Journal of Applied Philosophy doi: 10.1111/japp.12250

The Problem of Predation in Zoopolis

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ABSTRACT In this article, we argue that the phenomenon of predation is the source of several problems for Donaldson and Kymlicka's account of our duties towards wild and liminal animals. According to them, humans should adopt a general policy of non-intervention with respect to predatory behaviour involving wild and liminal animals. They justify this recommendation by appealing to the status of those animals as, respectively, members of sovereign communities and denizens of human-animal societies. Our goal is not to question their recommendation, but to challenge the reasons given in its support. On the one hand, we argue that, insofar as wild animal communities are incapable of dealing with massive predation, they do not possess the competence required for sovereignty. Moreover, we argue that, even if we leave the issue of competence aside, attributing sovereignty rights to communities including both predators and preys may not be the best way to protect wild animals' fundamental interests. On the other hand, we argue that there exist two important disanalogies between human denizens and liminal animals, which render Donaldson and Kymlicka's denizenship framework problematic. We suggest that the ultimate justification for a general policy of non-intervention lies in the significant risk of causing greater harm by acting otherwise, due to our limited knowledge and resources.

1. Introduction

In Zoopolis: A Political Theory of Animal Rights, 1 Sue Donaldson and Will Kymlicka have developed a new and original account of our duties towards non-human animals. Their account supplements and extends traditional animal rights theories (ARTs henceforth) by recognising that animals have not only basic universal rights grounded on their intrinsic characteristics, but also different group-based rights grounded on their specific relational position with respect to human beings. The authors distinguish three main groups of animals: domesticated animals, i.e. those who live amongst humans and are directly dependent on them as a result of domestication; liminal animals, i.e. those who live amongst humans, without being fully dependent on them or under direct human care; and wild animals, i.e. those who avoid humans and live a separate and independent existence outside human settlements. Donaldson and Kymlicka appeal to the categories of contemporary citizenship theory in order to identify the specific duties owed to the animals belonging to each of these groups. According to them, domesticated animals should be seen as members of a common human-animal society, that is, as co-citizens; liminal animals should be seen as co-residents of such societies, that is, as denizens; finally, wild animals should be seen as members of independent and separate communities, that is, as forming sovereign communities.

In this article, we shall focus on Donaldson and Kymlicka's account of our duties towards liminal and wild animals, in particular. These groups have one important feature in common: many of their members are systematically confronted with situations involving predatory behaviour, starvation, and other life threats.² In both cases, however, Donaldson and Kymlicka recommend adopting a general policy of non-intervention - a policy to be broken only in exceptional and isolated circumstances. Our goal is not to question this recommendation, but rather to cast some doubts on the reasons given in its support. More specifically, we shall argue that the phenomenon of predation renders Donaldson and Kymlicka's framework vulnerable to a set of significant problems. We shall also suggest that, contrary to what the authors explicitly maintain, the main reason for adopting a general policy of non-intervention is that we currently do not possess the knowledge and the resources to act otherwise, in a way that would effectively and reliably protect those animals' most fundamental interests. In other words, we will show that our duties towards liminal and wild animals are shaped by the so-called 'fallibility argument'.

The structure of our article is the following. In Section 2, we start by considering Donaldson and Kymlicka's account of our duties towards wild animals. In Subsection 2.1, we present the main features of their account. In Sub-section 2.2, we argue that, insofar as wild animal communities are incapable of dealing with systematic catastrophes affecting their members, such as massive predation, they do not possess the competence required for sovereignty. In Sub-section 2.3, we explore some alternative ways to justify a general policy of non-intervention. We show that the fallibility argument offers the most plausible justification. In Sub-section 2.4, we argue that this conclusion remains true even if we leave the issue of competence aside, that is, even if we suppose that wild animals do possess the competence required for sovereignty. In Section 3, we focus on Donaldson and Kymlicka's account of our duties towards liminal animals. After presenting the main features of their account in Subsection 3.1, we raise several objections against it in Sub-section 3.2. More specifically, we argue that the issues of predation and overpopulation generate two important disanalogies between human denizens and liminal animals, which render Donaldson and Kymlicka's denizenship framework inadequate.

2. The Problem of Predation With Respect to Wild Animals

2.1. From Traditional ARTs to Donaldson and Kymlicka's Account

Traditional AR accounts of our duties towards wild animals share two general commitments. The first is a commitment to the universality of fundamental basic rights. According to it, all sentient beings, including wild animals, possess inviolable basic rights, such as rights to life and to liberty.3 The second is a commitment to what Clare Palmer has called a 'laissez-faire intuition'. According to its most common versions, human beings have no positive obligations towards wild animals living in the wild (as opposed to wild animals kept in zoos or circuses). Their only obligation is simply to leave them alone, without interfering with their lives.

The problem for ARTs is that, at first sight, these two commitments seem incompatible. Indeed, if we take seriously the idea that wild animals have basic fundamental rights, then it seems that protecting those rights requires us to intervene in the wild on a continual and systematic basis, in order to protect wild animals from predation, starvation and other life-threatening situations. However, this conclusion is deeply counter-intuitive. In fact, it is generally seen as a *reductio ad absurdum* of the whole AR approach.

Wishing both to expand traditional ARTs, by making room for a limited range of legitimate interventions, and to avoid ARTs' counter-intuitive implications, Donaldson and Kymlicka suggest rethinking our obligations towards wild animals on the model of our obligations towards sovereign communities. Their strategy involves four steps. The first consists in offering a characterisation of sovereignty. According to them, sovereignty is a tool for protecting autonomy, as a means for flourishing. The idea is that, to the extent that the flourishing of the members of a community depends on the community's ability to freely maintain its form of social organisation on a given territory, then that community should, as a matter of justice, be protected against alien invasion and ruling through the assignment of sovereignty rights. Thus, sovereignty is ultimately grounded on the moral value of autonomy. It is the instrument that serves the moral purpose of protecting the animals' interest in autonomy as a means for flourishing.

The second step in Donaldson and Kymlicka's strategy consists in providing a criterion for identifying sovereign communities. They claim that a group of individuals counts as a sovereign community to the extent that the attribution of sovereignty rights to such a group of individuals helps achieve the moral purpose of sovereignty, namely, the protection of these individuals' interest in territorially-based self-determination. Donaldson and Kymlicka notice that, if we adopt this criterion, then sovereign communities do not necessarily mirror 'natural' communities. In the human case, many sovereign communities are constituted by a plurality of nations, sharing the same territory. Similarly, in the animal case, sovereign communities may be constituted by a plurality of different species (including species in predator-prey relationships), sharing the same habitat. In both cases, what makes such disparate groups parts of single sovereign communities is the fact that, by sharing a common territory, they are 'typically bound together by mutual dependencies', which create a common interest in protecting their territory from 'external threats', such as invasion, colonisation, and so on. ⁷

If the moral purpose of sovereignty is to protect an interest in autonomy, then, in order for wild animals to constitute sovereign communities, they must possess an interest in autonomy. The third step in Donaldson and Kymlicka's strategy consists in arguing that wild animals qualify for sovereignty in this sense. According to them, this requires showing that wild animals are competent to manage their lives and their communities independently of human intervention, in a way that promotes both their individual and their communal flourishing. Donaldson and Kymlicka claim that wild animals are clearly competent in this sense. The reason is that they are capable of successfully satisfying their needs and minimising the risks of life in the wild. If this is the case, the condition for recognising their sovereign authority is satisfied.

The fourth, and final, step in Donaldson and Kymlicka's strategy consists in examining the implications of the previous conclusion for the issue of our duties towards wild animals. According to them, sovereignty provides a new and better framework for rethinking the legitimacy of human interventions in the wild. In the human as in the wild animal case, massive interventions in foreign sovereign communities are

prohibited. This does not mean, however, that no intervention is ever legitimate. On the contrary, Donaldson and Kymlicka claim that interventions in a sovereign community are legitimate (and in fact, ceteris paribus, positively required) when three conditions are satisfied: (1) the community has suffered a catastrophe, either caused by human actions or by nature; (2) interventions do not compromise the community's sovereignty, but support its maintenance or reestablishment; and (3) foreign aid is not rejected by the sovereign community.

These three criteria allow Donaldson and Kymlicka to explain why their approach does not commit them to supporting systematic interventions in the wild, aimed at protecting wild animals from predation, starvation and other life-threatening situations. According to them, such interventions are illegitimate for the following reasons. First, predation and food cycles do not indicate that the sovereign community has suffered a catastrophe. '[I]n the context of ecosystems' - they claim - 'food cycles and predator-prey relationships are not indicators of "failure". Rather, 'they frame the challenges' that wild animal communities face. Second, interventions to end predation and food cycles can only be achieved by completely destroying sovereignty and reducing wild animals to a permanent state of human dependency. Finally, wild animals show a clear preference for being independent from humans and a strong resistance against human interventions.

To sum up, Donaldson and Kymlicka's account holds that humans should not intervene in nature, except in isolated circumstances. What grounds our particular duties towards wild animals is the moral value of autonomy, which is to be protected by attributing sovereignty rights to wild animal communities.

2.2 Are Wild Animal Communities Competent?

In this sub-section, we want to challenge Donaldson and Kymlicka's defence of the idea that wild animal communities are competent in the sense relevant for the attribution of sovereignty rights. We shall proceed as follows. First, we shall argue that massive predation constitutes a systematic catastrophe for wild animal communities. Second, we shall argue that the inability to deal with such systematic catastrophes is a sufficient consideration for counting a wild animal community as incompetent.

Let us start with the claim that predation constitutes a systematic catastrophe for wild animal communities. As several authors have pointed out, 10 most animals are r-strategists, that is, they follow a reproductive strategy characterised by high reproductive rates, 11 little or no investment in their offspring rearing, and dramatically low survival rates. Most of these animals die before reaching adulthood. Predation is one of the main sources of mortality. Thus, while their population remains fairly constant over time, this is not the result of competent skills in dealing with the risks of predation and life in the wild, but simply the consequence of a huge production of offspring, the overwhelming majority of which is destined to enduring sufferance and premature death. K-strategists, that is, animals adopting a reproductive strategy characterised by low reproductive rates and considerable investment in their offspring rearing, fare better in terms of survival rates. However, even their situation is far from enviable. To give one example, while attempting to estimate the impact of predation as a source of mortality amongst Thomson gazelles, Tim Caro calculated that 'predators kill between 51% and 82% of the estimated 73,000-86,000 gazelles recruited into

the Serengeti population each year'.¹² To give another example, Craig Stanford and his collaborators estimated that the annual mortality rate of red colobus due to Gombe chimpanzee predation varies between 15% and 35%.¹³ These numbers are staggering and have no comparison in the human realm. Considering all this, it is hard to deny that predation constitutes a serious catastrophe for wild animal communities.¹⁴ In fact, if predation occurred in a human society with the systematic and inexorable character that it has in the wild animal context, both for *r*-strategists and for *K*-strategists, we would not hesitate to judge that the community affected by it is suffering an endless, or *permanent*, catastrophe.

Donaldson and Kymlicka are aware that the phenomenon of massive predation poses an important challenge to the claim of wild animal competence. As we have seen, however, they think that, in the animal context, predation should be seen simply as one of the challenges that wild animal communities face. In particular, they claim that, since the ultimate goal is to elaborate 'a theory of justice for wild animals as they are' and since wild animals are 'outside the circumstances of justice with respect to one another's flourishing', we should see predation simply as 'a parameter of their lives', which they have to deal with.¹⁵

However, we find this line of thought unconvincing. The idea that living under the threat of death by predation is a fixed parameter of wild animals' lives is indeed questionable. First of all, while it is obvious that death is the inevitable end of all sentient beings' lives, it is not the case that death *by predation* must be seen as the inevitable end of wild animals' lives. Second, even if we grant that, insofar as the predators' flourishing depends on the possibility of killing their preys, then the former are not acting unjustly towards the latter, it does not follow that the preys are not suffering a catastrophe. Finally, although it is currently impossible for *us* to intervene so as to end predation, it does not follow that predation must, for this very reason, be considered an immutable feature of wild animals' lives. Holding otherwise comes close to 'sanctifying nature' – something that Donaldson and Kymlicka themselves, and for good reasons, want to avoid.¹⁶

If these remarks are correct, then we must admit that massive predation does constitute a permanent catastrophe for wild animal communities. In turn, this conclusion forces us to reconsider the issue of wild animal competence. There are two possible ways of understanding the relation between permanent catastrophes and competence. The first is expressed by the following principle: If a wild animal community is able to protect its members from permanent catastrophes (e.g. it is capable of dealing effectively with massive predation threats), then such a community possesses the competence required for sovereignty. According to this principle, the ability to protect its members from massive predation is just a sufficient condition for a wild animal community to count as competent. If so, the *inability* to protect its members from massive predation does not imply incompetence. One way to justify this claim consists in arguing that a wild animal community counts as competent simply provided that it is capable of achieving a sufficiently good balance of costs and benefits, given the context in which it lives – a context that may, however, be characterised by permanent catastrophes. Put differently, if we consider permanent catastrophes, such as massive predation, simply as external constraints limiting a particular wild animal community's activity (as Donaldson and Kymlicka do), then, subject to this constraint, it may still be the case that that community is capable of achieving a sufficiently high communal flourishing, or even to optimise communal flourishing. If this is true, then we obtain a principle that is quite friendly to Donaldson and Kymlicka's position.

However, it seems to us that, in the human case, we would not be content with this. Instead, we would probably adopt a stronger principle, according to which, if a community is *not* able to protect its members from permanent catastrophes (e.g. a protracted attempt at genocide), then such a community does not possess the competence required for sovereignty. In the wild animal case, this principle implies that if a wild animal community is incapable of dealing effectively with massive predation threats, then such a community does *not* possess the competence required for sovereignty. In other words, according to this principle, the ability to protect its members from massive predation is a *necessary* condition for a wild animal community to count as competent. If we adopt this principle, however, we must conclude that at least some wild animal communities do not possess the competence required for sovereignty.

Against this stronger principle, Donaldson and Kymlicka would argue that we should not set the bar for competence too high, since many human societies risk otherwise to fail the test. In their reply to Horta and Cochrane, they write: '[R]ates of murder and other violent crimes differ enormously from country to country: they are almost 100 times higher in some Latin American and African countries than in some East Asian countries. Yet we would not permit Japan to declare Honduras to be a failed state and establish a protectorate that provides better individual safety and security'. 17 We find this reply problematic. First, while it is true that the failure of the competence test is a matter of degree, it is also true that degrees matter. In this sense, Donaldson and Kymlicka fail to acknowledge that the amount of suffering, violence and death is generally much higher in wild animal communities than in human societies, as the examples given above show.¹⁸ Second, in the human case, we normally have reasons to think that the societies affected by high levels of violent crimes or deaths may adopt, in reasonable times, more effective policies to deal with those problems (perhaps with some appropriate economic aid or incentives from the international community). In other words, we have reasons to think that such states are not bound to suffer a permanent catastrophe, unless other states intervene. This contrasts with the animal case. Typically, we have no reason to think that wild animal communities may develop more effective systems to deal with massive predation. For instance, we have no reason to think that r-strategists will learn, in time, to protect their progeny more successfully. In fact, there is no need for them to do so; r-selection makes perfect sense from an evolutionary point of view and evolved precisely for this reason. The fact that such a strategy generates considerable amount of suffering and deaths is simply a reminder that the logic of fitness-maximisation does not always coincide with that of wellbeing-maximisation.

If this is true, then Donaldson and Kymlicka are in trouble. Indeed, they can no longer justify the adoption of a general policy of non-intervention in the wild by appeal to a sovereignty framework. Thus, if we still want to preserve a 'hands-off' approach to life in the wild, *consistent with a commitment to the existence of universal basic rights*, we need to find another way to justify it. One possibility consists in reconsidering the arguments against intervention offered in the literature. For reasons of space, we shall briefly consider five arguments: the discretionary argument, the flourishing argument, the ecocentric argument, the consequentialist argument, and the fallibility argument. ^{19,20}

2.3 Alternative Arguments in Favour of Non-Intervention

The discretionary argument holds that, in the human as in the animal case, providing assistance to individuals in need as a result of misfortune is not obligatory, but merely permissible.²¹ This argument can be formulated in different ways. In the animal case, one possibility consists in arguing that, insofar as predators are not moral agents, they do not violate the preys' right to life when they engage in predatory behaviour. This explains why we allegedly have no positive obligations to intervene in the wild.²²

The flourishing argument holds that the flourishing of wild animals requires that they be able to act in ways that fulfil their particular nature, as shaped by evolution through processes of predation. By eliminating predation, human intervention would preclude the possibility of flourishing for both predators and preys. Thus, to the extent that we ought to care about wild animals' flourishing, we also ought to avoid intervening in wild animals' lives. ²³

The ecocentric argument evaluates predation in light of the principle that '[a] thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise'. Assessed in this light, predation is actually beneficial, since it generally contributes to preserving the health of the ecosystem, which is the ultimate measure of value. As such, it should not be prevented, but rather protected and even encouraged. ²⁵

The consequentialist argument holds that a general policy of non-intervention is appropriate because it maximises the aggregate wellbeing of all the sentient beings involved. Indeed, although predation is a source of sufferance for the animals preyed upon, it is also a positive contributor to aggregate value, for it both secures the predators' wellbeing²⁶ and prevents the overpopulation and subsequent slow death by disease or starvation of the individual members of preyed upon species.²⁷

Finally, the fallibility argument starts from the assumption that duties of assistance have to be weighed against duties not to cause greater harm. By considering the limited knowledge about how to intervene effectively in the wild that we currently possess as well as the high risk of unintentionally causing greater harm, due to the astonishing complexity of natural systems, the argument concludes that it is generally preferable not to intervene in wild animals' lives.²⁸

Like Donaldson and Kymlicka, we believe that both the discretionary and the flourishing arguments suffer from irremediable flaws. The former preserves a general policy of non-intervention 'only by dramatically weakening our moral obligation to aid human in distress'.²⁹ The latter comes close to sanctifying natural processes shaped by evolution, including predatory behaviour, as inherently good and deserving preservation. In fact, while predation may have positive aggregate effects on communal flourishing, it is hard to see it as beneficial for the individual preys that loose their lives or greatly suffer as a result of it. As for the ecocentric argument, its holistic character, according to which the relative value of each component of the ecosystem depends on its contribution to the 'integrity, beauty and stability' of the biotic community, seems incompatible with the recognition of inviolable basic rights for all animals. Indeed, the ecocentric argument makes it permissible (if not obligatory) to violate individual rights for the sake of the greater good of the ecosystem. Thus, if we want to remain close to the AR tradition, we need to find elsewhere the justification for non-intervention. To the extent that it reaches similar conclusion while retaining the focus on individuals as

units of value, the consequentialist argument constitutes an improvement over the ecocentric argument. However, it remains unsatisfactory for several reasons. First, it is unclear whether the predators' wellbeing should count in the determination of the aggregate value of a state of affairs. After all, some consequentialists argue that, in the human case, we should not include in the aggregate calculus the satisfaction of serial killers' preferences. Second, sacrificing individual preys for the greater good of the majority seems to be a way of treating the former as mere means, in contrast with the central commitment of the AR approach. Finally, and most importantly, while it is true that predation may contribute to avoiding the catastrophic consequences of an unchecked demographic growth for the members of preyed upon species, it is also true that there might be other ways to avoid such consequences, ways that are compatible with the respect and protection of the preys' basic right to life and, more generally, with the main tenets of the AR approach. The several reasons. First, it is also true that there might be other ways to avoid such consequences, ways that are compatible with the respect and protection of the preys' basic right to life and, more generally, with the main tenets of the AR approach.

This leaves us with the fallibility argument. Examined by reference to the last objection, the fallibility argument is precisely a way to acknowledge that, although it might be possible to realise the 'benefits' of predation *without* predation and in a way that respects and protects the preys' basic rights, we currently do not know how to do that in an effective manner. For the time being, we should therefore avoid systematic interventions in the wild. This does not mean, however, that the fallibility argument has, at present, no practical implications whatsoever. For one, it allows for non-systematic interventions in nature aimed at assisting animals in need, whose consequences can be ascertained with relative certainty. In addition, it recommends suspending programs of predators' repopulation in ecologically 'stable' regions in which their presence is already scarce. Finally, it gives us a reason to start thinking about possible future scenarios involving human interventions and, more controversially, to develop small scale-projects aimed at testing different kinds of interventions, in controlled settings.

Donaldson and Kymlicka recognise the force of the fallibility argument and seem to accept it as a supplementary reason in favour of a general policy of non-intervention in the wild. At the same time, they are sceptical about its scope and argue that the argument ultimately misses the target. In particular, following Palmer, Donaldson and Kymlicka claim that the fallibility argument generates counter-intuitive results, since it entails that, if we had more reliable information and adequate resources, then, *ceteris paribus*, it would be *obligatory* for us to intervene in the wild in order to prevent (or at least reduce) predatory behaviour. This is in contrast with the general spirit of the laissez-faire intuition – a spirit which, despite their rejection of other aspects of the laissez-faire intuition, they want to preserve – according to which systematic interventions in the wild are non-obligatory (if not impermissible) *'in principle'*, rather than merely contingently. The same time for the fall of the same time that the fallibility argument generates counter-intuitive results, since it entails that, if we had more reliable information and adequate resources, then, *ceteris paribus*, it would be *obligatory* for us to intervene in the wild in order to prevent (or at least reduce) predatory behaviour.

We think, however, that this objection can be resisted. Indeed, it seems to us that, given the limits of the arguments examined so far, it is precisely the spirit of the lais-sez-faire intuition that must be rejected. This involves recognising, first, that if all animals have inviolable basic rights and if protecting such rights generates *prima facie* duties of assistance on our part, then we have a *prima facie* duty of assistance towards wild animals victims of predation; and, second, that although such a duty is, at present, overridden by other *prima facie* duties, most notably, the duty not to cause greater harm, things may change in the future. Our knowledge and resources may improve in such a way as to significantly reduce the risk of causing greater harm. In

such case, the *prima facie* duty of assistance might very well generate positive obligations to intervene in the wild.

As a matter of fact, we think we can even offer some sort of debunking explanation as to why AR theorists widely accept the principled understanding of the laissez-faire intuition. It is only because, historically, we have never been in a secure epistemic and practical position to intervene effectively that many AR advocates have developed the belief that to act thus is 'in principle' non-obligatory (or impermissible). However, reflection shows that this belief is mistaken. Our duty of non-intervention in the wild is merely contingent. Were our knowledge and resources to increase in the future, then, *ceteris paribus*, our obligations towards wild animals would take a different, and more demanding, shape.

2.4 Is Human Intervention to Prevent Predation 'in Principle' Impermissible?

Suppose that our discussion in Sub-section 2.2 is only partially correct. That is, suppose that, although massive predation does configure a state of permanent catastrophe, wild animal communities still count as possessing the competence required for sovereignty. In this case, the sovereignty framework remains theoretically in place. At the same time, at least one of the conditions for legitimate human intervention is satisfied, i.e. the occurrence of a catastrophe. Leaving considerations of fallibility aside, should we conclude that human interventions to prevent predation are permissible (if not obligatory) in those circumstances? Donaldson and Kymlicka would reply negatively. According to them, interventions to prevent predation can only be achieved by *destroying sovereignty*. Thus, such interventions would violate the second condition for legitimate interventions mentioned above.

In this sub-section, we want to challenge this reply. More specifically, we want to argue that Donaldson and Kymlicka's sovereignty account fails to provide us with the *ultimate* justification for non-intervention. Our starting point is provided by the following considerations. As we have seen, Donaldson and Kymlicka hold that sovereignty is a tool for protecting the community members' interest in self-determination against the injustice of being ruled by an alien power. In order for it to be an *appropriate* tool, however, two further requirements must be satisfied. First, the individuals must have a *legitimate* claim to self-determination. Second, sovereignty must be the best tool *in principle* for protecting their interest in self-determination. We believe that doubts can be raised about both of these requirements.

Before proceeding, it is important to understand why Donaldson and Kymlicka are forced to accept the second requirement. To do this, we need to go back to their critique of the fallibility argument. As we have seen, according to them, the problem with the fallibility argument is that it entails that, if we had more reliable information, then, *ceteris paribus*, we would have an obligation to intervene in the wild and prevent predation. Donaldson and Kymlicka take this to be a problematic implication. In particular, they take issue with the merely contingent nature of the current obligation to not intervene, generated by the fallibility argument. This suggests that, insofar as they see their account as improving on the fallibility argument, they see the sovereignty framework as providing a principled, non-contingent justification in favour of non-intervention. The question, then, arises as to whether this is really the case.

Let us proceed in order and consider the first requirement. As we have seen, according to Donaldson and Kymlicka, wild animal communities may include both predators and preys. ³⁶ The problem is that the former individuals use their freedom to *systematically* kill other, more vulnerable members of the community. Given this, it is hard to see why we should see their interest in self-determination as generating a moral duty of non-interference for humans in a position to intervene. Put differently, it does not seem that interventions aimed at preventing these killings would constitute a form of injustice towards the aggressors. As such, they should not be seen as an *ille-gitimate* violation of the community's sovereignty, even if such interventions resulted in the destruction of the community's pre-existing sovereignty.

One may object that, since the predators' survival depends on their ability to kill other animals, then intervening to prevent such killings implies condemning those predators to death. If so, such interventions constitute an unjust violation of the predators' own right to life.³⁷ There are two problems with this objection. The first is that it generates counter-intuitive results in the human case. For instance, suppose that an individual's survival from a rare disease depended on the possibility of receiving a series of organ transplants. Suppose also that, given the shortage of available organs, her only chance to receive these transplants were to kill a number of other individuals. Obviously, in this case, we would not consider intervening so as to prevent such killings a form of injustice towards the sick individual or a violation of her right to life. If this is true in the human case, however, it remains true also in the animal case. The second problem with the previous objection is that it fails to recognise that there might be other ways to guarantee the predators' survival, besides letting them free to kill other animals. For instance, one possibility would be to create natural sanctuaries, where predators would be fed with artificially created meat (perhaps by recreating situations analogous to those involving predatory behaviour). 38 The fact that we currently do not have the knowledge, the political will and the resources to create an environment of this kind (especially without the very serious risk of causing greater harm) is, at present, a decisive consideration against the creation of such sanctuaries. Crucially, however, this is a different consideration from the one adduced by Donaldson and Kymlicka.

Let us consider, now, the interest in self-determination of the victims of predation. To the extent that the prey's flourishing is not tied to the killings of other members of the community, their interest appears to carry significant moral weight. Is the attribution of sovereign rights to a community including their predators the best way to protect the preys' interest in self-determination? More specifically, is it the best way in principle to protect their interest? In the human case, there would be an obvious alternative: the creation, by secession, of a new sovereign community - one that excludes the systematic perpetrators of injustice. The problem is that wild animal groups do not have the capacity to claim or enforce secession. Secession is simply impossible for them. As we have seen, however, there exists a sufficiently close alternative to secession: humans could intervene in the wild and separate predators from preys, e.g. through the creation of natural sanctuaries. This would of course destroy the sovereignty of the original community. However, if we consider the preys' interest in selfdetermination and if sovereignty is only a tool for protecting such an interest, then, provided that the creation of such sanctuaries were able to achieve the moral purpose of sovereignty more effectively, it would be legitimate by Donaldson and Kymlicka's own lights.

However, Donaldson and Kymlicka are sceptical. They argue that the creation of natural sanctuaries would make wild animals dependent on humans in a way that is morally unacceptable, since such a dependency would be (i) induced and (ii) exercised in areas where wild animals are 'capable of exercising meaningful autonomy'. ³⁹ We believe that both these claims can be challenged. In response to (i), we can simply notice two things, to which Donaldson and Kymlicka would not object. The first is that dependency is an important feature of both humans' and other animals' lives. The second is that dependency is not intrinsically bad. ⁴⁰ In fact, dependency is bad only to the extent that it hinders the individual's capacity for autonomy. This suggests that 'induced' dependency is not intrinsically worse than 'natural' dependency. If so, replacing the mutual dependencies existing in nature between wild animals with human-animal dependencies would not be intrinsically objectionable. The only requirement is that this intervention be realised in such a way as to respect and promote wild animals' capacity for agency. The crux of the issue is whether this requirement can be satisfied.

This brings us to Donaldson and Kymlicka's claim (ii). Donaldson and Kymlicka would object that creating dependency in areas where wild animals are capable of acting autonomously is not a way to protect their capacity for autonomy. To this, we can respond in two ways. First, creating sanctuaries in order to isolate preys from predators would protect an important pre-condition for the preys' exercise of autonomy in any area of their lives, namely, remaining alive or being able to function. It would also assure that preys live in a minimally secure environment. In fact, this is another condition that can be regarded as essential for autonomy. The reason is that it is hard to see how one could exercise the kind of autonomy that is instrumental for flourishing in an environment so unsafe that one could only focus on mere survival. Second, there are no principled reasons to think that the creation of such sanctuaries would prevent wild animals from effectively exercising their autonomy. Consider the reasons to think the opposite. One is that the creation of natural sanctuaries would involve separating all animal species from each other into 'individual compartments', in a way that would prevent meaningful interactions between them. 41 However, we do not see why this would be true. Indeed, insofar as wild animals are not in a predator-prey relationship, such sanctuaries could be home to several species. Another reason is that natural sanctuaries would require the establishment of fixed barriers, which would drastically limit the animals' freedom and mobility. Our reply is that the existence of fixed barriers is not necessarily an obstacle to the exercise of meaningful autonomy. After all, we do not consider the existence of fixed borders a decisive obstacle to the exercise of autonomy in the human case. Yet another reason offered against the creation of sanctuaries is that they would require too close a relationship between humans and wild animals, mirroring that between humans and domesticated animals. The problem is that, since 'wild animals have many characteristics that are incompatible with human management of their lives', models of domesticated agency cannot be applied to wild animals. 42 In response, we maintain that the creation of natural sanctuaries would not necessarily require a proximate and visible human presence or the instauration of a relationship of trust and cooperation of the kind existing between humans and domesticated animals. In fact, we can imagine ways of making human management rather minimal and almost invisible. In other words, we can imagine the adoption of models of dependent agency different from those applied with domesticated animals.

If these remarks are correct, then all the principled objections against the creation of natural sanctuaries can be rebutted. At this point, it is important to reiterate that the goal of our article is not to recommend the elaboration of a program of massive intervention in the wild, aimed at creating natural sanctuaries so as to end predation. 43 In fact, we agree with Donaldson and Kymlicka that the adoption of a general policy of non-intervention is currently required. Our disagreement concerns the grounds for non-intervention. In our view, such a general policy is justified not because massive interventions would destroy the sovereignty of multi-species communities, such as those envisaged by Donaldson and Kymlicka, but rather because we currently have little or no clue as to how to intervene effectively in nature, nor sufficient resources (let alone the appropriate political will) to conceive, create, and maintain natural sanctuaries of the sort envisaged above. The scale and the scope of the interventions required to separate predators from preys would indeed be enormous. Thus, considering our limitations and the related risk of generating catastrophic cascade effects, we currently have decisive reason to avoid any such interventions.

Despite the agreement at the practical level, the previous discussion remains important because it shows that Donaldson and Kymlicka's sovereignty framework does not play a fundamental justificatory role. At bottom, the ultimate reason for non-intervening in the wild is that, at present, this is not the all-things-considered best way to protect wild animals' interest in self-determination, as a means for individual and communal flourishing. 44 Once again, however, things may change in the future. Our knowledge and resources may increase in a way that will make it possible to intervene in nature so as to protect wild animals' interest in autonomy in a more effective way.⁴⁵ If so, the justification for the current policy of non-intervention is merely contingent.

3. The Problem of Predation With Respect to Liminal Animals

3.1 Donaldson and Kymlicka's Denizenship Model

In this section, we want to discuss Donaldson and Kymlicka's account of our duties towards liminal animals. These are animals 'who have adapted to life amongst humans, without being under the direct care of humans'. 46 The category comprises many animals living in, or near, human cities, including, e.g., rats, squirrels, gulls, feral cats and raccoons.

Liminal animals have typically been ignored by traditional ARTs. For this reason, Donaldson and Kymlicka's elaboration of a framework for thinking about our duties towards them can be seen as one of their most innovative contributions. However, in the rest of this section we shall try to show that their account of our duties towards liminal animals is vulnerable to objections similar to those affecting their account of our duties towards wild animals. Before examining these objections, we shall begin by presenting Donaldson and Kymlicka's account in more detail.

The starting point of their analysis is the observation that liminal animals' presence in, and adaptation to, human settlements have created 'forms of dependency and vulnerability that distinguish them from both domesticated animals and truly wild animals'.47 This raises the following question: Given the specific features of liminal animals' presence in human communities, how ought we to conceive our relationship with them? Donaldson and Kymlicka consider, and reject, two options: (i) returning them to the wild; or (ii) offering them co-citizenship. Against (i), they claim that, for most liminal animals, 'there is no other place where they (qua individuals) belong, and so we cannot legitimately exclude them'. 48 Not only would returning them to the wild be unfeasible, but it would also be too costly, in terms of required coercion and exposure to likely death. 49 Against (ii), they argue that co-citizenship for liminal animals is neither feasible nor desirable. It is not feasible because (most) liminal animals do not satisfy the conditions for citizenship. Indeed, '[c]itizenship presupposes a level of sociability that makes possible reciprocal engagement, rule-learning behaviour and socialization'. 50 It requires an ability 'to have physically proximate and socially meaningful interactions', characterised by trust and cooperation.⁵¹ However, most liminal animals do not satisfy these conditions. Citizenship is also undesirable because liminal animals do not want to share the responsibilities that come with co-citizenship. This is evidenced by the fact that 'they do not seek our company or our cooperation'. 52 Trying to domesticate them would also be inappropriate, since it would involve gross violations of their basic rights.

In light of these considerations, Donaldson and Kymlicka argue that the best model of just relationships between humans and liminal animals is the one of denizenship. In the human case, there are two forms of denizenship: (1) opt-out denizenship and (2) migrant denizenship. The Amish community in the US provides a good example of the first form of denizenship, whereas illegal, temporary, or long-term migrants provide an example of the second form. According to Donaldson and Kymlicka, there are important similarities between human denizens and liminal animals, which justify using the model of denizenship in both cases. Indeed, human denizens and liminal animals face the same dynamics of invisibility and exclusion. Importantly, in both cases, we have to recognise that the simplistic 'in or out' options are inadequate. Considering this, denizenship appears to be the appropriate model. First, it secures the right to residency; second, it involves a reciprocal reduction in rights and responsibilities, to accommodate the desire of some groups to have a weaker relationship than that of full citizenship; third, it includes anti-stigma safeguards, i.e. a special responsibility from the state to ensure that denizens are not stigmatised, subjected to exploitation or treated as second-class individuals.

3.2 The Significance of the Disanalogies Between Human Denizens and Liminal Animals

We agree with Donaldson and Kymlicka that there are some important analogies between liminal animals and human denizens. From now on, however, we want to concentrate on the disanalogies that exist between the two groups.

If we compare liminal animals to migrant denizens, we can immediately notice two differences. First, migrant denizens are typically engaged in a process of active and voluntary *contribution* to society. By contrast, the contribution of liminal animals to human society is fairly minimal, if not inexistent. Second, even when they do not actively contribute, migrant denizens have the capacity to develop relationships of trust and physical proximity with fellow humans. Once again, this contrasts with liminal animals, who do not possess the required capacities or inclinations for having this sort of relationships. In this sense, the case of liminal animals is more similar to the case of opt-out denizens. Arguably, opt-out denizens do not really contribute to the project of

the rest of the society. In addition, they do not seek to establish meaningful relationships with fellow citizens outside their own community. Their lifestyle involves an element of free-riding as well as a desire to isolate themselves from the rest of the society. Once again, however, despite the superficial similarities, there are also two crucial differences between opt-our denizens and liminal animals. First, opt-out denizens are capable of *complying* with the basic social norms of the society. Second, there are legitimate ways for the rest of the society to try and ensure that the number of opt-out denizens does not become excessive, such that it imposes disproportionate (and unfair) costs on other citizens. Neither condition is satisfied in the case of liminal animals. In what follows, we shall try to show that these disanalogies represent a significant problem for the viability of Donaldson and Kymlicka's framework.

Consider the capacity to comply with basic social norms. Unlike human denizens, some liminal animals are actively engaged in a predator-prey relationship with other liminal animals. As Donaldson and Kymlicka recognise, in the human case this would certainly be considered a systematic violation of the basic norms of society. ⁵⁴ By contrast, they claim that such a relationship is acceptable in the case of liminal animals and that states have no obligations to intervene so as to prevent such instances of predation within their society. ⁵⁵ In order to justify a policy of non-intervention, Donaldson and Kymlicka appeal to the idea that, in the animal as well as in the human case, we need to find the right balance between liberty of choice and movement, on the one hand, and risks to life and safety, on the other hand – a balance that does not generate excessive costs in terms of autonomy. For some liminal animals, unlike for humans, this requires living with the risk of mortal attacks from fellow denizens.

Once again, however, we think that, if we distinguish predators from preys, this argument can be challenged. Consider two questions that can be asked with respect to predators. First, why should we want to attribute denizenship to them if, in addition to their unwillingness to contribute to society and to establish meaningful relationships with other members, they are simply unable to comply with our basic social norms (for instance, the norm not to kill other animal denizens or citizens)? The answer is not obvious. Suppose for the sake of argument that we did want to attribute denizenship to them. The second question is: Why should their interest in freedom of choice and movement count as a good moral reason for humans to refrain from intervening? Here again, it seems to us that a just society is not committed to protecting the predators' freedom to perpetrate their killings on the ground that their autonomy would otherwise be violated. In the human case, we would clearly not hesitate to restrict the liberty of denizens (or citizens) who violate the rights and liberties of others, e.g. serial killers. Moreover, we would do so even if this came at the price of reducing their autonomy or liberty (e.g. jail involves drastic reductions of liberty).

Perhaps, the idea is that we should not intervene because this would not be in the interest of the potential *victims* of predation. Donaldson and Kymlicka argue, indeed, that their approach is based 'on the assumptions that liminal animals (a) tend to avoid humans; (b) would prefer the risk of predation to confinement and other severe restrictions of liberty; and (c) have considerable competence for negotiating the risks of their environment, a competence that requires liberty (and risk) to develop.' ⁵⁶ We believe, however, that all these assumptions can be challenged.

As far as (c) is concerned, most of the considerations presented in the context of wild animals apply, *mutatis mutandis*, to liminal animals. To give just one example,

Donaldson and Kymlicka estimate that one hundred million birds die every year in the USA as a result of cat predation.⁵⁷ Arguably, this can be seen as a counter-example to their claim that liminal animals (birds, in this case) are competent in dealing with the risk of predation.

Consider now (a) and (b). The idea underlying these assumptions is that intervention would involve an unacceptable reduction of the group of potential victims' *autonomy*. Once again, however, it is not clear whether, and why, *all* types of intervention would have these effects. For instance, suppose we intervened to isolate house mice from their predators (e.g. feral cats). Once this is done (e.g. by creating sanctuaries for cats and implementing all sorts of regulations), we could leave house mice free to move and to choose as they want. Our intervention would simply reduce the risk to life and security that they face, without limiting their autonomy in any morally problematic way.⁵⁸

Donaldson and Kymlicka would reply by saying that, insofar as the potential victims are opt-out denizens, they themselves have an aversion to human interventions, including the most autonomy-friendly ones. After all, they have decided to opt-out. But if they do not want us to intervene, then our interventions are illegitimate. In fact, many liberal theorists think that this is precisely why, in the human case, the state's right to intervene in opt-out communities' affairs is more limited. There are two problems with this reply. The first is that the denizens' aversion to intervention seems to loose moral weight when fundamental rights are at stake. Indeed, there are good reasons to think that it would be morally permissible for a liberal state to intervene within an opt-out denizens' community in cases of systematic violent behaviours and killings involving its members. The second is that there exists an important difference between human and animal opt-out denizens. If the former wish to receive larger protections or benefits, they have a meaningful alternative: they can simply become citizens. Crucially, this is not a genuine option for most liminal animals, for they do not really have the capacities required for citizenship. So, their behaviour may not be representative of a genuine preference for being exposed to the risk of death. Put differently, it is difficult to argue on the basis of their observed behaviour that, if we could effectively intervene to protect them from this risk without significantly violating their autonomy, they would still prefer (and it would still be in their interest) to face the challenges of predation.

At this point, one might ague that, even if we could isolate all preys from their predators without violating the preys' autonomy, it would still not be a requirement of justice to do so, because it would be too costly for human citizens. In other words, although human intervention would not violate the 'reciprocity principle' of fair denizenship on the side of liminal animals (by compromising their autonomy), it would violate the fair terms of denizenship on the human side. The reason is that it would put an excessive burden on humans, relative to the benefits that we can derive from our relation with liminal animals. This seems true. However, it should be noted that this line of thought still does not address the question of why we should attribute denizenship rights to predators (in fact, to any liminal animal incapable of complying with the basic social norms).

We want to conclude by considering the second disanalogy between opt-out denizens and liminal animals, concerning the issue of 'population control'. As we have seen, in the human case if the number of opt-out denizens increases disproportionately, then the rest of society can envisage at least two acceptable forms of interventions in order to protect itself from excessive burdens. First, the society can create incentives for limiting their number, e.g. by encouraging political participation and good citizenship via education policies. Second, if these measures fail, the society can either demand that they remain, or return, to the full citizenship status or at least that they assume more responsibilities. In the case of liminal animals, however, we cannot adopt these strategies. On the one hand, liminal animals do not possess the capacity to deliberately control their population. On the other hand, we cannot oblige them to become citizens or to contribute more, since this would require gross violations of their basic rights.

What can we do then? Donaldson and Kymlicka offer a number of suggestions. They claim, however, that '[t]he most effective measures for controlling liminal animal populations are those that limit food sources and nesting sites, and provide habitat networks and corridors that are sufficiently large to allow natural systems of population control to emerge (e.g. population dispersal, competition, predation)'. ⁵⁹ We find this proposal problematic. It would clearly be unacceptable in the human case. Indeed, we would not let human denizens starve or create conditions that increase the likelihood of their death. Yet, these measures appear equally problematic when restricted to the liminal animal case. The reason is that they cannot be considered as *accidental* risks that liminal animals accept in order to benefit from the denizenship status. On the contrary, these measures seem to constitute *deliberate* basic rights violations. ⁶⁰

In fact, it seems to us that, if these measures can be justified at all, it is only for consequentialist reasons. Clearly, however, these measures do not fit either the political model envisaged by Donaldson and Kymlicka or a commitment to universal basic rights. In the end, it seems to us that the ultimate justification for a general policy of non-intervention in predator-prey relationships between liminal animals is that we currently lack knowledge and resources to do otherwise. This is of course nothing but the fallibility argument, with which the reader is by now familiar. If this is true, however, then Donaldson and Kymlicka's denizenship model is not the right framework for thinking about our duties towards liminal animals. ⁶¹

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NOTES

- 1 Sue Donaldson & Will Kymlicka, Zoopolis: A Political Theory of Animal Rights (Oxford: Oxford University Press, 2011).
- 2 In what follows, we shall mainly focus on the problem of predation.
- 3 Throughout the article, we will take for granted that this commitment is justified. For a summary of the reasons in favour of the recognition of universal basic rights, see Donaldson & Kymlicka 2011 op. cit., chapter 2.
- 4 See Clare Palmer, Animal Ethics in Context (New York: Columbia University Press, 2010), p. 68. Palmer distinguishes three main variations of the laissez-faire intuition. According to the first, interventions in the wild are always (prima facie) impermissible. According to the second, there is no (prima facie) duty to

intervene in the wild, but interventions are (sometimes or always) permissible. According to the third, less common variation, there is no (*prima facie*) duty to intervene in the wild, but interventions are (sometimes or always) permissible *and*, in some circumstances, even obligatory. Palmer herself adheres to a specific version (the 'No-contact' laissez-faire intuition) of the third variation.

- 5 Donaldson & Kymlicka 2011 op. cit., p. 174.
- 6 Sue Donaldson & Will Kymlicka, 'A defense of animal citizens and sovereigns', Law, Ethics and Philosophy, 1 (2013): 143–160, at p. 154.
- 7 We shall come back to, and discuss in more detail, Donaldson and Kymlicka's criterion for individuating sovereign communities in Sub-section 2.4.
- 8 Donaldson & Kymlicka 2011 op. cit., p. 176.
- 9 Donaldson & Kymlicka 2011 op. cit., p. 176.
- 10 See, for instance, Yew-Kwang Ng, 'Towards welfare biology: Evolutionary economics of animal consciousness and suffering', Biology and Philosophy 10 (1995): 255–285; Brian Tomasik, 'The predominance of wild-animal suffering over happiness: An open problem', Essays on Reducing Suffering 14/10 (2009). Available at http://reducing-suffering.org/wp-content/uploads/2014/10/wild-animals.pdf; and Oscar Horta, 'Zoopolis, intervention, and the state of nature', Law, Ethics and Philosophy 1 (2013): 113–125.
- 11 For instance, Horta reports that the Atlantic Cod 'can lay from a few thousand to several million eggs'. See Oscar Horta, 'Debunking the idyllic view of natural processes: Population dynamics and suffering in the wild', Télos 17 (2010): 73–88, at p. 81.
- 12 Tim Caro, Cheetahs of the Serengeti Plains: Group Living in an Asocial Species (Chicago, IL: University of Chicago Press, 1994), cited in J. Kingdon et al., Mammals of Africa, Vol. 6 (London: Bloomsbury, 2013) p. 367.
- 13 See Craig Stanford et al., 'Patterns of predation by chimpanzees on red colobus monkeys in Gombe National Park, Tanzania, 1982-1991', American Journal of Physical Anthropology 94 (1994): 213–228; and Craig Stanford, Chimpanzee and Red Colobus: The Ecology of Predator and Prey (Cambridge, MA: Harvard University Press, 1998).
- 14 This is not to deny that predation may *also* have beneficial effects, e.g. for the other members of the wild animal community or for the entire ecosystem. (See also endnote 25.) When assessed in terms of individual sufferings and deaths, however, the impact of predation seems genuinely catastrophic.
- 15 Donaldson & Kymlicka 2013 op. cit., p. 159.
- 16 See Donaldson & Kymlicka 2011 op. cit., p. 167.
- 17 Donaldson & Kymlicka 2013 op. cit., p. 158.
- 18 For lengthy discussions of suffering in nature, see Horta 2010, op. cit., 73-88; and Brian Tomasik, 'The importance of wild animal suffering', *Relations: Beyond Anthropocentrism* 3 (2015): 133–152.
- 19 The list is clearly not exhaustive. For instance, it does not include Rolston's 'natural selection argument' (see Holmes Rolston, III, Environmental Ethics: Values in and Duties to the Natural World (Philadelphia, PA: Temple University Press, 1988); and Holmes Rolston, III, 'Disvalues in Nature', The Monist 75 (1992): 250–278), Hettinger's 'aesthetic argument' (see Ned Hettinger, 'Animal beauty, ethics, and environmental preservation', Environmental Ethics 32 (2010): 115–134); and Hursthouse's 'virtue ethical argument' (see Rosalind Hursthouse, 'Virtue ethics and the treatment of animals' in T.L. Beauchamp and R.G. Frey (eds) The Oxford Handbook of Animal Ethics (New York: Oxford University Press, 2011), pp. 119–143). The main reason for not considering these arguments is that, like the ecocentric argument, they are not compatible with the idea that all animals have inviolable basic rights rights which cannot be violated for the sake of other (prudential, aesthetic or aretaic) values.
- 20 Donaldson and Kymlicka discuss only three of these arguments, namely, the discretionary, the fallibility and the flourishing arguments. See Donaldson & Kymlicka 2011 op. cit., pp. 158–167.
- 21 See Gary Francione, Introduction to Animal Rights: Your Child or the Dog? (Philadelphia, PA: Temple University Press, 2000), p. 185.
- 22 See Tom Regan, The Case for Animal Rights (Berkeley, CA: University of California Press, 1983).
- 23 See Jennifer Everett, 'Environmental ethics, animal welfarism, and the problem of predation: A Bambi lover's respect for nature', *Ethics and the Environment* 6,1 (2001): 54–55.
- 24 Aldo Leopold, Sand County Almanac (New York: Oxford University Press, 1949), pp. 224–225, cited in Baird J. Callicott, 'Animal liberation: A triangular affair', Environmental Ethics 2 (1980): 311–338, at p. 331.
- 25 For an example of the ecological benefits that predation may have, see William Ripple & Robert Beschta, 'Trophic cascades in Yellowstone: The first 15 years after wolf reintroduction', *Biological Conservation* 145 (2012): 205–213.

- 26 See, on this point, Rolston III 1992, op. cit.
- 27 See Aaron Simmons, 'Animals, predators, the right to life, and the duty to save lives', *Ethics and the Environment* 14,1 (2009): 15–27, especially pp. 22-25.
- 28 See, for instance, Peter Singer, Animal Liberation (New York: Random House, 1975), p. 226; Steve Sapontzis, Morals, Reason, and Animals (Philadelphia, PA: Temple University Press, 1987); Simmons 2009, op. cit., p. 23; and Jeff McMahan, 'The moral problem of predation' in A. Chignell et al. (eds) Philosophy Comes to Dinner (New York: Routledge, 2016), p. 274.
- 29 Donaldson & Kymlicka 2011 op. cit., p. 162.
- 30 See, for instance, John Harsanyi, 'Morality and the theory of rational behavior', Social Research 44 (1977), 623–656; and Richard Brandt, A Theory of the Right and the Good (Oxford: Oxford University Press, 1979).
- 31 For some suggestions, see McMahan 2015 op. cit., pp. 274-276.
- 32 The interventions that the fallibility argument would sanction as permissible are of the kind discussed by Donaldson and Kymlicka in 2011 op. cit., pp. 183–185.
- 33 On this point, see McMahan 2015, op. cit., p. 275.
- 34 See Donaldson & Kymlicka 2011 op. cit., p. 164.
- 35 Despite their differences, a principled scepticism about the existence of a (*prima facie*) duty to provide *systematic* assistance to wild animals in need is shared by all the versions of the laissez-faire intuition distinguished by Palmer.
- 36 See Donaldson & Kymlicka 2013, op. cit., especially pp. 151–154. Donaldson and Kymlicka explain: 'Ecology can help determine the relevant territory of sovereign animal communities [...], because animals within the boundaries of these territorial regions have a common interest in protecting this habitat from external threats. While the direct relations between different wild animals in a particular habitat may be antagonistic (e.g. between predator and prey), they are all dependent on the same habitat, and so share an interest in having sovereignty rights accorded in a way that would protect these territorially-specific modes of self-organisation from outside invasion, colonisation, or cross-border impacts. We argue that according sovereignty rights to multi-species habitats would indeed serve this moral purpose.'
- 37 Thanks to Valéry Giroux for raising this objection and for pointing out its counter-intuitive implications.
- 38 Another possibility would be to implement programs of genetic interventions aimed at transforming currently carnivore species into herbivore ones (see Jeff McMahan, 'The meat eaters', *The New York Times* 'Opinator', 19 September 2010. Available at: http://opinionator.blogs.nytimes.com/2010/09/19/the-meat-eaters/). For lack of space, however, in what follows we shall focus only on natural sanctuaries.
- 39 Donaldson & Kymlicka 2013 op. cit., p. 155.
- 40 See also Horta 2013, op. cit., p. 117.
- 41 Donaldson & Kymlicka 2013 op. cit., p. 156.
- 42 Donaldson & Kymlicka 2013 op. cit., p. 156.
- 43 The advancement of technology may, in the future, generate further possibilities. For instance, we can imagine the creation of monitoring systems that would allow us to conduct momentary interventions in the wild aimed at preventing predatory behaviour.
- 44 An anonymous referee has pointed out that Donaldson and Kymlicka's sovereignty framework is not supposed to protect wild animals' interest in autonomy only from ignorant, yet benevolent, interventions, but also from informed, yet *malevolent*, interventions. If this is the case, then it seems that there is a *further* reason for adopting Donaldson and Kymlicka's sovereignty framework, which is not captured by the fallibility argument. It is certainly true that, historically, interventions in human and wild animal communities have often been ill intentioned and finalised at exploiting, rather than benefiting, such communities. But defenders of the fallibility argument can recognise this. Not just, they can also consistently envisage measures aimed at protecting wild animals against such interventions, including (e.g.) forms of political representation. After all, malevolent interventions constitute a clear violation of the (*prima facie*) duty to assist wild animals in need. Put differently, when the fallibility argument is tied to the recognition that wild animals have basic fundamental rights, which should not only be respected but also positively protected, then its defenders can, and actually should, envisage ways to protect wild animals against malevolent interventions that violate such rights.
- 45 An anonymous referee has objected that our conception of autonomy is narrower than Donaldson and Kymlicka's, since, according to them, respecting wild animals' autonomy involves *also* respecting their aversion to human interventions. As a matter of fact, this conception of autonomy underlies the third condition for legitimate human interventions identified by Donaldson and Kymlicka (which we have

presented in Sub-section 2.1), according to which, in order for them to be legitimate, human interventions must not be rejected by wild animal communities. In their reply to Horta and Cochrane, Donaldson and Kymlicka greatly emphasise the importance of this condition by arguing that wild animals' resistance to human interventions and management is quite radical and cannot be easily discounted (see Donaldson & Kymlicka 2013 op. cit., pp. 156-157). It is thus legitimate to ask whether our argument is guilty of ignoring one important aspect of wild animals' autonomy, as conceived by Donaldson and Kymlicka. We want to respond by focusing specifically on the third condition for non-intervention. We wish to make three points against it. The first is that, contrary to what Donaldson and Kymlicka suggest, it would not be unjust to discount the aggressors' desires not to be interfered with, since these desires do not generate legitimate claims. The second is that, even if we consider only the victims' preferences, we still have reason to resist Donaldson and Kymlicka's reliance on wild animals' behaviour as a guide for inferring their preferences. Indeed, while it may be true that wild animals' behaviour shows that they prefer living away from, rather than under, human management, as Donaldson and Kymlicka maintain, it is not clear whether it also shows that they prefer undergoing death by predation over having their life preserved by human intervention. Yet, this is the real choice under discussion. The third, and most important, point is that it is possible to envisage scenarios where human interventions and management would not be incessant, invasive, and contrary to animal flourishing. In fact, our knowledge about how to intervene in the wild effectively and in the full interest of wild animals may considerably evolve in the future, so as to render human interventions less disruptive. In such cases, human interventions may very well respect autonomy, even as conceived by Donaldson and Kymlicka.

- 46 Donaldson & Kymlicka 2011 op. cit., p. 217.
- 47 Donaldson & Kymlicka 2011 op. cit., p. 217.
- 48 Donaldson & Kymlicka 2011 op. cit., p. 227.
- 49 Donaldson & Kymlicka 2011 op. cit., pp. 218, 228.
- 50 Donaldson & Kymlicka 2011 op. cit., p. 214.
- 51 Donaldson & Kymlicka 2011 op. cit., p. 214.
- 52 Donaldson & Kymlicka 2011 op. cit., p. 229.
- 53 Donaldson & Kymlicka 2011 op. cit., p. 233.
- 54 Donaldson and Kymlicka claim that '[i]n the case of human denizenship, we do not accept predation of some denizens by others, or the death of denizens by starvation or exposure. States have an obligation to protect all human residents, including denizens, from these basic threats of existence the status of denizenship does not involve waiving such protections'. See Donaldson & Kymlicka 2011 op. cit., p. 242.
- 55 Donaldson & Kymlicka 2011 op. cit., p. 242.
- 56 Donaldson & Kymlicka 2011 op. cit., p. 242.
- 57 Donaldson & Kymlicka 2011 op. cit., p. 247.
- 58 As a matter of fact, Donaldson and Kymlicka themselves suggest this as an example of legitimate intervention, which would have the additional effect of protecting songbirds from feral cats' predation. See Donaldson & Kymlicka 2011 op. cit., p. 247.
- 59 Donaldson & Kymlicka 2011 op. cit., p. 246.
- 60 An anonymous referee has suggested that Donaldson and Kymlicka's recommendations apply only in exceptional cases, e.g. when humans directly engage in activities that support increases in liminal animals' population. Two points can be made in response. First, even if it were true that resorting to predation and induced starvation to control liminal animals' population is an exceptional remedy, it would still be the case that such measures are incompatible with liminal animals' basic rights, as well as unacceptable in the human context. Second, Donaldson and Kymlicka's reference to the superior effectiveness of predation and starvation as means for population control suggests that they do not see these measures merely as extreme remedies to overpopulation. This impression is confirmed by the fact that Donaldson and Kymlicka refer to the predators' contribution to population control as one of the main ways in which such animals can benefit our communities. On this latter point, see Donaldson & Kymlicka 2011 op. cit., p. 249.
- 61 We would like to thank Valéry Giroux and Kristin Voigt for their very useful comments on earlier drafts of the article. We have also benefited from discussions with Sue Donaldson, Will Kymlicka, Greg Mikkelson, as well as the participants to the 2013 workshop on Zoopolis: A Political Theory of Animal Rights and to the 2014 workshop Au-delà de l'éthique humaine, both of which took place at the Université de Montréal. Finally, we are very grateful to two anonymous referees for raising important challenges and offering helpful suggestions on how to improve the article.