussion of how these rights should be incorporated and how we should fulfil the subsequent duties. Finally, it will be shown that the duties are actually directed towards the rare individuals, which entails that we can have special and stronger duties towards rare individuals.

5.1 Introduction

This chapter discusses the final possibility for how rarity might evoke duties in us. These duties are, however, not directed at the entity species, nor the individuals, but the fluid entity *collective*. With a collective I refer to any group of animals that is connected for some reason. Be it because they form a pack, or because they live in the same forest. It is any group that has some *collective interest*.

I will argue that a collective approach can, in some circumstances, entitle rare species-collectives to certain rights without having to commit to species as an entity or having to reduce all rights to rights that individuals have independently. This will be done by firstly showing that we can view animals as living in collectives. These collectives are characterised by their specific and shared way of living. Some of these collectives have developed a way of living on which the individuals of that collective vitally depend for survival or well being. I will argue that, similar to human cultures, such individuals have a right to the continuation of their collective way of living. This right to the continuation of their collective is only followed by a duty in humans to preserve it when humanity is the cause for the endangerment of the collective, i.e. when humanity is the cause of the rarity of

the individuals. As historical injustice to animals is similar to colonisation of human groups, it is argued that we also have a similar duty of restitution towards such collectives of rare animals. It is argued that this duty of restitution is best fulfilled by adopting an approach of sovereignty, in which humanity actively supports these collectives to become independent, autonomous and sovereign (again). Finally, I will argue that the right of the collective originates from a shared interest of all the individuals of the collective. This entails that under the circumstances of the vital dependence of rare individuals on their collective and the role of humans in causing the threat of extinction, rarity does evoke special duties in us towards rare individuals. Specifically, it evokes a duty of restitution.

5.2 *Collectives of rare individuals*

The reason for focussing on the entity collective comes to light when we compare rare species with threatened human cultures. This comparison might seem useless, since I have already argued that species as an entity are not of moral relevance. But bear with me for a second. At a first glance, the similarities between species and human cultures²⁷ seem striking. Human individuals that belong to one culture are distinctively connected to each other, they share a typical way of living. Individuals of a species are also distinctively connected and they also seem to share a typical way of living. Yet, where we would refer to all individuals living in this typical way as a 'culture' in the human case, it is not possible to do this for species. To understand this, let me first explain what I mean exactly with the way of living.

A specific way of living typically emerges when several individuals form a society. All of us, that is humans and animals, form many different societies, whether small or big. The word 'society' stems from the Latin word *societatem*, meaning 'fellowship, association, alliance, union, community' and the French word *societe*, meaning 'companionship, friendly association with others' ("Society," 2023). With this in mind, the bare minimum for a society seems to be that several individuals distinctively associate with each other, i.e. they have evolved a typical way of living together. An individual, then, can belong to many different

²⁷ Note that I am referring here to cultures in general, not endangered cultures. The comparison with endangered cultures will be drawn later.

societies (from here on, I will refer to such a society with 'group' or 'collective' to prevent confusion).

Take for example the lifestyle of a hardcore punker. She belongs to a certain group that is characterised by, among other things, spikey jewellery, a disposition for hardcore punk music and black clothes. Even though she might identify as a hardcore punker, she can also belong to other groups. She might be a student, she is one of the residents of her town and one of the people in her neighbourhood. She is also a regular baseball player. What I am trying to show is that every human individual is part of certain collectives. It works the same for individual animals. A squirrel living in the tree in my backyard is part of the squirrel population in my town, but she is also part of all the animals living in that particular tree. She is part of all organisms living in my neighbourhood but also of the animals that help with the reproduction of trees by hiding nuts. This squirrel has evolved a typical way of living with all her fellow society members.

As a human culture is an example of a huge group of people associating in a typical way, why would I not refer to the entity species as a collective sharing a typical way of living? Because individuals of species are not always aware of their connection with their conspecifics. In the case of human cultural groups, someone on continent A can identify with and be identified by a cultural group that exists on continent B. It is possible to have the members of the cultural group fragmented over the world as humans can be consciously connected to other humans in this world without having to be physically connected (all of the time). In the case of animals, this does not work. Take for instance the plains zebra. This species lives in the east and south of Africa (GBIF, 2022). Even though all individuals live on the same continent, it is highly unlikely that an individual living in Tanzania will be aware of the existence of other individual plains zebras living in Botswana. Humans have determined that these groups all exist of individuals belonging to the same species, but the zebras themselves are not aware of this fact. Thus, human cultures are not similar to species.

The comparison of human cultures with collectives of animals, however, does work. As mentioned before, human cultures associate with each other and are characterised by a

shared way of living. Where animal individuals are not aware of their conspecifics that are far away, they are aware of the conspecifics in their collective. The individuals with whom they associate. Moreover, if we look at collectives of animals, we find that they also associate in a specific way typical for their community, just as humans do. For instance, returning to the example of the plains zebras, a herd of zebras living in Tanzania has adapted to the specific environment of Tanzania. The group has innovated to deal with the context-specific challenges and has not only evolved in a species-typical manner, but also in a collective-of-plains-zebras-living-in-Tanzania-typical manner. Notice that such collectives do not solely exist out of individuals of the same species. Zebras, for instance, have developed a specific mutualistic²⁸ way of living with ostriches (Bhatnagar, 2022).

Examples of human groups that have adapted their way of living to the environment are people living in the middle of the desert, such as the Bedouin people in the middle east, or the sherpas in Nepal who even have an altered physiology to deal with the environment (Middleton, 2009; Sohn, 2017). All the individuals of these groups belong to the species *Homo sapiens*, but the individuals in the groups are connected in a collective-typical way. These people also form collectives with animals of other species. Many groups of Bedouin people live together with camels, who are essential members of the collective (Britannica, 2024).

Before we continue, I want to make a remark on the apparent similarities between the way of living and the lifeworld experience we have discussed in the previous chapter. In a sense, they are comparable. However, the important difference can be found in the one who does the valuation of either the lifeworld experience or the way of living. In the case of lifeworld experience, this experience is always going to be important for the one enjoying it. Your lifeworld experience is unique and matters to you, whether you are part of one species or another, or whether you are the last one representing a culture or just one in a dozen. It is experienced from within you, something personal. In contrast, a 'way of living' is necessarily shared with others. This entails that the rarity of an individual does not influence the

²⁸ Mutualism is a biological term that indicates different species working together for the benefit of both. In the case of zebras and ostriches, these two species complement each other in their lookout for danger. While zebras have a great sense of smell and hearing, ostriches have a much better eyesight. They work together to improve their ability to spot predators in time (Bhatnagar, 2022).

importance of the preservation of its lifeworld experience, this will always matter. However, rarity does matter for individuals who vitally depend on their group for survival, as the continuation of this way of living is negatively influenced by rarity.

5.3 The comparison between endangered human collectives and endangered animal collectives

Now that we have established what is meant by way of living and by collectives, I will zoom in on the specific collectives that are relevant for this essay. Remember that we were investigating whether we have stronger or special duties towards individuals of rare species and that this section investigates whether we have such duties when these rare individuals are part of a collective. In what follows, I will argue that some collectives of rare individuals are similar to *endangered* human cultures. I will argue that since we have special duties towards such endangered human cultures, we also have them towards some of these collectives of rare individuals.

First, rarity in human culture is of moral relevance because, generally, the members of these cultures have an interest in the survival of the culture. Members want to be outlived by their culture, its existence is essential for their well-being. An example of an acknowledgment of the solid ground of this interest is the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (United Nations, 2007). In this declaration, article 3 states that indigenous people have a right to "...freely determine their political status and freely pursue their economic, social and cultural development" (United Nations, 2007:8). It is not the case that indigenous peoples have their own declaration of rights because they have a different moral status on the individual level than other human beings. Rather, indigenous people are part of marginal groups that have been and are suffering greatly from repression by other humans. The UNDRIP was formulated to protect indigenous peoples from such repression and to acknowledge them as autonomous and legitimate communities. It specifically states that indigenous individuals have basic inviolable rights, not because these rights are different from other individual humans, but because their rights have been and

are disproportionately violated (United Nations, 2007). In other words, the declaration serves as a tool for indigenous peoples to (re)claim their autonomy and way of living. Thus, rarity morally matters in such cases where the people that are part of this rare collective do not want their collective to cease existing.

Not all collectives of rare animals would qualify for a similar approach. As in the human case, it matters whether the rare individuals care about the continuation of the existence of their collective. Many individual animals live on their own and they do not seem to care much about the survival of their conspecifics. An example would be moose living in North America and Europe. They are solitary animals living exclusively on plants, and only seek out conspecifics during mating season²⁹. These animals do not vitally depend on their conspecifics or other individuals for survival. However, in many other cases, individual animals are vitally dependent on other individuals. They need each other to survive, be it in a predator-prey relation, a kinship relation or any other kind.

Yet, some individuals do care about their fellow *rare* individuals. For instance, a herd of Nilgiri tahr (*Nilgiritragus hylocrius*) (figure 5). This is an endangered species and when the group becomes too small, their chances for survival drastically decrease as they become highly vulnerable for attacks by predators (GBIF, 2023)³⁰.

²⁹ The question remains whether it is of vital interest for solitary animals to find a mate. I find it hard to determine whether solitary animals can live a fulfilled life without producing offspring. Humans can certainly do so, but I am hesitant to extrapolate this to other species. If it is indeed of vital interest, the amount of collectives that needs to be protected increases greatly.

³⁰ There is a second possibility for caring about fellow rare individuals. This is when the individual is part of a collective that consists of different species, but when the collective is endangered nevertheless. For instance, when there is only a small piece of forest left and the collection of animals living in that forest are the last individuals in that area. They are endangered in the sense that their way of living ceases to exist with the disappearance of the ecosystem. Since we are interested in individuals that are rare in their species-kind, I will not further consider this possibility. But in both cases, the rarity of a collective of rare individuals matters morally when the individuals care about the continuation of their specific way of living.



Figure 5. An individual of the species Nilgiri tahr (*Nilgiritragus hylocrius*).

The second reason for why the analogy between endangered human cultures and rare species works is because they have suffered from similar forms of repression. This repression has often been described in terms of colonisation, which is useful for this paper as well. For many decades, and up until today, human groups have been exploited, chased away from their land, treated as commodities instead of persons, and in some cases murdered (Blakemore, 2023). This immoral treatment is usually justified based on discriminating logic (Kohn & Reddy, 2024). And it is not without reason that we refer to these practices with ‘treating people as animals’. Similar to human exploitation, we have exploited animals in many ways. They have been used as a source for food or clothing. We have used them for hunting purposes with no other goal than killing animals for fun. We have also expelled many animals from their lands, driving them into other areas or just killing them. This exploitation is still daily practice. When we decide to convert land into a building site, a place to delve raw materials or any other human purpose, the interests of animals living there are usually not considered or they are viewed as being of secondary importance. Even worse, we

often conceive of this land as empty when there are no human settlers, essentially denying the existence of the animals that live there (Donaldson & Kymlicka, 2011; Wolch & Emel, 1998).

It should be noted that in the human and animal cases, even though the systematics of repression are similar, the details of the repression vary from case to case. It should also be clear that the decolonisation colonised people fight for is similar in many respects, but different on a more detailed level. For instance, with the recognition of the rights of indigenous peoples, it should be noted that not every indigenous group wants the same. The goal of UNDRIP is to ensure the protection of the interests of indigenous collectives. The exact interests differ per collective, but by ensuring that all indigenous peoples can have interests as their collective, their characteristic way of living can be protected.

Such an approach could also be used for rare species. Even though 'rare species' is not a solid entity in the world, it is an accepted way to refer to all collectives of individuals that belong to rare species. Accordingly, 'protecting the interests of rare species' could mean that special consideration is given to collectives of rare individuals where the collectives have their own specific interests. For instance, while some collectives need more space to live, others might benefit from a clean-up in their habitat.

If we hold that endangered human collectives and endangered collectives of rare animals are similar with regards to special consideration of rights, then we should elaborate on two more points. The first being how we can incorporate such rights to collectives of rare animals. The second being whether the rights we think collectives have are rights of the collective, or rights of the individuals of the collective. In other words, it should answer whether we have finally found that we have special duties towards (some) rare individuals.

5.4 Incorporation of rights of collectives

5.4.1 Sovereignty as remedy

The wrong of colonialism starts with a failure in associating in a way that acknowledges the autonomy and equality of the colonised. Contact, even (or especially) when it is unwanted, is imposed on the colonised without considering their needs and desires (Ypi, 2013). A remedy for the effects of such unjust association is repairing the relation between the two groups and especially listening to how and whether the colonised group wants to associate any further. In the human case, colonised and repressed people call for such reparations in their fight for their right of self-determination³¹. Put another way, colonised people are calling for the acknowledgement of their capability of sovereignty. This quest for recognition of cultural groups being able to take care of themselves is similar to what Donaldson and Kymlicka (2011) propose in their book *Zoopolis*. They argue that we can address the issue of animal colonisation by acknowledging the autonomy of animals and their capacity for looking after their own needs and interests:

“The obvious remedy for this chain of injustices, as in the human case, is to establish norms of respect for the sovereignty of existing communities, prohibiting acts of aggression, colonisation, and displacement. Recognizing the sovereignty of a territorial-based community means recognizing that the ‘people’ inhabiting the territory have a right to be there and to determine the shape of their communal life; and that they have the ability to do so.” (Donaldson & Kymlicka, 2011)

When the sovereignty of a collective is recognised, this also includes the recognition of the right of this collective to be there and to have the freedom to determine how they want to construct their communal life. More importantly, it is a recognition of their capabilities to do so. As long as the collective does not violate any rights of others, it has the right to be free from colonisation and from paternalistic intervention (Donaldson & Kymlicka, 2011).

³¹ Of which the UNDRIP is one of the results.

The moral purpose of sovereignty, as Jo-Anne Pemberton puts it, is “nothing more than a means of providing a secure space in which communities can grow and flourish. The crucial value at stake is thus autonomy” (Pemberton, 2009, p. 7). Pemberton finds that collectives have a right to sovereignty when such collectives have an ‘independent existence’, ‘place value on it’, and ‘resist’ alien rule, and when they have ‘recognisable interests’ in their ‘social organisation’ (Donaldson & Kymlicka, 2011; Pemberton, 2009). Wild animal collectives meet these criteria and therefore qualify for the moral purpose of sovereignty.

As in the human situation, it is not the case that acknowledging sovereignty means taking off our hands of everything and just leaving them be. On the contrary, it means taking responsibility for past injustices and making sure that their autonomy is restored. However, once they have (re)claimed their autonomy, it also means that we should respect their wishes, even if that means that they want to be left alone (Donaldson & Kymlicka, 2011; Ypi, 2013).

5.4.2 Duty of restitution

Taking responsibility for past injustices leads to a duty of restitution (Chessa, 2005). But restitution should only be done with respect to the individuals. This entails that we should not repair whatever injustice only for the sake of fulfilling our duty. Take for instance a hypothetical population that we have been managing for a long time, not only by influencing their habitat but also by managing their fertility and reproduction. If these animals have become so dependent on this external management, we might need to conclude that we should stop this external management if we are unable to support these animals in such a way that they can become independent. Frank Chessa (2005) argues this is similar to how we reason in human healthcare ethics. He writes that when the prognosis of a severely ill human being is hopeless, we do not do everything in our power just to keep the person alive. Not even when it is a result of a mistake the doctor made during an operation, whether by accident or on purpose. Rather, we show respect for this person by allowing it a good death. This respect for individuals should also guide us in our approach to animal conservation

practices. We do not have a duty towards future generations of species, neither do we have duties towards the species to ensure its survival. We only have duties towards existing individuals to ensure they can live a good life (Chessa, 2005).

In line with this duty of restitution, Donaldson and Kymlicka (2011) make a distinction between legitimate and illegitimate intervention. Where legitimate intervention has as its purpose the restoration of sovereignty and independence of animal collectives, illegitimate intervention causes a situation in which there is ongoing dependency: the animals keep relying on external management by humans. One form of illegitimate intervention is the phenomenon of *benign colonialism* (*The Eternal Return of Benign Colonialism*, 2017). This is when intervention happens with good intentions, yet there is no acknowledgement of equality. The benign colonisers are imposing rules and measurements in whatever manner they think is best for the colonised. Even though it might be with honest and good intent, the colonised are denied their autonomy and sovereignty (“Benign Colonialism,” 2019). An example is when indigenous peoples are ‘educated’ on western societal norms, because the colonisers feel or think they should liberate them from their ‘old-fashioned’ or ‘savage’ societies. This can also happen with animals, when humans intervene in ecological systems ‘for the better’, while animals know themselves what is best for them.

How we put our duty to restitution into practice for animals and humans is where the analogy no longer works. While humans have an active memory of past injustices and are often compensated through a public acknowledgement of past injustices, affirmative action or monetary restitution, this does not work for animals because it is unfair.

In the human case, people belonging to the group that is responsible for past injustices have to carry the burdens of affirmative action. There is much debate on whether this is fair. Some say that holding current members of the group responsible is a form of reverse discrimination. They are not directly responsible for the actions of their ancestors and they have had no influence on where and when they were born (Pojman, 1998). In the case of animals, this critique is even more relevant because affirmative action would be

unfair to any animal carrying the burdens in every case³². Barring exceptions, the other animals have had no part in past injustices done towards rare species. Hence, it would be unfair to make them pay for it.

Something similar to monetary payback would also be inappropriate. You do not give a monkey, who is having a hard time because of habitat destruction, a few kilograms of fruit to make up for the damage done. How does that make life better for her in the long run? Restitution only works when the animals benefit from it in the future. For instance, ending the destruction of her habitat or growing a new forest.

It seems that in the case of animals the past matters because it illuminates our duty of restitution. But for putting this duty into practice, the facts on the ground should be guiding (Donaldson & Kymlicka, 2011).

In short, we should acknowledge the capacity of animal collectives to be sovereign and respect this sovereignty. It is only then that we can establish fair interactions between animal and human collectives.

5.5 Collective rights or individual rights?

The second point we had to discuss was whether the rights we think collectives have are rights of the collective, or rights of the individuals of the collective. In other words, we must investigate whether we have special or stronger duties towards (some) rare individuals.

As argued previously, collectives of rare animals of which the members have an interest in the survival of their group members, have rights to the continuation of their collective. These rights of collectives are group rights and group rights come in different forms. I will follow Peter Jones (1999) in distinguishing between at least two: corporate and collective group rights. Both conceptions usually combine an understanding of group rights

³² Since we are focussing on wild animals, this point holds. However, were we to discuss animals that live together with humans, affirmative action could be a possibility. Humans would then be the ones carrying the burdens, and this would be the appropriate group. The debate on whether and how affirmative action works is then still relevant, but that is a discussion for other papers.

with a version of the interest theory of rights. That is, the shared interests are sufficient to constitute a right. Yet, the two forms differ in other aspects, especially regarding the reducibility of the rights and interests of the group to its members (Jones, 2022).

The corporate conception is comparable to the species-as-individuals thesis. Namely, this approach conceives of the group as an individual, similar to how species were considered individuals. Accordingly, a group can have a right in the sense of 'its right'. This is when it is thought that a group can be harmed as an individual, the group as an entity has moral status. The interests of the group, then, can be different from the aggregation of the interests of its members. Finally, the group supervenes on its members, it is non-reducible (Newman, 2011). Applying the corporate conception to our case would require that the group of rare animals has an interest in the typical way of living. Not the individual animals, but the group itself has an interest. Just as I have argued in the beginning of this essay, this does not make sense. If we follow our earlier discussed interpretation of the interest theory of rights, the entity 'group' must be an individual with selfhood to have an interest that is a plausible ground for a right. But such a group has no selfhood. There is no conscious "I" for which things can go better or worse. Therefore, the corporate understanding of group rights does not rightly describe the group rights of our collectives of rare animals.

Proponents of the collective interpretation of group rights also argue that it is not necessary for a group to have moral status as an individual or to have interests that are non-reducible to its members (Jones, 2022). The collective conception interprets having rights in the sense of a group having a right as 'their right'. This is when the members of a group have a right together. Importantly, they do not have this right separately from each other.

A group right understood in this sense means that it is the moral status of the individuals that hold the right collectively that gives rise to the moral standing of the group right (Jones, 1999). The shared interests of the individuals are sufficient to justify a group right. In this instance, it is the case that the interests of the individuals are inherently communal. That is, their interest cannot exist independently. An individual cannot have an

interest in a specific collective way of living when there is no one to share it with. It might sound like it, but this is not an argument against the collective understanding of group rights. It is still possible for a group right to be grounded in the morally relevant interests of the individual members, even though the right is necessarily held collectively by the individuals (Jones, 2022).

In other words, as the collective right is grounded in the interests of the individual members, the duties towards the collective are essentially duties towards the individual members of the collective. Rarity turns out to be morally relevant in this respect and we can have special duties towards rare individuals *because* of their rarity.

When an individual is part of a collective on which she critically depends for survival and well being, she has a collective right to the continuation of her collective. If the continuation of the collective has been put into danger due to human actions and the individuals have become rare, then humans have a duty to restitution. This entails that we have special duties towards such rare individuals to ensure the continued existence of their collective. If the individuals would not be rare and their communal form of life would not be in danger, they would still have the right to the continued existence of their collective, but it would not entail a duty to restitution. Rather, it would oblige us to take only those steps necessary to ensure that the wild animals remain autonomous, sovereign and independent (Donaldson & Kymlicka, 2011).

5.6 Interim conclusion

In this chapter, I have shown that we can view animals as living in collectives. Individuals that are dependent on the specific way of living they share with their collective for their survival or well being have a right to the continuation of their collective way of living. Consecutively, I argued that the way we have treated animal groups in the past is comparable to the colonisation of human groups. I argued that when animal collectives still suffer from

the consequences of this historical injustice, we have a duty of restitution, as we do in the human case.

The rarity of individuals, then, evokes a duty in us when their rarity is a consequence of historical injustice caused by humans *and* when the individuals vitally depend on their collective. This duty comes in the form of a duty of restitution. It can be fulfilled first and foremost by acknowledging the sovereignty of the animal collectives. Furthermore, by actively supporting these collectives to become independent, autonomous and sovereign (again), while taking into account the prognosis of such an approach and the specific needs and desires of different collectives.

Finally, I have shown that this collective interest in the continuation of the collective is reducible to the members of the collective. This entails that our duties, even though they are derived from a collective interest, are indeed directed at rare individuals.

It turns out that under the circumstances of the vital dependence of rare individuals on their collective and the role of humans in causing the threat of extinction, rarity does evoke special duties in us towards rare individuals. Specifically, it evokes a duty of restitution.

Chapter 6: Conclusion

6.1 Concluding remarks

This thesis investigated whether we have stronger or special duties towards individuals of a rare species than towards individuals of a common species. We have seen that there were three possible ways in which the rarity of individuals could evoke duties in us. They could either be evoked from derivative rights of individuals from the rights of the entity species (species approach), from the special or stronger rights of rare individuals themselves (individual approach), or from special or stronger rights of individuals that are part of a rare collective (collective approach). It was argued that both the collective and the individual approach cannot account for any special or stronger duties towards rare individuals. Adopting the collective approach, on the other hand, revealed that under certain conditions we do have special duties towards rare individuals. Those rare individuals who are vitally dependent on the continuation of their collective and whose collective is endangered due to historical injustice caused by humanity, have a special right to the continuation of their collective. This right evokes a duty of restitution in humanity, which should be fulfilled by a sovereignty approach. Although the interest in the continuation of the collective is inherently collective, it was found that the interests are reducible to the individual members of the collective. This means that the duty of restitution is directed towards the rare individuals that vitally depend on their collective. Hence, it can be concluded that, under certain conditions, we have stronger and special duties towards individuals of a rare species than towards individuals of a common species.

6.2 Discussion

This essay provides a novel insight regarding the way we perceive rare animals. It combines the necessary element of viewing rare individuals in relation to their conspecifics, without having to commit to including all individuals of that species on the whole world. Moreover,

by comparing rare collectives of animals to endangered human cultures, a new way of approaching the protection of rare animals was proposed. Since the protection of endangered human cultures is better developed, this served as an inspiration for how we can formulate the protection of rare animals. I have proposed that we use the term 'rare species' similarly to how we use the term 'indigenous peoples'. It would be interesting to develop a protection analogous to the protection of indigenous peoples. It might even call for the formulation of a Declaration of Rights of Rare Animals.

Besides these novel insights, this essay is relevant in several aspects. First and foremost, it can be used by policy makers and conservationists to critically analyse their policies regarding rare species. If they find that their policies are based upon argumentation that is found to be unsound, this essay should be able to give them some guidance on which grounds certain policies could be allowed, required or even put down.

Moreover, this essay draws attention to the fact that humanity has, and still does, often behaved immorally towards individual animals and groups of animals in the name of species preservation. Policies such as captivating individual animals for breeding programs are often based on invalid argumentation. It is argued that such policies are in the interest of species, but this essay shows that species cannot have interests. Rather, such policies are in the interest of humanity. This is not necessarily a problem, but as basic rights of individuals are often unjustly violated with the implementation of these policies, they should be re-evaluated. By illuminating these practices, this essay can hopefully contribute to further steps towards the just treatment of individual animals.

Finally, this essay formulates how we can deal with the difficult case of historical injustice in relation to rarity. Animals are not aware of past injustices, nor are they aware they belong to a species that is rare, but consequences of historic unjust treatment are often detrimental on the individual level because it has made the circumstances of living today much more difficult. This essay illuminates in which cases we should act to make up for our historical injustice and in which cases we should not.

From this essay several questions have arisen, as it has not investigated whether we can have duties towards collectives that share a typical way of living, but of which the members are not of the same species. It could be said that (some) animals in such collectives vitally depend on the continuation of this collective. However, since the members of these collectives do not, for instance, produce offspring with one another, the internal cohesion of the collective is questionable. Yet, is it possible that we also have special duties towards such collectives?

Another question regards the type of animals I have investigated in this essay. I have focused on wild animals only, but there are also liminal animals (those who live among humans, such as pigeons or mice) and domestic animals (those that live in a close relationship with humans and are dependent on us for their survival). The different ways in which domestic and liminal animals interact with humans probably demand a different approach to rarity than the one described in this essay. It would be interesting to investigate what the effect of rarity is on our duties towards those animals.

Finally, due to lack of space, I could not further investigate the interest of individual animals in reproducing. This is necessary for the continuation of species, but I wonder whether animals have such an interest in it that if they would not reproduce or would not be able to reproduce, it would severely affect their well being. Humans, for instance, do not vitally depend on reproduction. Nor does every human want to have children. If individuals have a vital interest in reproducing, then rarity might affect this interest which might evoke another duty in us.

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Summary

This thesis investigates whether we have stronger or special duties towards individuals of a rare species than towards individuals of a common species. There are three ways in which the rarity of individuals could evoke duties in us. They could either be evoked from derivative rights of individuals from the rights of the entity species (species approach), from the special or stronger rights of rare individuals themselves (individual approach), or from special or stronger rights of individuals that are part of a rare collective (collective approach).

Both the species and individual approach are dismissed as inducers of special or stronger duties. Species are entities that cannot be seen as individuals with selfhood, which excludes the possibility for them to have rights. Consequently, we cannot have duties towards species, and there are thus no duties towards individuals derived from duties towards species. The individual approach is dismissed because rarity is not a quality that can be acquired and individuals themselves are not aware of the fact that they are rare. This prevents the possibility for individuals to have special values or interests evoked by rarity. As a consequence, we do not have any special or stronger duties towards rare individuals. The collective approach shows that, under certain conditions, we do have special and stronger duties towards rare individuals. Rare individuals can be seen as belonging to certain collectives, characterised by a specific way of living. Some of these collectives can be compared to endangered human cultures and as we have special duties towards such endangered human cultures, we also have them towards some of these collectives of rare individuals. Specifically, we have them towards those individuals who are vitally dependent on the continuation of their collective and whose collective is endangered due to historical injustice caused by humanity. These duties are captured in a duty of restitution which ensures the establishment of the sovereignty of collectives. Although the interest in the continuation of the collective is inherently collective, it was found that the interests are reducible to the individual members of the collective. This means that the duty of restitution is directed towards the rare individuals that vitally depend on their collective. Hence, it can

be concluded that, in some cases, we have stronger or special duties towards individuals of a rare species than towards individuals of a common species.