

LIVING TOGETHER: OUR DUTIES TO LIMINAL ANIMALS

Varun Iyer

Advised by: Prof. Hanser; Prof. Fernandez

May 7, 2022

Rev. 83e6c Build d261c

Contents

| | |
|---|-----------|
| Introduction | 3 |
| 1 Basic Rights | 6 |
| 1.1 Capacities-Oriented Approaches | 6 |
| 1.1.1 Consequential Views | 7 |
| 1.1.2 Capabilities-oriented Views | 9 |
| 1.1.3 Animal Rights | 10 |
| 1.2 Korsgaard's Kantian View of Animal Rights | 11 |
| 1.2.1 Korsgaard & Using Animals | 13 |
| 1.3 Implications and Uncharted Territory | 16 |
| 2 Animals and Property | 19 |
| 2.1 Defense of Property | 20 |
| 2.1.1 Claiming Property | 21 |
| 2.1.2 Property in a State of Nature | 23 |
| 2.1.3 The Agent-Relative Prerogative | 24 |
| 2.1.4 Proportionality and Property | 25 |

| | |
|--|-----------|
| <i>CONTENTS</i> | 2 |
| 2.2 Non-Rational Animals and Non-Rational Humans | 26 |
| 2.2.1 Beneficence | 27 |
| 2.2.2 Proxy Rationality | 30 |
| 2.2.3 Size, Number, and Future Expectations | 32 |
| 2.2.4 The Role of Moral Status | 33 |
| 3 Risk of Harm to Non-human Animals | 35 |
| 3.1 A General View of Risk | 36 |
| 3.1.1 Cost-Benefit Analysis | 36 |
| 3.1.2 Risks as Reciprocal, Connected Practices | 39 |
| 3.1.3 “Social Practice” | 41 |
| 3.2 Animals and Reciprocal Risks | 42 |
| 3.2.1 Objections | 44 |
| 3.2.2 Representation | 46 |
| 3.2.3 Restitution | 47 |

Introduction

Animal ethics has an overwhelming focus on animals used for food and animals used in research, and rightfully so. The majority of the animals that humans ever interact with are livestock animals — everything else is within the statistician's margin of error.¹ For nearly all applied purposes, animal ethics is farmed animal ethics.

The majority of literature in animal ethics (especially literature by philosophers who do not focus on animal ethics) has been focused on capacity-oriented views towards animals. These kinds of views focus on what our duties are to non-humans merely because they can suffer/experience/have ends. These views are the basic first steps necessary to do any other animal ethics, and in general, these views are sufficient to denounce modern animal farming.

There is also a considerable amount of discussion about our duties to wild animals. Environmental ethicists discuss duties to wild animals from the perspective biotic community integrity, and animal ethicists de-

1. sullivan and wolfson

bate whether our approach to wild animals should be interventionist or preservationist.

But the wild animal/domestic animal discussions leave behind an excluded middle (pun intended). Animals like deers, rats, squirrels, pigeons, seagulls, and gophers share human-modified spaces but are not under direct human control. We interact with these animals often, and our duties towards them cannot be described in terms of 'biotic communities' or 'preservationism' since our day-to-day activities affect their lives greatly. These animals are alternately referred to as liminal animals or contact-zone animals. I will treat these terms as interchangeable for the purpose of this paper.

Just three major works discuss contact zone animals: Clare Palmer's *Animal Ethics in Context*, Sue Donaldson and Will Kymlicka's *Zoopolis*, and Wayne Gabardi's *The Next Social Contract*. While all agree that our treatment of liminal animals should improve, none of them enumerate or discuss specific ways that contact-zone animals are harmed by humans or what our duties are to avoid this harm.

In this paper, I will examine two human interactions that are harmful to liminal animals: defense of human property (i.e. trapping gophers) and imposing risks (i.e. driving cars). I will establish the duties that we have to moderate these interactions.

In Part 1, I will outline a view of basic, capacity-oriented duties towards animals that I will use as a starting point. In Part 2, I will discuss a theory

of property and the circumstances in which humans can defend property rights against nonhuman animals. In Part 3, I will discuss the risks of harm that humans impose on non-human animals and the limits of those risks.

Part 1

Basic Rights

The aim of this work depends on the idea that we owe at least some moral duties to nonhuman animals. In this section, I will substantiate this view. The most important philosophical choice I make in this section is to adopt a rights-based approach to animal ethics as opposed to a consequential approach or a capabilities-oriented approach.

To explain this choice, I'll describe the competing views, explain the appeal of a rights-based approach, and provide a brief account for a rights-based view of nonhuman animal ethics.

1.1 Capacities-Oriented Approaches

In *Animal Ethics in Context*, Clare Palmer identifies three common capacities approaches to animal ethics: consequential approaches, rights-oriented

approaches, and capabilities approaches.¹

Plamer refers to these as *capacities-oriented approaches* because they focus on what we owe to animals by virtue of their existence and fundamental capacities alone. There is a distinction between capacities-oriented approaches and relational approaches, which describe what we owe to animals by virtue of the relationships we have to them. Both approaches are important and reflect considerations in different dimensions of animal ethics.

1.1.1 Consequential Views

Modern consequential approaches to animal ethics can trace their roots to Peter Singer's influential *Animal Liberation*. Singer's utilitarian approach takes suffering to be the threshold criterion for moral consideration. The pain of non-human animals should have equal moral significance to the equal pain of humans. Singer's approach is also known for the *equal consideration of unequal interests*. All interests count equally, whether human or non-human, but different creatures have different interests. For example, Singer claims that, humans have greater interests in continued life because they have long-term life projects whereas many non-human animals do not.

This approach is compelling and historically significant. There is also

1. Clare Palmer, *Animal Ethics in Context* (New York: Columbia University Press, 2010), Ch. 2.

great appeal in setting suffering as the threshold characteristic for a creature to have moral patienthood, and a pain threshold is consistent with the rest of this work.

However, Singer's consequentialist approach is vulnerable to the same sharp criticisms as a consequential approach towards human ethics. Martha Nussbaum identifies three key theoretical problems: (1) aggregation and trade-off against different kinds of goods, (2) aggregation and trade-off over different beings, and (3) excessive focus on satisfaction at the expense of agency.² Christine Korsgaard highlights highly counterintuitive outcomes of consequentialism with replaceability.³

Palmer identifies some bullets that a consequentialist view must bite. Most significant among them is the unending obligations to harness, control, and reduce harm to all wildlife. Consequentialism runs into similar problems as applied to problems of self-defense. An avowedly consequential view excludes any discussion of liability or self-defense, leading to all kinds of unintuitive outcomes in defense cases. Admittedly, consequential approaches have a much easier time handling questions of risk than non-consequential views. However, there are serious moral problems with aggregating and distributing risks so long as the benefits are sufficient (which is the modern policy mantra). These will be discussed in

2. Martha Nussbaum, *Frontiers of Justice: Disability, Nationality, Species Membership* (Cambridge MA: The Belknap Press, 2006), 71.

3. Christine M. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals* (New York: Oxford, 2018), 11.9.2, 12.3.4.

greater detail later on.

1.1.2 Capabilities-oriented Views

The capabilities approach to animal rights was first articulated in Martha Nussbaum's work.⁴ The capabilities approach has moral foundations in wonder, and the recognition of dignity in other forms of life. The approach demands that non-humans must have the opportunity to exercise their fundamental capabilities which are necessary for them to lead flourishing lives.

The capability approach has some appealing upshots that resolve concerns about utilitarianism. The approach does not endorse trade-offs or comparisons between different *kinds* of good, and the approach finds value in the creature and life itself and not merely in experience, as the utilitarian does.

However, Nussbaum's application of the capabilities approach is not always consistent,⁵ and the approach has more to say about global justice than about how to conduct interpersonal interactions. One weakness of the capabilities view is that it does not identify a difference between action and inaction with respect to satisfying fundamental capabilities. Like the utilitarian view, this leaves us with endless obligations to control and support wildlife. Some embrace this consequence, but I see it as a *reductio*

4. Nussbaum, *Frontiers of Justice: Disability, Nationality, Species Membership*.

5. Nussbaum, 404.

of the view. The capabilities approach is not the one that I adopt or endorse here, but I think that it is largely consistent with the rest of this text, and could be used as a starting point for this project.

1.1.3 Animal Rights

The rights-based approach to animal ethics is most closely identified with Tom Regan and Gary Francione⁶. More recently, Kant scholars Christine Korsgaard and Barbara Herman have also articulated theories of animal rights.⁷

Rights approaches are distinct from other approaches because they focus on identifying inviolable (or strongly protected) guardrails on moral activity. Rights theorists identify impermissible actions (e.g. killing an animal) but distinguish between acting (and thus violating a guardrail or a rule) and merely allowing to occur (perhaps failing duties of aid, but not of equal moral weight to acting). Rights theorists can also best explain liability, agent-relative prerogatives, and other features of self-defense. It is a little less certain how rights theories may apply in conditions of uncertainty, but rights views can immediately identify the intuitive discomfort with treating risks to life as mere costs to optimize.

Any rights-based view could be compatible with this work. In order to motivate the view before diving into novel work, I will briefly give Chris-

6. See e.g. Palmer, *Animal Ethics in Context*

7. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals* TODO herman

tine Korsgaard's Kantian, rights-based approach of animal rights.

1.2 Korsgaard's Kantian View of Animal Rights

For the purposes of this work, I take the view of fundamental rights advanced by Korsgaard in *Fellow Creatures*.⁸ Much of the work presented later could be adapted to suit many non-consequentialist theories, but I will present Korsgaard's view to motivate a basic rights approach to animal ethics.

Korsgaard's argument is established on the foundation of Kant's moral philosophy. Kant seeks to determine the presuppositions of valuing; the premises that are implicitly accepted any time we confer value upon something. There is no metaphysical "absolute" reference frame from which "true" value can be determined. Rather, things are valuable insofar as they are valuable to a being.

Kant argues that rational beings can only pursue ends that are absolutely good, good from all perspectives.⁹ So, an end that one rational being pursues is absolutely good and worthy of pursuit by any other. Humans have the capability to act as rational beings. When humans rationally act on ends, they confer absolute value on those ends, marking them as good absolutely. "By pursuing what is good for you as good absolutely, you show that you regard yourself as an end in itself, or perhaps to put it a

8. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals*.

9. Korsgaard, 8.4.1.

better way, you make a claim to that standing.”¹⁰

This seems to leave animals — most of whom are not rational beings — out of the moral picture. If animals are not rational, then they cannot make a claim to standing as an end in themselves.

Korsgaard argues that Kant uses the phrase ‘end in itself’ to refer to two slightly different concepts. Kant sometimes refer to an ‘end in itself’ as a being who has the ability to legislate for itself and all rational beings. At other times, Kant refers to an ‘end in itself’ as a being whose ends are recognized as absolutely good and protected by universal legislation. Korsgaard argues that the two do not always need to be one and the same.

When we act as rational beings, we do not assert that only rational beings have value. After all, a rational being without any substance, form, or other natures would not have any ends within itself to seek or any desires to pursue. Instead, our rational nature confers value upon the ends we seek as animals, creatures who have representations of the world and seek good within it. We share these ends and this nature with other non-human animals, and so when we value ourselves as creatures that have a final good, we also confer value on other creatures with final goods. In her own words,

As rational beings, we need to justify our actions, to think there are reasons for them. That requires us to suppose that some ends are worth pursuing, are absolutely good. Without meta-

10. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals*, 8.4.4.

physical insight into a realm of intrinsic values, all we have to go on is that some things are certainly good-for or bad-for us. That then is the starting point from which we build up our system of values—we take those things to be good or bad absolutely—and in doing that we are taking ourselves to be ends in ourselves. But we are not the only beings for whom things can be good or bad; the other animals are no different from us in that respect. So we are committed to regarding all animals as ends in themselves.¹¹

1.2.1 Korsgaard & Using Animals

Thus far, it has been established that animals are ends in themselves. But it has not yet been explained what duties are generated by this claim, or what it means to treat an animal as end in itself.

Specifically, there is some ambiguity about whether Korsgaard finds it especially wrong to *use* an animal as opposed to incidentally harming them. The use/incidental harm distinction is important to this work because moral intuitions and academic writing regarding self defense generally relies on this distinction. Most famously, it is easier to argue that it is permissible to pull the lever on the trolley problem, and more difficult to argue that it is permissible to push a person's body in front of the trolley.

I believe that there is a great moral difference between killing gophers

11. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals*, 8.5.5.

that eat humans' vegetables and using rats for medical experimentation, even if they both undergo virtually the same treatment. Making this case requires a use/harm distinction for the treatment of nonhuman animals.

It is not absolutely clear to me whether Korsgaard herself believes that there is a use/harm distinction for non-human animals. I believe that there is such a distinction, but I will briefly describe some of the contradictory indications in Korsgaard's work.

It is clear that Korsgaard sees some differences between treating humans as ends and animals as ends because humans are co-equal legislators while animals are merely protected by legislation. Korsgaard comes to the conclusion that animals have a good, but because they lack rationality, they do not get an 'equal vote' in our interactions with them.¹² Despite the fact that they cannot consent to our interactions with them, because our own moral legislation declares their ends to be worthy, we have a duty to treat animals in a manner that is consistent with their ends.¹³ Korsgaard distinguishes this treatment from treatment of animals "in ways to which they would consent if they could," but she is unclear if the two generate different outcomes.¹⁴

Korsgaard uses the difference between animals and human ends to differentiate herself from Reagan's strong position against using animals:

Recall Tom Regan's remark, quoted in 10.2.1, that "What's wrong—

12. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals*, 12.2.1.

13. Korsgaard, 12.2.1.

14. Korsgaard, 12.2.1.

fundamentally wrong—with the way animals are treated isn't the details that vary from case to case. It's the whole system. The fundamental wrong is the system that allows us to view animals as our resources, here for us." Since I think we are treating animals as ends in themselves in the sense that they are ends in themselves if we treat them in ways that are compatible with their good, I do think we need to think about "the details that vary from case to case."¹⁵

This suggests to me that Korsgaard does *not* find that the use of animals is in itself wrong; using an animal as a resource in a way that is consistent with its good could be permissible.

Later on, however, Korsgaard makes a comparison between animal testing and self defense: "If a madman has got hold of a gun and is threatening to shoot your child, many of us think you may shoot the madman if it is the only way to save your child. But you may not steal the madman's organs even if your child will die without a transplant."¹⁶

This suggests to me that Korsgaard would believe at least that *use* of a creature is more difficult to justify than merely harming them. These views are in tension, but need not be contradictory. Korsgaard might reconcile them by arguing that *pure* use of a creature (with no attendant losses to its end) is not wrong at all, but that using a creature in a way that causes

15. Korsgaard, *Fellow Creatures: Our Obligation to the Other Animals*, 12.2.1.

16. Korsgaard, 12.5.2.

harm is more difficult to justify than the harm alone.

Another approach might be to argue that use of a creature in a way that does not detract from any of their ends is not really use, in the same way that taking advantage of an employee's labor is not using them so long as they consent. The parallel between consent for humans and the good of animals also lines up nicely with Korsgaard's earlier thoughts on the difference between treating animals in ways that are good for them and treating animals in ways to which they can consent. If the former and latter are coextensive, we can replace consent in human cases with 'preserving good' in animal cases, thus explaining why cases of 'pure' use are not really use at all in the animal case.

Both of these routes are defensible, consistent with Korsgaard, and agreeable to the rest of my work, so I will not pursue an exhaustive argument here.

1.3 Implications and Uncharted Territory

The 'basic' starting point that I take here and its implications are not uncontroversial, even among some animal ethics scholars.

The least of the implications that Korsgaard points out are the abolition of all (or nearly all) animal husbandry and farming, or at least economically viable farming practices. It would also demand the abolition of all medical experimentation on animals, although some behavioral studies

that did not treat animals contrary to their well-being in any way may still be permissible.

Korsgaard also advocates for a preservationist ethic towards wild animals. While the precise duties and changes in behavior this might generate are yet unexplored, it is clear that the relentless pace of human expansion depends on the moral assumption that wild animals are not ends and do not deserve any consideration. For example, U.S. Environmental Impact Statements do not require examination of potential harm to 'pest' or common wild animals like gophers or deer.¹⁷

While the question of expansion and its impact on wildlife is certainly interesting, it has already been explored to some degree from a few different perspectives. Donaldson & Kymlicka identify wild animals as sovereign beings that have rights to their own space, which Katherine Bradshaw supports with a legal theory of wild animals as property owners. Wayne Gabbardi outlines a political ethic that eschews modern capitalist expansionism and advocates for animal voices to have a seat at the table of community decision making. All of these views build forward from the idea that animals are ends that have certain rights that deserve moral consideration.

In comparison, what has been explored less is our duties to *commensal* animals; creatures like deer, mice, racoons, birds, and gophers. Animals of these species often live in or interact with human spaces. Our interests

17. cite

only conflict with domestic and wild animals when we seek to *use* their bodies or their spaces for our purposes. In contrast, our interests are constantly on a collision course with the interests of commensal animals. They nest in homes, eat gardens, and tunnel through grass. In return, they are trapped, starved, run over by automobiles, or collide with glass buildings.

These animals too are ends in themselves, but it is less clear what our duties are towards them. It seems clear to me (and Korsgaard)¹⁸ that humans do not have a duty to end their own lives or seek to reduce our species to nothing. However, this radical approach would be necessary to truly eliminate all of the harm that we cause to these creatures.

While Donaldson & Kymlicka, Wayne Gabardi, and Clare Palmer all address this problem and agree that the harms that we impose should be reduced, they do not explore the problem thoroughly. Specifically, they fail to grapple with the potentially unending duties that might be generated by taking the idea that we ought not harm animals to the fullest extent.

In this work, I seek to sketch out some of our duties to commensal animals, and conversely, some things that are not within our duties to these creatures.

18. cite

Part 2

Animals and Property

In her work *Moral Status*, Mary Anne Warren argues that animals have a lower moral status than humans.¹ Warren's argument relies on the intuition that we are willing to kill rats that invade our homes where we would not be willing to kill human children if they were in the same position.

Warren's argument has already been rejected², but her hypothetical raises unanswered questions. Human and animal interests come into constant conflict over the Earth's land and resources. It seems as if any hard-line animal rights theory would be forced into an uncomfortable conclusion. To minimize killing animals over land or resource conflicts, humans would be forced to adopt a gatherer lifestyle.

Property is a human solution to a natural, eternal problem: the distribution of scarce resources among competitors. Long before human civi-

1. Warren is a little dated... should I be bringing her up here?

2. that one 2007 paper

lizations and philosophers of law, nonhuman animals communicated, cooperated, and defended claims to territory among one another.³ Brashaw, Kymlicka, and Cherly Abbate all argue that non-humans can have rights to resources that mirror human property rights, and that these rights should be protected through the law.

In this section, I discuss the converse question — to what extent human property rights can be protected or enforced against non-human animals.

I will conclude that humans have subject-relative prerogatives to defend their rightfully acquired property. This prerogative permits the use of lethal defensive force as a final resort to defend a person's closely held property against nonhuman and human invaders alike.

2.1 Defense of Property

Defense of property sometimes justifies actions that are otherwise impermissible. If a person is walking across the street in front of us, we may not demand that they leave. We certainly should not harm them or treat them as liable to harms. We can certainly demand that a person walking around our home leave. If they ignore the demand, they may be liable to harm.

These statements are relatively uncontroversial when referring to rational persons who willingly and knowingly trespass on private, individually owned or occupied property. This becomes less clear when discussing

3. Karen Bradshaw, "Animal Property Rights," *University of Colorado Law Review* 89 (2019): 23.

nonhuman animals. Few of them could be described as rational and even fewer might understand the concept of property. Even if they could, they might fall outside the covenant or agreement that protects property rights.

However, it seems like the concept of self-defense or defense of property can still be applied against animals. If there are insects living in my skin, I feel no qualms about killing them, even though they may not be aware they are invading my body.⁴ I am also willing to believe that it is easier to justify capturing or even killing rats in one's home rather than rats living in the woods.

In this section, I'll consider the nature of the right of property and the morality of defense of property.

2.1.1 Claiming Property

Property are the things that a being controls in order to secure their ends. To hold a resource as property is to have a rightful claim to use it for any purpose that does not interfere with the choice or similar right of another. To claim an unclaimed resource as property, one need only control it and signal an intent to continue controlling it. The concept of property is not dependent on the existence of an agreement to enforce or define it.⁵

4. I will assume for the moment that these insects should be accorded moral status though it is unclear.

5. The position articulated here is relatively generic and could be defended on many grounds, but I am most closely following Arthur Ripstein's interpretation of Kant's view. (Arthur Ripstein, *Force and Freedom: Kant's Legal and Political Philosophy* (Cambridge, MA: Harvard University Press, 2009))

Consider a pared down example. A table is laid out with a collection of books on it, along with a sign saying “Free to Take.” I see a book I like, and I intend to collect it after class. If another person takes the book before I do, then they have not wronged me.

On the other hand, imagine I actually did take the book. Another person sees it in my bag and chooses to take it from me. This person has wronged me because they used an object which I had marked as my property in a way that I did not authorize.

This example also demonstrates that an interest-based theory of property alone is insufficient. In both cases, my interests are set back by equal amounts. However, I am only wronged in the latter case.

This description is rather simple and far from complete. I will readily admit that there are certain restrictions in claiming property — it would probably be wrong for a person to take all of the books, for example. Rights of property can be modified or clarified by political bodies. In addition, there is a distinction between property (specific pieces of real property, objects, and agreements) and wealth (the degree that the sum total of one’s property allows them to secure their ends). While there ought to be relatively stringent protections over individual pieces of property (something like eminent domain/takings requirements), enforceable obligations to transfer a certain amount of wealth need not be as strongly justified and compensated.

2.1.2 Property in a State of Nature

Even within a state of nature, prior to any unification of will or hypothetical agreements, intruding upon a person's rightfully claimed personal property renders the intruder liable to defensive harm unless the property owner is duty-bound to accept the intrusion. Establishing that property may be defended in a state of nature is important because we are (quite literally) in a state of nature with the other animals.

Consider an example given by Jonathon Quong. A shipwrecked sailor washes up to the shore of a deserted island. Her leg is wounded. In order to save a limb, she can use a special piece of seaweed that has washed up on shore with her. She uses the seaweed to cover the wound. Soon after, another person washes up alongside. The second person also requires the seaweed to staunch a wound. The second person has an interest in the seaweed that is equal to the interest of the first person. It seems clear here that the second person could not take the seaweed from the first.⁶

To extend the example, let's say that the sailor needs to set the seaweed aside temporarily. If she demonstrates a need and intent to continue using it, then she has demarcated it as her property. The second person ought not take the seaweed from the first even though it is no longer directly connected to her person. If the second person does so, then they render themselves liable to proportional defensive harm from the first.

In a pre-political state, there is no assurance that a right to property will

6. Quong

be respected. Ripstein writes that the assurance problem means that the right of property defense cannot be exercised a state of nature.⁷ But as Japa Pallakathiyil notes, a lack of assurance does not necessarily imply that a person's right loses all *moral* force. It remains permissible to use defensive force over clearly determined property even in the absence of a political body.⁸

2.1.3 The Agent-Relative Prerogative

In the previous section, I stated that a person can become liable to proportional defensive harm when they intrude on another person's property. This is only applicable when a person is rational (can respond to moral reasons) and aware that the object they are interacting with is another's property. For example, a rational elephant (or a rational person in a country with different customs) may not become liable to defensive harm because they may not be aware of the kinds of signals used by humans to claim property.

This position is insufficient to explain situations where the intruder is not rational or responsible for their intrusion — the innocent attacker. Most intrusions by nonhuman animals are innocent because they are non-rational or unfamiliar with human conventions and signs that claim property.

7. Ripstein, *Force and Freedom: Kant's Legal and Political Philosophy*, 162.

8. Pallakathiyil herself does not wholeheartedly endorse the principle the I land on, but I believe her objection to Ripstein is sufficient to make my point.

I will adopt Jonathon Quong's explanation of the morality of defense against an innocent attacker. Quong's explanation relies on the agent-relative prerogative. The agent-relative prerogative is a principle which states that an agent is permitted to weigh their own ends more heavily than another's interests. The prerogative can also extend to other beings that an agent is responsible for or have strong relations with — for example, a person is also permitted to give greater weight to the interests of their child. I will not make an extensive argument for it here; see Quong for a more detailed discussion.⁹

In a situation when at least one being's rights will be violated (like an innocent attack), the agent-relative prerogative gives an agent the permission to prefer that another's rights are violated instead of their own. This permits proportional self-defense against innocent attackers.

2.1.4 Proportionality and Property

The proportionality constraint of self-defense requires acts of defense to not cause much more harm than they seek to prevent. In paradigm cases of defensive force against a liable attacker, the attacker's interests are weighed less heavily because they have made themselves liable. In addition, a defender (but not a third party) is permitted to weigh their own interests more heavily under the agent-relative prerogative.

In contrast, in a case of defense against an innocent attacker, the at-

9. maybe I should motivate it just a little more though

tacker's interests do not have a reduced strength. Instead, the defender's agent-relative prerogative and increased weight to their own interests is the only justification for their defense. A third-party would not have reason to prefer the defender's interests over the attacker's.

The fact that the defender's rightful property is endangered is a threshold condition for the use of defensive force. The proportionality of the defensive force is determined in part by the strength of the defender's interests that are at stake. This means that proportionality will look very different for different pieces of property. A piece of seaweed or a plot of farmland that is critical to one's life or livelihood represents a strong interest. On the other hand, other rightfully possessed things may be less important and permit a lesser amount of defensive force to be used to preserve them.

2.2 Non-Rational Animals and Non-Rational Humans

The previous section described a right of property and rightful defense of property against innocent, human attackers. In this section, I will describe some of the differences between innocent human attackers and non-rational animal attackers and why they are relevant to ethics.

There are important differences between non-human and human animals. These differences are unrelated to the mental capacities of different

beings. Instead, these differences have to do with the special relational duties we have to most non-rational humans and the differences in size and number that necessitate violent response against nonhumans in more cases than for humans.

The intuitions highlighted by Mary Anne Warren pick out these differences rather than differences in the underlying duties we owe to humans and animals because of their basic capacities. I am not arguing that there are no differences in capacity-based duties towards humans and nonhumans. Instead, I am arguing that these differences are not necessary to explain differing intuitions about the permissibility of defensive force.¹⁰

2.2.1 Beneficence

In Clare Palmer's *Animal Ethics in Context*, Palmer argues that we have few, if any duties of beneficence to wild animals that are unaffected by human actions. However, we owe wild animals duties of beneficence when we benefit from institutions that harm them, when we form inter-special communities with them,¹¹ or when we are causally responsible for unwarranted harm to them.

In most circumstances, we have few obligations of beneficence to the rats, raccoons, and other liminal animals that largely benefit from human

10. The argument structure here is similar to the section in Palmer that references Pogge's work. The idea is to show that different intuitions about humans and animals can be explained without reference to moral status by pointing to all of the other different factors.

11. Garibaldi

expansion and human spaces.

The obligation of beneficence is related to self defense because it sets an upper bound on the proportionality of self-defense through the agent-relative prerogative. In paradigm cases of self-defense, the offending party has made themselves liable in some way when they choose to take a violent action.

But the logic of self-defense through the agent-relative prerogative is different. When defending oneself against a non-culpable attacker, we do not assume that the attacker has forfeited or decreased the strength of their rights against being harmed. Instead, the defender is permitted to take harmful defensive action because they are permitted to weigh their own interests, goals, and projects more highly than that of the attacker. If they may prevent harm to themselves by redirecting it towards a third party (without *using* that third party's body or property in the process), then they are permitted to do so.

Their obligation of beneficence to that third party sets an upper bound on the amount of harm they may redirect relative to the amount of harm they would accept. Let's say that a defender must kill an innocent attacker in order to prevent the loss of a leg. This might very well be permissible under the agent-relative prerogative.

If a defender would be duty-bound to accept the loss of a leg to (for example) save 5 innocent attackers, then they may not defend themselves against those innocent attackers for the sake of their leg. This does not im-

ply that they may defend themselves against 3 attackers — it is worse to cause harm than to fail to rescue a person from harm. However, the beneficence continues to serve as an upper limit, a maximum on the amount of harm that can be imposed to protect oneself.

Beneficence can be more than just an upper limit. The degree of beneficence that we owe to a person is directly related to the strength of their interests compared to ours. If we have a strong duty of beneficence to a person (or animal), then we ought to meet their ends even at considerable personal cost. Their interests weigh heavily on the scale compared to our own.

It is a similar weighing of interests that determines proportionality for defense against innocent attackers. We are permitted to weigh our own interests more heavily than the equal interests of another. The weight we give the other being's interests is directly related to the comparison underlying the obligation of beneficence. The main difference between defense against innocent attackers and the duty of beneficence is that the former case is concerned with doing harm and the latter with giving aid. In general, it is worse to do harm than to fail to give aid, so the scales are adjusted slightly differently in the case of innocent self defense. But the quantity measured (the difference in weight between the defender and the attacker's interests) is the same in both cases.

So, when we have a greater relational obligation of beneficence to someone, we also have greater duties to accept the harm they innocently impose

in order to avoid harming them.

Note that the general duty of beneficence is different from specific compensatory duties. My obligation to repair the damage that I caused to another person's car doesn't make me more liable to the innocent threats that they may impose. However, my general relational duties of beneficence towards a person (say, because they are my family member or coworker) give me a reason to weigh their interests more heavily both in my duties of beneficence and my prerogative of defense against innocent attackers.

2.2.2 Proxy Rationality

As Christine Korsgaard puts it, animal + rational \neq human. A non-rational human is (almost always) dependent on other humans to survive. Many non-rational animals are capable of securing their own ends without human help.

Non-rational humans are generally in the care of other, rational humans. Human communities and sometimes individual humans usually have strong duties of beneficence to care for non-rational humans. When non-rational humans are in the care of rational humans, that human can take on some of the duties of ensuring that a non-rational human secures their ends in accordance with the relevant duties and laws that would apply if the non-rational human were rational.

Rational humans are responsible for the actions of non-rational humans in their care. I don't mean this in the retrospective sense of culpabil-

ity or moral responsibility. Rather, I mean it in the prospective sense. If a child steals a candy bar from a store, their parent is not morally responsible for the theft. However, the parent is responsible for making the store whole and educating their child, if appropriate.

Parents or other guardians can also be responsible in the retrospective sense. A parent may be negligent, permitting their child to intrude on others' personal space. If so, that parent would be culpable for their negligence and responsible for apologizing to others and making them whole. It is not always the case that the guardians of non-rational humans actually act in accordance with their duties. But the important thing is that those duties actually exist and have a person that ought to fulfill them.

This is not true of many non-rational animals. These animals cannot fulfill duties¹² and do not have a 'proxy' rational agent that can take responsibility for their actions.

The upshot of all this is that when there is some assurance that property rights will be respected or duly compensated, the importance of defending the right decreases. In addition, a guardian's responsibility can provide some assurance that future trespasses do not occur. We can infer that a rat who is expelled may intrude again if they are not left far away, but we cannot infer the same when we return a non-rational human (or animal) to their guardian.¹³

12. I think they can have duties though. Most humans aren't rational most of the time, but we can enforce duties against them while they're asleep. Similarly, I can enforce a duty against an animal who would have had such a duty were they rational.

13. I don't think I'm being incredibly clear in this passage whether the existence of the

2.2.3 Size, Number, and Future Expectations

There are a few pragmatic concerns that makes violence against non-human invaders necessary more often than violence against human invaders. Non-human animal invaders are often smaller than humans. There are also more of them. In common cases, they also multiply — a few rats in a home today may mean a dozen in a few months.

The first two points have to do with the necessity constraint of self-defense. In cases of self defense, no person deserves to be harmed. Instead, costs are distributed in the fairest way possible. However, overall costs should still be minimized. If a defender can take choose between a less harmful defense and a more harmful defense (both of which fully address the threat), they have an obligation to choose the former. That obligation has nothing to do with the degree of status or consideration given to the attacker.

Because humans often occupy spaces designed for humans, it is often possible to address innocent human invaders using non-lethal means. However, non-human invaders occupy spaces in our walls and crevices in such a way that it is more difficult to find them and more difficult to remove them non-lethally. This doesn't mean that they have fewer moral rights — if it were possible to do so, there would still be an obligation to take the least harmful means. Instead, it just means that in some cases,

duty is important or whether the pragmatic assurance is important. I'm not too clear on that myself.

it might be permissible to kill a nonhuman animal where a human threat could be addressed without violence.

The final point — the fact that contramensal animals often multiply — has to do with the magnitude of the threat. The presence of several termites in the walls does not necessarily weigh greatly on the interests of the humans who live there. However, a few termites will likely become a few thousand. So, the anticipated threat that the termites present is not just their presence in the wall, but in the likely future harm that they might impose. The likely possibility of escalating harm permits a wider scope of defensive actions now in order to avoid future harms in addition to imminent harms.

2.2.4 The Role of Moral Status

The three non-capacity characteristics that humans often have (stronger duties of beneficence, proxy rationality, and pragmatic differences) explains most of the difference between defense against, say, rats and defense against, say, children. Companion animals and domestic animals have all three of these qualities. Defenders have stronger duties of beneficence, the animals are in the care and control of a guardian, and they are few in number, large in size, and slow in reproduction. When we compare dogs and children, I think the gap in our intuitions about the morality of self defense certainly shrinks.

There is still a gap — and maybe that gap is attributable to a difference

in relative moral status. But that does relatively light lifting compared to these other features. It also only 'kicks in' in situations when we are forced to compare human and animal interests (like innocent self-defense or lifeboat scenarios). It does not permit the *use* of animals as if they have no ends at all. It certainly doesn't do to what Warren, DeGrazia, and others want it to do in permitting animal research or hunting.

Part 3

Risk of Harm to Non-human Animals

Risks of harm pervade our daily lives. Driving cars, operating oil refineries, and even flipping light switches impose risks on other beings. The moral boundaries of imposing risk are hardly settled even in the case of humans. However, the issue has yet to be directly addressed in the case of non-human animals, even though it has a tremendous significance in environmental and public policy.

In this chapter, I will briefly sketch a theory of risk imposition that is informed by the basic deontic views I have accepted in previous sections. I will then identify three elements of the ethics of risk imposition that are unique to nonhuman animals.

First, I'll address the intuition that it is worse to impose risk on wildlife

than it is to impose risk on contact-zone or liminal animals. Second, I will discuss the relationship between human duties to avoid imposing risk and the expansion of animal population. Third, I will consider the problem of vultures, or the moral value of secondary benefits generated through potentially wrongful risk imposition.

3.1 A General View of Risk

Discussions of the moral permissibility of risk can be divided into two different categories: the duties of an individual risk-imposer, or the duties of a regulator setting rules for individual risk imposition. For the purposes of this paper, I will collapse the two discussions by setting aside practical considerations about the implementation or enforcement of policy. What I am interested in is the values that regulators and individuals alike should seek to uphold.

3.1.1 Cost-Benefit Analysis

The dominant view in modern U.S. regulation is cost-benefit analysis, a close relative of expected utility theory. Regulators use economic methods to estimate the cost that a person is willing to pay to avoid a particular amount of risk. This measure is used to ‘price’ a human life, providing a guidepost to determine the costs that must be paid in order to avoid risky actions. This measure is often referred to as the Willingness To Pay (WTP)

metric.

This view is defended by Cass Sunstein, who argues in favor of its efficacy and that this measure is consistent with consequential and deontological theories. It seeks to maximize expected consequences and also treats people in accordance with the rules they create for themselves, thus respecting their dignity.¹

Apart from possible methodological shortcomings,² this view is most closely criticized by Lisa Heirtzerlinger, who argues that Sunstein essentially assumes that risk impositions are de facto permissible and that safety precautions are sometimes required. Sunstein does not ever consider that the risky activity as a whole might be impermissible, or consider what the justification for engaging in the activity might be.

In addition to Heirzerlinger's criticism, Sunstein's argument is also vulnerable to the objection that the methodology of WTP does not capture what it is permissible for *other* people to do to me. I may rightfully choose to save \$50 of my dollars by accepting some small risk. However, this is not evidence that I would endorse the rule that some other person could benefit to the tune of \$50 while exposing *me* to the same risk.³ While Sunstein argues that production costs will eventually be passed down to the consumer, Sunstein does not consider that the person at risk and the person benefiting could be different — a factory could impose risk of harm

1. cite

2. cite

3. Sven Ove Hansson, *The Ethics of Risk* (New York: Palgrave MacMillan, 2013), 98.

to people around area A, but produce products which are primarily sold in area B. In this situation, the residents of area B are benefiting from the loss of residents of A with no clear economic mechanism to correct this inequity.

A more fundamental concern with the WTP approach is that it violates some of the core commitments of deontological ethics; namely, that it assigns a price to that which is priceless — a life. Though Sunstein and advocates of WTP argue that their practice does not assign a price to life, and merely a cost for some statistical benefits. Despite this rhetorical shift, the WTP theorist would still be acting as though they had assigned a fixed price to dignity.⁴

The issue with the rhetorical shift is further revealed by Lisa Heitzler, who enumerates a number of uncomfortable consequences of the WTP metric that really seem like instances of valuing dignity itself, despite what the economists might respond.

Importantly, the cost-benefit analysis view reduces the value of animals and the environment to the instrumental costs that people are willing to pay to protect them. Non-human animals generally do not actively participate in the human economy, so we cannot determine a WTP metric for them, no matter what normative force it would carry. This use of the WTP metric treats the environment and other animals as merely instrumental and only worth the price that humans are willing to pay. The

4. Uncertainty Kant

single strongest argument in favor of the WTP metric is that it describes self-authored preferences regarding risk, and in a way respects the agency of a person. However, this argument does not apply to the way that WTP is used to price other animals and the environment.

Even if cost-benefit analyses are the most efficient way to regulate and control our environmental impact in an increasingly complex economy (as Richard Posner argues)⁵, because of the preceding problems, cost-benefit analyses do not have great normative force and cannot serve as the guideposts of or moral values. Instead, it must be the other way around — we should appraise the moral values we hold and perhaps accept cost-benefit analyses as the lesser of many evil means to best uphold those values.

3.1.2 Risks as Reciprocal, Connected Practices

Sven Ove Hanson's view of risk as a set of connected social practices could provide a moral foundation for our imposition of risk on our fellow creatures. Hanson argues for a 'fair exchange of risk' model, concluding with the principle that:

Exposure of a person to risk is acceptable if (i) this exposure is part of a persistently justice-seeking social practice of risk-taking that works to her advantage and which she de facto accepts by making use of its advantages, and (ii) she has as

5. cite

much influence over her risk-exposure as every similarly exposed person can have without the loss of the benefits that justify that exposure.⁶

This principle is agreeable, and Hanson argues for it capably. It provides an ethical basis for many day-to-day practices that essentially everyone would like to accept as permissible. It also outlines the reasons that we can call another to account for their risk taking. We might argue that imposed risk is unreasonable (it goes beyond common social practice); that it is unjust (it is unevenly concentrated); or that it is unaccepted (the relevant class of people exposed to risk have not had the opportunity to accept it, or have explicitly rejected it).

Hanson's view is also consistent with the intuition that, all things being equal, it is worse to impose risk on people outside of community that benefits from the risk imposition than it is to impose risk on people inside of that community. In other words, it would be worse to divert a U.S. factory's pollution to a town in Canada than towards a town on this side of the border. This acknowledges the political dimension of risk and the role that consent and appropriate procedure play in risk imposition.

One point that Hanson does not make about reciprocal risk exchange but ultimately bolsters his stance is that it may not actually be necessary for a person to exercise their liberty to take risks under a social agreement for them to benefited by that liberty. In other words, if my neighbor and

6. hanson 107

I both have equal say in a rule that permits everyone to use a driving lawnmower, it is not necessarily unfair or unequal to me if I do not use a driving lawnmower. I retain the option to use one of I choose; I am held to the same rules as my neighbor even if I do not seek to exercise them to the fullest extent.

Of course, if the rules are structured to permit all of my neighbor's desires and none of mine, I might claim that the rules are unjust. In practice, there is a preference to permit risky activities of the upper classes when equally risky behaviors of the impoverished are condemned.⁷

3.1.3 "Social Practice"

One ambiguity in Hanson's view is how widely to draw the net of 'social practice.' Does social practice include any and all socially-acceptable risky acts? We might accept that driving is a social practice, whereas archery is not, as Jonathan Quong argues.⁸ Or, we might choose a broader view that collects and considers essentially all permitted social practices as one big social exchange.

I don't think that there are moral reasons to distinguish between activity types in this way. As Helen Frowe argues, if a risky action earns the actor some benefit at the cost of some risk of harm to others, the class of the action does not seem to affect its morality.

7. cite e.g. francione

8. cite

It may be legal to drive around for enjoyment but not shoot guns up in the air for enjoyment, even if both impose the same risk to others. But I think that this is a convenience of legislation and not a moral implication. We all agree to some level of risk that we tolerate in order to benefit from those impositions and impose risks of our own, but this exchange doesn't speak to the class or type of token actions of risk so long as they have acceptable costs and sufficient benefits.

So, when Hanson discusses the social practice of risk-taking, he must refer to it in the broadest sense; all risky acts which, taken together, leave us better off than the absence of all these acts.

3.2 Animals and Reciprocal Risks

Hanson does not consider risks imposed to non-human animals. However, I believe that non-human animals fit well into this framework.

In this section, I am most interested in non-domesticated liminal and wild animals. Domesticated animals fit clearly into Hanson's framework as wards of people that do buy into systems of risk and have representation in the way that risks are permitted.

Hanson's view requires that (1) beings accept benefits from risky practices, (2) beings have influence over the risky practices that are conducted, and (3) that the risky practices are justice-seeking, aiming to equalize costs and benefits. On first glance, it seems as if non-human animals cannot pos-

sibly fit this framework because non-human animals do not themselves engage in significantly risky practices towards human life.

Though nonhumans do not themselves generate significant risks, many of them do benefit greatly from the risky practices that constitute urban life. The cars that rumble by bring home an important source of food for racoons. The factory that produces french fries will benefit the pigeons that feast on leftovers in a parking lot.⁹ Many liminal animals thrive among the risks of urban life and derive benefits from the processes that generate that risk. Not least among the benefits is the exclusion of less-adapted competitors that would otherwise fight for the same resources.

I want to be careful here in not referencing the abstract idea of ‘animals’ or ‘the animal.’ I am not saying that the class of liminal animals benefits, or that the class of racoons benefit. Classes of beings do not ‘benefit,’ at least not in the way that biotic ethicists mean. I do not mean that urban life allows more pigeons to exist than the absence of urban life, or that ‘the pigeon’ flourishes more in urban life. If I were to make these claims, I would but up against a non-identity problem because different species and kinds of animals would exist without an urban landscape. Instead, what I mean is that most *individual* pigeons eat food that would not be available but for a complex web of exchanged risks and make nests in buildings that would not be there but for social practices of risking.

An important benefit of this view is that it explains the intuition that

9. Zoopolis

it is worse to expose non-contact zone animals to risks than it is to expose liminal or contact-zone animals to risk. This is because those individual animals are much more likely to benefit from human social practices of risking. This intuition is seen in, for example, Donaldson & Kymlicka's discussion of wildlife bridges over remote roads, but neglect of the possibility of 'squirrel bridges' over town streets.¹⁰ This is not to say that squirrel bridges should not be built, or even that they are not obligatory. Instead, my conclusion is that harm to creatures that do not benefit from human practices of risking is more morally bad than harm to creatures that do benefit.

3.2.1 Objections

There are two primary objections that can be made against including animals within reciprocal risk relationships in this way. The first is that human social practices of risking are made *for* humans; the benefits they generate for the other animals is merely incidental. This undercuts the idea that animals can be said to be coequal beneficiaries of a risky system. The second is that there is no necessary condition between the imposition of risk on these animals and the benefits they garner. It would be possible for people to provide the same benefits to other animals with far fewer risks.

The primary problem with both of these objections is that they are both

10. Cite

equally applicable to the case of humans. Social practices of risking are not made to benefit any specific person; in a way, any benefit they generate for an individual are merely side effects of the churning of a much larger system. In addition, it is not clear that the *intention* underlying the benefit is morally significant (even if an intention can be ascribed to the social practice of risk, which no single agent authorizes or enacts). It is not by the benevolence of the butcher or the baker that a person is able to enjoy their seitan and bread, but they are certainly still deriving a benefit.¹¹

The second objection could also apply to humans — no person actually accepts or desires to take on a specific risk. In many circumstances, it would be possible for a society to choose to protect a person from all risks while still providing them with all of the benefits of society. However, this is just an elevation of one person above all others; the system of risk-taking as a whole is necessary to enjoy the benefits in general whether we choose to insulate one person or not. In this case, we insult the dignity of most people by holding that one otherwise co-equal beneficiary should bear no costs at all.

Similarly, we could theoretically limit all of the risk that we impose upon an animal while still working to provide them the same benefits. But this would be elevating that animal above all others and above humans. Limiting all risk would result in dramatic changes to the urban and sub-

11. You could say at least that the butcher and baker intend to serve the person even if not benevolently... the rats that eat the baker's scraps may not owe her anything. Something to consider.

urban landscape that they benefit from.

3.2.2 Representation

The one piece of the puzzle that is currently missing are the justice-seeking and co-representation elements of the reciprocal risk principle. Currently, individual, non-endangered or migratory animals are essentially excluded from direct consideration by regulatory agencies and legislatures that determine acceptable exposures of risk.

This is wrong for two reasons. First, lack of representation of interests of beings that have a real stake in rulemaking is wrong and causes impositions of risk under those rules to be wrong. Second, pragmatically, the scales are tipped against just distribution of costs and benefits because of this lack of representation.

This may be remedied by appointing representatives of non-human animals on road, emissions, and other environmental safety organizations. This may seem to contradict the role of these animals (as Donaldson and Kymlicka would put it) as denizens, not co-equal citizens. However, there are circumstances when it is clear that denizens should be given input — maybe not on the political community's core values and aims, but certainly on specific items that are particularly relevant to their well being and reflect the basic duties of the political community towards them. For example, migrant workers who are most at risk of illness due to pesticide use should have a say (if not a near-dispositive say) in the way that pesti-

cides are applied and regulated.

Though denizens are not of the political community in the same way as citizens, they share in the social practices of risking and have the right to representation in the bodies that govern this practice.

3.2.3 Restitution

Imposing risks on a person can obligate restitution in two ways. First, one may have a duty to compensate for imposing a risk as such. Second, one may have a duty to hold another harmless for an injury that results from a materialized risk.

A duty to provide restitution in these two cases has been described previously by several different works.¹² But it is less clear how restitution might work in the case of nonhuman animals. There are two primary difficulties in the nonhuman case. First, it is unclear whom restitution should go to. Second, it is unclear what form restitution should take, since bank accounts are meaningless to squirrels. Third, the amount of restitution that is morally required is unclear, as non-human animals do not participate in the economic system that is normally used as measuring tool for damages.

12. See e.g. Hansson, *The Ethics of Risk*, Helen Frowe, "Risk Imposition and Liability to Defensive Harm," *Criminal Law and Philosophy*, 2021, Claire Finkelstein, "Is Risk a Harm?," *Univ. of Pennsylvania L. Rev.* 151 (2003): 963–1003

To Whom

In human cases, it is relatively clear who should be compensated for risky activity. When compensating for risks as such, the class of people who are believed to be at risk before the fact should receive some compensation for the risk that is imposed on them. As Hansson notes, this compensation may not be necessary if risks are fairly distributed or exchanged across different social and productive sectors.¹³ When compensating for materialized injury, compensation should be given to the person that has suffered an injury that is potentially caused by a human-imposed risk.¹⁴

The first kind of compensation seems relatively clear for the case of non-human animals. It may take extra work, but one could identify a class of non-humans that are being exposed to additional risks. The second kind is more difficult. In human cases, the tort system would likely depend on the person who is injured to come forth with a claim against risk imposers. It is possible that we may never know or find the individual animals who are injured as a result of imposed risks.

But just as in human cases, there are some circumstances when we do not know who exactly has been injured by an imposed risk. Hanson's solution to this (which can be extended to non-humans as well) is to compensate the class of people who may be injured proportional to the magnitude of their injury and the chance that they are injured. If we truly have

13. Hansson, *The Ethics of Risk*, 103.

14. Hansson, 112–113.

no further information about the class, then this may look exactly like antecedent compensation.

We do have some information about which animals are injured, however. People often bring oiled, struck, or injured animals to wildlife hospitals. It is among the compensatory duties of risk for car-drivers to contribute to wildlife hospitals that care for wildlife injured by human-imposed risks.

If animals die because of imposed risk, compensation may be directed as it is for dead humans — towards the family and community that might suffer from the loss.

What Form

Money in a bank account means nothing to squirrels, and squirrels cannot themselves use it to accomplish their ends. I think this question is the easiest to answer. Karen Bradshaw argues that the existing legal instrument of trusts serve as a way for animals to hold and disburse property. Trusts are legal persons like corporations or nonprofits, but they are created for the sake of specific benefactors, and the executor of the trust is legally required to use funds in a way that most benefits the trustee.

In this way, trusts or other bodies could be created that would use compensatory funds to create sources of food, shelter, or medical treatment for non-human animals that are exposed to risk.

Measuring Amount

Measuring the amount of compensation owed is a thorny problem for humans and non-humans alike. Compensating harm or even life seems like it requires putting a price on dignity, anathema to core Kantian commitments. Courts today still use clunky, morally jarring tools like future earnings totals to determine compensation for a wrongful death.

This is a difficult question that deserves a much longer treatment of its own. I will acknowledge the concern, but not seek to establish a view on it here.

Bibliography

- Abbate, Cheryl. "The Search for Liability in the Defensive Killing of Non-human Animals." *Social Theory and Practice* 41, no. 1 (2015): 106–130.
- Bjorndahl, Adama, Alex John London, and Kevin J.S. Zollman. "Kantian Decision Making Under Uncertainty: Dignity, Price, and Consistency." *Philosophers' Imprint* 17, no. 7 (2017).
- Bradshaw, Karen. "Animal Property Rights." *University of Colorado Law Review* 89 (2019): 809–861.
- Cano Pecharroman, Lidia. "Rights of Nature: Rivers That Can Stand in Court." *Resources* 7, no. 1 (2018). ISSN: 2079-9276. <https://doi.org/10.3390/resources7010013>. <https://www.mdpi.com/2079-9276/7/1/13>.
- Cohen, I. Glenn, Norman Daniels, and Nir Eyal, eds. *Identified Versus Statistical Lives: An Interdisciplinary Perspective*. New York: Oxford University Press, 2015.

- Deckha, Maneesha. "Humanizing the Nonhuman: A Legitimate Way for Animals to Escape Juridical Property Status?" *Unknown* 13, no. 2 (2003): 46–129.
- Donaldson, Sue, and Will Kymlicka. *Zoopolis: A political theory of animal rights*. OUP Oxford, 2011. ISBN: 9780191620553.
- Finkelstein, Claire. "Is Risk a Harm?" *Univ. of Pennsylvania L. Rev.* 151 (2003): 963–1003.
- Fitzgerald, Amy J. "A Social History of the Slaughterhouse: From Inception to Contemporary Implications." *Human Ecology Review* 17, no. 1 (2010): 58–69.
- Francione, Gary. *Animals as Persons: Essays on the Abolition of Animal Exploitation*. New York: Columbia University Press, 2009.
- Frowe, Helen. "Risk Imposition and Liability to Defensive Harm." *Criminal Law and Philosophy*, 2021.
- Guyer, Paul. *Kant's System of Nature and Freedom*. New York: Oxford University Press, 2005.
- Hansson, Sven Ove. *The Ethics of Risk*. New York: Palgrave MacMillan, 2013.
- Herman, Barbara. "Embracing Kant's Formalism." *Kantian Review* 16, no. 1 (2011): 49–66.

Heyward, Claire, and Dominic Roser, eds. *Climate Justice in a Non-Ideal World*. New York: Oxford University Press, 2016.

Korsgaard, Christine M. "Fellow Creatures: Kantian Ethics and Our Duties to Animals." *The Tanner Lectures on Human Values*, 2004.

———. *Fellow Creatures: Our Obligation to the Other Animals*. New York: Oxford, 2018.

Louden, Robert B. *Kant's Impure Ethics: From Rational Beings to Human Beings*. New York: Oxford University Press, 2000.

Magel, Charles. "Animals: Moral Right and Legal Rights." *Between the Species* 1, no. 5 (2 1985).

McCarthy, David. "Liability and Risk." *Philosophy and Public Affairs* 25, no. 3 (1996): 238–262.

McMahan, Jeff. "Self-Defense and the Problem of the Innocent Attacker." *Ethics* 104, no. 2 (1994): 252–290.

Nussbaum, Martha. *Frontiers of Justice: Disability, Nationality, Species Membership*. Cambridge MA: The Belknap Press, 2006.

Otomo, Yoriko, and Edward Mussawir. *Law and the question of the animal: a critical jurisprudence*. Routledge, 2014.

Palmer, Clare. *Animal Ethics in Context*. New York: Columbia University Press, 2010.

Ripstein, Arthur. *Force and Freedom: Kant's Legal and Political Philosophy*. Cambridge, MA: Harvard University Press, 2009.

Singer, Peter. *Animal Liberation*. 40th Anniversary Ed. Open Road Media, 2009.

Sunstein, Cass R., and Martha C. Nussbaum, eds. *Animal Rights: Current Debates and New Directions*. New York: Oxford University Press, 2004.

Thomas E. Hill, Jr. "Hypothetical Consent in Kantian Constructivism." In *Human Welfare and Moral Worth: Kantian Perspectives*, 13:300–329. Clarendon Press, 2002.

Tribe, Laurence H. "Ten Lessons Our Constitutional Experience Can Teach Us About the Puzzle of Animal Rights: The Work of Steven M. Wise." *Animal L. Rev.* 7 (2001): 1–8.

Watkins, Eric, ed. *Kant on Persons and Agency*. New York: Cambridge University Press, 2018.

Wise, Stephen M. *Rattling the Cage: Towards Legal Rights for Animals*. New York NY: Perseus Books, 2000.

Wood, Allen W., and Onora O'Neill. "Kant On Duties Regarding Non-rational Nature." *Aristotelian Society Supplementary Volume* 72 (1998): 189–228.

Zimmerman, M. J. "Risk, Rights, and Restitution." *Philosophical Studies* 128, no. 2 (2006): 285–311.