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Justice, Environment and Virtue in Martha Nussbaum's Capabilities Approach

An attempt to reconcile a capabilities-based account of justice with the concerns of the environmental movement through the application of virtue theory

Alexander William Newbrook

Abstract: Martha Nussbaum has produced a compelling account of how we might do justice to non-human animals, but in doing so she seems to have committed us to a project of 'policing nature', which appears to be at odds with many of the ethical commitments of the contemporary environmental movement. Intervening to make the circumstances of wild animals more conducive to their flourishing may be in accordance with the principles of Nussbaum's capabilities approach, but it is at odds with the concerns of environmentalists who wish to ensure the functioning of ecosystems and the survival of species as an ethical imperative. Superficially, at least, it appears that one cannot endorse the capabilities approach and simultaneously be an environmentalist.

In this thesis, I attempt to reconcile these two positions through appeal to the exercise of the virtues. While many of the premises of the capabilities approach and of the environmentalist accounts of ethics that I discuss are mutually exclusive, I suggest that an environmental virtue ethic, such as that described by Ronald Sandler, can justify many of the ethical stances that the environmentalist wishes us to adopt. In particular, characteristics of the virtue of humility can inform the agent as to why extending justice to wild animals is not a warranted course of action. I also apply virtue ethical considerations to the issues of species extinction and ecosystem destruction, areas in which the capabilities approach seems to offer little guidance. Thus, I propose augmenting our capabilities-based account of justice with an environmentally conscious appeal to the virtues in order to produce more consistent moral guidance with regard to the non-human world.

Justice, Environment and Virtue in Martha Nussbaum's Capabilities Approach

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Abbreviations used

Only one abbreviation appears throughout: Nussbaum's book, *Frontiers of Justice: Disability, Nationality, Species Membership*, is abbreviated to 'FJ'.

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In Memoriam

Nigel William Newbrook

(1956-2011)

Introduction

This thesis represents an attempt to reconcile some of the preoccupations of contemporary environmental ethicists with the partial account of justice for non-human animals proposed by Martha Nussbaum and, more generally, with ethical theories that advocate the extension of direct moral concern towards animals. By examining several different areas in which these schools of ethics have been considered to give contradicting guidance - protection for wild animals; justice for non-sentient animals, ecosystems and species – and in each case attempting to discern whether there are any grounds for favouring one approach over the other, I analyse those respects in which they appear to come into conflict and offer a potential solution. Although my own position ultimately endorses Nussbaum’s account of justice for animals, I am motivated to seek some form of reconciliation between her concerns and those of environmental ethicists rather than assert the primacy of one theory over another. In part, this motivation stems from my own moral intuition: while I am largely convinced that the flourishing of non-human animals is a matter of justice, I am not comfortable with the assertion made by Nussbaum and others that such matters as species extinction or ecosystem degradation are reducible to the concerns of individuals. As a result, this thesis might be thought of as an exercise in what Rawls terms ‘reflective equilibrium’: the comparison of one’s rationally derived principles to one’s moral convictions, in the hope that attempting to bring these two sources of moral judgement into closer agreement will produce more satisfying moral principles (Rawls 1971, p.20, loc.497). The case Nussbaum provides for considering sentient animals to be meaningful subjects of justice seems to me to be a compelling one: like humans, animals appear to be agents pursuing their characteristic good, and if the pursuit of a human good is a matter of justice, then it seems reasonable to suggest that the same might be said for that of animals. But, to borrow a metaphor from Christopher Stone, the moral landscape possesses features that are not captured by the capabilities-approach map alone (Stone 1987, p.138). Just as a road map does not generally detail gradations in altitude, a purely capabilities-

based map omits certain features that nevertheless make up part of the moral topography, such as species (as I will argue in Chapter 5). The underlying objective throughout this inquiry is not necessarily to find one set of topographical features that defines the entire landscape: to extend the metaphor, one can often deduce where hills, mountains and cliffs are on a road atlas because the roads will be shaped to accommodate them, or be marked as tunnels where they cut through, but it is not the easiest way to locate them. Similarly, it may be possible to stretch one account of morality to accommodate forms of moral decision making or types of morally relevant entity that have previously been overlooked, but the result is not necessarily satisfying.¹ Rather, I am aiming to at least begin to describe a map that can be used satisfactorily by both environmentalists and animal rights advocates, because it accommodates features that both find important.

I have chosen to focus on Nussbaum's capabilities approach as representative of the various accounts of the rights of animals available. This is because Nussbaum's position brings into particularly clear relief the issues that are held to render an account of justice for individual animals incompatible with being a 'serious' or 'deep' environmentalist. In particular, Nussbaum suggests that if non-human animals are meaningful subjects of justice, then rather than limiting our attentions to cats, dogs, cows and chickens in our care, we ought to aim at "the gradual supplanting of the natural by the just"; we ought, in other words, to intervene in the lives of wild animals to protect them from the environment and from one another (*FJ*, pp.399-400). While one may be inclined to dismiss this proposal solely on grounds of its impracticability – and it seems likely that actually creating a world in which the lives of wild animals are regulated by justice seems to be the preserve of science fiction – I am more concerned with finding philosophical grounds on which to object to it. In a future world where we genuinely were able to protect deer from being eaten by bears without risking ecosystem

¹ Although it sometimes is: one example where this approach seems to work well is discussed in Chapter 4, in which I suggest that the capabilities approach can describe the just treatment of non-sentient organisms with relatively little difficulty.

collapse, might there still be good reasons not to do this? In the meantime, Oscar Horta has suggested that when humans act to influence ecosystems, our priority ought to be the welfare of individual animals rather than ecological or anthropocentric concerns: thus, we ought to reconsider plans to release predators such as wolves or white-tailed eagles into habitats from which they have been extirpated, given that these animals will harm the ecosystem's other inhabitants (Horta 2010, pp.173-178). Thus, it appears that adopting an ethic that focuses on the wellbeing or flourishing of sentient animals entails very different policies from those recommended by an ethic that accommodates concerns regarding the preservation of ecosystems or species, or respect for wildness *per se*. Thus, as Mark Sagoff, concludes, one cannot simultaneously be an 'animal liberationist' and an environmentalist, since the former, if they are truly serious about protecting the welfare or rights of non-human animals, must be prepared to "sacrifice the authenticity, integrity and complexity of ecosystems" in their defence; conversely, the environmentalist cannot take to be inviolable the rights of animals if they are to fulfil their aims of preserving those systems and wholes that are their primary moral focus (Sagoff 1993, p.90).

Despite being enthusiastic about the capabilities approach to justice for animals, I am not as ready as Horta and Nussbaum to conclude that the incompatibility of an animal rights approach with 'deep' environmentalism means that the former should always triumph at the expense of the latter, especially if the result is untrammelled human intervention with and remodeling of the nonhuman world to make it 'just'. As a result, the second and third chapters of this thesis spend some time specifically examining Nussbaum's proposal that nature ought to be made just, attempting to establish whether such a policy is a significant count against Nussbaum's project, and whether one can justifiably affirm the general notion that one can treat nonhuman animals justly or unjustly without being committed to the protection of animals in the wild. My response – that extending justice to all wild animals is inconsistent with a good moral character – informs the discussion of justice for nonsentient animals, species and ecosystems; entities that are left out of Nussbaum's

formulation of the capabilities approach. Although in the case of species and ecosystems I agree with Nussbaum that these entities are not the kinds of things to which we can, even at a stretch, extend capabilities justice, I identify what I hope are good reasons for human beings interested in living a morally virtuous life to care about them.

Chapter 1 begins with an outline of the capabilities approach and discussion of several initial concerns raised. Although I do not attempt to justify choosing the capabilities approach over any other theory of justice, I do defend the approach against the criticism (made by Ramona Ilea) that Nussbaum does not make a convincing argument for extending justice to non-human animals, providing two non-exclusive arguments grounding direct moral duties to them. The first of these is probably the more familiar 'extensionist' argument: this is the suggestion that animals ought to be considered valid subjects of justice because they share morally relevant traits with human beings; specifically, non-human and human animals alike have lives that can go better or worse for them depending on how free they are to exercise key capabilities. Since Nussbaum adapts her account of justice coherently to include animals, the burden of proof is on the denier to provide a morally relevant difference that would justify excluding animals from the sphere of justice. I move from here to consider a second argument put forward by David Cooper: failure to treat animals with direct moral concern represents a failure to exhibit morally excellent states.

I do not particularly favour one of these arguments over the other, although I do share some of Cooper's misgivings over the extensionist's focus on consistency. The upshot of this discussion is, however, that arguments for extending the capabilities approach beyond the species barrier can be produced if we need them. From here I move to a discussion of the capabilities approach in the context of some of the aims of the political animal rights movement, especially its relation to 'abolitionism' – the proposal that just treatment of animals requires that they no longer be treated as property. Nussbaum does not seem to view the institution of animal ownership as problematic in

itself: I argue that she ought to, and that the capabilities approach provides a clearer philosophical argument in favour of abolition than has been advanced by that position's best-known proponent, Gary Francione.

In Chapter 2, I begin to address the tensions that arise between the capabilities approach and certain theories of environmental ethics. Nussbaum's moral individualism, coupled with her scepticism regarding any distinction between 'positive' and 'negative' moral duties, commits her to the project of, as she puts it, 'the gradual supplanting of the natural by the just' – that is to say, intervening in the lives of individual wild animals in order to protect their exercise of their capabilities. As a project, this seems contradictory to the goals of environmental ethicists such as John Baird Callicott and Ned Hettinger, since Nussbaum seems to require that we prioritise the wellbeing of individual animals over natural communities such as ecosystems and species, which Callicott takes to be the appropriate recipients of human moral concern beyond the species barrier. Because ecosystems (for example) require the suffering and destruction of wild organisms in order to maintain their integrity (which Callicott takes to be directly morally valuable), attempts to provide justice for individuals in the wild appear to be incompatible with direct moral commitments to wild communities.

Having noted that the capabilities approach and holistic environmentalism advocate different policies regarding our treatment of non-human entities, I proceed to examine the misgiving voiced by Ned Hettinger that individualistic approaches to the moral treatment of non-humans are inherently 'anti-nature' and therefore at odds with what Hettinger considers to be 'true' environmentalism. Regardless of whether animal rights advocates actually embark on a campaign to make nature just, the fact that they tend to disvalue the suffering of wild animals when this is one of the engines of ecosystemic functioning suggests, for Hettinger, that individualistic approaches to non-human ethics are at odds with a proper valuing of the natural world. I observe that this

assertion has been subject to persuasive criticism at the hands of Ty Raterman and Jennifer Everett: both argue that the value of natural objects can be separated from the pain and suffering required to bring them about, or at least, that pain and suffering need only be valued in a very qualified way if we are to value nature. This seems to be the approach adopted by Nussbaum when she criticises the 'nature worship' of some environmentalists: although she thinks that a positive relationship with the nonhuman world is a key capability for human beings, Nussbaum is also clear that we ought not uncritically hold every aspect of nature to be worthy of preservation. This chapter therefore concludes that Callicott's and Hettinger's objections are unlikely to provide us with a convincing argument in themselves either for rejecting the capabilities approach as a whole or for retaining the capabilities approach in general but ignoring its commitment to protecting wild animals.

The focus on Nussbaum's statements regarding wild animals continues in Chapter 3, in which I consider two further objections to 'supplanting the natural by the just'. The first of these involves the concept of autonomy, which is held in high regard by Nussbaum during her description of the capabilities approach. Nussbaum suggests that autonomy plays a role in the flourishing of a human life but is less central to the flourishing of non-human animals, the most obvious example being that of domesticated animals, many of whom would simply die if they were rendered free from human interference overnight. I initially consider whether this assessment is accurate, considering a competing account of autonomy put forward by Eric Katz. For Katz, autonomy, in the form of an ability to exist and develop free from rational processes, is a key factor distinguishing natural objects from artefacts. The autonomy of wild animals, plants, rivers and rock formations, for Katz, provides them with a kind of subjectivity, which is lost or degraded if they are subject to human control. Katz deplores the notion that an artificially managed 'replica' ecosystem might be substituted for the real thing with no inherent loss of value: the substitute would lack autonomy, and would therefore be an artefact rather than a natural object. Presumably, Katz would also object to a world managed so as

to minimise injustices endured by wild animals: such a project would require that humans acted to promote those capabilities that they identified as valuable in wild animals, undermining their (the animals') authority and turning them into artefacts.

I do not spend a great deal of time debating the validity of Katz's distinction between natural and artificial objects, though I happily acknowledge that it is contentious. Rather, I suggest that, even if Katz is correct in saying that there are natural objects and artefacts and that the former can be distinguished from the latter by the degree to which they are autonomous of human ends and functions, such an objection is unlikely to dissuade anyone committed to making nature just. This is because the capabilities theorist can accept that Nussbaum has possibly undervalued autonomy while nevertheless maintaining that animals 'rescued' from danger in the wild can realise many other values. We might agree that, on the whole, it is better that the autonomy of wild animals be preserved, while maintaining that the loss of autonomy is nevertheless justified if the animal in question is generally more free to exercise its capabilities under human protection. So even if Nussbaum accepts Katz's analysis, it is not clear that preserving the autonomy of wild animals will be a priority for her over preserving their capabilities.

Nevertheless, the second objection that I consider does start with the question of the autonomy of animals, and one of Katz's concerns regarding it: Katz suggests that disregarding the autonomy of nature may be indicative of the vice of hubris. Although Katz does not elaborate on this a great deal, I propose that Katz is right to voice this concern, and that it deserves to be developed into a broader virtue-ethical critique of Nussbaum's position on wild animals. I consider various ways in which the policing of nature might be considered to exhibit a hubristic approach to wild animals, one that is at odds with the proper exercise of the virtue of humility. Endeavouring to expand the sphere of justice so that it encompasses all sentient animals requires that humans place themselves in a position of dominance over other species; this is inconsistent with an appropriate sense of our

moral authority. On the other hand, since domesticated animals already embody human values and exist in human communities, they can coherently be placed under the protection of justice.

Chapter 4 moves away from the capabilities approach to examine another way in which existing animal rights positions are held to be at odds with positions in environmental ethics. In this Chapter, I begin with what I take to be the simplest case: the question of whether nonsentient (in the sense, primarily, of being able to have experiences and particularly being able to experience pleasure and pain) individuals can coherently be subjects of justice or injustice. In some respects this is a return to the discussion regarding extensionism in Chapter 1: Nussbaum extends justice to sentient animals but broadly denies that nonsentient animals can be treated justly or unjustly. Biocentrist environmental ethicists such as Paul Taylor and Gary Varner, on the other hand, have suggested that human moral responsibilities towards the nonhuman environment are grounded, ultimately, in duties towards individual lifeforms, including sentient and nonsentient animals, plants, fungi and even microorganisms. Noting the similarity between some of the language used by Taylor and that used by Nussbaum, I focus primarily on his work: Taylor grounds the moral worth of organisms in their being 'teleological centres of life' that pursue their own good, while for Nussbaum, allowing individuals to pursue their own good ('flourish') is the central goal of the capabilities approach. As a result, I consider whether nonsentient lifeforms have capabilities and why Nussbaum excludes them from the approach. While I agree with Nussbaum that nonbeneficial pain has a particularly powerful ability to blight a subject's life, and that therefore the flourishing of sentient animals represents a particularly urgent question of justice, the fact that her approach rests on the exercise of a wide range of capabilities and not merely sentience suggests that the capabilities of, for example, a sapling to consume water, sunlight and nutrients to grow into a tree is a capability potentially worthy of protection under capabilities-based justice. However, I nevertheless acknowledge that human interests nevertheless regularly require that we thwart the capabilities of

at least some organisms, and that we probably cause less harm when we deny the flourishing of nonsentient lifeforms than we do in harming sentient animals. As a result, I suggest that our duties towards nonsentient life tend to lie in the region of responsible use of resources, more careful evaluation of the evaluation of our interests – we may need to dig up potatoes for carbohydrate, but ought to think twice about making a gift of cut flowers, for example.

In Chapter 5, I discuss a claim that is frequently made both by environmentalists and by animal rights theorists themselves, that individualistic animal rights theories are incapable of justifying any direct moral consideration of species. This is a position held by Nussbaum herself: although she does allow that species may have scientific or aesthetic value, she denies that preserving species is a matter of justice in itself (outside of any injustice suffered by the individual species members). I examine one argument for grounding duties to species on purely aesthetic grounds, put forward by Lily-Marlene Russow: the value of a species rests on our admiring the properties of its members and believing that there ought to be creatures 'like that' in the world. I contrast Russow's approach with Rolston and Johnson's assertion that species exist as entities in possession of direct moral value themselves, on the grounds that they have a good of their own that is independent of the good of their individual members. Rolston's rationale for defending such a view is that an approach such as Russow's, which ultimately turns on a human good (aesthetically valuable contact with members of other species), will fail to properly respect the value of species that are not fortunate enough to enjoy human aesthetic appreciation.

If species are entities possessed of their own good, then, following the rationale laid out in Chapter 4, it may be worth considering whether one can meaningfully treat them justly or unjustly under the capabilities approach. Ultimately, I conclude that Rolston's arguments for the good of a species can typically be expressed less contentiously as concerns regarding the wellbeing of individual species members and that species are probably not appropriate targets of direct

capabilities justice. As a result, it is not clear that species possess any form of flourishing of their own for the capabilities approach to protect, unlike even very simple organisms.

However, I suggest that those of us who nevertheless believe that there is a morally relevant difference between the death of an organism and the death of the last organism of a particular species may do better to justify these sentiments through an appeal to virtue ethics. I suggest that, in particular, wonder and humility are two important virtues connected with the preservation of species. Wonder, I suggest, seems to be a morally appropriate response to the awareness that species exist as particular ways of being in the world, and the number, variety and intricacy of the different forms adopted by life. Consideration of the narrative properties of species, which represent, as it were, chapters in the story of life on our planet, ought also to inspire humility. Thus, although Nussbaum may be right in suggesting that species are not appropriate subjects of justice, a virtuous agent will nevertheless regard anthropogenic extinction as ostensibly a bad thing, even if it were somehow brought about by nonviolent means.

Chapter 6 adopts a similar line of inquiry, this time considering the prospect of capabilities justice for ecosystems. I begin with an existing attempt to accommodate ecosystems within the capabilities approach: that of David Schlosberg. Schlosberg suggests that ecosystems can be conceptualised as having a kind of flourishing comparable to that of an individual animal: Schlosberg suggests that ecosystems, like organisms, have a potential that they can either fulfil or fail to fulfil, and that allowing ecosystems to fulfil their potential is a matter of justice. Adrian Armstrong has gone so far as to suggest a list of 'consideranda' for the functioning of ecosystems, which he suggests be considered analogous to Nussbaum's key capabilities. I suggest that this approach struggles to establish direct duties towards ecosystems due to its lack of an obvious source of normativity: it is not obvious why we ought to be concerned as to whether an ecosystem is reaching its potential or

not, whereas we can support the flourishing of even a simple organism as being good for that organism.

I then proceed to evaluate an environmentalist attempt to ground direct moral duties to ecosystems, focusing on the work of Lawrence Johnson. Johnson begins with an analogy between an ecosystem and an organism, suggesting that the former is a kind of 'living system', in that it draws energy from its surroundings to maintain a state of negative entropy, and that it maintains an identity over time through the functioning of 'cybernetic' systems of feedback. Ultimately, I am prepared to acknowledge Johnson's claim that an ecosystem can be described as a living system, but note that it does not necessarily follow from this that an ecosystem can flourish or fail to flourish in the way required by the capabilities approach.

Touching on the issue of whether things can be good or bad for an ecosystem is the debate regarding ecosystem health. Commentators such as Callicott have suggested that health is a concept that can be meaningfully ascribed to ecosystems: thus, interrupted functioning in an ecosystem can be likened to an injury or disease. Callicott suggests, furthermore, that health is a 'thick concept' containing its own axiological value: we cannot think of a *prima facie* instance of good health being bad for its possessor. Thus, if health can be meaningfully ascribed to ecosystems, then it may play the role of a 'key capability': if health is a meaningful concept in this context, then there are ways in which it is appropriate or inappropriate to behave towards ecosystems. Ultimately however, I conclude that if ecosystem health, used in this way, is a 'thick' concept then it is *not* an appropriate descriptor of ecosystems, since the goodness of good health depends upon it being a good state for its possessor to be in, and this is not obviously true: there is no real reason to think that an ecosystem with interrupted functioning is any better off than one that is functioning normally.

However, I then look at another interpretation of the ecosystem health concept, put forward by Katie McShane, according to which a particular state may constitute good health for an ecosystem is it is what someone who cared about the ecosystem would choose for that system's

sake. Since people demonstrably can and do care about forests, rivers and savannahs for their own sake, it seems one can intelligibly suggest that an ecosystem can be 'harmed'. I suggest that one can shore up this account of ecosystem health through an appeal to virtue ethics, arguing that a genuinely virtuous agent ought to care about the ecosystems around them for their own sake.

The final chapter, Chapter 7, attempts to take stock of some of the claims I have made in the rest of the thesis. I observe that I have frequently claimed, not only that a theory of justice can stand to be augmented by considerations of virtue, but that considerations of virtue can in some circumstances, such as in the case of our duties to wild animals, override considerations of justice. Though this Chapter does not include what I consider to be an unproblematic resolution to this conflict of values, I nevertheless attempt to make sense of what is happening here. I begin with a general consideration of the ways in which virtue and justice might interact: I observe firstly that a just society can often play a role in allowing the individual to acquire and exercise virtue and that, furthermore, living in a community organised on the grounds of justice will often require the exercise of virtue on the part of its citizens. In the process of making this latter point, I examine Aristotle's discussion of the virtue of justice in the *Nicomachean Ethics*, suggesting that his account of justice, with some modification, describes a valuable character trait in citizens of a modern liberal society, which I refer to as 'fairness'. Individuals with this character trait will be unwilling to profit at the unfair unreasonable expense of others, and therefore opposed to both interpersonal and institutional discrimination. They will be open to the proposal that all individuals ought to be provided with opportunities to flourish by exercising their capabilities, although they may come into reasonable disagreement over how these opportunities may be provided.

Having introduced this concept of a virtue of fairness, I go on to suggest that what the capabilities approach represents is in fact an articulation of part of this virtue. Thus, what is required by the capabilities approach should be seen as part of the requirements of the virtue of justice (*qua*

fairness). When conflicts between justice and humility occur, as in the case of Nussbaum's proposal to police nature, these should be viewed as a conflict between the moral requirements of two different virtues. Our optimism regarding how resolvable these conflicts are will therefore depend upon how optimistic we are about the prospect of resolving any conflict between multiple virtues.

I then attempt to anticipate several concerns regarding the prospects of basing justice on an account of virtue ethics. In particular, I discuss whether virtue ethics are unacceptably agent-centric, and suggest that this objection is based on a misunderstanding of how virtue ethics handles value. I also discuss whether a virtue-ethical account of justice is adequately persuasive, and suggest that it can be persuasive if framed as a minimum standard of fairness expected by the community of its members.

In conclusion, three main moral commitments extend throughout this work. The first is that Nussbaum is right to suggest that nonhuman animals can meaningfully be subjects of the capabilities approach, and that many of the ways in which we currently treat animals can meaningfully be described as unjust. The second, which I admit is a somewhat more vague commitment, is that ecosystems, species and other ecological wholes matter morally for reasons that are independent of the wellbeing of their constituent organisms, and we should at the very least be reluctant to overturn them in the pursuit of justice. The moral underpinning of this conviction emerges in the form of the third commitment, which is that the pursuit of justice ought to be tempered in at least some situations by the conditions of a good moral character, which responds to some of the important features of, among other things, ecological wholes. The result, I hope, is a map of the ethical landscape that is richer and more complete than those produced solely by insisting on an entirely individualistic or entirely holistic approach to non-human ethics, and which accounts for the concerns of both camps without becoming contradictory.

Chapter I: The Capabilities Approach: Its Motivations, Principles and Two Initial Concerns

In preparation for a discussion of the capabilities approach's relation to environmental ethics, this chapter contains a general overview of the partial theory of justice outlined by Nussbaum in *Frontiers of Justice*. I also consider several aspects of the approach that have been considered problematic by other commentators, and attempt to address some of these concerns in the hope that they can be laid to rest before we examine the specific issue of wild animals in the next two chapters. I start with an outline of Nussbaum's case for a capabilities-based account of justice, without offering much in the way of critique: my aim here is not to demonstrate that Nussbaum's is the optimal account of justice available, but merely to show the reasoning that leads her to reject existing accounts of liberal justice in favour of her own. This is followed by a description of what justice on Nussbaum's account actually looks like, first for humans and then for non-human animals. Then, I go on to examine what I consider to be an important procedural issue in Nussbaum's account of justice for non-human animals, raised by Ramona Ilea. Ilea suggests that a significant omission in Nussbaum's treatment of non-human animals is the lack of a specific, convincing argument justifying the extension of direct moral concern beyond the species barrier. Thus, I attempt to supply such an argument, and consider two candidates: first, a 'straightforward' extensionist argument similar to those used by established animal rights advocates; and second, an argument based on an analysis provided by David Cooper regarding concern for non-humans and the demands of virtue. I conclude, broadly speaking, that both of these approaches seem broadly consistent with the capabilities approach, and either could be cited as justification for incorporating non-human animals under the protection of capabilities justice. Finally, I discuss some of the implications of extending justice over non-human animals in terms of human practices, and to what extent the capabilities approach might support some of the broad policy goals of the animal rights movement. In particular I consider whether the capabilities approach is compatible with the current status of domesticated animals as human property, and whether it requires that humans ought to end the consumption of animal

products. I conclude that an end to the institution of ownership over animals is probably a clearer consequence of the capabilities approach than Nussbaum herself seems to believe.

Why does Nussbaum propose an alternative to the social contract tradition in political liberalism?

Much of the motivation behind Nussbaum's development of the capabilities approach is grounded in what she considers to be three problems that are as yet unsolved by contractarian approaches to justice: namely, these approaches' inability to provide adequate justice to people with disabilities, to the field of international relations, and to non-human animals. Nussbaum provides a considered analysis of why these areas have been unsatisfactorily dealt with by the social contract tradition, identifying four features of most social contract theories that prove problematic in these cases.

Nussbaum identifies the circumstances of justice described by these theories as the first problematic area. The narrative of many social contract theories, most notably those of Hobbes, Locke and Rawls, relies on some conception of a 'state of nature' prior or external to human society. The social contract narrative describes circumstances under which humans are likely to form political societies – circumstances under which it makes sense for humans to abandon their (posited) solitary existence in the state of nature and cooperate to secure their survival (Nussbaum 2006 (henceforth '*FJ*', pp.26-27). Citing Rawls, Nussbaum identifies two types of such circumstances: the objective and subjective. The objective circumstances include coexistence in a specific geographical territory, and rough equality in "physical and mental powers", vulnerability to aggression and in the capability to resist domination among all the parties concerned. Additionally, there exists a "moderate scarcity" of resources, to the extent that cooperation is still necessary to secure them, but not to such an extent that any projects will inevitably fail due to a paucity of materials. The subjective circumstances in which the parties find themselves consist in their having roughly similar needs and interests, "or at least complementary interests" – although there is the potential for conflict between them, it is not inevitable. The parties also possess "weaknesses of knowledge and judgement" (p.27).

Nussbaum's key objection to the contractarian description of the circumstances of justice at this stage is that the description excludes parties whose mental and/or physical capacities are markedly different from the 'norm' (indeed, we may find it difficult to imagine how some such individuals could survive at all). These individuals (or entities – Nussbaum points out that the same problem applies to nations whose powers or resources are not equal to those of others) are unable to enter into the social contract on an equal footing with 'normal human beings', who can simply dominate them due to the asymmetry of their respective powers. It therefore excludes both humans with significant mental and/or physical disabilities and nonhuman animals. The state of nature account, while not necessarily suggested to describe an actual time in human history, is nevertheless held to describe "some especially important properties of human interaction in the real world". Individuals excluded from the initial circumstances of justice are consequently excluded from the foundations of the social contract and therefore from the basis of our account of justice – if they are subsequently included at a later stage, it will be as 'addenda' (p. 28).

The second feature criticised by Nussbaum is the social contract tradition's emphasis of the 'free, equal and independent' natures of the parties involved. Individuals are considered to be free, in that nobody owns anybody else and everybody has the freedom to pursue their own conception of the good. This freedom is prior to political organisation, and is taken to confer certain rights not to be enslaved or dominated. Yet this assumption causes problems when considering the respective positions of non-human animals and of humans with severe mental disabilities, who may not be available to produce or follow a conception of the good in the way the term is generally used. As the right not to be enslaved is based on the capacity to do this, the contractarian account struggles to explain why these beings cannot be enslaved (p.28-29).

With regard to equality, the sense in which it is relevant here is not only in the sense of "moral equality, but a rough equality of powers and resources" (p. 29), particularly in the absence of inequalities arising from civilised institutions, such as education. As discussed above, this is central to

the account of how and why the parties enter into the contract in the first place, and its overlooking of individuals markedly outside of these norms excludes them from the foundation of the political society (p.31).

Finally, the parties are considered to be independent, in that they do not depend upon one another and generate their own “claims and projects” rather than following those of others. This seems to be the most clearly problematic of these three characteristics with regard to Nussbaum’s problems of justice: many severely disabled people are dependent on others, as are domesticated and some wild animals dependent on humans and poorer countries dependent on the wealthy. The idea of a contract among equals involving these individuals has difficulty getting off the ground, therefore, as the dependent party can simply be dominated by the more powerful (pp.33-34). Thirdly, most social contract theories share some conception of mutual advantage: the parties forming the contract do so because it is in their interests to cooperate, even if this means relinquishing certain freedoms, rather than remaining in the state of nature. As a result, altruism and, therefore, justice for its own sake, are left out of the account altogether (p.34). Although this has the considerable advantage of not relying on any putative good will of the participants, it precludes the possibility that individuals who are unable to contribute to the mutual benefit of all (or who can make only a limited contribution) can be direct subjects of justice (they might still be able to benefit from any altruistic feeling that does exist, but their benefit seems not to be a matter of justice).

Finally, the parties of the social contract are considered to be primarily interested in advancing their own projects and pursuing their own conception of the good (p.35). Nussbaum does not comment at length on this feature, but it again excludes nonhuman animals, people with severe physical or mental impairments and less powerful countries from justice under the contract. In many cases, these parties will be unable to construct and/or pursue their own good without assistance – assistance which they cannot necessarily count on receiving unless other parties choose to make providing it a project of their own (again, it cannot be a matter of justice).

There is a broader point to be found when we examine these features of the contractarian decision. They work to exclude certain parties from the group who design the principles of justice by which their society will abide: their interests cannot be present in the foundation of society due to one or all of the factors outlined above. This is problematic because although they do not frame the principles of justice, they nevertheless must live in the society that is arranged according to them, providing a substantial problem of exclusion. As Nussbaum puts it, the questions of *by* and *for* whom the principles of justice are designed are conflated (p.16). It is not necessarily a problem that those who frame the principles of justice are *not* representative of all parties concerned – indeed, it is hard to see how this could be anything other than the case, since much of the difficulty arises from the fact that some individuals (actually, most of the individuals on the planet when one counts non-human animals) simply cannot participate in framing these principles. Rather, the problem arises due to the assumption that our immediate concern should be a social contract produced by individuals possessing certain capacities, on behalf only of individuals with the same capacities. Because the model on which the principles of justice are based is one of negotiation between equals, individuals who are unable to participate in this process must trust that the framers of the principles will ‘add in’ their considerations at a later date.² This assumption that justice is a matter of

² Such criticisms as Nussbaum’s do not go undisputed. Again, I primarily provide Nussbaum’s criticisms of the social contract decision in order to frame her concerns in developing the capabilities approach; it is not my intention to spend a great deal of time discussing whether Nussbaum’s liberal theory of justice is the best available when it comes to the rights of animals. For a defence of Rawlsian contractarianism in the context of animal ethics, see Mark Rowlands’ *Animal Rights: Moral Theory and Practice*, Ch. 6. Rowlands suggests a more purely ‘Kantian’ version of Rawls’ social contract, according to which the contract is seen as elucidating, rather than being entirely constitutive of, the moral law (as would be the case under a ‘Hobbesian’ contract) (Rowlands, 2009, p. 126). Rowlands draws the reader back to what he refers to as Rawls’ ‘intuitive equality’ argument, according to which, very briefly, one is not entitled to the benefits derived from properties that one has nothing to earn (such as belonging to a privileged ethnic or religious group or, more controversially – and more central to Rawls’ position – possessing talents, good business sense, athletic ability and so on). Presumably, species membership is also an unearned characteristic (pp.132-134). The individual in the Original Position, then, can suppose that they do not possess the property of being human when they formulate the principles of justice, just as they can suppose that they lack their particular gender, creed, race and so on (pp.150-152). As a result, bracketing out knowledge of what species I am will have an influence on the principles of justice that I will accept: one can therefore produce a non-anthropocentric (or non-narrowly anthropocentric) set of principles based from the original position. The fact that animals cannot enter the original position themselves is therefore not a barrier to their being considered as subjects of justice, as far as Rowlands is concerned.

mutual agreement between rough equals ignores inequalities in needs, abilities and dependencies that have an undeniable impact on the lives of many people.

The basic principles of the capabilities approach

Nussbaum's attempt to rectify this problem is manifested in the capabilities approach. Nussbaum aims to present a partial account of minimal justice "informed by an intuitive idea of a life that is worthy of the dignity of a human being" (p.70). Such a life is one that contains opportunities to engage in a wide variety of life-activities gauged to contribute to overall flourishing: therefore, all individuals are entitled to exercise their capabilities in these areas to at least the minimum level required for an adequate level of human dignity. Nussbaum stresses, following Marx, that capabilities are plural and not reducible to a single component or subordinate to an overarching concept such as overall utility (pp.74-75, 159); indeed, one of the reasons that she rejects utilitarian approaches to justice and development is that on these accounts, certain life-activities may be 'traded off' in favour of others if this results in an increase (or no decrease) in net happiness (pp. 72-73). For Nussbaum, a society that does such a thing "has short-changed its citizens" (p.75), since there are some capabilities to which we are all entitled and should not be expected to have to compromise. Equally, a society should respect the capabilities of all of its citizens – it cannot aggregate across individuals in order to boost average utility (p.72). When the 'flourishing of individuals' is discussed over the course of this work, it should be read as indicating a state under

If Rowlands is correct, one will observe that he seems to run into the same difficulty encountered by Nussbaum in the following two chapters. If I am 'species-blind' as a formulator of the principles of justice, and set about choosing principles that will provide justice for all species, then I will soon find that it is very difficult to find principles that satisfy members of all species. However, the goods of animals of different species are frequently in conflict: justice for deer will presumably include protection from tigers – but the tigers' collective account of the good will presumably require that they be allowed to eat deer. Rowlands' neo-Rawlsian account of contractarian justice for animals may also lead to its advocates making the kinds of outlandish claims made by Nussbaum and discussed in Chapters II and III of this thesis. Animal rights advocates who favour Rowlands' account of justice for animals over Nussbaum's will therefore still have to answer the kinds of questions regarding wild animals and other entities that are addressed later on.

Furthermore, it is worth noting that while Rowlands does not think that his neo-Rawlsian account of the social contract excludes animals, he does acknowledge that opponents of animal rights certainly have used elements of social contract theory such as those identified by Nussbaum to deny that animals can be protected by justice.

which all of an entity's key capabilities are at or above the minimum level required for a life worthy of human dignity.

Of the capabilities themselves: Nussbaum presents a list of ten capabilities that she considers to be essential to human flourishing and briefly describes those protections and opportunities that she believes that they necessitate. She stresses that the list is subject to revision and that the version presented in *Frontiers of Justice* is merely the most recent. As they stand, the central human capabilities are considered to be: life; bodily health; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment (pp. 75-77). Their descriptions and the entitlements that stem from them are deliberately left vague (for example, the capability of bodily health is defined on p.75 as "being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter"), in order that they can be interpreted by theorists and policy makers in ways that best serve cultural contexts and circumstances (it might also be noted that the approach could potentially permit a variety of different political or economic systems, though Nussbaum does not discuss this in any detail in *Frontiers of Justice*). It is deliberately designed so as to permit a substantial amount of 'overlapping consensus' between individuals possessing "very different conceptions of the ultimate meaning and purpose of life" (p.79), thus protecting a high level of religious and cultural pluralism.

Because of her emphasis on asymmetrically providing justice to individuals with needs and capabilities that differ significantly from the 'norm', and who could easily just be dominated by one of the other parties to the social contract, it is easy to see why, in outlining her alternative, Nussbaum gives ample space to discussion of justice towards non-humans. Humans have historically exerted their (frequently abusive) influence over other species, and continue to do so on a tremendous scale. Non-humans have historically been excluded from the realm of full moral consideration, and particularly consideration under principles of *justice* for various reasons, including those features of the social contract tradition outlined earlier, in addition to conceptions of dignity grounded in rationality (p.327), a characteristic supposedly proprietary to humans. The capabilities

approach, on the other hand, introduces the possibility of considering justice for animals due to its conception of just treatment as grounded in recognition of “a wide range of types of animal dignity” (p.327). Nussbaum moves from considering human dignity to the consideration of multiple forms of animal dignity – just as there should be a base standard at which we can say that a human is flourishing, each non-human animal species possesses its own standard based on those life-activities that are necessary in order for us to be able to say that a member of that species is flourishing. Such a standard is referred to by Nussbaum as the “species norm”. By invoking the species norm, Nussbaum allows the capabilities approach to accommodate the “characteristic flourishing” of a non-human species, facilitating a detailed account of which capabilities should be respected in order for a member of that species to be treated justly *qua* a member of that species. The capabilities approach is explicitly concerned with the heterogeneous forms that the flourishing of different animals will take: animals such as leopards, which spend most of their lives in solitude, will merit different forms and levels of support for their capability of affiliation than will social animals such as lions. This example is particularly illustrative, as it shows that even comparatively similar animals dwelling in fairly similar habitats can have diverging needs that impact substantially on their wellbeing. Utilitarianism, particularly simple pleasure/pain utilitarianism, is likely to struggle to adequately describe why it would be wrong to force two leopards to share a small enclosure: such a theory will focus simply on the fact that the animals are likely to fight and cause each other physical harm, rather than on the fact that solitary existence is part of what is required in order to flourish *qua* leopard. Nussbaum does stress, however, that in constructing the species norm we should not merely look at the way animals currently live and “read off norms” from it without evaluation (p. 347). Some animal capabilities will have a negligible or negative effect on basic flourishing and their provision should not necessarily be considered a matter of justice, just as is the case for humans. As a result, providing full accounts of what is required to provide full justice to non-humans will require extensive and continual investigation and evaluation of animal capabilities – potentially for each species on the planet.

Nussbaum's is not the only version of the capabilities approach available. Most notably, Nussbaum makes frequent reference to the work of Amartya Sen, including many of his examples as illustrations of the need to focus on capabilities as a way of addressing variations in need that affect quality of life (*FJ*, pp.164-165). It should be noted that Sen has typically focused on capability as a measure of human development, and is more willing than Nussbaum to allow capability to be framed in terms of income, if we were able to adequately elucidate the level of income necessary for an individual to enjoy adequate capability exercise (*FJ*, p.165; Sen 1993, pp.41-42). More generally, Sen is far more inclined to leave his capability approach incomplete: he does not recognise the need stated by Nussbaum to produce an objective account of human functioning, so that the capabilities theorist can state that human beings need to be able to engage in life-activities *x*, *y* and *z* to an acceptable level, otherwise they are considered to have been unjustly deprived (Sen 1993, p.47). Although Nussbaum is significantly less prescriptive than Aristotle in the precise forms that those life-activities should take (Aristotle asserts that there is only *one* 'function of man' – p.46), her specification of a list of basic capabilities is a marked departure from Sen, who prefers to leave the capability approach capable of accommodating a number of different routes to defining capability and development.

Some of the reasons that I have decided to focus on Nussbaum's version of the capabilities approach are practical: Nussbaum writes specifically about animals; her claims regarding justice for wild animals, as we shall see, are provocative and neatly illuminate the conflict between justice for animals and environmental ethics that I shall be examining later on. But I am also inclined to agree with Nussbaum's case for adopting specific lists of defined, separate capabilities for human beings and non-human animals. Nussbaum holds that, in order for capabilities to be a useful concept for use in describing issues of justice, we ought to be able to refer to "some list, however tentative and open-ended" of capabilities that we have evaluated as being worth upholding by a just constitution (*FJ*, p.166). This is why Nussbaum is less casual than Sen regarding the prospect of allowing income to stand in as a proxy for capability: there are some capabilities that play a role in securing human

dignity in a way that cannot be reproduced or compensated by income (p.167). This is possibly even truer in the case of non-human animals than it is for humans. Non-human animals, particularly those in the wild, have multiple capabilities necessary for flourishing that are unlikely to ever be compensated by income (even if we imagine a kind of 'animal trusteeship grant' paid to their human guardians, not unlike child benefits). Animals' networks of intra- and interspecies interaction and their ties to their natural habitats (or to built environments that take their needs into account, analogous to the modifications made to public space made to accommodate, say, wheelchair users) cannot easily be swapped out for replacements of similar economic worth. When talking about providing justice for animals, it is helpful to specify these kinds of requirements, so that advocates for the flourishing of animals can describe what it is they are demanding and why they believe their demands ought to be taken seriously as relating to the provisions of a just constitution. They will be able to make the case that a forest ought to be preserved because the pine martens that live there require access to that habitat in order to exercise their capability of Control over Their Environment by maintaining their territory in an ecosystem that supports them, or that keeping a dog in isolation for long periods of time is a violation because dogs require social interaction with other human and canine members of their community in order to adequately exercise their capability of Affiliation. It may still be possible to make these kinds of arguments through reference to a more general concept of capability; however, the task is likely to be easier if we can point to specific, constitutionally protected components of a dignified life that we believe to be in need of supporting. The case is further enhanced, I would suggest, by the fact that Nussbaum uses analogous sets of capabilities for both human and non-human animals. If we agree that a capability such as Affiliation is essential for a human life, and also are able to demonstrate that the use of that capability is also vital for the dignity of a dog, then it is up to the opponents of justice for dogs to justify supporting the constitutional protection of human Affiliation but not that of canine Affiliation. Using the same set of capabilities across species helps to establish the project of justice for animals as one that is focused

on describing the fundamental entitlements of beings who, though they have substantially different needs, are nevertheless members of a community on equal terms.

All the same, we should be careful that a desire to be able to make forceful claims regarding constitutional protection does not straitjacket the capabilities approach unduly, as Sen is concerned that it might (Sen 2004, p.78). Some of Sen's concerns in this regard do not particularly apply to Nussbaum's specific capabilities list: for example, Nussbaum insists that her key capabilities should each be considered equally as valuable as the others, so Sen's wish to avoid a lexically ordered list, where the 'less important' capabilities can always be traded off in favour of the more important, remains fulfilled. Similarly, Nussbaum acknowledges that the list of capabilities should be open-ended and subject to revision (*FJ*, p.78), so Sen's insistence that the account of capability ought to be open to public debate in order that new freedoms can be insisted upon as their importance is discovered can be partially addressed by this provision (Sen 2004, pp.78, 80). Finally, as I have mentioned above, Nussbaum adopts a list because she believes that this is what the capabilities approach ought to do specifically to address the issue of outlining the "central human entitlements in terms of which basic social justice is defined" (*FJ*, p.166). It does not follow from this that we have to use Nussbaum's list, or any list at all, whenever we wish to adopt the capabilities approach to address one problem or another. Sen actually acknowledges that Nussbaum's adoption of a list of basic entitlements is highly useful for her purposes; however, it might not be useful to use Nussbaum's list when, say, discussing issues relating to human economic development (Sen 2004, p.79). As long as we do not insist that Nussbaum's is the only formulation of the capabilities approach that we will ever need, it seems acceptable to use a list when doing so suits our purposes, especially if that list is formulated in a sufficiently general way and can allow for a significant degree of adaptation according to context, and if we bear in mind that the list is only part of a broader account of justice and development (*FJ*, pp.78-79).

It should be noted as well that Nussbaum is not the only capabilities theorist to have produced a list. Ingrid Robeyns, for example, has produced a list of capabilities that she suggests we

ought to use when examining issues of gender inequality, and especially gender inequality in the developed world (Robeyns 2003, pp.71-75). Robeyns makes specific reference to Sen's desire to keep the capability approach as open as possible; unlike Nussbaum, she does not propose that her list of capabilities ought to constitute requirements of justice that all political constitutions ought to incorporate; rather, she is concerned with using the list to "highlight aspects of gender inequality and disadvantage" (p.75). It makes sense, for the purposes of this thesis, to focus on Nussbaum's list, especially as presented in *Frontiers of Justice*, where she is particularly concerned to tackle the issue of justice for non-human animals. Robeyns' list, for example, includes items such as 'Paid work and other projects' (p.72); although one could possibly adapt this capability in such a way that it accommodated our concerns regarding conditions for working animals, it seems more felicitous to adopt more general capabilities that can accommodate working humans and animals equally well, as Nussbaum does with her capability of Control over One's Environment (*FJ*, p.400). Even if Nussbaum did not specifically address nonhuman animals, her open-ended list of broadly interpreted capabilities suggests itself as a useful way of talking about extending justice to animals. If we focus on what a human being needs in order to adequately exercise their capabilities of Senses, Imagination and Thought and determine that this involves entitlements to "appropriate education, to free speech and artistic expression, to freedom of religion...[and] a more general entitlement to pleasurable experience and the avoidance of beneficial pain," then we can see that some of these entitlements, or things strongly analogous to them, are also central to the dignified lives of some animals (a stimulating environment, appropriate training or socialisation, some degree of choice in how to spend their day), while others are probably not (free speech, artistic expression) (pp.396-397). It is therefore advantageous, when talking about extending justice to non-humans, to be able to describe the entitlements that we want for animals in terms that human beings can easily comprehend and relate to. Again, this reinforces the sense that the animals in question are co-members of a community with us, and that their requirements are justified on a similar basis to ours.

Without necessarily claiming that Nussbaum's capabilities list is the most useful in all circumstances, for the purposes of this thesis it is clearly an attractive model.

Justifying the extension to animals: Ilea's objections

However, before proceeding with such a project, one question that requires answering is that of *why* humans should wish to acknowledge the moral status of non-humans, particularly when this is likely to generate many moral obligations with little or no potential for repayment. Though Nussbaum is critical of the social contract tradition's eliding of the questions "By whom are the principles of justice formulated?" and "For whom are they formulated?", it may not be immediately apparent that the principles of justice are (or even should be) formulated for non-human animals at all – indeed, she is keen to point out that many liberal thinkers (Kant, for example, and Rawls) deny precisely that we have duties of justice to animals at all (Kant is discussed on pp.329-330, Rawls on pp.331-335). To make the case for the moral considerability of animals as a matter of justice, Nussbaum relies heavily on the arguments of Aristotle regarding the sense of awe and wonder that we experience on examining non-human life forms, even in the case of creatures that we find comparatively un-charismatic (*FJ*, pp. 347-349). Aristotle's argument that we can feel wonder at the many and diverse forms that life can take could be supported by more recent developments in the life sciences, such as the development of Darwin's theory of evolution: adaptations of even such unglamorous creatures as hagfish can be appreciated as allowing these animals to fill their evolutionary niche and thrive as a species. Although Aristotle himself does not discuss whether animals themselves are morally considerable, Nussbaum suggests that we can move from feeling wonder and awe from looking at complex organisms, to feeling that that organism's characteristic flourishing is good, or at least non-trivial, to the idea that its flourishing ought to be protected (or at least not interfered with). Nussbaum admits that this is an argument based on an intuition, and Ramona Ilea has pointed out a number of problems with it. Firstly, she notes that Nussbaum's theory is primarily concerned with the flourishing of animals that can feel pain – yet there are a

great many non-sentient beings capable of eliciting wonder and awe in humans – spiders, redwoods and viruses being the examples used by Ilea. Indeed, we may feel more wonder looking at these beings than we might from observing a sentient creature like a rat or a domestic cow, pig or chicken (Ilea 2008, p.549). Nevertheless, Nussbaum (or Aristotle) might respond that our not feeling wonder and awe at the sight of an animal might not necessarily mean that it is not *worthy* of these emotions. In the case of domesticated livestock in particular, we may be socialised only to view these creatures as the inconvenient corollaries of being able to consume meat and dairy products; the problem may be compounded due to our having bred these animals specifically to suit our purposes, often at considerable expense to them. Our relation to these animals is therefore not one that encourages wonder and awe, even though they are still capable of complex behaviours that may merit recognition. Still, this response may demonstrate the shortcomings of an argument based on this kind of intuition alone. It is hard to see how one might convince individuals who flatly state that they feel absolutely *no* sense of wonder to either a particular species or towards non-humans in general that they ought to do so, merely because certain other individuals *do* feel these things. Already, then, it appears that a case should be made based on something other than moral intuition, or at least in addition to moral intuition.

Ilea goes further: even if we do accept that all species are worthy of wonder and awe, we are still required to demonstrate how this would lead to our wishing to safeguard and respect the flourishing of non-human animals. We are capable of feeling wonder and awe at the sight of spectacular buildings, rock formations, intricate technical workings or inspired pieces of engineering. We could, as did certain Cartesians, study animals with an attitude of technical appraisal: their characteristics and behaviours may inspire us in much the same way as a particularly ingenious and elegant technical solution or mechanism, without engendering any respect for their characteristic flourishing or even simple wellbeing. There is no obvious reason why the scientific value of a non-human animal should translate to moral value, particularly in the strong sense advocated by the capabilities approach. As Ilea puts it, the Aristotelian approach, oriented as it is towards scientific

study, "might show that animals *can* flourish; [however] it is not enough to persuade us that nonhuman animals *deserve* to flourish" (Ilea 2008, p.549). Later on in her article, Ilea expands upon this point and that mentioned in the previous paragraph to express her doubt that substantial numbers of people *do* either feel wonder and awe from contact with nonhuman animals or translate feelings that they do have into intuitions that these animals deserve moral consideration. In particular, she questions whether *enough* people feel these things to merit Nussbaum's claim that there exists serious 'overlapping consensus' in favour of extending justice to animals, or that there is at least the realistic potential for sufficient overlapping consensus to develop, citing as evidence the lack of legislation to end any but the most egregious instances of cruelty to animals, particularly livestock, and arguing that those measures that do exist hardly indicate a groundswell of public opinion to the effect that all animals should have their key capabilities protected in the way that Nussbaum claims they should (p.551). She even goes so far as to suggest that, with factory farming on the increase as developing countries industrialise, if anything, we are collectively heading *away* from the possibility of forming any overlapping consensus supporting extension of the capabilities approach to non-humans (pp.552-553). For the capabilities approach to be effective in the area of providing justice to animals, it requires a stronger normative argument than that provided in *Frontiers of Justice*: it needs to be able to state that we *should* recognise nonhuman animals as beings worthy of dignity and respect, and do so on a stronger basis than reliance on intuition and the possibility of changing attitudes in the future.

Justice and non-human animals: Equal consideration

Fortunately, arguments to this effect are available and generally quite simple, and although such an argument has not been provided by Nussbaum many other thinkers have discussed it in the context of a variety of different animal ethics. One of the most sympathetic and useful formulations as far as the capabilities approach is concerned can be found in the arguments articulated by Evelyn B. Pluhar. Pluhar writes to defend what she calls 'the right not to be eaten', providing an account

based upon the fact that human and non-human animals' "basic interests in and desires for life, health and general well-being" entitle one to consideration as an agent seeking to achieve goals. Though Pluhar concentrates on non-interference rather than the more active levels of assistance that Nussbaum believes individuals are entitled to, the argument is very similar: we wish for our goals not to be thwarted, therefore it is inconsistent for us not to recognise and respect the same wish in others. Although it seems unlikely that many non-humans can use moral imagination in this manner, the inference is nevertheless strong enough to generate moral obligations on the part of humanity. We can recognise that non-humans work towards their own flourishing in a way that is at least analogous to our own (though non-humans may not be able to reflect on their goals in the same way that humans do); presumably there are certain things that matter to animals in broadly the same way as the prerequisites for our flourishing matter to us. As a result, unless we are to declare ourselves out-and-out egoists, it is inconsistent for us to support the capabilities of humans while failing to support, or actively thwarting, the capabilities of animals. Encouragingly, Pluhar is also in agreement with Nussbaum on the subject of the painless killing of non-humans. Both thinkers state, in roughly similar terms, that such killing is not morally justifiable since it thwarts the animal's future interests (in the language of the capabilities approach, it denies opportunities for future flourishing, though Nussbaum herself also gives much consideration to the 'cutting short' of life activities that provide a dignified existence). Nussbaum is, if anything, a little more robust in this area than Pluhar, who claims that animals' rights not to be prematurely killed largely stem from their having some sense of their lives extending into the future:³ for Nussbaum, on the other hand, animals (human and non-human) can suffer injustices that they are not necessarily aware of (see *FJ*, pp.386-388, and Pluhar, 2004, pp.97-98). Nevertheless, both are in a position to refute the claim made by Scruton (2004, p.88) that it does not matter to a cow whether it is killed at thirty, forty, fifty or sixty months. It *may not* matter to the cow in the reflective manner in which we might casually

³ Pluhar has quite a high estimation of most food animals' mental capacities: she suggests that the ability of many animals to learn from experiences suggests at least some minimal ability to synthesise sense data into a coherent self.

use the term, but there are things that matter to the cow, and it is deprived of these things in being slaughtered.

Another source for this argument can be found in Gary Francione, who argues that the principle of equal consideration – the principle that we should treat like cases alike – necessitates that we ought no longer to treat animals in ways that we would not condone for humans (in particular, Francione argues that we should not treat animals as property). This specific formulation will receive more detailed treatment later on – what is important is Francione’s argument that human and non-human animals’ shared trait of sentience (the ability to experience pain) necessitates that we recognise the interests of both in not suffering. As Francione points out, this is among the most conservative and uncontroversial principles of moral philosophy (Francione, 2000, pp.82-85). Yet another iteration is put forward by Dale Jamieson in a form that allows ready translation into the language of the capabilities approach: Any claim that I make for myself that I deserve moral value by virtue of my possessing property P entails that I also recognise the equivalent moral value in all other individuals also possessing property P. Therefore, if I am to claim that I am deserving of just treatment as a result of my possessing capabilities that are necessary conditions of my flourishing (i.e., if property ‘P’ is the property of possessing needs and capabilities), I ought also to value the claims to just treatment generated by all other individuals who are also capable of flourishing (Jamieson 1998, p.47).

Justice and non-human animals: Cooper on speciesism and virtue

However, there is another argument that may be applied either instead of or in conjunction with the principle of equal consideration. David Cooper has criticised the emphasis placed by advocates for the moral protection of non-humans (not only those seeking to wish to extend protection to individual animals but also those wishing to protect ecosystems and other ‘natural wholes’) on commonality and consistency. Describing the definition of speciesism as an analogue of racism and sexism, Cooper questions whether what makes these mindsets objectionable is their lack of

consistency. When animal rights advocates accuse their opponents of speciesism, the presumption seems to be that what is required is “the extension to a wider constituency of already-established principles”, rather than the rejection or re-evaluation of new principles. Cooper rejects this model, as well as the notion that moral progress along these lines is always achieved by the recognition of morally relevant similarities between the ‘new additions’ and the existing members of the moral community (Cooper, 1995, p.141). He argues that this model overlooks or oversimplifies the objections of ‘speciesists’: they are portrayed as irrational for not applying their moral principles across the species barrier in the face of the similarities between human and non-human animals, when in fact the ‘speciesist’ argument is better characterised as “incredulity towards the idea that the similarities can count when weighed against the massive differences” between the two (p.142). The charge of inconsistency does not hold, since the ‘speciesist’ makes their moral judgements regarding non-humans against “a background of general practices and attitudes” (p.143). Therefore, it cannot be *inconsistent* for a ‘speciesist’ to value a dog as a companion animal and yet value cows or pigs only for their capacity to provide food, as they make these judgements within a conceptual framework in which they are appropriate. This is not to say that this framework can or should not be subject to re-evaluation – but re-evaluation is what is required, rather than an expectation that individuals should simply apply to non-humans those moral considerations that they currently apply to humans.

Nevertheless, Cooper does maintain that a comparison between speciesism and, say, racism can be valid and that both can be condemned on similar grounds: it is simply that inconsistency is not the most effective criticism available. Two possible arguments outlined by Cooper are that concern for other species is necessary for proper human flourishing, and that concern for non-humans is “required for full exercise of the virtues”. In the first case, Cooper argues that a life lived without concern for others indicates a deficiency in or lack of “imagination, openness and empathy” and would therefore be “stunted” (pp.144-145). It can be argued that a life that is lived in ignorance or denial of the worth of non-humans is lacking a wholesome and worthwhile element. Indeed,

Nussbaum endorses a viewpoint very similar to this when she includes as one of the basic capabilities required for human flourishing the ability to “live with concern for and in relation to animals, plants and the world of nature” (FJ, p.77). The capabilities approach emphasises opportunity, rather than functioning (pp.171-173), so the mere presence of this capability on the list appears not to necessitate that every individual ought to be forced to admit and appreciate the worth of non-humans (much in the same way that our entitlement to good health only necessitates that our health be adequately supported and protected from interference, not that we are obliged to ensure that we are optimally healthy). However, it is worth considering how a society might protect and enhance its citizens’ capability in this area (valuing non-humans) – interestingly, though the capabilities approach often focuses on justice in the developing world, this is one capability in which many individuals in more economically developed countries may also arguably be severely deficient. Obvious measures might include the protection and extension of wildlife conservation programmes in order that the ‘world of nature’ still actually exists for humans to live with concern for and in relation to, and the funding of research into additional ways in which wild animals, plants and ecosystems might be protected from extinction or collapse. Public education through museums, film, radio and television documentaries and school curricula would also be likely to increase public understanding and appreciation of non-humans.

This is to say nothing of what this entitlement might mean for the billions of non-human, non-wild animals who spend their lives in contact with – and who, in in the majority of cases, owe their existence to – human beings, often to their severe detriment. Certainly, these animals are *treated* only as resources rather than as beings possessing complex capabilities, needs and experiences, and presumably these industries could not have grown to such a scale if the lives of the animals concerned were not already de-valued to a large extent, but does their existence actually contribute to the public perception of their worth as reduced to their instrumental value? A conclusive answer to this question would require extensive psychological and sociological research, factoring in how well-informed the public actually are regarding issues of animal welfare, but given

the scale and extent to which animals such as pigs are brought into the world, manipulated, engineered, tortured and eventually killed for their various body parts by the factory farm systems, it seems not entirely out of the question to suggest that the prevalence of this industry contributes to or reinforces the trivialisation of their value in public perceptions. The disconnect between the living, suffering animal and the pink, plastic-looking cutlets in the supermarket aisle seems to play at least some part in the current dismissal of these animals' interests in Western societies. When the only pigs we encounter in our daily lives are wrapped in cellophane, it may interfere with our ability to appreciate them as loci of inherent moral worth. Therefore, a society interested in upholding capabilities justices may consider protecting the flourishing of non-humans on the grounds that failing to do so interferes with its citizens' capability of living with regard for other species. Exactly what form this protection would take, and how far it would go, would require tailoring to the society in question – it might simply involve educational campaigns about the capabilities of domestic animals, the practices involved in animal food industries and the viability of a vegetarian diet, heightened welfare regulations, or even restrictions on the number of animals that can be bred for food production (perhaps coupled with subsidies for farmers producing vegetable protein for human consumption). Nussbaum states that she prefers a broadly 'libertarian' approach to those capabilities for which the emphasis is on opportunities rather than functioning (health, for example), but the issue of other species may entail a more interventionist approach, depending on the actual weight given to the actual flourishing of non-humans.

It is harder to connect the capabilities approach with Cooper's claim that recognition of the moral worth of non-humans might also be a condition for full exercise of the virtues. It seems difficult to justify giving a system of political justice the responsibility for making us more virtuous as individuals. Yet, virtues and sentiments of benevolence and kindness play a critical role in the capabilities approach, and as systems of justice go it seems well-placed to address this issue. Indeed, Nussbaum anticipates that one objection to the approach will be that it required entirely too much benevolence towards individuals who are not necessarily in a position to reciprocate: disabled

people, severely impoverished or unstable nations, or non-human animals (*FJ*, p.409). Nevertheless, she observes that the exclusion of disadvantaged groups has diminished over time, and suggests that the diagnosis of Mill and Rousseau – that compassion and benevolence can be increased through public education and changes in environment in order to “foster...conceptions of the person and human relations that support its basic principles” (p.413). If Cooper is correct, and kindness and respect are necessary for the full exercise of the virtues, then it appears highly appropriate that a society aiming toward capabilities justice should actively propagate and encourage these virtues, as they are central to the success of the capabilities project.

As to whether Cooper’s argument is *better* to those put forward by the ‘mainstream’ animal liberationists described above – it seems more appropriate to acknowledge the argument without necessarily discarding the principal of equal consideration. Although Cooper suggests that his analysis shows that “the vocabulary of justice is not the most felicitous one in which to express a concern for other species”, it seems hard to eject animals from the capabilities project wholesale given the explicit focus that Nussbaum gives to the basic capabilities of the human being *as* an animal. If we are concerned about the just treatment of humans based on their capacity to flourish (to re-invoke Jamieson’s argument - based on their possessing property P), how do we justify not extending the same consideration to all those creatures – particularly those already in our care – who also possess the capacity to flourish? At the same time, Cooper’s discussion intersects with capabilities approach in two highly relevant ways. First, he iterates in detail what Nussbaum appears to be attempting to describe when she stipulates that humans have the capability of positive interaction with other species, and second, Cooper draws attention to the approach’s reliance on – and no doubt to desire to foster – a reasonable level of benevolence in its citizens. This is probably likely to be the case for any workable theory that attempts to extend justice to individuals who are unable to reciprocate when the virtues of kindness and benevolence are exercised towards them – and Cooper, not unlike Nussbaum, believes this insistence on reciprocity to be a flaw in the ‘cynical’ contractarian school (Cooper, 1995, p.147). The capabilities approach may, therefore, be a ‘more

virtuous' theory of justice than those that are the target of Cooper's article, and therefore capable of redeeming the principle of equal consideration while addressing some of these questions of virtue and the good life.

Human consumption of animals: 'very difficult cases'

Having established one or more reasonable arguments for providing justice to animals, it is worth examining what consequences the pursuit of capabilities justice might have for our relationship with domesticated animals and, in particular, the role that they play in the human diet. So far, we have seen that the approach is motivated to solve the perceived failure of existing accounts of justice to cover the issue of justice for animals. The alternative approach offered is grounded in the idea of protection of a basic kind of dignity, one that is grounded in the needs and capabilities that human and non-human animals require in order to acquire a minimal level of flourishing (the 'species norm'). Although, as Ilea points out, Nussbaum's own argument for providing animals with the consideration of justice is weak, the approach easily admits a more conventional, 'extensionist' argument, similar to those provided by Pluhar, Francione or Jamieson, and given force by the virtue-based arguments propounded by Cooper. Obligations of justice, according to Nussbaum, are generated by these capabilities and needs, and it is the responsibility of society to ensure that its (human and non-human) members' entitlements in these areas are adequately protected. If animals have analogous entitlements to humans – and Nussbaum uses a very similar list of key capabilities in both cases – this would appear to very clearly prohibit the killing of animals for food or to extract other resources in almost all circumstances. Nussbaum does not devote a great deal of space in *Frontiers of Justice* to this question, though the little that she does say provides fertile ground for discussion.

Most of what Nussbaum says regarding the animal food and garment industries regards what she refers to as 'cruel practices' – examples of cruel practices that have been recently banned include

cropping tails, 'retiring' racehorses to the slaughterhouse and caging chickens (*FJ*, p.392). Discussing these practices in relation to 'overlapping consensus' supporting the rights of non-humans, Nussbaum states that opposition to these practices will increase "as people acquire more information about the treatment of animals and gain the ability to make more informed consumer choices", and as questions regarding potential alternatives to animal products are answered (pp. 390-392). However, a gradual phasing-out of some of the more egregiously cruel practices of factory farming and the animal entertainment industries hardly seems well placed to deliver support for the very strong entitlements of animals, for which Nussbaum argues quite convincingly elsewhere in the book. She goes on to describe her adapted list of ten key capabilities for animals, which, like that provided for humans, entitles non-humans to opportunities to exercise: life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment. Since the raising of animals for food violates, at the very least, their entitlement to life (thereby also depriving animals of all the other things to which they are entitled) and in nearly all cases also deprives them of opportunities to exercise their other capabilities during their lifetimes, it seems difficult to justify any such practice.

Nussbaum's discussion of animals' entitlement to life is quite revealing on this issue. She states that, broadly speaking, all sentient animals are entitled to protection from gratuitous killing for sport or "luxury items such as fur" and that "cruel practices and painful killings in the process of raising such animals for food" should be banned. Cases involving painless killing are considered "very difficult" when carried out to gain food or to control populations. Cases of euthanasia, on the other hand, are more clear-cut when it is carried out to end irreversible pain (*FJ*, p.393).

Before continuing with the discussion of meat-eating, a small revision might be made to Nussbaum's discussion of euthanasia. It certainly does seem correct that our concern for animals' flourishing should extend in some cases to ending their lives. However, since Nussbaum has, up to this point in the book, been diligent in pointing out the advantages of the capabilities approach over hedonistic utilitarianism, it seems appropriate to amend the criteria provided. Rather than

‘irreversible pain’, we should retain a heterogeneous set of criteria when calculating whether an animal’s life is still worth living. Thus, an animal might justifiably be put down in cases where it has no appreciable quality of life. This admits the possibility that an animal might be in irreversible pain but still live a life worthy of an adequate level of difficulty (as in the case of an arthritic cat that still takes food and purrs when stroked, for example). It also seems possible that there may be animals that do not enjoy an acceptable quality of life but do not feel irreversible pain (this might include animals with multiple debilitating but not painful medical conditions).

Returning to the question of eating meat, we may question whether the killing of animals for food really represents a ‘difficult case’. Nussbaum’s main motivation for labelling it as such seems largely due to several quite reasonable empirical questions that she takes to largely be unanswered. These questions are concerned with whether it has been established that a vegan or vegetarian diet is compatible with human flourishing, both in terms of its providing adequate health and in terms of its ecological viability (p.402). There may be related questions of food security. It may be that a vegan or vegetarian diet is suitable for some individuals and not for others, due either to biological factors (health conditions) or factors arising from local food resources (the most obvious cases being areas at high altitude or latitude). Such conditions seem to create legitimate conflicts between the respective flourishing of humans and animals, and in these conditions at least, the question of painless slaughter of animals for food does appear to be difficult (then again, there are conditions under which the painless slaughter of *humans* for food seems difficult). What is important here is that there does not seem to be any *philosophical* factor rendering the slaughter of animals controversial: in the absence of any conflicts, it appears that doing so denies animals of their entitlements and is clearly unjust. If we admit this to be true, then consideration of the animal food industries should be viewed in the context of resolving conflicts between animal and human flourishing – and Nussbaum is adamant throughout *Frontiers of Justice* that conflicts among the flourishing of different individuals should be eliminated or ameliorated in the long term, even if this is not possible in the short term. It is therefore surprising that Nussbaum does not provide a more

lengthy consideration of the animal produce industries, given that her project – the provision of universal justice to non-human animals – is so ambitious.⁴ She suggests that our short-term goal ought to be “good treatment [of food animals] during life, and painless killing” (p.402), subject to revision as more data on the health and ecological effects of abstinence from animal products become available.

Nevertheless, it seems likely that those cases in which genuine conflict arises between the interests of human and non-human animals are relatively rare. The most obvious question to be settled is that of whether a diet free of animal products can provide levels of health consistent with adequate human flourishing. Aside from the anecdotal evidence of long-time vegetarians and vegans, there are encouraging conclusions drawn by respected mainstream scientific institutions to the effect that a meat and/or animal product-free diet does not carry any particular risk compared to one containing such items. In a well-known and frequently-cited article, the American Dietetic Association has stated that “appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases” and that “well-planned vegetarian diets are appropriate for individuals during all stages of the life cycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes” (Craig, Mangels and American Dietetic Association, 2009, p.1266). Although Dwyer and Loew (2004) consider that our understanding of the effects of vegan diets is incomplete, and that vegans are at greater risk than omnivores of deficiencies in various vitamins and minerals [most notably vitamins B12 (p.63) and D (p.65), and iron (p.64) and calcium (pp.65-66)], particularly during the early stages of the lifecycle, they “conclude that all known nutritional risks can be avoided by appropriate dietary planning that results in intakes of nutrients from foods (or, in

⁴ In fairness, it may simply be that Nussbaum recognised that issues surrounding the treatment of animals in the cause of food production have already been covered in significant detail by other contributors to the literature. Schinkel has produced similar arguments to mine to argue that, unforeseen dire consequences of mass conversion to veganism notwithstanding, meat consumption and medical testing on animals are much more clearly incompatible with Nussbaum’s premises of the capabilities approach, and with the more general moral concern that she advocates towards nonhuman animals, than she herself seems to believe, based on the discussion in *Frontiers of Justice* (Schinkel 2008, pp.51-58).

some instances from supplements) that meet levels suggested in the Recommended Daily Allowances". Barnard and Kieswer (2004) are more enthusiastic: they cite studies indicating that vegetarian diets carry health benefits including relief from symptoms of type II diabetes and cardiovascular disease (p.48), relief from symptoms of arthritis (p.53), and protection from "obesity, heart disease, stroke, cancers hypertension, type II diabetes, and osteoporosis" (p.53). Key, Appleby and Rossell (2006) do not find evidence that a vegetarian diet has such a wide spectrum of benefits, yet their review does cite studies in which vegetarian mortality rates in England and Wales were significantly lower than those in the general population, and conclude that vegetarians tend to have lower BMIs and risks of ischaemic heart disease than non-vegetarians, and they conclude that "in Western countries the health of vegetarians appears to be good compared with national averages and similar to that of non-vegetarians with a comparable background and lifestyle". Interestingly, they also observe that although concentrations of vitamin B12, which is thought to be unobtainable from plant sources, are low in vegetarians and vegans, cases of B12 deficiency in vegans are rare. It therefore appears that a number of credible sources do not feel that a vegetarian or vegan diet would be prejudicial to human flourishing on grounds of health, and, indeed, there is some evidence that it would be beneficial.

It is harder to be quite as confident when discussing the environmental and food security implications of widespread veganism; Nussbaum may be correct when she states that nobody knows what effect this would have on the world's climate and ecology. However, there are several statistics worth bearing in mind. Because animals consume vegetable matter, their footprint is significantly larger than is often apparent from watching dappled Frisians grazing in a field. As much as forty percent of the world's grain is fed to animals to produce meat, and the amount of grain fed to American livestock each day could be made into two loaves of bread for every human being on the planet. The draw of livestock on the planet's reserves of land, water and fossil fuels is also correspondingly high – it requires approximately nineteen times as much land to provide a meat-eater with food for a year as it does a vegetarian, and production of one kilogramme of chicken

requires approximately seven times as much water as does one kilogramme of potatoes (Francione, 2000, pp.14-15). Livestock production is also a major contributor to anthropogenic climate change. Production of corn and other grains for livestock feed (and approximately fifty percent of the world's corn harvest is produced for this purpose) requires substantial use of nitrogen fertilisers extracted from fossil fuels. Production of fertilisers in this way contributes 41 million tonnes of CO₂ to the planet's atmosphere each year, and the crops produced in this way then have to be harvested, shipped and often processed themselves before they are fed to animals, whose rearing also requires substantial use of fossil fuels on-farm (Food and Agriculture Organisation of the United Nations, 2006, pp.86-89). Furthermore, livestock are the largest single source of anthropogenic methane emissions, with the total emissions from enteric fermentation and manure estimated at around 104 million tonnes per year (pp.95-97). Even from this very cursory discussion, it appears that animal farming has the potential to significantly impact food security and ecological conditions, with consequent effects on global resource distribution and health.

Compatibility of the capabilities approach with the institution of animal ownership

Even if these empirical questions were answered satisfactorily, would the capabilities approach require that all institutions by which humans currently make use of animals be gradually (or even immediately) brought to an end? Gary Francione, already mentioned above, presents the argument that the main duty we hold towards non-human animals is a duty not to treat them as property (Francione, 2000, pp.xxxiii-xxxiv and throughout). Francione maintains that animals "have morally significant interests in not being subjected to unnecessary suffering", interests that they share with humans: under the principle of equal consideration, therefore, we ought not to treat animals' interests as trivial when making moral judgements that affect them (pp.81-84). He argues further that in order for animals' interests in not suffering to be taken seriously, their legal status as property should be abolished (p.86). This does not appear to be as much a philosophical consideration as it does a practical one, though this distinction is somewhat complicated by

Francione's insistence on rough parity between the moral value of humans and non-human animals, as shall be seen. It seems *prima facie* that we might be able to retain certain animal-property institutions (such as 'no-kill' dairy, egg and wool farms, pet ownership, and zoos) as long as these do not cause animals' interests in not being harmed to be subordinated to profit or other non-essential human motives (i.e., as long as there are sufficiently rigorous welfare laws protecting them).

Francione's disagreement is on the grounds that 'humane treatment' laws have been on the statute books of many countries for a century and a half or more, during which time the exploitation of animals has intensified on an unprecedented level. He lays the blame for this apparent paradox at the feet of animals' status as property, for, as was the case with Transatlantic slavery, the interests of the owned individuals are entirely subordinated to those of their owners (even if the specific interests of the owners were comparatively trivial, such as increased profit or ease of handling). The law is unable to reconcile the moral obligations generated by the interests of living property with their inferior moral status compared to that of their owners. For this reason, Francione argues that genuine advocates for the rights of non-human animals ought to be concerned with the abolition of the institution of animals as property (p.86).

As observed above, it is not entirely clear as to whether Nussbaum would agree. In addition to her somewhat ambivalent attitude to meat-eating, she appears not to take issue with the use of animal labourers so long as they have "dignified and respectful labour conditions" (*FJ*, p.400), nor with keeping animals in humane and stimulating environments in zoos (p.397). There is no clear statement as to whether she believes that these institutions are indefinitely acceptable so long as they meet the basic requirements of flourishing for the animals involved, or whether these are to be considered best-case, temporary states of affairs until zoos and animal labour can be phased out. The issue is further complicated by the approach's emphasis on *characteristic* flourishing. Does a sheepdog flourish better, *qua* sheepdog, if it is allowed to fulfil the purpose for which it was bred, or if it is kept from doing so? Nussbaum seems to be inclined to say the former, since she argues that animals' capability for Senses, Imagination and Thought (which entitles humans to education, among

other things), may entitle some animals (Nussbaum specifically mentions border collies) to appropriate training – and in fact suggests that a collie who has not been trained has been abused in some way (p.397). It seems plausible to suggest, however, that the experience of chasing sheep can be simulated in some satisfactory way (and, if we are serious about ending wool, lamb and mutton farming for profit, there may not be any sheep for the dog to chase anyway!). Though Nussbaum tends towards ‘intelligent, respectful paternalism’ with regard to animals (p.378), it may be in many cases that respecting the characteristic flourishing of an animal entails not interfering in its life or abstracting it from its environment (as in the case of zoo animals). Moreover, if Francione is correct, and the current legal status of animals is central to our failure to take their interests seriously, it would be a contradiction of the spirit of the approach if it were to permit the assignation of non-human animals to a legal category that allowed their interests to be entirely or partially subordinated to non-essential requirements of humans.

On the other hand, one marked point of departure between Francione and Nussbaum is the precise value that each places upon the status of non-human animals’ flourishing in comparison to that of humans. Francione rejects the idea that humans have any *de facto* superior moral value over animals. While we may choose to rescue our child over our dog from a house fire, this example tells us more about the relational properties and responsibilities that we feel we have toward the child than it does about the harm that would befall each individual were they to be allowed to burn alive. As a result of the rough parity of their interests, we can never treat an animal purely as a means to satisfy human interests based on its animal status alone. The basis of Francione’s claim that human and non-human interests have parity is not entirely clear, other than his analysis of this ‘burning house’ problem (Francione, 2000, pp.151-152; 161). While he is correct that this hypothetical may not tell us a great deal about human and non-human interests, there is an argument that he does not address, and which Nussbaum does make use of when discussing the resolution of conflicts between human and animal flourishing. This argument is as follows:

Nussbaum does not suggest that the differences between humans and non-humans are necessarily of a qualitative sort. Rather, she tends to describe the difference in terms of degrees of complexity (p.386). More complex lifeforms suffer more greatly from being harmed because they have a greater number of capabilities and because their capabilities themselves tend to be more complex – they have the potential for a greater number of life activities, and can be said to have ‘more to lose’ from being killed or having their flourishing thwarted (*FJ*, p.386).⁵ This does not render the death or harm of simple creatures trivial, but it does suggest that in cases of genuinely unavoidable conflict between more and less complex creatures, we ought to resolve them in favour of the more complex (at least in the absence of any other considerations – for example, killing a bee might inflict less harm than killing a human, but if we devastate the bee population to reduce the likelihood of bee-sting-inflicted medical emergencies or deaths the resulting lack of pollinating insects would cause widespread ecological disaster). Nussbaum urges caution, since “even painless killing of a relatively simple animal such as a rat inflicts some harm”, and we ought to ensure that conflicts genuinely are unavoidable and otherwise irresolvable before we commit to harming other creatures (particularly sentient creatures). If rats become a threat to human health we ought to ensure that the problem cannot be avoided by implementing sufficient public sanitation and education programmes before we mobilise the exterminators (p.389).

The relevance of the above is that Nussbaum appears to be more ready than Francione to accord greater moral protection to humans than non-humans in situations such as the burning house problem. It does not follow that property status is antithetical to animal flourishing *simply because it is antithetical to human flourishing*. Does this mean that the approach can permit the continued treatment of animals as property? Not necessarily. It may still be that the abolition of animal-property institutions is a necessary measure for the protection of animals’ flourishing. If legal status as property functions as an impediment to the serious consideration of their interests within a legal framework, then capabilities advocates ought to be concerned with challenging this institution.

⁵ I discuss this issue in more detail in CH. IV.

It may be that in the process, we discover other, more constructive ways in which we can live with animals. The institution of pet ownership might be adapted into an institution of animal adoption – since many responsible pet owners already view their companion animals as friends or family members, this does not seem an implausible change. It seems likely, however, that if the law sanctions the keeping of animals as property for the purposes of turning them into food, say, or clothing, then this will ultimately prove incompatible with these animals' flourishing, not only because even painless killing thwarts these creatures' interests, but because once the law sanctions the creation and destruction of animals' lives for economic benefit, genuine concern for their flourishing is undermined. As a result, it seems likely that most capabilities theorists ought to advocate the abolition of all use of animals as property, however benign. Furthermore, if we admit the points made by David Cooper, mentioned earlier, capabilities theorists may also be concerned about the effect that these institutions have on our ability to fully appreciate animals, and on our cultivation of the virtues of kindness and benevolence towards creatures not capable of reciprocating.

Conclusion

This chapter has discussed Nussbaum's motivation in advocating the capabilities approach as an alternative to contractarian theories of justice on the grounds that the latter does not adequately accommodate individuals who are unable to participate in the social contract or to agree to participate in reciprocal justice. The capabilities approach, by addressing the needs and capabilities of the human as animal, purports to provide a nuanced and heterogeneous account of how justice can be provided to individuals with substantially differing requirements, by supporting a wide range of necessary life-activities to a specified level. Discussion of the capabilities of humans with needs and experiences that differ from the human norm leads to the discussion of whether the same can be true of non-human animals, and Nussbaum provides a modified version of her original capability list with the aim of describing how animal flourishing can be supported. Although Nussbaum does

not provide a complete argument as to why we should be concerned about the flourishing of non-humans, the principle of equal consideration appears to be consistent with her premises, and the capabilities approach also appears to accommodate David Cooper's arguments based on the relationship between concern for non-humans, human flourishing, and exercise of the virtues. Finally, the relationship between the capabilities approach and current forms of animal exploitation was considered in detail. It appears likely, pending the answer to several empirical questions, that the approach necessitates the end of the consumption of animals and their various products for food, clothing and other non-vital uses for most people on the planet. Furthermore, it may be necessary to meaningfully securing the flourishing of non-human animals for us to abolish all treatment of animals as property, as this legal status traps animals in situations where their flourishing is likely to be compromised for profit.

Chapter II: Supplanting nature

Probably the most controversial element of Nussbaum's discussion of justice beyond the species barrier is her insistence that animals' capabilities should be protected whether or not the individual animals in question are under our control. According to her, the state (or other responsible body) has affirmative responsibilities with regard to the capabilities of all of its citizens, human or non-human, potentially necessitating large-scale human intervention to protect animals from harm caused by humans, other animals, or from natural privation or disaster. As a result, Nussbaum considers that all harm⁶ suffered by sentient animals is potentially a matter of justice, and that the capabilities approach ought, ultimately, to aim for "the gradual supplanting of the natural by the just" – the eventual extension of political justice beyond the cultural sphere, aiming at restructuring the way that wild animals live so as to minimise the denial of their capabilities in the wild (*FJ*, p.400). After a brief outline of Nussbaum's justification for positive as well as negative duties and a discussion of why the idea that humans might intervene in the lives of wild animals is not simply absurd, I will consider the objections raised by certain environmentalists against Nussbaum's focus on the flourishing of individual wild animals. The most important objections in this area are that considering the rights of wild animals prevents our valuing and showing respect for not only 'nature', broadly construed, but also the specific natural communities, such as ecosystems and species, that constitute the natural world. Rather than an individualistic account of what we owe to non-humans, these philosophers advocate for a holistic view, taking the good of the community as the basic unit of moral consideration. Since these communities often depend upon the suffering of individual wild animals to function, conferring direct moral value upon them appears to be antithetical to an individualistic approach to justice. As a result, the capabilities approach, along with other accounts of 'animal rights', appears to have set itself up in opposition to the way in which nature works, and its advocates appear to be incapable of showing genuine respect for the natural world.

I will examine a number of responses to these concerns. In particular, I will suggest that Nussbaum may be less vulnerable to the charge, levelled by J. Baird Callicott, of 'hyperindividualism', since she can make sense of wild communities forming an integral part of the way in which wild animals flourish. Although she still appears not to be able to countenance the idea that animals can be sacrificed for the good of the community,

⁶ Recall from the previous chapter that the harm we are interested in here is the depletion of opportunities for capability-exercise below the level described by the 'species norm'.

Nussbaum can nevertheless give consideration to the notion that ecosystems have a good that is not reducible to the good of their constituent organisms, even if she does stop short of conferring non-instrumental value upon such communities. Arguably, her account of the good of wild non-humans is more developed than that presented by Callicott, since Nussbaum can provide some concessions to the ecological value of wild animals while maintaining a focus on the individuality, subjectivity and irreplaceability of the animals themselves that appears to be lacking in a purely holistic account.

The second environmentalist charge – that animal rights advocates are incapable of properly valuing nature – has been formulated in detail by Ned Hettinger. Since Nussbaum considers constructive relationships with non-human nature to be part of what is required for human flourishing, it would seem to be a significant count against her project if it were to emerge that valuing the flourishing of non-human animals interfered with this human entitlement. However, the validity of Hettinger's claim that valuing nature ought also to require that we wholeheartedly accept, or even participate in, predation has been questioned by Jennifer Everett and Ty Raterman. Hettinger's insistence on the goodness of pain and death in nature may lead to his being characterised by Nussbaum as a 'nature worshipper', along with Callicott, and this charge forms the most substantial part of her own consideration of the value of nature. Nussbaum makes the point that not only is nature cruel, but it is also not the harmonious, unchanging force that certain environmentalists have made it out to be. Not only is it not necessarily worthy of unqualified worship, but it is not even entirely clear as to what nature *is*, given the pervasiveness of human influence even on areas that are popularly considered 'wilderness'. As a result, the idea of a firm dividing line between 'nature' and 'culture' is dubious at best, and nature is an inappropriate source of moral norms.

Positive and negative duties: How sharp is the distinction?

The possibility that we might have duties to wild animals arises from Nussbaum's claim that justice exacts positive as well as purely negative duties on the part of those responsible for upholding it, since justice in the capabilities approach is dependent on an account of the needs of the individual. According to her analysis, what it means for one individual to have a duty to another is that there is something that individual needs to have done (or not done) to or for them. If we have a duty not to violently rob other people, there is the implication that bodily security is a human need. Furthermore, this need may also generate duties to prevent

robberies to the extent that we are able to, since it is fairly meaningless to claim that individuals ought not assault one another if they have no guarantee of protection from assault (*FJ*, p.276). As a result, Nussbaum contends that there are in fact *no purely negative duties*, since even *prima facie* negative freedoms necessitate preventative or compensatory action on the part of the state or other body.⁷

Furthermore, Nussbaum identifies common ground between the capabilities approach and existing conceptions of justice. She claims that there is, for example, plenty of room for agreement between the capabilities approach and Kantian conceptions of justice that focus more explicitly on duties not to treat others purely as means. Such an account of justice is also grounded, according to her, in a sense of human dignity that describes what it is that human beings can be and what they require. Kantian dignity consists in being recognised as a being with one's own ends; Kantians typically place more focus on the role of rational agency in grounding the dignity of the individual than Nussbaum does.⁸ The Kantian account of dignity intersects with that produced by Nussbaum. Violently assaulting an individual obviously evidences a failure to respect their entitlement to a life worthy of human dignity as an end in themselves, but so does employing them to work in exploitative or degrading conditions, or for less than a living wage (p.277). When we treat an individual as an end in themselves, or fail to, we do so with reference to some conception of what being an end in oneself means for that person, based on facts regarding that individual and their context. Our account of what is required for an individual to flourish in this way therefore exists "prior to and to some extent independently of" any discussion of precisely who owes what to whom. If we maintain a solid concept of what it means to flourish, independent of the political and economic vicissitudes that determine who is in the best position to provide or secure the conditions of flourishing, then we can produce a robust account of what individuals ought to be able to expect. Treating individuals as an end requires that they have opportunities to fulfil their capabilities: it involves recognising that they are in pursuit of a characteristic good, and that they need things (or opportunities to do things) in order to attain this good (*FJ*, p. 278, clarified in Crescenzo, 2012, p.179).

⁷ Nussbaum's justification for judging the nation-state to be the body most squarely responsible for the upholding of capabilities justice is grounded in her judgement that governments are, or at least, should be, accountable to their citizens in ways that multinational companies, NGOs and organisations such as the EU or the World Bank are not. This argument is presented in more detail in Nussbaum (2000), pp.103-104, and 2011, pp.113-115.

⁸ Or rather: Nussbaum acknowledges that rational agency plays a significant role in the dignity of most humans due to its being a central part of human animality, but has produced a partial account of justice that does not *require* an individual to be a rational agent in order for it to possess a characteristic form of dignity.

Discussion of positive and negative duties that are framed solely in terms of what is owed by an agent to a patient therefore overlook fundamental elements of what justice should be. At different points in time, the bodies and individuals best placed to enact and promote justice will alter according to social, political and economic forces. On the other hand, an account of what it is to flourish, based on human needs and abilities, remains comparatively stable. Grounding an account of justice in these features of what it is to flourish as a human animal therefore allows us to evaluate the performance of bodies such as governments across cultures and historical periods (*FJ*, p.278). If people fall below the minimum acceptable level in one or more of the capability areas that Nussbaum identifies, then they are not flourishing. This fact about the individuals in question exerts a moral claim upon those in a position to satisfy it, as a matter of justice.

In Nussbaum's account, the requirements of the individual exert positive and negative moral claims on the community as a whole, since what is required to adequately exercise a given capability may require interference in some areas (mandatory provision of a minimum level of education) and non-interference in others (freedom to practice our religion). This is held to be the case with both human and non-human animals. It appears that doing justice to a pig requires not only that we refrain from beating or forcibly impregnating it⁹ (negative duties; non-interference), but also that we feed it, ensure that it has opportunities to forage and live communally with other pigs, and provide it with a suitable habitat that affords it sufficient stimulation and exercise of its capabilities (positive duties; interference). Because these moral claims are generated prior to the identification of any group or body capable of recognising them, there appears to be no reason why this detailed consideration of animals' capabilities should be limited to domestic animals such as pigs, who are already within our sphere of influence: potentially, wild animals have equally strong claims to dignified treatment. While no one may currently be in a position to save deep-sea fish from the beaks of Humboldt squid, the fishes' entitlement to life and bodily integrity remains in place, 'waiting for us'.¹⁰ If we consider failing to discharge these duties less blameworthy than neglecting others, it is perhaps because they are more difficult to discharge, and not because wild animals' flourishing is of any lesser value.

⁹ Depending on how highly we weigh the pig's capability of living a long life against the benefits that will accrue to humans from killing and eating it, our negative duties to the pig also appear to include not raising and slaughtering it for food.

¹⁰ Actually, Nussbaum is doubtful as to whether fish are sufficiently sentient to qualify as subjects of justice. See Ch. IV for a discussion regarding justice for nonsentient life.

It can therefore be seen that the claim that certain capabilities can generate entitlements lies at the core of Nussbaum's discussion regarding what is owed to wild animals. The positive entitlements that animals can claim from us are presented in her prospective list of animal capabilities. Animals are entitled to such levels of nourishment, good health, protection from the elements, and so on, as are required in order for them to meet the minimum level of flourishing (the 'species norm'). However, the entitlements go beyond the mere physical conditions of existence: many animals are also capable of social interaction, of benefiting from training, of paying attention to their physical cleanliness, and of controlling their environment to one extent or another, and they are entitled to protection in these areas as well. The animals in relation to whom we are most obviously in a position to provide these things are domesticated animals, and perhaps these responsibilities are already widely accepted as incumbent on keepers of companion animals in particular. We are less used to thinking about other domesticated animals in this way, but doing so also appears to be a clear requirement of justice (as was hopefully established in the previous chapter). Yet it may be that there are many wild animals whose capabilities we are already in a position to recognise, up to the required minimum. The capabilities of wild animals that seem most urgently in need of our attention, according to Nussbaum, are those of Life, Good Health and Bodily Integrity (since many wild animals die unpleasant and premature deaths, either at the claws of predators, or due to privation, disease or exposure to the elements) and Affiliation (since many animal cultures incorporate hierarchies involving the exclusion, frustration humiliation or persecution of weaker individuals, often through violent competition (*FJ*, pp. 394-399). These deprivations erode what Nussbaum sees as animals' entitlement to mutually affirming relations with their environment and other species, and to live in "an interdependent world in which all species will enjoy cooperative and mutually supportive relations". Since there is little likelihood of this coming about naturally, it is incumbent upon humanity to intervene to bring about "the gradual supplanting of the natural by the just" (p.399).

The alleged absurdity of justice for wild animals

This shift of focus from discussion of wrongs committed by humans to harm suffered by non-human animals in the wild has surfaced previously in the debate on animal rights, typically as a proposed *reductio* of pro-animal rights positions. D.G. Ritchie proposed that, in order for consideration of animals' well-being to be anything other than a "hypocritical sop to pug-loving sentimentalists" (1916, p.107 *f.*, cited in Clark 1979, p.171), we

ought to seek to prevent even the predation of birds upon earthworms. Similarly, Scruton considers the fact of predation to render the case for vegetarianism on grounds of animal rights absurd, since if animals exert moral claims against humans they also exert them against one another (he appears not to believe that animals cannot be moral patients without also being moral agents; Scruton, 1998, pp.131-2). The assumption appears to be that the notion that we might prevent animals' suffering in the wild is simply ridiculous. Yet, as Nussbaum points out, we are clearly capable of intervening to prevent or mitigate at least some egregious harms suffered by animals in the wild, and could increase our ability to do so through advances in technology and expertise. The fact that animals do not appear to be moral agents (or are not generally able or inclined to arrest their own predation) ought not to have any bearing on the validity of our project of reducing harm. If the interests of animals exist prior to and independently of our ability to do anything about them, they nevertheless *do exist*. Nor does the lack of a moral agent as perpetrator excuse us from acting: as Nussbaum puts it, "the death of a gazelle after painful torture is just as bad for the gazelle when torture is inflicted by a tiger as it is when it is inflicted by a human being", even if death by tiger is not as "blameworthy" (FJ, p. 379). Refusing to assist the (human or non-human) victims of an earthquake on the grounds that no moral agent caused their predicament not only demonstrates a "callous" lack of a morally valuable "susceptibility to human distress"; by responding only to "moral evil and not [to] physical evil" (Clark, 1979, p.171) we violate Nussbaum's account of justice, for we refuse to acknowledge the individuals' form of dignity, based as it is on their capabilities and needs, as discussed above.

Tyler Cowen has entertained the possibility that there may be policies that we can adopt to address the suffering of wild animals. Cowen's answer to the conflict between the gazelle and the tiger is particularly direct: rescind the protection currently afforded to the endangered tiger, as this will allow us to save many gazelles per tiger from painful deaths while allowing hunters to make a profit from the sale of tiger parts (Cowen 2000, p. 173). If this leads to overpopulation among gazelles, with a corresponding increase in risk of unpleasant death from starvation or disease, gazelle populations can be managed by humane culling or, preferably, by non-lethal means such as provision of contraceptive-laced food or relocation (so, contrary to Cowen's claim, it is uncertain that his solution will result in a net profit in terms of resources – nevertheless, the lot of the gazelles might still be better). From Nussbaum's point of view, this policy ought only to be a last resort, since the capabilities approach commits us to upholding the dignity of the tiger if at all possible (Cowen,

writing in 2000, considers the implications of nature-policing for utilitarian, rights-based and holistic approaches to wild animals, but not the capabilities approach). We ought not to allow significant harms to be inflicted upon tigers if their flourishing can otherwise be accommodated, even if accommodating them is very expensive. We might find other ways of keeping tigers from killing gazelles, such as keeping them in separate enclosures, fed on vegetable protein if possible, or *in vitro* meat, or perhaps on elderly or sick gazelles that have been humanely euthanized, or roadkill. If we painlessly kill gazelles to control their population then they can be served up as tiger food, though the option of vat-grown gazelle meat appears to be the most promising, given that it would involve no capabilities violation, as it would allow us to feed tigers even if we controlled gazelle populations by sterilisation or other non-violent means.

On the other hand, this may not be enough if we are to genuinely do justice to the tiger. The flourishing of predatory animals may require more than a carnivorous diet; rather, the actual predatory act itself may be central to any account of what it means to have a life worthy of tiger dignity. This point emerges briefly in *Frontiers of Justice* when Nussbaum discusses the provision of a toy made from a ball and rope to satisfy the predatory urges of the tiger in the Bronx zoo, but a far more detailed consideration of this problem has been put forward by Daniel Crescenzo. Crescenzo considers several aspects of Nussbaum's discussion of wild animals: in particular, he considers her allowance that exercising predatory instinct may well be an important part of what it means to flourish characteristically as a predator. He argues that the ability to *kill* is "not easily separable [for at least some predators] from the ability to exercise predatory instinct", and therefore may be essential to these predators' flourishing. Focusing on the behaviour of wolves as an example, Crescenzo suggests that the observation of wolf packs during hunting and killing other animals indicates that these activities are centres of capability fulfilment in areas such as affiliation, senses, emotion and thought, and practical reason. Hunting and killing allows wolves to exercise predatory traits including their keen senses, their sense of excitement in the hunt, social interaction, and abilities of goal forming and execution (Crescenzo, 2012, pp.189-192). These form part of the wolves' way of being to the extent that much of what it means to say that a wolf is capable of practical reason, for example, is bound up with their ability to form goals relating to hunting and killing prey, and so it is difficult to exclude these life-activities when building an account of the wolves' species norm. Therefore, it is hard to see how the conflict between the wolf and the elk can be resolved without causing at least some harm, though one course of action may be less harmful than others.

Either the wolf is allowed to destroy the elk's flourishing, or the wolf is fed vat-grown elk meat but incurs harm by being unable to exercise many of its capabilities – and it may well be that the 'ball-on-a-rope' solution mentioned previously does not adequately satisfy it, even if we were able to provide these to animals in the wild.

Crescenzo does not intend this discussion of predatory capabilities as a way to excuse us from policing nature. Presumably the elk, having all of its capabilities denied by being painfully eaten alive, suffers a far greater harm than the wolf who has some of its predatory drives thwarted. If we are committed to preventing as much harm as possible, we still ought to consider coming to the elk's assistance in some way.

Furthermore, and maybe more importantly, a great many harms are incurred by wild animals by means other than predation. Parasitism and symbiosis are more common forms of interspecies interaction than lethal predation, and predation is a riskier survival strategy for the hunter than for the hunted, judging by average mortality rates between predator and prey species (Balcombe, 2010, pp.156-160). Animals suffer greatly from natural disasters, habitat destruction, pollution, extremes of temperature, starvation and drought, conflict within their own social groups, and disease, and it seems plausible that these challenges have shaped them to at least as great an extent as the 'evolutionary arms race' between predator and prey. Even if we choose to leave conflicts between wild animals unresolved for the time being, there are many ways in which we could conceivably protect their capabilities without having to inflict harm. Indeed, we already do prevent some of these forms of harm in a piecemeal manner when we take such actions as providing nestboxes and food for garden birds. It is not inconceivable that we could do something similar for other species, protecting them from at least the most egregious harms visited upon them by their environment.

Environmentalists and predation

Any notion that we might systematically interfere with animals in the wild on grounds of justice for individuals is likely to attract dissent from one established group of theorists whose objections Nussbaum seems only partially to anticipate: those who hold that we have strong, direct moral obligations to the non-human environment. Although these philosophers share Nussbaum's basic premise – that direct moral consideration is not the sole province of human beings – her assertion that it is the rights of individuals with which we ought primarily to be concerned appears vulnerable to criticisms that these environmentalists have levelled at more

established 'animal rights theorists'¹¹ such as Peter Singer and Tom Regan. Whereas the animal liberation movement's more conventional opponents (styled by Callicott as the 'ethical humanists') object that affording individual rights to animals casts the 'net' of moral considerability too widely, its environmentalist opponents argue that the net is cast either not widely enough (since the capabilities approach focuses upon animals, and primarily only sentient animals) or over the wrong sorts of entities (individual non-humans, rather than collectives such as ecosystems or species). A broader objection is that the concern exhibited by animal rights theorists towards the lives, welfare and/or rights of nonhumans is in some way at odds with the way in which nature is 'set up', and that animal rights theorists cannot simultaneously value individual non-human animals and natural processes. In either case, the objection is not so much (as it is in Ritchie's case) that animal rights are an absurdity, but that a commitment to animal rights is incompatible with a genuine appreciation of the natural world. It should be noted that this view is not the sole province of environmentalists: Tom Regan has stated that animal rights and environmentalism "are like oil and water: they don't mix," due to the irreconcilability of the former's individualism and the latter's tendency to insist that individuals may be sacrificed for the good of the natural 'community' (Regan, 1983, pp.361-362). In what follows, I will primarily address this second family of objections, since I take it to be quite plausible to suggest that the capabilities approach ought to give greater consideration to the flourishing of non-sentient living things, and will discuss this issue in greater detail in Chapter IV.

Environmentalists and predation: Callicott and the good of the biotic community

¹¹ Writers on both sides of the environmentalist/animal rights debate have used a bewildering variety of terms to describe the positions involved. Advocates for the rights, welfare or individualistic value of animals might be referred to as animal liberationists, animal rights theorists or activists, animal welfarists, humane moralists, or animal activists. None of these seems to provide an entirely adequate description of the capabilities approach: Nussbaum does not necessarily advocate the 'liberation' of all domesticated animals; nor does she think that our duties to them are limited to respecting their rights or welfare; she specifically states that she considers the flourishing of animals to be a matter of justice, not one of humanity or compassion; and it is not clear that she would consider herself an 'activist' on the behalf of animals. Nevertheless, many (though not all) of the arguments addressed to theories that fall under these labels by environmentalists could also be plausibly directed the capabilities approach. Generally speaking, it seems best when talking generally to refer to 'animal rights' or 'the animal rights movement', since this is a term that has come to be accepted in common parlance to describe a heterogeneous social movement (thus, Peter Singer has been described as an 'animal rights advocate', despite his taking a thoroughly Utilitarian approach).

Likewise, 'environmentalism' covers a multitude of different platforms, especially in non-technical use where it has come to refer to more or less any attitude of care regarding flowing, growing or 'wild' things, or even simple prudential concern regarding the effects of atmospheric pollution on human wellbeing. There are a number of key features particular to the kind of environmentalism that is at stake here: foremost among these is an assertion that at least some (non-sentient) natural things are capable of being valued for their own sake, rather than purely instrumentally. In addition, a focus on collective entities, rather than individual beings, is a frequent theme: individual animals might be sacrificed to protect an endangered species, or certain plants uprooted to preserve the integrity of a particular soil. Arguments in favour of these claims are discussed in this and subsequent chapters.

Although he has subsequently revised his position (Jamieson, 1998, pp.45-46), probably the starkest and most notorious framing of this debate from the environmentalist side can be found in J. Baird Callicott's 1980 paper, 'Animal Liberation: a Triangular Affair'. The predominant claim here was that the debate concerning the moral status of non-human world has in effect three sides – animal rights advocates ('animal liberationists' or 'humane moralists' in Callicott's terminology), conventional anthropocentric ethicists ('ethical humanists') and environmentalists (of whom Callicott concentrates on those taking their inspiration from Aldo Leopold's 'Land Ethic') (Callicott 1980, p.315). Although the Land Ethic shares the humane moralists' desire to extend moral concern beyond the human species, Callicott is quick to point out that this concern did not appear to prevent Leopold from killing and eating deer and other game, nor did it seem to invoke in him any particular concern for the plight of domesticated animals. In fact, Leopold and his successors often appear to show more concern towards non-sentient beings such as plants and fungi than they do towards sentient animals. Callicott suggests that this is because the similarity between animal liberationism and the Land Ethic is only superficial: whereas the former seeks to describe extra-human moral obligations using established moral theories (Callicott focuses in particular on Singer's utilitarianism), the latter begins its account using different criteria altogether. The Land Ethic seeks a re-evaluation of such "cherished first principles" as equal consideration; preferring instead to evaluate the "moral value, the rightness or wrongness of actions" in terms of "the integrity, stability and beauty of the biotic community" – that is, in terms of the good, however we define it, of species, ecosystems, soils and other 'natural wholes' (pp.318-320). Thus, an action that causes the death and suffering of a large number of sentient beings may be morally justifiable if doing so prevents damage to or aids the natural processes at work in an ecosystem – as, for example, would arguably be the case if wild rabbits were eradicated from the Australian countryside. By the same token, hunting animals that would otherwise overpopulate seems to be considered at least permissible, or even morally necessary, and wild predators that perform the same role ought to be valued over and above the animals on which they prey. Callicott therefore endorses the protection of some plants and animals and the destruction of others, and views the extension of a blanket protection over all sentient creatures (on Benthamic or any other 'humanitarian' grounds) as a 'catastrophic' prospect (p.320). The Land Ethic makes sense of instances of predation (and parasitism) as relations that comprise the community that an ecosystem represents, rather than as clashes between the interests of individuals (p.321).

Callicott makes use of two metaphors to elucidate the relations between the biota in an ecosystem: first, they are compared to cells or organs in an organism, and then to individual citizens of a community (though he concedes that the community analogy may be more consistent and less problematic, as it avoids the possibility of reifying collections of individuals¹²) (Callicott 1980, pp.321-322). In each case, however, he makes reference to the distinction between the good of the collective and the good of all of the individual constituents: the former is not reducible to the latter. Sticking specifically with the community analogy, Callicott claims that a community or nation requires something other than the (maximised?) good of all of its members in order for it to flourish: there needs to be some recognition of the 'good of the community' (pp.321-324). In other words, there is a good for the community that is not reducible to the good of its individual constituents. This may function as a criticism of certain aggregate utilitarian models. One can easily imagine scenarios in which a community is badly run while its inhabitants enjoy high levels of utility, as might be the case in a society fuelled by copious amounts of *soma* or virtual reality sessions. More generally, a society whose citizens all individualistically sought to maximise their standard living could be a very sterile, self-indulgent place, with little room for sentiments such as neighbourliness or solidarity. However, Nussbaum has herself provided a great deal of discussion on the distinction between standard of living and quality of life – the latter case being representing a measure of genuine flourishing. In particular, she considers human beings (and many animal species) to be capable of flourishing only as members of communities: such species represent Aristotle's political animals, and opportunities for community membership are ingrained in what it means for these species to have adequate exercise of their capabilities (*FJ*, p.159). She may therefore be able to acknowledge some sense of the 'good of the community' that is distinct from the experiential well-being of individuals. We might accept civic duties that are onerous, such as taxation, in order to produce a community where individuals are mutually valued, where they can participate in public life, and in which there is a constructive exchange of ideas and experience between citizens of diverse backgrounds. Part of our motivation for doing so may be that such a community is simply a pleasant place to live, but there are things implied in practices of community-building that seem to reach outside of experiential wellbeing. If one's main concern is to find a pleasant environment in which to live, the most direct route could be to simply move to the most genteel neighbourhood one can afford (and to endeavour to increase one's earning power and thus

¹² These difficulties are discussed in significantly more detail in Chs. V and VI of this work.

continually 'upgrade' to a nicer neighbourhood or gated community), or, as already mentioned, seek some alternative means of escape (if not *soma* and virtual reality then perhaps beer and digital television – or absinthe and fine art). Nevertheless, individuals do take it upon themselves to make sacrifices, in terms of time or disposable income, to fund and participate in community projects.

Still, it should be emphasised that Nussbaum's sense of the value of the community, such as it is, is still subordinate to the value she places on the individual: we desire, or ought to desire, healthy communities because this provides the context in which we exercise our capabilities. For example, community involvement plays a major role in our exercising our capabilities involving social interaction and participation (such as Affiliation and Control over One's Environment). Nevertheless, the community exists externally to these individuals, and its good may not be reducible to measures of experiential welfare, especially aggregate models such as standard of living. Our community may be badly run, unequal or atomised, and we may not observe any effect that this might have on our experiential welfare if we are provided with sufficient distractions. All the same, the citizens of such a community are not necessarily flourishing. By the same token, it may also be the case that other species flourish best, or, perhaps, most characteristically, when located in healthy wild communities of one sort or another - be they packs, flocks, species-populations,¹³ or ecosystems (*FJ*, pp.71-72; 382-383). As a result, Nussbaum can endorse many of the same policies advocated by environmentalists insofar as they contribute to or provide the context for animals' flourishing: injunctions against habitat destruction, introduction of exotic species into fragile ecosystems, and poaching of endangered species (the latter, at least, may also be more straightforwardly an animal rights issue as well: Nussbaum can endorse this provision both because of the harm done to the animals being poached, and because dwindling numbers provide numerous collective detriments for other members of the species population). Furthermore, we may be able to go beyond this comparatively narrow focus on the flourishing of individuals, seeking to improve the integrity, stability and beauty of natural ecosystems even if this does not necessarily result in any real improvement for sentient animals (for example, measures whose main effect is to increase the

¹³ The term 'species-population' is taken from Taylor, 1986, pp.69-70, and refers to a group of animals of the same species. As Taylor points out, the term avoids the question of whether a species itself can be harmed by referring to the aggregated members of the species rather than positing the existence of an entity called, for example, *Rattus norvegicus*. Additionally, it provides greater flexibility when talking about species that are well-established over multiple geographic areas: members of the species may be doing well in one area but poorly in another; thus, the species population of brown bears in the United Kingdom has collapsed, but the species-population elsewhere in Europe is recovering.

biodiversity of the local flora). We may not be able to produce strong norms to this effect directly from the principles provided by Nussbaum, but since the capabilities approach is intended as a partial account of justice only, individuals possessing commitments to the wellbeing of ecosystems as part of their own comprehensive doctrines of the good ought to be permitted to adhere to them.

It appears, then, that Callicott's reference to the good of the biotic community is not entirely unpalatable from the point of view of the capabilities approach. However, what Nussbaum does not appear to be able to countenance is the real substance of Callicott's claim regarding the biotic community: that its constituents ought to be sacrificed for the community's sake. Again, the capabilities approach does appear able to maintain a commitment to some environmentalist policies in this area, even if not necessarily for what Callicott would perceive as the 'right' reasons. We might, for example, permit some animals to be harmed if this would avert a greater harm at a later date, and thus endorse what Gary Varner refers to as 'therapeutic hunting' of certain 'obligatory management' species who would otherwise overproduce and destroy their habitat, resulting in wide scale harm due to disease and starvation (Varner 1998, pp.100-101; *FJ*, p.380). We may by the same token allow a biotic community to persist, even at significant expense to its constituent animals, if intervening would unavoidably cause an ecosystem collapse that would bring about a greater harm (*FJ*, p.379). What the capabilities approach does *not* permit us to do is to sacrifice individuals (including allowing them to suffer preventable harm) solely for the good of the community; this judgement applies both to the wild communities discussed by Callicott and to his analysis of human communities.¹⁴ In this respect Nussbaum is in agreement with Tom Regan, who considers this proposition to reveal a 'fascistic' undertone to the Land Ethic, preventing its integration with any rights-based or other individualistic view of the value of non-humans (Regan 1983, p.362). Although Nussbaum is not committed to Regan's level of scepticism regarding the concept of the good of the biotic community, since she can make sense of it as a kind of 'background' to the flourishing of individuals, she too appears committed to the analysis of the Land Ethic as 'fascistic' insofar as it seeks harm for individuals in order to keep the machinery of the ecosystem running. Similarly, she is likely to struggle to justify the sacrificing of members of one species to benefit those of another.

¹⁴ However, by 1988, Callicott no longer seems to advocate a holistic ethic for human communities, or at least claims that human and non-human communities may require different ethics: see his paper 'Animal liberation and environmental ethics: back together again' in *Between the Species* 4(3), reprinted in Callicott JB (ed), 1989. *In Defense of the Land Ethic: Essays in Environmental Philosophy*.

Nussbaum's and Regan's ultimate position is that what ought to dictate our treatment of an organism are its capacities. These capacities, in Nussbaum's case, inform both its priority as a recipient of justice (with more complexly sentient species generally taking precedence over the less complex or non-sentient in cases of genuine conflict – *FJ*, pp.358-359) and the specific entitlements involved in securing its flourishing. When we form policy regarding a species-population, we do so with reference to what those particular animals need and are capable of – certain intrinsic properties. For Callicott, on the other hand, an organism's moral worth is evaluated with reference to the role it plays in the functioning of the ecosystem (Callicott 1980, pp.324-325). Thus, the flourishing of a moss or lichen can potentially take moral precedence over that of a deer. Likewise, predators are highly valued from Callicott's point of view, precisely because they suppress the flourishing of prey animals and thus prevent their populations from damaging their ecosystems. Callicott is not clear as to whether the only valuable characteristic of predators is their functioning as a 'cog' in the 'machinery' of an ecosystem (or, to retain Callicott's own language, their fulfilling their 'civic duties' as members of the biotic community). It should be pointed out, as Nussbaum and Crescenzo surely acknowledge, that many predatory animals exhibit other complex behaviours that surely have great significance to them but only partly, if at all, affect the biotic community: they are beings who are subjects, who pursue their own characteristic good, who exercise capabilities involving complex modes of affiliation, emotions such as curiosity and affection, and so on. We can imagine scenarios in which the transfer of energy through, say, a savannah ecosystem was carried out not by living animals but by robots – 'replicant herbivores who process vegetable matter until such time as they are disabled by remote command, biodegraded by nanites, or otherwise disposed of by 'predator units'. If an animal's value is routed in its occupying an ecological niche, then such a science fiction scenario could be equally as valuable as a wild ecosystem: the robot predators, fulfilling the same ecological role as their animal counterparts, would appear to have the same moral worth.¹⁵ If, however, we decide that the artificial ecosystem is not as valuable as a natural one, then this may be because there are other valuable properties inherent in the replaced animals, in addition to or instead of their function in relation to the biotic community. In designating the biotic community as the "*ultimate* measure of the moral value, the rightness or wrongness of actions" (Callicott 1980, p.320; my italics), Callicott runs the risk of focusing only on the relationships between the citizens of the community and never on the citizens themselves. Of course, Callicott

¹⁵ An argument against such a replacement, produced by Eric Katz, is examined in the next chapter of this thesis.

can value animals' capabilities indirectly even if he takes this extreme position: for example, the pack behaviours of wolves contribute to making them successful predators. Nevertheless, it is striking that the Land Ethic appears to be vulnerable to the same accusation levelled at animal liberationists: an incomplete appreciation of the lives of wild animals. If the capabilities approach is unenthusiastic regarding the less savoury aspects of wild animals' lives, the premises of the land ethic presented by Callicott appear to overlook much of the everyday 'content' of those animals' lives.

This view is particularly evident in Callicott's discussion of domesticated cows and sheep, animals that he considers to have little or even negative ecological value. He cites opinions to the effect that these are 'hooved locusts', only 'half-alive', with diminished faculties compared to their wild analogues and little value ecologically speaking (and therefore little moral value) (Callicott 1980, pp.329-330). This supposedly gives the lie to any claim that their "natural behaviour'...is cruelly thwarted on factory farms", because domesticated animals are "living artefacts", like tables and chairs: their natural behaviour is long forgotten (p.330). Even during his reconciliation with animal liberation, Callicott states that domesticated animals cannot possess the right to life or freedom, since they have been bred to fulfil human purposes and "to condemn the morality of these roles...is to condemn the very being of these creatures" (Callicott, 1989, p.56). This serves to separate the animal liberation movement from other social justice movements, such as the civil rights movement, since the latter deals with subjects capable of living their own lives, a feat of which domesticated animals are apparently incapable. Here, however, Callicott appears to have missed an important point. These animals may have an artefactual element in their being, the result of thousands of years of breeding for docility and meat quality – but they are decidedly *not* tables and chairs. The distinction is not only that they are alive and furniture is not: rather, as Nussbaum clearly grasps, cows, sheep and pigs are subjects and they pursue their own good (whether that good is 'natural' or not). Although there are probably some cases where domesticated animals have been so dramatically modified by human intervention that they may be genuinely incapable of pursuing their characteristic good (for example, broiler chickens that have been bred to carry so much meat on their bodies that they can no longer walk), most domesticated animals still have plenty of potential to exercise recognisable key capabilities from Nussbaum's list. Possibly, many of these animals would not be able to survive if simply turned loose into the wild, but they might nevertheless be able to live alongside human beings as members of a multi-species community.

Respect for nature requires respect for killing: Hettinger and Callicott on wild suffering

That Nussbaum does not value the harm-causing nature of predatory non-human animals is the source of a broader environmentalist objection to the capabilities approach: namely, that Nussbaum and other 'animal liberationists' are accused of effectively setting themselves against nature. Instead of, or in addition to, being unable to value various natural entities, they are on this account in denial of a fundamental aspect of the way in which the world functions: the transfer of energy through killing and consumption. Hence, Callicott alleges that animal liberation amounts to "a world-denying or rather a life-loathing philosophy", since the constitution of the natural world is such that, unavoidably, "one being lives at the expense of another" (Callicott 1980, p.333). Similarly, Ned Hettinger quotes a personal communication in which Holmes Rolston III questions whether "a vegetarian even understands the way in which the world is built", referring to the role that killing and consumption play in the process of speciation – a process of which, ultimately, we are a product. What would be lost, according to Hettinger, were humanity to convert to a vegetarian diet and forsake hunting in favour of wildlife photography, would be the opportunity to appreciate, and to show that appreciation by participation in, the "sometimes violent, painful and life-sacrificing *processes* of nature" (Hettinger, 1994, p.14). Although Hettinger acknowledges that contemporary meat-eating practices are at something of a remove from anything resembling 'processes of nature', he nevertheless holds that meat-eaters are able to value and affirm the value of nature and human evolution in a more profound manner than vegetarians. Meat eating is superior to vegetarianism since it allows for participation in the trophic pyramid at a higher, more sophisticated level: thus, eating animals, and particularly, eating animals that one has hunted oneself allows humans to properly claim their place in the evolutionary process (pp.14-15). Hettinger's and Rolston's attitude is characterised by Marti Kheel as that of the 'holy hunter': by taking and consuming the lives of wild animals, these individuals locate and reconcile themselves with their place in the universe by occupying what they perceive as their proper place in the food chain (Kheel 1995, pp.101-103).

Callicott has a somewhat similar attitude to the perceived universal devaluing of pain present among advocates for animal rights. Due to his focus on Singer (and, by extension, Bentham), some of Callicott's criticisms of 'animal liberation' fall somewhat wide of the mark when addressed to Nussbaum. Nevertheless: his claim in this regard is that the logical consequence of our devaluing pain is that we should seek to minimise

it, and that this is absurd since pain is a useful evolutionary mechanism, and a world without pain – presumably most easily arrived at by anaesthetising the populace – would involve a great deal of harm, since this would impair organisms’ ability to avoid noxious stimuli (pp.332-333). This is not simply an argument from adverse consequences, however: rather, it can be viewed as another example of how, from Callicott’s point of view, environmental ethics takes something that has a useful purpose provided for it by nature (pain) and then assigns it an entirely negative value. Even if this objection applies to utilitarianism, it cannot also apply against the capabilities approach, since Nussbaum holds that pain (or fear, or any similar unpleasant but useful evolutionary trait) is not necessarily to be avoided if it does not impair flourishing (which permanent anaesthesia surely would). There is little in *Frontiers of Justice* to suggest that capabilities justice should come wrapped in cotton wool: pain suffered through consensual activity, such as a sporting injury, need not necessarily be considered an injustice (though if the injury is temporarily or permanently disabling this may generate additional entitlements for the sufferer). Callicott surely has it the wrong way round: pain may be instrumental to our avoiding suffering harm, but it is the avoidance of harm that is good here, and not the pain itself. My burning my hand on the cooker may be beneficial to the extent that it causes me to move my hand away and to take more care in future, but my acknowledgement of this fact does not amount to an endorsement of all and any pain I might incur. Indeed, pain is only useful *because* we disvalue it as an experience. As I have suggested, these arguments are unlikely to dissuade Nussbaum, who acknowledges that some harms may be unaccompanied by any sensation of pain, and that not all painful sensations accompany harms of the kind that she considers to be issues of justice. The fact that we disvalue pain (when we actually do disvalue it), therefore, seems not to convincingly support any contention that animal rights theorists are ‘anti-life’.

Still, perhaps Hettinger’s point regarding death, and especially death as a result of predation, can make a similar point more convincingly. Without actively valuing death as a part of nature, Hettinger alleges that we are committed to precisely the view that Nussbaum appears to hold: the view that a world without predation (and, presumably, the other forms of wild suffering by which the processes of speciation are advanced) would be preferable to the current state of affairs (Hettinger 1994, p.15). Thus, we run the risk of devaluing the process by which the bewildering array of beings that comprise the world’s macro- and micro-flora and fauna came into being. Furthermore, we disown our own genetic inheritance as a species that has

come about through the sacrifice of individuals and the killing of food species (pp.15-16). By disvaluing pain and death, animal liberationists are ignoring the price to be paid for pleasure and life. Callicott provides his own brief endorsement of this point: animal liberation represents the latest stage in a process by which culture has attempted to “exempt [humans, and now non-humans] from the life/death reciprocities of natural processes”; as a result, its advocates are overlooking the inextricability of suffering and nature. According to Callicott, “if nature as a whole is good, then pain and death are also good” (1980, p.333).

Nussbaum may be more vulnerable to this objection than other animal rights advocates, due to the inclusion in her account of human flourishing the capability “to live with concern for and in relation to animals, plants, and the world of nature” (*FJ*, p.77; this is the capability referred to by Nussbaum simply as ‘Other Species’): opportunities to appreciate and value nature appear to be requirements of capabilities justice for human beings. If capabilities justice for animals prevents meat-eating and, in particular, hunting, it may run the risk of hampering genuine valuing and respect for nature and recognition of humanity’s relation to natural processes in the strong, ‘genuine’ way described by Callicott and Hettinger. Nussbaum may be prepared to simply dismiss these concerns: the approach does not permit just any exercise of the capabilities, and one definite boundary of their exercise is provided by the rights of other individuals, so she is not likely to find it plausible that we allow current hunting and food animal-rearing practices to continue purely so that certain specific concepts of the good can be exercised in full. At the same time, the approach ought to be concerned with admitting as many concepts of the good as possible. While it may be undesirable to allow environmentalists to actually inflict harm on other animals as a way of pursuing their own good (any more than it would be permissible to allow a sadist to torture non-consenting human beings), it may be equally undesirable to insist that wild suffering always be viewed as unmitigatedly problematic, especially if this prevents us from valuing nature on its own terms, or from exercising certain valuable attitudes towards nature that involve our recognising it as something vast and made up of processes that have shaped us and the other animals around us. There seems to be some incongruity between stipulating that humans are entitled to live with concern for the natural world while simultaneously refusing to acknowledge the roles played by death and suffering in its workings. Yet, according to Hettinger, this is precisely what Nussbaum risks doing: continuing the process by which humans have isolated themselves from nature, and entrenching the belief

that nature is something to be thwarted and escaped from. The suspicion arises that the 'nature' that Nussbaum believes human beings are entitled to is only a much sanitised version.

Ty Raterman and Jennifer Everett have both addressed the problem of the supposed inseparability of valuing nature and valuing predation. Raterman argues that environmentalists can consider predation 'lamentable', even while recognising that the taking of life in a natural context provides significant benefits. Even if we acknowledge that predation furthers evolutionary processes, prevents overpopulation and exemplifies praiseworthy characteristics of both predator and prey, we are not committed to unqualifiedly endorsing it, much as we can value an individual without unreservedly valuing the traumatic past of which they are a product. Raterman's example here is a recovered drug addict: it is easy to see how such a person could have value in their manifesting certain personality traits, such as resilience or humility, that have been developed as a result of their having been addicted; yet, drug addiction is clearly not something we ought to embrace, or advocate as a general means of developing the desirable traits. It would be better if the recovered addict could be the person they are without having had to go through their traumatic past (Raterman, 2008, pp.426-427). Everett makes a similar point using the example of a child who is the product of rape: here the point is possibly even clearer, since the child simply would not exist at all without the undesirable elements of their past (whereas, in the case of the addict, we might suggest that, had they had a less troubled past, they might have grown into a human being just as valuable). Condemning rape does not mean that we dismiss this child as worthless, or as having less value than a child conceived consensually – though Everett does suggest that we might value that particular act of rape *purely insofar as* it was instrumental to the child's being conceived. Everett also discusses the possible role played by rape in human evolution, and reaches the same conclusion: we can acknowledge the possibility that sexual violence, or infanticide, or promiscuity played important roles in shaping the human race without suggesting that they are valuable or that modern humans should seek to emulate these practices in order to affirm their appreciation for nature (Everett, 2004, p.310). Everett and Raterman separately discuss certain other concerns raised in connection with this issue. Raterman points out that a similar objection – that finding predation lamentable prevents us from valuing admirable characteristics exemplified by the animals involved – also falls flat: we can clearly value the courage, ingenuity and cooperation involved in perpetrating a bank robbery while condemning the fear and hurt suffered by the bank staff and bystanders (2008, p.427). Everett raises interesting questions with regard to Hettinger's

defence of hunting that are of relevance to how instrumental such practices might be to proper valuing of non-human nature and human evolution (as per Nussbaum's capabilities list). First, she points out that the category of forms of acceptable meat eating – those that are carried out as a way of valuing nature by participating in natural processes – is a far smaller one than Hettinger seems to believe is the case, and that this criterion excludes virtually all forms of meat consumption practiced by humans today, including most forms of hunting (2004, pp.308-309). Furthermore, she questions whether even the rarefied 'ecological' meat-eating advocated for by Hettinger is a necessary condition of genuine respect for nature (if it is not, then Nussbaum would seem to have no obligation to accommodate it whatsoever, since it would no longer represent any unavoidable conflict between human and animal flourishing). Hettinger's overenthusiasm for the role of the predatory carnivore may itself belie a distorted view of what nature involves: why, after all, should valuing nature involve identifying with and emulating (however imperfectly) wolves and lions rather than vegetarian gorillas (with whom we certainly have more in common). Eating vegetable matter is still a form of consuming life, after all, even if one is fruitarian. Everett points out that, contrary to what Hettinger supposes, the trophic pyramid is simply a description of who eats whom in nature: there is nothing inherently better or worse about being higher up or lower down on it, and predators occupy higher positions solely by virtue of being predators. Thus, Hettinger's suggestion that humans should seek to "emulate the predator's obliviousness to the suffering of the prey by refusing to acknowledge the badness of suffering", viewed in this light, begins to look somewhat one-sided, gratuitous, or even unwholesome (Everett 2004, p.311). Discussion of value in nature that focuses overly on predation and wild suffering can evoke suspicion that what is being discussed is not really respect for life, but a naïve preoccupation with death – as Marti Kheel puts it, such ethics run the risk of being not biocentric, but *necrocentric* (Kheel 1995, p.107).

The value of nature and the valuing of predation and wild suffering, then, appear to be anything but inextricably linked. The same is surely the case for our valuing the human race as it exists now, or as it relates historically to natural processes. It should be added that there are many other powerful counterexamples to be found to dispute Hettinger's and Callicott's claims that valuing a thing requires the affirmation of the less savoury aspects of its existence or genesis, other than those provided by Everett and Raterman. It is hard to imagine a human culture extant today that has not been shaped by violence, bigotry and disenfranchisement; indeed, many valuable aspects of cultures or subcultures arise from, or as reactions to, prejudice and

persecution; many artworks are borne of, and from, grief, despair and frustration. We would surely look askance at anyone who suggested that to value these things truly, one must also affirm, or even participate in, the pains involved or manifested in their creation. As Everett suggests, it seems that if these painful aspects are valuable at all, it is only insofar as they have contributed to the end product. Such examples, along with those provided by Everett and Raterman, cast serious doubt on Hettinger's claim that "when a process that produces a product is essential to *understanding* what the product is, one cannot consistently affirm the value of the product while denying the value of the process that created it" (Hettinger, 1994, p.14). We can value nature, and provide opportunities for human beings to live with concern for it, without having to value wild suffering (or, perhaps, while valuing it in only a very qualified sort of way).

'No nature worship': How serious ought we to be about valuing 'nature'?

However, Nussbaum is prepared to question even the extent to which we *ought* to value nature, for it is not only the human capability of concern for other species that is at stake. After all, Nussbaum conceives of the flourishing of individual non-human animals, who do not have the option of admiring nature from a distance, as having direct moral value – indeed, as a matter of justice. Callicott remarks at one point in *A Triangular Affair* that "notwithstanding the naturalistic fallacy...there appears very often at least a strongly compelling psychological connection between the way the world is imagined or conceived and what state of things is held to be good or bad, and what obligations we, as moral agents, acknowledge" (1980, p.321). Nussbaum would presumably agree that there is some connection between the way we perceive things and the way we believe they ought to be; after all, her original argument for including animals within the realm of justice is that "if we feel wonder looking at a complex organism, that wonder at least suggests the idea that it is good for that being to persist and flourish as the kind of thing that it is" (*FJ*, p.349). Our norms regarding how to treat animals stem from observation of what it is that they are capable of and what constitutes a dignified life for members of their species; on a more profound level, our judgement that there is something worthy of protection in the flourishing of individuals is connected to our perceiving humans and non-humans as beings seeking their own good, possessed of some degree of subjectivity and agency, whose goods are often not capable of being considered in isolation but depend on interaction with communities and, often, members of other species. Although Nussbaum's and Callicott's accounts of where the value of organisms differ, they nevertheless agree

that an organism's just treatment is related to certain facts about the way that it lives. However, a significant point of departure is Nussbaum's explicit rejection of a non-evaluative approach when examining the capabilities of a species: rather, the minimal responsibilities of the political conception are considered to comprise supporting those capabilities that contribute to the flourishing of members of the species in question.¹⁶ The process by which we decide which capabilities merit support is one of evaluation: we ought not to simply 'read off capabilities from the way in which animals currently live in the wild, for not all life-activities are desirable (p.390). Both human and non-human animals are capable of, for example, violently confronting or humiliating rivals, but these are not necessarily appropriate life activities for the capabilities approach to support. Being prepared to rule out undesirable capabilities leads Nussbaum to the view that we ought to beware "romanticizing nature, or suggesting that things are in order as they are if only humans would stop interfering". Nussbaum takes issue with the position held by "at least some environmentalists" that nature is "harmonious and wise" (pp.366-367). Any appreciation for nature ought to be tempered by an awareness of the fact that nature comprises systems that are grossly unfair by any humanitarian standard: we ought to avoid any worship of (or, to borrow Everett's analysis of Hettinger, *infatuation with*) the way that we observe nature working, and to be wary of any belief that its mechanisms cannot be improved upon (Everett, p.312;¹⁷ *FJ*, p.365).

Nussbaum considers the uncritical valuing of nature problematic for two somewhat related reasons. The first, and probably simplest, is that the way in which nature currently operates does not clearly represent the best state of affairs. As Callicott and Hettinger are well aware, nature depends on a high level of death and

¹⁶ At least, Nussbaum appears to think that this is a point of departure. Her 'no nature worship' argument certainly seems to contradict many of Callicott's statements in 'A Triangular Affair', as well as the attitude communicated by Hettinger in 'Bambi Lovers versus Tree Huggers'. But it is not clear that either are genuinely trying to advance a non-evaluative approach to ethics involving non-human animals and nature at the *normative* level: both support predation because they perceive it as good, because it is a process by which nature operates and by which speciation continues – because it tends to promote the interests of the biotic community. If we find these things good, then predation has at least instrumental value. What Callicott and Hettinger, and Leopold before them, do not appear to evaluate is the goodness of ecosystems and natural processes themselves, and it is this attitude that she is targeting in this section. Particularly in Callicott's discussion of the community, there is no real consideration the question of for whom or for what reason the community exists, or why its good is worth pursuing (1980, pp.323-324). Unfortunately, Nussbaum does not address her concerns in *Frontiers of Justice* to any environmentalist philosophers directly, so it is not obvious exactly whom she has in mind when she makes these accusations.

¹⁷ This is not to say that Everett necessarily endorses interference with nature according to Nussbaum's criteria: she is merely concerned here with pointing the difference between infatuation and genuine love or respect: her claim is that a more thoughtful respect for nature should acknowledge its faults without glorifying them, in contrast with Hettinger's indifference to the suffering of prey animals.

suffering in order for it to persist as it does: however, contrary to their claims, ours is not the best world imaginable. There is nothing absurd or sacrilegious about the suggestion that it might be preferable if a larger number of creatures were allowed to exercise their capabilities to a carefully calculated minimal level. The simple fact that a certain state of affairs exists in nature ought not to be considered a justification for it (and Nussbaum approvingly quotes Mill's description of the manifold forms of violence inflicted by nature); Nussbaum's own response to Callicott's claim that "if nature as a whole is good, then pain and death are also good" is that nature as a whole is not obviously good, given the amount of capability-denial involved (*FJ*, pp.366-367).

Nussbaum's second argument against 'nature worship' is that it is not clear that there is any coherent entity, 'nature', to worship. The idea that 'nature as a whole is good' seems to take as a premise the notion that the natural state of things, free from human interference, is the most desirable and that this state comes about and persists as a result of natural processes alone – what Daniel Botkin refers to as the 'Balance of Nature myth' (Botkin, 1996, pp. 26-27; *FJ*, pp.368-369). Botkin uses a variety of examples – most notably, the increase in biodiversity in Hutchinson Memorial Forest, New Jersey, after forestry services in the area ceased suppression of forest fires that prevented crowding by maple saplings (pp.29-31) – to argue that human interference (in this case, causing forest fires) can often benefit an ecosystem; that change is the norm, rather than stability; and that we cannot expect that nature will adequately manage itself to produce the most desirable end results. Nature is already pervaded by human influences to the extent that it is often no longer clear exactly what states of affairs have and have not been brought about or altered by human activity. We ought to intervene, and are able to choose those norms by which our actions will be guided, rather than trying to read them off from some vague idea of 'what nature is really like'. This does not mean that maintaining the 'stability, integrity and beauty' of ecosystems is not a worthwhile goal, but it is not obviously more worthwhile than seeking to protect the capabilities of wild animals where we are able to do so without inflicting greater harm in the process. Depending on our frame of reference, "reappraising things unnatural, tame and confined in terms of things natural, wild and free" (Callicott 1980, p.329) might not have the consequences that the Land Ethicists believe: considering the lot of "things natural, wild and free" may lead us to the decision that if the denial of their capabilities is necessary to natural processes, then so much the worse for nature. It may be that we are unable to ever genuinely "supplant the natural by the just": many natural systems may be so

complex and delicate that we are simply unable to interfere with them without inflicting greater harm on the animals within. Nevertheless, appeals to protect natural systems simply because they possess some mysterious, ineffable value are unlikely to militate against our committing to such improvements as we are confident can be carried out without inflicting greater damage.

Conclusion

Advocates for the capabilities approach appear to be committed to the ultimate goal of the “gradual supplanting of the natural by the just”. Not only is human intervention in the lives of wild animals not absurd on Nussbaum’s account, but the approach is at most only partially constrained by concerns regarding the value of the non-human environment. While a complete sanitisation of nature, even if it were possible, might cause significant harm by removing from the lives of humans the capability to live with concern for the non-human world, and from those of non-humans the opportunity to flourish in accordance with the genuine exercise of their capabilities (particularly in the case of predatory animals), a broad commitment to improving the lot of wild animals nevertheless seems to remain in accordance with Nussbaum’s account of harm and moral duty. An unquestioning ‘worship’ of the way in which nature currently works, especially ‘worship’ centred on natural processes that entail death and suffering, is both inconsistent with the approach and, according to Nussbaum, simply unwarranted: it is not clear that the way in which nature works is especially ‘good’, and many wild animals have capabilities that the political conception need not seriously consider supporting. Furthermore, the concept of ‘nature’ is itself a questionable one, given the extent to which natural systems are currently influenced by, and depend upon, human intervention. As a result, rather than ‘reading off’ norms from nature, it is incumbent upon us to develop our own norms regarding the natural world: in Nussbaum’s case, these norms are developed from her sense of humans and animals as agents pursuing their own flourishing. The next chapter will examine possible reasons why she may wish to reconsider her single-minded focus on individual flourishing as the main ethical paradigm outside of human society.

Chapter III: The predation problem revisited: Autonomy and Humility

In this chapter, I attempt to settle the problem introduced in the previous chapter. If one accepts the capabilities approach as a plausible account of what is owed to non-human animals as a matter of justice, one appears to be committed to the policing of the non-human environment – to, as Nussbaum puts it, the ‘gradual supplanting of the natural by the just’. As the previous chapter has hopefully shown, Nussbaum’s injunction against ‘nature worship’ and her doubts about whether the ‘natural’ state of affairs is genuinely something we have strong reasons to preserve in itself are a considerable obstacle to objections against the idea that we ought to ‘police’ the non-human world; indeed, there is some doubt as to whether we can genuinely talk of such a thing as ‘nature’ at all. However, as stated in the Introduction to this thesis, simply declaring Nussbaum to be the winner at this juncture is likely to prove unsatisfactory to many. Initially, we may balk at the idea of changing the non-human environment to bring it in accord with principles of justice simply because of the magnitude of this task, its reliance on ecological and technological knowledge that we do not currently possess, and the fact that there are instances of injustice aplenty if we limit the scope of justice purely to humans, or to humans and domesticated animals. In addition to these issues of practicality, the idea of expanding human control into the nonhuman world – of shifting the boundaries of the community to incorporate potentially every living thing, or sentient living thing, on the planet – carries, I wish to suggest, a persistent sense of wrongness, weirdness, or ridiculousness to it. The core ideas of the capabilities approach seem, I hope, fairly plausible as a model for human and non-human animals. It seems fairly likely, therefore, that there are plenty of individuals who would be prepared to advocate for a capabilities-based approach to justice but who would nevertheless be deterred by Nussbaum’s very strange and alarming proposal with regard to wild animals (I consider myself to be among them).

In this Chapter, then, I consider possible solutions to this predicament. It is likely that Hettinger’s and Callicott’s objections to making nature ‘just’ were unconvincing in part because they share very few

starting premises in common with the capabilities approach: both environmentalists are fairly casual about the painful deaths of wild animals and, indeed, about the wellbeing of individuals more generally. Both based their arguments on appeals to the value of an entity or entities (nature, natural processes or natural systems) in which Nussbaum identifies relatively little direct value. One would have to give up most of the premises of the capabilities approach to find Callicott's views on the goodness of the biotic community fully convincing. It may therefore be more profitable to examine the premises of the capabilities approach to consider whether Nussbaum is correct in drawing the conclusions she does regarding justice for wild animals.

In this Chapter, I examine two possible justifications for removing the commitment to policing nature from our account of justice. The first of these is an argument from autonomy. Nussbaum identifies autonomy as a central component of what it is to flourish as a human, and also argues that the ability to pursue one's own good has some role to play in the flourishing of non-human animals. I consider whether Nussbaum has correctly weighed the value of autonomy in animals' lives and introduce Eric Katz's work on the subject. Katz considers respect for autonomy to be of critical importance in treating non-human animals, nonsentient lifeforms and even natural objects such as rock formations in the morally appropriate manner. I therefore consider whether Nussbaum's capabilities approach might accommodate Katz's stronger sense of autonomy when it comes to deciding what to do with wild animals: if so, we might be justified in maintaining a broad policy of reducing our involvement in the non-human world, while maintaining a different set of moral principles towards humans and domesticated animals. Ultimately, however, I suggest that Nussbaum's pluralistic account of what is owed to a subject of justice prevents Katz's account of autonomy from having any real success in averting our commitment to policing nature. Loss of autonomy may harm an animal, but there are significantly greater harms that that animal may suffer if left to its own devices. Even if the capabilities approach were to value the autonomy of wild animals more highly than is currently the case, there seem to be overriding reasons to interfere in wild animals' lives.

The second argument that I consider is not one that makes direct reference to the premises of the capabilities approach, although I do suggest that it is more in line with the spirit of what Nussbaum seems to want justice to do. Rather than conceive of autonomy solely as a property whose loss constitutes a harm, I suggest that it is a characteristic that demands a particular response from an individual of good moral character. Thus, it is at this point that I introduce the idea that our account of justice ought to be understood as part of a broader moral framework, and that an action may seem to follow from the principles of the capabilities approach and yet be at odds with other valid moral concerns, particularly concerns regarding what constitutes a good moral character. I focus in particular on whether policing nature is consistent with aspects of the virtue of humility, and suggest that it is not. Thus, a virtuous moral agent may consistently hold that animals existing within human communities are valid subjects of justice, but that there is no strong case to re-draw the boundaries of the community to ensure protection for all wild animals.

Nussbaum and autonomy

Nussbaum considers autonomy to be a value worth preserving and gives it considerable weight, with the result that it comes to play a significant shaping role when considering what kinds of assistance might be provided to animals. Although she does not believe autonomy to be as important for animals as it is for humans, Nussbaum nevertheless holds that we ought to keep it in consideration when formulating policy toward them. For her, “the best form of aid is a form that preserves and enhances autonomy, rather than increasing dependency” (*FJ*, p.375). While Nussbaum is prepared to limit animals’ autonomy in order to protect their broader exercise of their capabilities, she is nevertheless reluctant to render wild animals unable to flourish without human assistance where there are alternatives. There is a possibility that respect for animals’ autonomy might justify a distinction between the positive and negative duties that we might have towards nonhuman animals that does not hold in the human case. Nussbaum imagines an argument to the effect that positive intervention might be not only unnecessary but even “morally repugnant,” since “the sovereignty of

species, like the sovereignty of nations, has moral weight". What sets the capabilities approach apart from other accounts of animal rights is its commitment to *characteristic* flourishing. Nussbaum invites us to consider what other species ought to be able to do in order to flourish: once we examine this question, which rests on the assumption that justice ought to accommodate a plurality of forms of flourishing, our attention is drawn to the fact that members of other species have their own characteristic approaches to pursuing their goods. Committing to this idea might mean that we choose to let creatures "settle certain very important matters on [their] own, without human intervention, even of a benevolent sort" (p.373). If wild animals are construed as agents seeking a good that is characteristic to their species, then justice may simply require that we leave them alone to do so. To intervene would presumably be to interfere with wild animals' characteristic pursuit of their good, their ability to exercise capabilities linked to autonomy and self-determination: it would, therefore, harm them.

Nussbaum's rebuttal of this imagined argument centres on the ambiguity surrounding the extent to which animals truly do exist independently from humans. Not only are some animals domesticated, tame, or raised in captivity, but many – even most – wild animals are affected profoundly by human activity, though they may appear to exist independently from us. Humans alter animals' habitats, regulate their populations by hunting, or (willingly or unwillingly) provide food or shelter for them; human intervention may even be a deciding factor in some species-populations' survival (such as when a habitat or breeding ground is designated protected, or when garden birds are provided food in the winter). The effects of human intervention are pervasive, perhaps to the extent that no or very few animals are genuinely independent from us. As a result, a blanket 'laissez-faire' policy with regard to wild animals, ignoring the concrete situations of dependence in which such creatures already find themselves, appears neither practically nor morally viable. We have, willingly or unwillingly, made wild animals dependent upon us through our past encroachment upon the natural world: the idea that we should suddenly shirk the positive duties that these relations of dependence generate is, for Nussbaum, unacceptable (pp.373-375).

If we accept Nussbaum's imagined arguments here, then recognition of the harm constituted by inhibition of autonomy might motivate us to reject some specific forms of paternalistic care as morally unjustified. Respect for animals' autonomy appears to require that we refrain from putting predators or prey animals into 'protective custody' in order to 'resolve' conflicts between them; that we attempt to make our presence in their lives as subtle as we can, that we protect, preserve and restore wild animals' natural habitats, and that we generally leave as much space as possible in our projects for animals to "settle certain very important matters" on their own (p.373).

This role is problematic, however. What concrete effect should concern for autonomy have on our policy decisions? Furthermore, how do we know when we are inhibiting wild animals' autonomy? The protective custody example, in which predators and prey are forcibly separated to prevent the former from violating that latter's rights, at first seems fairly clear-cut. Here, the predators' desires and impulses are being actively thwarted, even if they are provided with adequate food and exercise. To prevent problems of overpopulation, perhaps elderly or sick animals are painlessly euthanized, or perhaps a genetically engineered virus is introduced into the populations, which renders its carriers temporarily or permanently sterile. Both the predators and the prey have been made dependent upon human intervention (to a much greater extent than that to which they were before). On the other hand, the lives of both are probably better in most other respects: the prey animals, in particular, have been saved from the very considerable harm of being eaten, and the predators likely live a much less precarious existence than before as well, if they are now provided a steady supply of food, veterinary attention, and so on by human carers. Since Nussbaum denies that autonomy has the same significance in the lives of animals as it does in those of humans, it appears hard to justify not making these very substantial improvements to animals' capacity to flourish, if our refusal to do so rests purely on the grounds that doing so inflicts a vague, unspecified harm upon individual animals, who are unlikely to place much value in what it is they have lost anyway.

The acknowledgement that animals appear not to value their autonomy for its own sake also poses problems when considering exactly what forms of intervention it (autonomy) renders permissible. Consider the following example: humans decide to prevent solitary predators (say, bears) from killing deer. The bears are kept in a designated reserve that resembles, from the bear's point of view, their natural territory in size and content, other than the fact that deer are kept out by human rangers (they are settled in their own reserve). In fact, the bears' reserve is carefully managed by humans, who ensure that there are decent supplies of the bears' favourite foodstuffs, that they have opportunities to start and maintain family groups, and otherwise enjoy appropriate levels of their conditions for flourishing. If predatory activity is necessary for the bears' flourishing, then perhaps this can be simulated: robotic deer (perhaps along the lines of Philip K. Dick's 'replicants') might be introduced into the system, or, more modestly, toys such as the ball and rope given to the tiger in the Bronx zoo. Perhaps the bears' food could be laced with a drug that allows them to hallucinate that they are chasing deer! The point is that the human manipulation of the bears in this situation is very extensive; they might be entirely dependent upon human regulation of their environment to survive, yet the manipulation might be carried out in such a way that the bears are completely unaware of it. Other than preying upon deer, the bears are free to follow their own inclinations – indeed, they are arguably more free, since they are no longer so limited by scarcity or misfortune. From their point of view, they are living autonomously: the harm incurred by their loss of real autonomy is not one that impacts upon their experiential wellbeing. This is not necessarily a problem in itself for Nussbaum: the capabilities approach uses an objective-list account of flourishing that allows for harms that do not register on a subjective level (for example, depriving someone of education when they have not been socialised to value it). Nevertheless, it seems to strain the bounds of credibility to suggest that the bears are being forced into an unacceptable compromise between their wellbeing and their exercise of autonomy: the bears just do not experience any limit on their ability to pursue their flourishing, *qua* bears. If the autonomy of wild

animals is to represent a more profound limit upon our policies toward them, a more precise and forceful description of its objective value is required.

Donaldson and Kymlicka propose that justice can obtain between humans and wild animals if the latter are considered to be members of communities to whom we extend rights of sovereignty. Interaction between human and wild communities would then be governed according to terms of fairness between sovereign nations, while animals already living in human communities would be treated as citizens of those communities or, in the case of so-called 'liminal' animals, as protected denizens (Donaldson & Kymlicka 2011, pp.169, 229-230). This seems like a promising model for ensuring fair relations between humans, domesticated animals and wild animals; though Donaldson and Kymlicka do not refer to Leopold themselves, what they are proposing seems to be thoroughly in the spirit of the latter's entreaty that humanity considers itself "plain member and citizen of the land-community", rather than its conquerer (Leopold 1949, p.204). Respecting animal sovereignty would involve careful regulation of human activities in wild animal habitats, limiting interference with wild animals through malice (e.g., hunting), inadvertent 'spillover effects' such as pollution or grazing domesticated animals, but also positive intervention such as that posed by Nussbaum (Donaldson & Kymlicka 2011, pp. 156-157,193-194). But it is one thing to state that treating wild animals as sovereign communities is the ideal relationship that should obtain between humans and wild animals, and another to provide justification as to why this is the right way in which to treat them.

Donaldson and Kymlicka make a strong case for the ability of wild animals to regulate their own lives: wild animals meet conditions of sovereignty by possessing interests in autonomy, and in "maintain[ing] their modes of social organisation and self-regulation on their territory" (p.173). However, Nussbaum's point regarding the autonomy of wild animals is not so much that they are *incapable* of self-determination, but that it plays a less central role in their flourishing than is the case for humans (*FJ*, pp.374-376). What is required, therefore, is an argument capable of convincing human agents that they ought to care enough about the autonomy of wild animals, and the

sovereignty of their communities, not to respond to the compelling moral force of animal suffering in the wild. For Donaldson and Kymlicka, the moral purpose of claims to sovereignty is to assert the interests in autonomy held by the people making those claims (Donaldson & Kymlicka 2011, p.173). They argue that this is true of wild animals as well: wild animals' flourishing is highly dependent on maintaining the integrity of their relationship to their territory and historic habitats, and this is violated by human intervention, especially if that intervention results in dependence. Perhaps this is a more convincing case for the centrality of autonomy to the flourishing of wild animals than Nussbaum has thus far considered. Still, we might be tempted to try to limit the harm suffered by wild animals if we think that we might be able to do so without substantially eroding the relations to one another and to their habitat that constitute their autonomy, even as it is construed by Donaldson and Kymlicka. It would help if we could produce an argument capable of outlining precisely why a human agent ought to take the autonomy of wild animals more seriously than Nussbaum does, and why we should be extremely reluctant to intervene to 'rescue' them from the conditions found in nature even if we think that doing so will cause more good than harm. Treating wild populations of animals as sovereign communities is an attractive model: if we can rid the capabilities approach of its commitment to policing nature then we may well wish to adopt something very similar to what Donaldson and Kymlicka are proposing as the basis for our relationship with wild animals. However, it would be helpful to have an underlying reason to do this, beyond simply desiring to shrug off Nussbaum's proposals regarding wild intervention.

Katz on autonomy, non-human subjecthood, and artefactuality

One vociferous critic of human interference with nature, and advocate for recognition of nature's autonomy as a value, is Eric Katz. In a series of papers, Katz has argued against the human management of wild spaces on the grounds, broadly speaking, that such a project represents an encroachment of human power on nature's 'territory' by inhibiting nature's ability to autonomously pursue its own development. He cites as the most extreme example of this encroachment Martin H.

Krieger's article, "What's Wrong with Plastic Trees?", in which Krieger, starting from the premise that the value of natural objects and ecosystems is primarily located in human experience of them, suggests that replicated ecosystems can have much the same value as naturally occurring ones (Krieger 1973, pp.449-450). Nevertheless, Katz also extends his criticism to significantly less ambitious projects, such as the replacement of wild woodland with sustainably managed woodland. To make his case, Katz employs a distinction between artefactual and natural objects. He reasons as follows: the nature of an artefact is bound up in its purpose and function. All artefacts share a causal history that makes reference to human ideas, desires and projects, which are evident in their design, presentation or use. This is in contrast to natural objects, which lack any such purpose and are instead ontologically and teleologically freestanding from humans and culture. Natural objects, and nature taken as a whole, develop according to their own processes or, in any case, according to processes not chosen by any human designer. Whereas artefacts have their processes and functions granted to them by human designers, manufacturers and users, natural objects develop according to biological, systemic and natural mechanical processes (Katz 1997a, p.128). That artefacts always contain in their being a means to ends, while natural objects have the potential to exist as ends in themselves, affords them a certain ostensible moral value. Katz suggests that they can therefore meet Kant's criterion of the autonomous morally considerable subject (p.129). Presumably, rather than valuing rationality in ourselves and others, morality in this case requires only that we respect the autonomy, broadly construed, of other entities. Katz is intentionally stretching the definitions of subjecthood and autonomy here: natural individuals, objects and systems exhibit autonomy "in that they are independent from external design, control and manipulation" (Katz 1997a, p.129). As a result, human manipulation of nature – such as the replacement of woodland with a managed tree plantation – involves the transformation of natural objects and systems with artefacts, however seamless the substitution appears. The autonomous self-realisation of natural systems and objects is thus inhibited or destroyed, violating the integrity of these morally considerable subjects (Katz 1997c, p.139). This occurs even in such apparently benign projects as sustainable forestry: while a

sustainably managed forest may embody more environmental goods than an intensive tree plantation, it is not autonomous to the extent that the original forest would be, however closely it might resemble it. This is because the sustainable plantation exists as a result of, has been planned according to, and is managed in order to fulfil, human desires, values and purposes (Katz, 1997d, pp.99-100). To emphasise: this is not to say that it is as 'bad', from the point of view of Katz's environmental ethic, as the intensive plantation. Katz's concern is rather to say that there is, nevertheless, something of value that is lost when we transform a natural object or system into an artefactual one, and that this represents some form of human encroachment upon nature. He concludes that what is happening here is a kind of colonisation or imperialism, the substitution of human values for natural value, the interference with nature's ability to pursue its own development rather than being subordinated to human ends (Katz 1997c, p.141). Also motivating Katz's work is a more immediate concern: considering restored landscapes and natural ecosystems to be of equal value seems to render widespread destruction of nature (such as intensive resource extraction) permissible, as long as we repair the damage done when we are finished. Such an attitude would seriously undermine any case for preserving nature as it is, and for valuing nature as something untouched by human presence. According to Katz (citing an example used by Robert Eliot), the difference between a natural and a 'restored' ecosystem is somewhat akin to that between an original artwork and a forgery: the former holds, and exists in relation to, certain valuable historical and genetic properties that contribute to its value, and these are lacking in the latter (Katz 1997d, p.96).¹⁸ Mistaking an artefactual ecosystem for a natural one, like mistaking a forgery for an original artwork, betrays an ignorance of much of the source of these valuable properties. Note that Katz's objection here is more ambitious than a simple claim that environmental restoration is morally

¹⁸ Katz acknowledges that this is not a straightforward analogy since, in the case of the artwork and the forgery, we are comparing one valuable artefact with another, supposedly much less valuable one, whereas in the case of the ecosystems we are comparing an artefact (the restored ecosystem) with something that is not an artefact at all. Nevertheless, both the original artwork and the natural ecosystem provide "a special kind of continuity with the past", in that they both refer back to certain creative processes.

wrong: as far as Katz is concerned, environmental restoration is in fact *impossible*, since what we are really doing is replacing natural objects with artefacts.

Katz's critique requires that we employ a sharp definition between nature and culture that is not necessarily obvious. If humans and their capacity for artefact creation have evolved according to natural processes, it is not clear that we can easily separate artefacts and natural objects in the way that Katz supposes. Matters are made worse when we admit Nussbaum's point, described earlier, that human influence has thoroughly pervaded the natural world, and that few natural objects, systems or individuals remain untouched. Katz anticipates both of these objections, and issues a two-pronged response: firstly, he does allow that there are degrees of artefactuality and naturalness, and that these terms can exist on points on a spectrum. A sustainable woodland is more natural than an intensive tree plantation, and more still than a toxic waste dump; however, the artefactuality in its being becomes clear when we compare it to an area of old-growth forest. Similarly, a housecat or broiler chicken is significantly more of an artefact than a lion or a condor: each of the former bear their connection with humans far more obviously in their bodies and in the way in which they interact with the world than either of the latter. Secondly, while it is true that humanity's capacity for artefact creation is an evolved property, it is not true that all of our behaviours are equally in tune with our evolved nature: following Andrew Brennan, Katz distinguishes 'natural' behaviours (such as childbirth without modern medicine, or consuming foods in keeping with our 'natural' diet) from those which manipulate natural processes. Natural behaviours or capacities are not natural by virtue of their not being human, but by virtue of their being closer to certain forms of human being, rather than others (Katz 1997d, pp.103-104). We need not conclude that identifying some human behaviours as natural produces normative injunctions against them; Katz presumably does not wish to suggest that it would be morally wrong for women to request an epidural during childbirth. Rather, we ought to recognise that some human behaviours involve the control and manipulation of nature to greater or lesser degrees, and that when we

engage in these behaviours we limit nature's ability to develop according to its own protocols, producing a loss of value that ought to be weighed against the putative benefits of our actions.

Critiquing Katz: Why the argument from autonomy is unsuccessful

Before considering how Katz's critique of ecological restoration applies to Nussbaum's project, it is worth considering the criticisms made on Katz's thesis by Andrew Light. Light argues that Katz's objections apply in full only against a certain subset of restoration projects, and that his arguments do not pay sufficient attention to what those engaged in restoration work actually seek to achieve. Light identifies in Katz's writing five arguments that comprise the latter's objections to restoration, which are summarised below:

KR1. The Argument from Duplicity

A "technologically created 'nature' will be passed off as reality": if we follow Krieger's proposals, for example, areas landscaped to resemble naturally-occurring prairie will be presented as an adequate replacement for the real thing.

KR2. The Argument from Arrogance or Hubris

That humans might consider themselves capable of restoring nature in this way evinces arrogance or hubris.

KR3. The Argument from Artefactuality

As discussed above, Katz argues that 'restoring' ecosystems actually involves the replacement of natural objects with artefacts.

KR4. The Argument from Domination

Because all artefacts are anthropocentric (their functions and purposes reference a human creator or user), they unavoidably embody human values. Thus, replacing natural objects with artefacts inhibits nature's ability to "pursue its own independent course of

development”, resulting in the imperialistic imposition of human values upon the natural world.

KR5. The Argument from Replacement

If we *deny* that replacing natural objects with artefacts involves loss of value, then the “value in the original natural entity does not require preservation”: this would render permissible the unchecked abuse of nature by humans, so long as we commit to repairing the damage we have inflicted after we have finished (Light 2000, pp.56-57).

Light argues that KR4 is Katz’s strongest objection to ecological restoration, and it is therefore the argument that he spends most time attempting to refute. His response is instructive when we consider Nussbaum’s case, as well. Light’s argument here is that, *even granting that restored nature is not really nature*, at least some restorations can be of value. If this can be established, then individual acts of restoration can be evaluated according to the other four objections: if restorations, however artefactual, can be good, then which restorations *are* good can partially be identified by reference to the considerations that motivate them (pp.57-58).

Nussbaum’s project is certainly not any kind of ecological restoration: indeed, it is quite the opposite, far more so than the restoration projects that Katz believes are really acts of domination. Nussbaum is explicitly arguing for, to one degree or another, the replacement of whatever has heretofore been considered the natural order of things with a new order focused on providing justice, by securing their flourishing, for wild animals (*FJ*, p.400). Nussbaum has already provided a rebuttal to some environmentalist critics in the form of her argument against ‘nature worship’: it is not remotely clear that there is very much in the way of a ‘natural order’, or that nature manages itself particularly well in the absence of human interference, or that the ‘natural way of things’ delivers by any means the best outcome for animals (pp.366-370). Nevertheless, as outlined above, there exists within the capabilities approach some (perhaps unspecified) room for considering the autonomy of wild animals (and if autonomy itself is a good, then perhaps we might also consider the

autonomy of nature in general to possess some ostensible moral value). If we grant that something of value might be lost in our “supplanting of the natural by the just” (p.400), then argument KR4 might have some traction on the capabilities approach. The value of nature’s autonomy must be weighed against the value conserved or created by protecting animals’ flourishing, and this might indeed further limit the scope of Nussbaum’s conception of a “truly global justice” for all individuals: measures that involve substantial sacrifice by animals of their autonomy in exchange for relatively small increases in the conditions for flourishing might be ruled out. It might be that the systematic supplanting of the natural will have to wait until we are able to implement such science-fiction scenarios as introducing robot deer into the wild for wolves to run down. Furthermore, Light suggests that some acts of restoration, such as removing contamination from soil, appear to increase nature’s autonomy by providing natural entities with more opportunities to pursue their development (Light 2000, p.58); by the same token, there are many actions that might be taken that would enhance animals’ autonomy *as well as* other aspects of their flourishing, such as habitat protection or captive breeding programmes for endangered species.

Katz’s objection KR4 does not successfully preclude a general project of supplanting nature, however. When faced with the choice between preserving the (mysterious) autonomy of nature and preventing real, substantial harm to wild animals, Nussbaum appears committed to taking the latter option where it is practical to do so. Katz’s argument here is presented as an appeal to consequences: interfering with nature has the consequence of extending human imperialism over it by subordinating its values to our own. Protecting the flourishing of wild animals renders them partial artefacts, separating them from the natural processes according to which they used to live and instead forcing them to live according to those capabilities that humans have picked out as worthy of protecting. There is a parallel to be drawn here with domestication. Like Callicott, Katz argues that domesticated animals are living artefacts, and of no special relevance to an environmental ethic: though once wild, these animals have been shaped by a historical process that has been subject to extensive human guidance, to produce individuals well-suited to human ends

(Katz 1997b, p.28). Their inclusion in human communities has subjected them to human values, with the result that they now embody them in the amount of milk, wool or meat that they provide, or in their docile character, or other characteristics. The effects on wild animals, were Nussbaum's project to proceed in its most extreme form, would be similar (though perhaps not so obvious). The course of their development would cease to be shaped by natural processes, and instead would continue along lines that humans have selected (even if the protected characteristics were selected according to significantly less anthropocentric criteria than has been the case with domesticated animals). Extending human protection to all wild animals would in effect represent a benevolent taming of nature, a 'soft' domestication whereby their development is divorced from natural process and diverted towards goals set by humans.

Yet, returning to Light, we see that if this effect of nature's supplanting is acknowledged, Katz's objection loses its force. We may concede that the erosion of nature's autonomy is an ostensible harm without acknowledging that it is a harm that cancels out the considerable good we could do by protecting individual animals' capabilities. As an advocate of ethical holism, Katz presumably advocates some forms of intervention in nature: for example, managed hunting of the much-maligned white-tailed deer to prevent overpopulation. As Light points out, it does not follow from the premise that objects are more natural the further they are from human interference that we should never interfere with nature (Light 2000, p. 59). The protection of individual wild animals might not be a good that Katz would accept, but it is not a good that Nussbaum has to abandon even if she accepts that human intervention with nature involves a loss of autonomy and that this represents a measure of domination (though Nussbaum seems to prefer 'paternalism'). When loss of autonomy is framed as a harm that individual wild animals can suffer – when we adopt a consequentialist account of the loss of autonomy as loss of value – then there will always be tension between our seeking to preserve autonomy and our seeking to promote some animal capabilities over others. From the point of view of the capabilities approach, an individualist (partial) account of justice, concerns over autonomy will frequently lose out to more pressing concerns over substantial

threats to overall flourishing. This problem is compounded by the relatively low value that Nussbaum assigns to the autonomy of animals: while loss of autonomy may inhibit many opportunities for full flourishing, it does not appear to do so to the same extent as loss of life, or serious injury, particularly for those animals incapable of valuing their autonomy themselves. Furthermore, it is not clear that all interventions to promote flourishing necessarily result in loss of autonomy. Animals facing fewer threats to their survival or good health might easily be said to have greater ability to develop and pursue their characteristic flourishing than if left alone. Whether an animals' habitat is preserved out of holistic considerations or to promote its flourishing, the effect will often be an increase in opportunities for the creatures concerned to pursue their own projects. Nussbaum's argument does not appear to be vulnerable to Katz's other four objections, either. Because there is no claim in her discussion to the effect that her 'truly global justice' is to be passed off as a facsimile of nature, the arguments from Duplicity, Arrogance or Hubris, and Artefactuality, KR1, 2 and 3, appear to have no more effect than they do against restoration projects that also do not make these claims (Light, pp.57-58). In the case of restorations, Light argues that KR5 does not apply so long as we do not claim that replacing an ecosystem with an artefact justifies the plundering of natural resources. In Nussbaum's case, things are slightly more complicated. As we have seen, Nussbaum's arguments *do* appear to permit drastic restructuring or interference of the natural world on the grounds that this can yield an increase in value, in the form of protection of wild animals' flourishing. The capabilities approach will probably tend not to countenance the plundering of wild nature in the sense that Katz is concerned with, albeit on the grounds that this will tend to reduce opportunities for flourishing for human and non-human animals, rather than out of any holistic considerations. And even if we can imagine scenarios in which this is not the case (for example, if vital natural resources can only be obtained through environmentally detrimental means), we presumably have duties to anticipate these kinds of trade-offs and do what we can to ensure that they can be avoided. According to Katz's analysis, what happens when we do this is that one natural value, autonomy, is destroyed and replaced with human values, such as justice. On the

capability theorist's account, what we are instead doing is measuring one value that we find in wild animals, autonomy, against other values that are also present - the capabilities for affiliation, good health, and so on. Perhaps this escapes objection KR5 as well, on the grounds that the values being selected are not in themselves narrowly anthropocentric (as they clearly are in the 'restoration thesis' that Katz describes) and, again, because we appear to be able to justify sacrificing the somewhat mysterious value of autonomy for the very substantial values rendered available by protecting capabilities. Furthermore, recall that the capabilities approach only provides a minimal, partial account of justice. Animals are not necessarily entitled to *absolute* autonomy, but simply an adequate level – and perhaps the level enjoyed by the bears in their wilderness preserve is adequate. Again, the consequentialist arguments offered by Katz appear to provide few limitations on Nussbaum's project beyond those she covers herself in her discussion of "respectful paternalism".

Katz's 'inadvertent' appeal to moral character

Nevertheless, Katz's discussion, particularly as condensed by Light, may offer some hope of an alternative argument that is, nevertheless, derived from a consideration of animal autonomy. Recall that KR2 is an argument from arrogance or hubris – the hubris of humans who consider themselves capable of passing off an artefactual copy of nature as the real thing. This is *not* obviously a consequentialist argument: rather, it appears to be a comment on the moral character of the individual who believes that this kind of action is permissible (or, in Nussbaum's case, apparently obligatory). In the narrow form in which it is presented by Light, this argument obviously does not apply to Nussbaum's project: as discussed above, Nussbaum does not claim that her just environment would still be nature.¹⁹ There might, however, be space for an argument from hubris that rests on grounds not covered by Katz. Nussbaum does not claim that we can replicate nature, to

¹⁹ However, in some of the more moderate sections of *Frontiers of Justice* there does appear to be an assumption that nature's supplanting *would* be less than total – for example, her claim that "we do not have the option of giving the tiger in the wild a nice ball on a string to play with" seems to presuppose that there *is* a wild for the tiger to inhabit (p.379).

be sure: she seems to be saying that we can make it better, and that we can be confident that we can produce an account of what is best for members of other species that is superior to the current state of affairs. Such statements as “an intelligently respectful paternalism is vastly superior to neglect” hardly resound with humility or temperance with regard to our own moral authority (*FJ*, p.380). This is particularly true if we accept Katz’s contention that introducing an artefactual element into the being of wild animals, by replacing the processes according to which they live with a set of values selected for them by humans, carries at least a shade of imperialism (as supplanting the values of conquered peoples with one’s own surely does in the human case).²⁰ Even if we can accept that this is an acceptable trade-off according to the logic of the capabilities approach, the unease that many of us would feel at the idea of drastic intervention with the natural world might prompt us to ask the question, “What kind of a person would do that?”²¹ Clare Palmer suggests that this character-based approach might be a useful one to take when considering what might be wrong with domesticating animals: that shaping animals to suit one’s own ends, even if doing so does not damage their experiential welfare, might indicate a lack of certain valuable character traits on our part (Palmer 2010, p.127-128). The similarity between domestication and Nussbaum’s project suggests that a similar inquiry is relevant in her case as well. There may be traits evidenced by the extreme capabilities theorist that we find admirable: consistency, compassion, fairness and fortitude all spring to mind. At the same time, we might indeed also encounter hubris, both in the form of an

²⁰ Discussion of rendering wild animals into artefacts by selecting from among their characteristics those that we wish to promote indicates an interesting question for Katz’ account of the essence of artefacts: when we create at least some artefacts, we are perhaps not really *creating* them, in the full sense of the word, but making selections regarding material, shape and design based on the properties that we wish to have the finished item to have. If we wish an artefact to conduct electricity well, we might make it out of copper. If we wish it to hold a cutting edge, we might choose carbon steel. Perhaps, therefore, there is an extent to which creating an artefact is not so much a matter of imbuing it with certain properties, but selecting from the properties of the materials available to us. This adds an additional dimension to Katz and Callicott’s claims that domesticated animals and plants are ‘mere’ living artefacts, with no ‘proper’ being of their own. It is true that their properties refer to human purposes and selection process, but they are, nevertheless, properties that *belong* to the animal or plant, even though they have been brought to the fore so as to suit human ends. One thing that might threaten this is the introduction of synthesised traits, or traits ‘borrowed’ from other species, in the form of genetic modifications. When a tomato is given genes belonging to a fish, do these become the tomato’s characteristics?

²¹ Palmer cites Thomas Hill’s environmental virtue ethics to examine our possible misgivings regarding the idea of a genetically modified pig that feels pain but has no desires or inclinations, other than to feed when he or she is hungry.

overconfidence in the availability of a 'technical fix' for the problems of wild animals, and in the form of belief that such a fix really *would* represent an increase in value – that humans can and ought to select and promote those traits among the other species that are conducive to their characteristic flourishing.

Sandler on the scope of 'active benevolence'

Using a virtue-oriented approach to environmental ethics, Ronald L. Sandler has argued against what he refers to as 'active benevolence' towards wild animals – essentially, Nussbaum's suggestion that we have obligations to prevent animal suffering in the wild. There appear to be three main objections discernible in Sandler's discussion of this topic: first, a policy of active benevolence, and the arguments upon which it is based, overplay "the significance of pain"; second, if all life has inherent worth, and "when we help one individual we harm another", then the benevolence that we extend to wild animals can never be comprehensive if it takes the form of active benevolence; and third, active benevolence is "not conducive to an agent flourishing or meeting well the demands of the world" (Sandler 2007, pp.74-75). Although the first of these objections is easily accommodated by Nussbaum's approach, the second and third provide a valuable insight into what one might find objectionable about the idea of 'supplanting nature'.

Nussbaum appears easily able to accommodate the argument concerning the role played by pain: Sandler's point here is that, rather than extending direct moral consideration to the flourishing of animals because, by virtue of their being sentient, they meet our criteria of moral considerability, we ought to be concerned about pain because avoiding nonbeneficial pain, and seeking beneficial pleasure, are components of flourishing, and that is what we value (p.74). Furthermore, there are some pains that are characteristic of the life-form of the species, and some that are not (Sandler contrasts the pain of a mink caught in a trap with that of a mink giving birth (p.75)). This appears to be in line with the capabilities approach: although Sandler and Nussbaum might disagree over precisely how prominently pleasure and pain feature in our account of species-characteristic

flourishing, they both agree that we ought to be concerned about providing a plurality of goods for (at least some) animals. However, as has hopefully already been established, when Nussbaum discusses intervention in the lives of wild animals, her aim is precisely to secure a plurality of goods for the creatures in question: she is not merely concerned with reducing animals' pain (indeed, if some pains are found to be conducive to flourishing, then presumably the capabilities theorist can endorse them). A key tenet of the capabilities approach is that its account of the good is not reducible to concerns regarding experiential welfare: flourishing is manifested through participation in a plurality of valuable life-activities.

As for the second objection: this could be interpreted as a concern regarding practicability. Currently, we seem to be unable to protect deer without harming the animals who prey on them. Even if we are able to feed the carnivores in some other way, they still suffer harm if they are unable to obtain other characteristic goods normally obtained through hunting, such as exercise of their social or rational capabilities, or the satisfaction particular to making a kill (Crescenzo 2012, pp.189-194). Even if we accept Nussbaum's *de facto* hierarchy, according to which more complexly sentient creatures' flourishing comprises a more urgent matter of justice by virtue of these beings' greater capacity to suffer harm (*FJ*, p.361), supplanting nature appears to generate conflicts between animals of similar levels of sentience that are not straightforwardly resolvable. However, Nussbaum's commitment to avoiding unresolvable conflicts appears to blunt this objection somewhat. Her allowance that we might resolve conflicts in the direction that involves the least harm is specifically intended to cover short-term, 'emergency' measures to address situations that come about when "society is not well-designed" (p.401). If we cannot currently avoid harming one animal to aid another, we ought to develop the means to do so. Technologies such as *in vitro* meat and genetically-engineered viruses would allow us to feed carnivorous animals and control populations without harming individuals: if technological solutions can be found, or at least imagined, for these problems, then presumably the same can be done for the others. As a purely practical consideration, then, Sandler's third objection does not succeed against Nussbaum's project.

However, what this discussion does reveal is the extent to which a commitment to promoting wild flourishing can increase in scope. Intervening to fix one problem rapidly introduces others: if we succeed in protecting deer from predators, we find ourselves having to contend with overpopulation and Lyme disease. Perhaps if we introduce a virus to render deer infertile and reduce population growth, the reduction in the number of deer carcasses will impact the organisms normally involved in breaking them down, with a possible corresponding reduction in soil fertility. We might find ourselves having to spread fertiliser on previously natural grassland, and then devising a technological fix for the detrimental effects of that policy. Now, it is theoretically possible that human beings might be able to develop technological solutions to all of these problems (though it seems more likely that we would quickly become intimately aware of the limitations of our ability to control nature, or that finding solutions would involve a great deal of disastrous trial-and-error). To do so, however, would appear to commit us to the eventual complete or near-complete control of the natural world. Whether or not this kind of near-omnipotence is realistic, we might be prompted to ask whether or not it is really *desirable*. A virtue-oriented approach provides us with an answer to this question that does not depend on our believing that the natural order of things is in itself sacred or good: there may be praiseworthy attitudes that we are unable to adopt if we pursue this kind of comprehensive paternalism.

This appears to intersect with Sandler's final objection to active benevolence: that it "is not conducive to an agent flourishing or meeting well the other demands of the world" (Sandler 2007, p.74). Acknowledging comprehensive control of the natural world as an acceptable goal to pursue now appears hubristic: it assumes that the challenges faced by our own species and others can be solved technologically, that humans have the power and the right to 'come to the rescue' of the other animals. The characteristic attitude here appears to be the same as that identified with 'technocratic' approaches to other environmental problems, according to which fossil fuel depletion and climate change can be addressed by switching to nuclear or solar power rather than changing the way we use energy. If there is a problem arising from interaction between human beings and the

natural world, then we ought to change the world, rather than ourselves (pp. 132-133). An attitude of humility, which acknowledges that there are limits to human power and authority, is more conducive to understanding ourselves as co-members of communities that contain many other species of animal, a conception of the human that is common to Nussbaum and environmentalists such as Sandler, Callicott and Leopold.²² Such an attitude might require that we change ourselves to accommodate the characteristic ways of flourishing of other living things, that we refrain from insisting that they conform to our agenda (however benevolent that might be).

As far as “meeting well the demands of the world” is concerned, this may be another practical consideration: we have other goods to pursue in addition to extending justice to wild animals, and the effort it would take to comprehensively promote the flourishing of all creatures is effort that cannot be spent elsewhere. Comprehensively bringing natural ecosystems under our control might preclude our obtaining other goods. Alternatively, we might interpret ‘meet well’ as ‘meet *appropriately*’.²³ Sandler argues that virtues can be appropriate reactions to phenomena encountered in the world: some character traits may be virtues due to the fact that they promote the good of other sentient beings (Sandler 2007, pp.27-29).²⁴ Nussbaum opens her chapter on justice for non-human-animals with Cicero’s account of a Roman crowd, moved to anger and pity by the entreaties of elephants pitted against gladiators in the arena. According to Cicero, the crowd were motivated by a feeling that the elephants “had a relation of commonality (*societas*) with the human race” (*FJ*, p.325). This appears to be a morally appropriate response: outrage at the cruel treatment of nonhuman animals is often motivated or heightened by recognition that the creatures concerned are much like us, that they are also agents seeking their own good. Articulating our respect for this feature of animals’ existence as a set of fundamental entitlements makes sense: it

²² See Leopold, 1968, p.204: “In short, a Land Ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member of it. It implies respect for his (*sic.*) fellow-members, and also respect for the community as such.”

²³ It is not at all clear to me that this is how Sandler intended this sentence to be interpreted. However, the appropriateness of virtues as a response to encountered aspects of the world is an important facet of his account of pluralistic virtue ethics.

²⁴ Sandler also examines the interaction between these noneudaimonistic virtues and Taylor’s biocentrism on pp.70-74, particularly p.73.

allows us to crystallise our commitment to their flourishing, and to acknowledge that many animals are members of human communities where respect for others is often expressed in similar terms. At the same time, recognition of this feature of their lives might also move us to hold back from systematic intervention in their lives, however benevolent, where this conflicts with the notion that humans are members, rather than rulers, of a wider community. Allowing awareness of this position to shape our pursuit of justice requires that we practice humility when estimating our technological and moral power.

Cooper and Murdoch on Humility

David Cooper has suggested that certain of the wrongs that we do (or are preparing to do) to animals cannot be adequately articulated purely through reference to rights or suffering (Cooper 1998, pp.146-147). Rather, Cooper examines common public reactions to certain proposed avenues of bioengineering research, and argues that affective responses such as disgust, or concerns regarding 'playing God', are best explained as allusions to the moral character of those to whom these feelings are directed. Bioengineers who create ultra-docile animals, or animals who are not distressed by the experience of pain, are considered on this analysis to lack certain valuable 'human sentiments' central to living a virtuous, flourishing life (pp.150-153). The charge in the bioengineers' case is, again, a lack of humility: a dissatisfaction with what is perceived to be alien, which is incompatible with proper flourishing. By the same token, an exploration of the unease with which we regard the suggestion that we might make nature better seems to yield similar objections: systematic intervention in nature is a policy of 'playing God'; there is something ridiculous about the suggestion that we might control something so vast and complex. Cooper also makes reference to the claim, made by Iris Murdoch, that humility, brought about by attention to natural and artistic beauty, is an 'unselfing' virtue, one that directs us away from our own projects to remind us that we live in a world with other "animals, birds, stones and trees" that nevertheless go their own ways. Experiences, such as catching sight of a kestrel hovering outside one's window can lead to a

forgetfulness of the self that directs us to live with concern for others, and that allows us to inhabit the reality of other entities (Murdoch 1970, pp.82-83; Cooper 1998, pp.154). Perhaps this analysis also applies to Cicero's account of the elephants in the arena: one can imagine the crowd receiving the impression that their sympathies were being sought out by creatures capable of recognising humans as fellow animals. The unnerving experience seems to have caused them to forget their bloodlust, to review their desire for entertainment in light of the elephants' obvious desire to live.²⁵ At the same time, this other-directed attention reminds us that we are, as Leopold says, only 'co-members' of the Earth's community. A managerial attitude, one that looks at the natural world purely in terms of conflicts and problems to solve, is incompatible with a genuine concern and attentiveness towards the diverse ways in which animals pursue their respective forms of flourishing.

Conclusion

Hopefully it can be seen that, for those of us who are enthusiastic about the capabilities approach but unenthusiastic about the prospect of policing nature, there is a plausible route by which we can shed this commitment. A direct appeal to the role played by autonomy in animals' flourishing was initially considered and found not to be particularly fruitful. This was because, even if we were to make use of the distinction between autonomous wild objects and artefacts employed by Eric Katz, with its resulting strong assertion of the importance of autonomy in establishing moral subjecthood, loss of autonomy seems only to be one harm arrayed against many possible harms that wild animals might encounter. It is not only that, were the animals able to choose, they might readily trade in their current level of autonomy in exchange for human protection, although that could hypothetically be the case. Rather, autonomy, as Katz presents it, does little to militate against 'policing nature' because many human interventions may arguably *increase* animal autonomy in

²⁵ It does not especially matter, therefore, whether this is a case of anthropomorphism: it is enough that the humans had the impression that they were dealing with fellow subjects. Additionally, it is interesting that the widely shown animal rights documentary *Earthlings*, which uses commonality as a theme throughout, displays a protracted sequence of circus elephants being mistreated by handlers, with tragic consequences.

many regards and, furthermore, any loss of autonomy that the animals do incur could be potentially concealed from them through some elaborate theatrical set-up. So, whilst we ought to make sure that animals are properly compensated in some way for the loss of autonomy they arguably incur from contact with human guardians, the guardianship itself still seems to remain a persistent corollary of capabilities justice.

A more promising way to encapsulate the 'wrongness' of policing nature might be to examine what such a course of action would say about those carrying it out. While there are praiseworthy characteristics that could potentially be exhibited by such people, it is apparent that committing oneself to a drastic alteration of the world in order to mould it to fit one's values is inconsistent with the virtue of humility, as elucidated by Cooper and Murdoch. Perceiving the world as something over which, ideally, we could exert absolute control conceptualises the human agent as both technologically and morally capable of prescribing what is best for the non-human inhabitants of the planet. Thus, it frames human projects (the pursuit of justice) as not only being central to the existing human community (or mixed human-animal community) but to everything else in the world as well. Such a preoccupation with one's own projects is redolent of the vice of hubris, and therefore incompatible with maintaining a good moral character.

Chapter IV: Biocentrism and the Capabilities Approach

In this chapter, I will consider whether the capabilities approach is capable of motivating concern for the flourishing of non-sentient animals, plants, and other forms of life. Although Nussbaum limits concerns of justice to sentient animals, I will argue that she is wrong to do so: possession of capabilities appears to be the threshold for consideration as a recipient of justice in her approach, and non-sentient animals and plants generally seem to have at least some capabilities. After discussing why removing the condition of sentience does not provide a *reductio ad absurdum* of the approach by committing us to justice for machines and other artefacts, I look at the work of biocentrist Paul Taylor. Taylor claims that all living things have inherent moral worth, on the grounds that they are ‘teleological centres of life’: this term closely resembles Nussbaum’s conception of capabilities-possessors as ‘agents pursuing a good’, and so I will consider whether Taylor’s ethic of respect for nature can provide the normative content for a capabilities-conscious environmental ethic. Taylor uses this view of the worth of individuals to ground a set of principles guiding human behaviour towards natural entities. I will draw on criticisms of Taylor’s work made by Schmidtz and Sandler to suggest that an approach formed from general principles is not the most effective way of formulating our ethical commitment to the flourishing of members of other species: rather, a virtue-based account enables us to incorporate what Taylor considers to be the relevant facts about other life-forms into our moral framework and respond appropriately.

Do non-sentient beings possess capabilities?

In Chapter II, it was briefly mentioned that the focus of the capabilities approach might be overly narrow. In an apparently contradictory passage of *FJ*, Nussbaum limits the ‘threshold of minimal consideration’ to those animals she deems ‘sentient’, by which term she seems to mean ‘capable of experiencing pleasure and pain’. As a result, she considers it implausible that we should extend justice to mosquitos, though she admits that this is a difficult position for the capabilities approach

to support since, unlike utilitarianism, it holds multiple aspects of flourishing to be intrinsically good, rather than concerning itself merely with experiential welfare: “we should adopt a disjunctive approach: if a creature has *either* the capacity for pleasure and pain *or* the capacity for movement *or* the capacity for affiliation and emotion[...]and so forth[...]then that creature has moral standing” (*FJ*, pp. 361-362). Rather than admit mosquitos into the class of beings who have entitlements based on justice, however, Nussbaum states that all “creatures that have one of the other salient capacities[...]also have the capacity to feel pleasure and pain” (p.362).²⁶ Her position is made a little more tenable (and a little less obviously disproven by the example of the mosquito) in the notes to this paragraph, in which she elaborates that movement from place to place is considered a morally relevant category when it is taken in the Aristotelian sense of a creature becoming “aware of a good thing at a distance, [desiring] that good, and [moving] toward it in consequence” (p.448, note 42). Nussbaum includes this distinction to rule out the movement of single-celled organisms, but it may exclude all non-sentient lifeforms: without sentience, it is hard to consider how an organism can be aware of a good thing *qua* good thing, undermining any claim that it truly desires it. A mosquito who becomes aware of the carbon dioxide breathed out by a mammal and moves towards it because she is driven toward sources of food, or a plant that grows towards sunlight, may not actively *desire* blood or light: they do not know that these things are good; their seeking after them is just a part of their makeup. When a mosquito chooses to bite one individual over another, it does not make sense to say that she *prefers* her victim in the way that a cat might prefer one brand of tinned food over another. So perhaps Nussbaum’s criteria are not at odds with her exclusion of the mosquito (or some other animal that falls below the disjunctive threshold).²⁷

²⁶ Nussbaum thinks this is true of those terrestrial species of whom we are currently aware: she does allow that there may conceivably be beings with capabilities who do not feel pleasure or pain – for example, God, angels, space aliens, true artificial intelligences, or human personalities ‘uploaded’ onto a computer mainframe.

²⁷ For a detailed discussion of whether cold-blooded vertebrates and invertebrates have desires, and whether they are capable of feeling pain, see Varner 1998, pp.26-54. Varner concludes that, based on parallels drawn between behaviour and brain structure, fish and other less complicated animals probably cannot be said to possess desires regarding the goals that they are inclined to pursue (pp.28, 45-46), though they may feel pain (pp.52-54).

Then again, it is not clear as to why desiring goods should necessarily be the deciding factor in our test-case of movement. The mosquito's flight and the plant's growth are both goal-directed, as is the sea anemone's trailing its tendrils in the water. These entities appear to exercise capabilities for movement in a way that is at least somewhat self-directed, and which relates to their flourishing. Perhaps, then, we can consider all but ateleological movement as a legitimate capability – although, even in this case, the organism is often making use of an adaptation vital to its pursuit of its good, as in the case of the tumbleweed that rolls to distribute its seeds. If we include a condition that a capability must be conatively exercised, or some similar threshold, then it appears that we are not only concerned with capabilities themselves: it appears that we are stipulating that in order to 'count', capabilities must interact in a particular way, the capability for movement interacting with an ability to form desires.

However, Nussbaum complicates matters by listing 'life' itself as a capability, along with 'bodily health', though she does not mention these capabilities when discussing her disjunctive formula. This is a vexing omission: if we restore these two missing capabilities to the formula, then it appears that an organism can qualify as deserving just treatment simply by virtue of its being alive: in other words, such a restoration would undermine any suggestion that capabilities need to be exercised in a certain way in order to be key capabilities.

Perhaps in this case, too, we must include the stipulation that an organism must value being alive, or value its health in order to qualify under these criteria. However, this is problematic for at least two reasons. First of all, it is not clear in the case of many sentient creatures that they actively value being alive, or that they have a concept of not being alive such that they are capable of forming preferences between the two options. Even animals capable of identifying and desiring good things within the context of their life may not be able to satisfy this more demanding formulation of this capability. Currently, this is not a problem: sentient animals satisfy the disjunctive criteria on many other counts. Then again, if this capability (Life) does not function as a criterion for these animals' direct moral standing, we might question why it is included as a capability at all.

Perhaps living to the end of one's natural lifespan is necessary to properly exercise one's capabilities (this was one of the arguments given against painless killing in Chapter I): if so, it appears only to have derivative value. If Nussbaum wishes instead to treat living one's life, in the absence of strong reasons not to go on, as intrinsically valuable, then it seems that it should be a formal criterion of direct moral standing. If one is alive, then under the capabilities approach, there are just and unjust ways in which one can be treated: one can be prevented from living out one's natural lifespan.

Secondly, it is simply not clear that this more demanding formulation of the capabilities is an adequate one, or one that remains true to the initial focus of the capabilities approach, which is the promotion of flourishing. If we are concerned about the flourishing of individuals, and are prepared to extend this concern beyond the species barrier, then *all* species are presented to us as valuable candidates for our concern. Examining the species arrayed before us, we see that whatever their other capabilities, the flourishing of each creature depends upon its remaining alive, whether it actively values being alive or not. We also see that all organisms take at least some steps to remain alive and, indeed, to reproduce (which presumably also means that they exercise the capability of bodily integrity to one extent or another): these things seem to be central to their flourishing and, since promotion of flourishing is the condition according to which we establish which capabilities are key capabilities, it is hard to see how excluding these items from the disjunctive formula in their simpler forms can be justified. As Fulfer points out, Nussbaum places undue emphasis on the role played by cognition in flourishing: by intimating that there is a standard by which one can be considered a subject of justice that goes beyond flourishing *qua* exercising what capabilities one actually possesses (beyond Nussbaum's *objective list* of criteria for flourishing), Nussbaum "imports unnecessary anthropomorphism" back into the capabilities approach (Fulfer 2013, p. 26). The relations in which we co-exist with nonsentient lifeforms are such that we are capable of affecting their flourishing through our actions: Fulfer argues that attention to this fact is what ought to be our main concern in remaining true to the spirit of the capabilities approach, rather than focusing on

those animals that are sufficiently similar to us that we can readily imagine how things are going for them (p. 27).

Admitting that there are just and unjust ways of treating living things is not to say that all injustices are equally urgent. All we have established is that, under the capabilities approach, there is no just reason to deny that the flourishing of nonsentient life forms is nevertheless a good of some sort: we ought to respect these beings' pursuit of their respective goods unless we have strong reasons to do otherwise. For the sake of constructing an 'overlapping consensus' on the matter, Nussbaum treats the question of equal moral worth as a metaphysical one: differing human conceptions of the good will provide different answers on this question; many religious and secular conceptions will struggle to affirm the claim that sentient, nonsentient and human lifeforms all share the same level of moral standing, although she herself claims that "there is no respectable way to deny the equal dignity of creatures across species" (p. 383). However, where conflicts between the flourishing of individuals exist, they can be resolved by appealing to her account of harm as reduction of a given capability or capabilities below the threshold set by the species norm. A lifeform that only possesses the capabilities of life, bodily health and bodily integrity (we can stay with Nussbaum's example of the mosquito, though mussels or sponges seem more obvious) suffers less harm if these capabilities are taken away than a lifeform who possesses these capabilities in addition to sentience, emotions, affiliation and so on (a rat, for example) (pp.385-386). The more complex sentient creatures have, as it were, more at stake: killing an animal that possesses capabilities such as affiliation robs him or her of future opportunities to exercise these capabilities *in addition to those shared with the simpler organism*. Furthermore, species whose members exist in more complex relationships with their capabilities often have more invested in the conditions of their flourishing: a rat who experiences pain both as a stimulus and as a state of affairs which they wish to avoid seems to suffer a greater harm from being skewered than a fish, who experiences pain without necessarily desiring it to cease, or a mosquito that doesn't experience pain at all (pp.386-387). Nussbaum therefore grounds her justification of differential treatment between different

species on the supposed existence of both quantitative and qualitative differences between the harms suffered by their members.

We do sometimes have to make choices that call for the killing or damaging of other lifeforms: where these are unavoidable, Nussbaum proposes that we use these sorts of considerations to guide our decisions. We might, therefore, conclude that we do less harm in consuming plants than we do when we consume mammals and birds: where the former option is available to us, it appears to be the right thing to do.²⁸ It may be that we decide that some lifeforms are so simple, and incur so little harm on being destroyed, that their destruction is justifiable if doing so is conducive to even relatively trivial human projects. Nevertheless, if we are concerned with flourishing, we ostensibly possess duties towards even very simple lifeforms.

Do non-living things have capabilities?

Once we remove the conditions of sentience or possession of desires, it is necessary to define why we do not hold responsibilities of justice to artefacts. Let us take as an example a simple robot that has been programmed to 'learn': when faced with a task, it is programmed to seek a particular result, and is given a number of programmes to run in order to reach the correct result (it might try them randomly or systematically until it achieves the correct one). The robot has a memory, so that it can keep track of which solutions correspond to which problems. A more complex design might be provided only with disparate pieces of code and the ability to combine the pieces until it produces a programme capable of solving a given problem. Such a machine would presumably also have things that it needed in order to continue functioning – a power supply, and protection from heat and moisture. We will assume that it is also programmed to fulfil its own needs if possible: it has a fan that it can adjust to dissipate heat efficiently, will seek out sunlight or a charging station for its

²⁸ It should, of course, be acknowledged that not all habitats can support a purely plant-based diet, and that much of the world's human population is simply not in a position to let calories go to waste. It is not reasonable to expect humans in these positions to sacrifice their flourishing to satisfy moral demands. However, it may be incumbent on governments to take such measures as, for example, redirecting subsidies to make a vegetarian lifestyle a more reasonable option.

batteries, move away from areas where it detects unsafe levels of humidity, and so on. Does this machine demonstrate capabilities such as practical reason? If so, it appears possible that there are beings with capabilities that do not depend upon their being alive, and whose good is therefore a matter of justice.

I am inclined to say that a machine of this sort probably does not qualify, although a genuine artificial intelligence might yet. This is because although such an artefact arguably has a good, its good is not really its own, and its capabilities do not exist as conditions of its good but merely reference the purposes of designers, creators and users. The robot requires certain conditions to be met in order to exercise its capabilities: in this respect, it is much like an organism. But when those conditions *are* met and the robot is exercising its ability to learn, it is not securing its own flourishing but carrying out a function assigned to it by an external party (Katz, 1997a, pp. 122-123). A robot that has spent a year exercising its capabilities, and which has recorded solutions to a large number of problems, is not obviously any better off than one new out of the box, or in pieces on a workbench, though it is more useful from our point of view. This is unlike a vine that photosynthesises to provide itself with nourishment, exercising in the process its capabilities for life and bodily health, and which is clearly better off than one that has been moved into the shade. In this case, the capabilities in question provide a clear answer to Nussbaum's motivating question 'what does a member of a given species need to be able to do in order to live a life worthy of its characteristic dignity?', in a way that the capabilities of the robot do not. Although our account of the dignity of the plant is far simpler than that of human dignity, in that it is essentially reducible to biological function (Gary Varner makes a similar point in his account of interests – see Varner 1998, pp.68-69), the plant's good is nevertheless its own: its ability to secure its basic existence conditions is directed toward its own teleology.

The capabilities approach as a biocentric ethic?

The previous two chapters have been concerned with arguments against our enforcing the individual rights of sentient animals: hopefully from that discussion it can be seen that there are appropriate reasons – reasons that Nussbaum can accept – against seeking to enforce a global justice, against protecting the flourishing of all sentient animals, both domestic and wild, even though they appear to meet the threshold for just treatment. These reasons appear to hold in the case of less complex entities as well: if we can be dissuaded from pursuing the relatively urgent claims of justice for individual sentient animals then it should follow that we can also avoid committing to the protection of entities whose inability to feel pain renders their claims comparatively trivial. To say that we do not have a duty of protection to every single mussel or every single bacterium, however, is not to suggest that our behaviour toward them is morally irrelevant. Once we abandon Nussbaum’s narrow individualistic focus and her criterion of sentience, the question of just treatment for wild things opens into an enquiry into what form our duties to all living things might take.

Paul Taylor’s environmental ethic appears to have a great deal in common with Nussbaum’s discussion of non-human animals. Briefly, Taylor holds that the duties that we hold toward the natural world and the organisms that make it up are derived from a particular moral attitude that presents itself to us when we acknowledge certain facts about the world’s living things (Taylor 2011, pp. 44-45). Encouragingly, among these relevant facts is Taylor’s conception of living things as ‘teleological centres of life’ – that is, they are “unified systems of organised activity” aiming to promote their own characteristic goods in their own ways (p.45). This formulation reads much like a radical formulation of Nussbaum’s approach: living beings are characterised as seeking – whether or not they do so actively or not – some particular form of flourishing that is unique to them: although they are not agents, they nevertheless pursue a good. The fact that some living things lack interests does not render the claim that they can flourish false; like Nussbaum, Taylor holds that living things have an objective good that is revealed to us if we remove ourselves from anthropocentric considerations of value. Through the use of moral imagination, we can examine what it means for an animal or plant to do well (pp.66-67). Recognising that we co-inhabit a world with other beings

growing towards or pursuing their own flourishing allows us to put our pursuit of our own good in perspective, to view ourselves as members of one species among many (though, surprisingly, Taylor does not include humility in his list of the virtues grounding the ethic of respect for nature on pp.212-213).

Capabilities, Biocentrism and Humility

Like Nussbaum, Taylor incorporates our biological nature into his conception of the morally relevant characteristics of the human being. Of particular importance is the contingency of our existence on the health of the biosphere: Taylor emphasises that this is a predicament that we share with members of other species. Not only do we share with them a dependence upon the goods provided by the earth's biosphere, but the provision of these goods is not guaranteed: despite advances in human technology, our existence is characterised by the same precariousness as that of every other creature and plant (pp. 102-105). When we come to appreciate the relationships in which we exist toward the biosphere as a whole and toward the individual creatures with which we share it, we become aware that we are one species among many striving to obtain its characteristic good, that our good is tied to our nature as embodied biological beings, and that these are aspects that we hold in common with every other creature we encounter. Such a view of ourselves is, Taylor claims, conducive to our viewing ourselves as members of the 'Earth's Community of Life': the great web of interdependent organisms striving to realise their own respective good in the precarious circumstances provided by the universe's natural processes (pp. 101-116). In fact, the points regarding our dependence on the biosphere and the precariousness of this position are just two of the five points held by Taylor to provide such a conception of ourselves. I have focused on them as they appear to be the two most sympathetic to Nussbaum's Aristotelian view of animals as 'agents pursuing their own good'. The other points include a realisation that our uniquely human characteristics are produced by the same processes that produced all of the Earth's other species; an acknowledgement that we share with all other organisms a freedom to pursue our own flourishing

that can be hampered by internal and external constraints; and an awareness that our existential relationship with the biosphere as a whole is asymmetrical: we are comparatively 'late on the scene' as far as many of the Earth's other species are concerned, and our extinction would not affect it in the same way that the failing of the Earth's life support systems would affect us (pp. 105-116). The points regarding the precariousness of our existence and our overall insignificance in the scheme of things is, I think, not intended to invoke a 'holy dread' as much as it is to ground a sense of the same kind of humility discussed towards the end of the previous chapter. These serve as a reminder of the absurdity of the anthropocentric attitudes that we have historically adopted, and perhaps they can also serve as a reminder of the relative absurdity of 'sentientism' as well. When we compare ourselves to a horseshoe crab, say, we find that we are far more complex than these creatures, but also that our complex sentience and rationality and the horseshoe crab's simple resilience are the product of the same processes, and that in both cases the characteristics serve to promote the characteristic good of the creature involved. We cannot dismiss the teleology of the simpler creatures and plants while simultaneously claiming to have respect for the natural world. However more real or vivid our own moral situation might be to us in comparison to that of other species, any claims we might make regarding human superiority over other lifeforms is revealed to be in tension with a species-neutral standpoint.

Returning to Nussbaum, there appears to be a high degree of congruence between her discussion of nonhuman animals and Taylor's account of what it means to be a member of the Earth's Community of Life. Both conceive living beings as dependent entities pursuing a characteristic good, and both take an awareness of our situation as being surrounded by other beings with whom we share these characteristics as grounding a moral attitude of concern for these creatures (see Nussbaum's account of Aristotelian wonder in *FJ*, pp.348-349). This is stated in terms of feeling awe or respect at the form or functioning of a member of another species (what Darwall

would refer to as *appraisal* respect), but a kind of *recognition* respect²⁹ could also articulate this sentiment: we can recognise that an organism's traits serve a similar purpose to our own, that it is a 'co-striver' in the same world in which we find ourselves: we can extend an animal or plant a kind of basic respect in addition to whatever esteem we might have for its beauty, majesty, intelligence or similar 'charismatic' features. Like Taylor, Nussbaum does not use deductive reasoning to make this argument; rather, sentiments to the effect that other creatures do not deserve to flourish are simply held to be at odds with this kind of recognition.

Also informing this attitude is a more-or-less explicit (more in Taylor's case, less so in Nussbaum's) denial of human superiority on the grounds that the respective values of different species various attributes are incommensurable. This requires some drawing out in Nussbaum's case: like Taylor, Nussbaum holds that we have in common with other lifeforms a capacity for characteristic flourishing (like them, we are teleologically directed beings). The capabilities that make us uniquely human are aspects of our animality – we possess them because we have bodies that are organised in particular ways, and which interact with our environment in certain ways. They have this in common with the capabilities possessed by other species, who also share our predicament: we live in a world filled with species whose members' flourishing is frequently subject to internal and external restraints.³⁰ Hopefully, it can therefore be seen that the capabilities approach can admit a conception of living things similar to that used by Taylor to ground his moral attitude of 'respect for nature'.

The consequences of extending justice to nonsentient animals: Taylor's four duties

²⁹ *Recognition* respect refers to the basic respect accorded to (in this case) living things just by virtue of the fact that they are 'teleological centres of life', and which thus grounds our moral duties towards them. *Appraisal* respect is the special respect accorded to individuals showing excellence in specific areas (musical talent, say), and which does not necessarily carry any normative commitment (Darwall, 1977, pp. 38-39).

³⁰ This point should be fairly self-evident; I take it to be implied simply by the fact that Nussbaum considers flourishing to be a matter of justice and, particularly, by her refusal to admit a distinction between positive and negative duties. If our flourishing were not frequently in danger of being thwarted, it is hard to see why we would invest much effort in securing it! In other words, there is a sort of 'circumstances of justice' argument to be made here: as Rawls points out, if we lived in a world of abundance, it is unlikely that we would have to be concerned about distribution of goods (Rawls, 1971, p. 127).

If the preceding analysis has merit, and the capabilities approach shares relevant premises with Taylor's respect for nature, it seems sensible to ask what bearing this should have on the content of the resulting ethic. If it is coherent to talk of justice for nonsentient creatures, this may exacerbate the problems caused by Nussbaum's commitment to policing nature – except that, as the previous chapter has hopefully shown, such a commitment is incompatible with full exercise of the human virtues, specifically a proper sense of our own moral power. If we discard these commitments, it appears that Nussbaum has little to say about justice for wild animals, and this appears to be a vexing omission in the theory: it may be hubristic for us to take on the project of systematically securing the flourishing of every wild organism we come across, but it does not follow from this that we have no responsibilities towards them whatsoever, or that our responsibilities consist solely in leaving them alone. It is tempting to frame all of our commitments to non-humans purely in terms of Taylor's approach instead, for Taylor provides a set of duties that we supposedly hold towards living nonhuman entities. In what follows, I shall give an account of these duties, discuss the plausibility of the duty of non-interference, and, using points arising from this discussion, argue that a duty-based account does not capture adequately the moral character of our relation to the environment. Though some of the examples I will use refer to sentient animals as examples, the points made should be taken to refer to any organism that meets the now-expanded criteria of justice.

The four duties outlined by Taylor are those of non-maleficence, non-interference, fidelity and restitutive justice. All except the duty of restitutive Justice are, for the most part, negative in scope, and impose moral limitations on what human beings can do. Non-maleficence imposes a duty to avoid inflicting harm upon or killing wild things; non-interference prohibits us from performing actions detrimental to the freedom of wild things; fidelity prohibits the exploitation of wild creatures through exploitation of their trust in us (for example, when animals are trapped or lured to satisfy human needs); and, under the duty of restitutive justice, we have a duty to repair damage inflicted upon the biosphere and to make suitable reparations for harms inflicted upon wild biota. Many actions contravene more than one of these duties; for example, most breaches of the

duty of fidelity also involve harming and suppressing the freedom of the animal concerned (Taylor 2011, pp. 172-192). Duties can also conflict, and in recognition of this, Taylor has provided a pair of priority principles: firstly, fidelity and restitutive justice can override non-interference if this brings about a substantial good and does not break the law of non-maleficence, such as when animals are constrained to a certain area to prevent them developing a misplaced trust in human food provision, or when animals are kept out of a contaminated area. Secondly, restitutive justice can override fidelity if this brings about a substantial good and does not break the law of non-maleficence, as in the case of animals captured to repopulate a depleted population or to clean them of contamination by pollutants (pp.195-197). Note that Taylor does not, therefore, allow animals to be harmed in the cause of restitutive justice or fidelity; we cannot kill introduced animals to protect native species, for example. These duties are derived from the overall moral attitude of respect for nature, which Taylor invites us to take up once we have considered the relevant ecological and existential facts regarding our relation to members of other species. We can make ourselves accountable to the Earth's 'community of life' in such a way that it becomes comprehensible for us to say that we should avoid harming or restricting the freedom of members of other species and that, if we violate these duties, we have a responsibility to redress the harm that we have caused.

Regarding the plausibility of the duty of non-interference, it has already hopefully been shown in Chapter III that the capabilities approach and its account of harm no longer commit us to duties of systematic interference to protect individual animals' flourishing. The conclusions of the previous chapter are further emphasised if we believe that recognising the capabilities of other creatures grounds an attitude similar to respect for nature, according to which we should have a sober and realistic estimation of our own moral power. As a result, recognising that animals and plants can flourish, and holding their flourishing to be valuable, does not burden us with duties to extend the rule of justice over the natural world. However, a lack of positive duties in this regard does not equate to an overall negative duty. Clare Palmer has provided an insightful investigation into what she calls the 'laissez-faire intuition', a generally held belief that we have no duties to

interfere – and may have a duty not to interfere – with wild animals. Palmer provides three formulations of the intuition: the Strong, Weak, and No-contact laissez-faire intuitions (LFIs; Palmer, 2010, p. 68). Taylor’s account of our duties towards animals accords most strongly with the Strong LFI: we not only have duties not to harm wild living things, but also possess a duty not to assist them (though this duty can be overridden under certain circumstances discussed above). The Weak and No-contact LFIs, on the other hand, hold that although we have no duty to assist nonhumans, doing so may be permissible. Furthermore, the No-contact version holds that there are certain relations that may obtain between humans and animals that can generate obligations to assist, such as when an animal has been harmed by past human activity or when relations of dependence have come about (Taylor’s view therefore incorporates elements of both the Strong and No-contact LFIs). Such relationships do not generally exist between ourselves and wild animals, so we have no systematic duty to assist in such a case.

Virtues, rather than principles

It is not clear that the capabilities approach, once rid of its commitment to protecting wild animals’ capabilities, would support the Strong LFI in the way that Taylor seems to. Nussbaum’s theory is at odds with Taylor’s duty of non-interference as a blanket requirement of justice to wild nonhumans, especially once augmented by considerations of virtue. As mentioned previously, the capabilities approach draws our attention to the characteristic striving of other lifeforms and fosters attentiveness to their needs. Imperialistic or paternalistic ambitions may be at odds with this attitude, but so are indifference and callousness. We are, in particular, aware that members of other species share our predicament, that their flourishing is often precarious, and that they frequently have their capabilities thwarted for no reason. It is not clear that refusal to assist is always the appropriate response to these facts. Take, for example, the case of a stranded whale or dolphin,

whom one encounters while walking along the beach.³¹ Perhaps we know that there has been a storm at sea recently, and the resulting disorientation is the likely cause of the animal's beaching. Assuming that we are able to help, it is implausible that we actually *ought not* to do so on the grounds that we have a duty not to interfere with the creature. The salient features of this scenario appear to be that the animal is helpless (she will suffer and die as a result of our inaction) and that no good can be obtained from her death that could not be brought about by other means (the dead creature may provide food for scavengers, but this will come about whether she dies here or whether she lives out the rest of her life and dies at sea),³² and that there is an immediacy to it that is lacking from consideration of what happens to animals 'out there' in the broader wild. Unlike an animal who falls prey to a carnivore (or, indeed, a plant that falls prey to a herbivore), the dolphin's cruel predicament comes about due to a freak accident, and, by another accident, we are able to save it. Whether or not it is merely permissible (or perhaps, supererogatory) for us to save the dolphin or whether we actually have a duty to (that is, whether the appropriate response to this situation is one that falls under the Weak or the No-contact LFI) is a difficult question. The dolphin has (we shall assume) not been placed in this predicament by any human action (in this respect it is unlike the dumpster kittens of Palmer's example, nor do we owe it any responsibilities under Taylor's duty of restitutive justice), and we have not accepted special obligations to protect it (we are not members of an organisation committed to helping beached cetaceans, and we have not

³¹ This example is used by Sandler (2007, p.75) to make a similar point regarding compassion.

³² This appears to be different from cases in which we encounter an animal being preyed upon by another: here, there appears to be a specific good that can be derived only from this specific act of predation. This specific prey animal is dying in order for the predator to survive, and the predator cannot flourish without causing harm to specific prey animals, whereas the scavengers benefit from harms that have already befallen other creatures. Additionally, it is not clear that preyed-upon animals are dependent upon the assistance of the human spectator in the way that the dolphin is: the predator and prey are participants in a kind of contest over which of them gets to live, unlike the freak accident that beaches the dolphin. Siding with the prey or predator involves aligning ourselves against the other party.

It may be that I am wrong, and that perhaps it is permissible for us to interfere to help the prey animal as well, if doing so does not cause an equivalent or greater harm (it should also be noted that we are unlikely to be in a position to rescue a seal from a polar bear if we simply chance upon them while exploring the tundra! But we might be able to rescue a snail from being smashed to pieces by a thrush, if we were so inclined). This still does not commit us to systematic intervention, and so perhaps it is not too significant a problem. Also, most wild prey animals are not in the relations of dependence upon us that Palmer claims ground duties under the No-contact LFI, so even if we admit this version of the intuition, cases where we are committed to intervention are still likely to be rare.

engineered a situation in which the dolphin is dependent on humans for food) (see Palmer, pp.106-112). Perhaps, therefore, the capabilities approach can make use of the No-contact LFI to suggest that although we have no duty to assist, and no duty *not* to assist the dolphin in this situation, we could have such duties under other circumstances.³³

What would we want to say about the individual who walks past the dolphin without helping her? Perhaps they attempt to invoke some sense of humility to justify their actions: “It’s not up to me to make decisions about whether wild animals live or die”, they might say. Such an attitude seems to be in conflict with other virtues, however, and with a proper appreciation of what it might be like to be a stranded dolphin. The agent appears to have mistaken the morally salient characteristics of the situation. There are capacities, such as moral imagination, which we could easily exercise in this situation and which would draw our attention to its salient points (Cooper 1995, p.145). If we walk away, the dolphin *will* suffer a drawn-out and painful death (or at least, she is more likely to do so than if we help her). The general recognition that our moral power is not sufficient to extend justice over the natural world seems to miss the point in this instance: a more appropriate reaction appears to be to respond to our feelings of compassion and kindness towards the dolphin. An analysis of the case of the stranded dolphin that is grounded purely in duty obfuscates the situation’s particular moral character: treating saving the dolphin as a merely permissible act appears to be inconsistent with a full exercise of the virtues. An account of environmental ethics based purely on a complex of duties appears to obscure certain moral characteristics of some situations. There are situations where it can be morally permissible, supererogatory, or maybe even necessary, to aid animals in distress, and where the appropriate response appears to be revealed when we consider its reflection on the character of the agent. The existence of these cases suggests that a purely duty-based account may not be the best way to make

³³ If we were in the habit of feeding dolphins close to the shore, and that caused them to become beached, for example, we might consider ourselves responsible and to possess duties of restitution.

manifest our attitude of respect for the flourishing of other creatures, particularly in cases such as those of wild nonhumans where our conduct is not based on concerns of justice for individuals.

A similar point is made by Sandler: by grounding his duties in a single moral attitude, that of respect for nature, Taylor has rendered his entire account of moral duty to nonhumans reducible to recognition of a single moral characteristic, inherent worth (Sandler, 2007, pp. 70-71). It has already been seen that Nussbaum's account of baseline moral standing is disjunctive: there is no one capability that confers moral standing, other than perhaps life (or perhaps, as discussed above, having the capability of life is what makes all of the other key capabilities key capabilities). Unlike Taylor, Nussbaum does not provide a firm answer to the question of whether members of all species have equal moral worth: more pressing for her is the question of what justice comprises for a member of a given species. The mere fact of an organism being a teleological centre of life, its being capable of flourishing, renders it comprehensible for us to talk about its just treatment. But an attempt to formulate principles that cover just treatment for all organisms based on this consideration alone appears reductive, and likely to ignore other features of the account of the value of living things (Sandler 2007, p. 70; Schmidtz 2011, p.130). If we *only* value traits that are shared by all organisms, then we appear to be acting just as arbitrarily as we are if we *only* value traits that are unique to humans (Schmidtz 1998, p. 59). Rather, an adequate environmental ethic ought to allow us to be appropriately responsive to multiple sources of value in the world.³⁴ This is not to say that these values can never be overridden: indeed, this is necessary in order for human beings to secure their own survival and flourishing in the world. Some harms do not require apology (for example, when we use antibiotics to fight a bacterial infection), since they are inflicted in order to procure non-trivial human goods that cannot be acquired otherwise (Sandler 2007 p.73; *FJ*, p.386-387). There is nothing conducive to respect for nature in sacrificing our pursuit of our own good for

³⁴ One way to exhibit concern for the flourishing of wild nonhumans could be to respect the flourishing of relevant species in the form taken by preservation work. As capabilities are often formed through the animal or plant in question's relationship with its environment, capabilities-oriented preservation projects could derive norms based on what an ecosystem's inhabitants require in order to flourish. If one particular species is dependent upon another to survive (for example, if a particular species of bird is adapted to feed on pine seeds) then the protected area ought to be able to support both.

the sake of a colony of microorganisms, since this is not an approach to being in the world that acknowledges what would be referred to by Sandler to as our 'form of life' and by Nussbaum as human dignity.

Conclusion

A virtue-based approach provides us with a solid normative account of what is required of us in our relation with the natural world, and when formulating what is owed to members of other species. Nussbaum's focus on sentience appears to unfairly exclude the flourishing of nonsentient animals, plants and other organisms from our consideration of justice, but, at the same time, does capture a valuable point: there are other things of value in the world other than the mere capability to live and possess a good. We do nonsentient organisms a disservice if we treat them as trivial, but admitting this does not require that we respond to their capacity to flourish in the same way as we do a dolphin's or an antelope's. Formulating our responsibilities in these areas in the form of generalised duties is therefore unlikely to be the most felicitous approach. Formulating them in the form of requirements of good character allows us space to be compassionate when that is what is called for, and just when confronted with a matter of justice.

Chapter V: The Capabilities Approach and Species

So far, we have discussed the various stances that the capabilities theorist adopts, or ought to adopt, towards individual living organisms – human beings, domesticated animals, wild animals, and nonsentient lifeforms. In this and the following chapter, I turn to discuss whether the capabilities approach has anything to say about collective entities, in this case species (Chapter VI will discuss the capabilities approach and ecosystems). I begin by examining the position typically adopted by established proponents of individualist ethics regarding species, and note that between Regan, Taylor and Nussbaum there seems to be relatively little sympathy for the notion that we owe anything in particular to species as a matter of direct moral duty. This is ostensibly consistent with their premises: we can describe the needs and capabilities of even a very strange living organism fairly well, given sufficient study, but it is not clear that species really need or do anything. Initially, then, I consider an approach that does not challenge the assertions of moral individualists: that of Lilly-Marlene Russow. Russow suggests that we ought to care about species going extinct because their members possess aesthetically valuable characteristics: if there are no longer any animals ‘like that’, then those characteristics will be lost. I suggest that there is nothing especially wrong with indicating the aesthetic value of nonhuman animals, but that we may be uneasy about basing an account of the value of species purely on aesthetic grounds, for several reasons: firstly, we may want an account that is more obviously ‘moral’ (although I do consider David Cooper’s proposal that aesthetic appreciation can be a moral virtue); secondly, we may want an account that is less explicitly entwined with the retention of human goods, in the form of aesthetically valuable experiences; and thirdly (and relatedly), we may want an account that states the value of all species, and not just those who have the good fortune to be found aesthetically pleasing by humans.

These concerns prompt a discussion of attempts to secure more solid, less anthropocentric grounding for the rights of species. I discuss Rolston’s and Johnson’s characterisations of species as ‘collective entities’, disputing the claims made by individualists such as Taylor that they do not

possess a good, cannot be harmed, and are therefore not the kinds of entities regarding whom we can have direct moral duties. If this is the case, then maybe it can be argued that species have something analogous to capabilities, and therefore are similar enough to agents pursuing their own good that we may further extend the capabilities approach to include them.

However, the arguments that species possess a good of their own are rather suspect, as demonstrated by Palmer and Belshaw. First of all, many of the arguments used by Rolston to show that species possess their own good can be reiterated in individualistic terms. More damningly, there is no real indication in either Rolston's or Johnson's accounts of what is good about the good of a species, even assuming that there is such a thing. Ultimately, the attempt to accommodate species within the capabilities approach appears to be a step too far.

This does not necessarily mean that we have to accept the 'hardline' individualist positions outlined at the start of the chapter, however. I suggest that there are several aspects of what a species is, and what it means for it to become extinct, to which a virtuous agent ought to respond. Again humility plays a role in regulating a morally appropriate response to the array of species that we are faced with as inhabitants of Earth, as well as the intricacy of what, following Russow's observation, one might refer to as 'that-ness'. Furthermore, a virtuous agent might, as James contends, be moved to respond morally to the age of species, and the fact that the currently existing species members represent a stage in a lineage that projects backwards and forwards in time. Thus, even if species projection is not a matter of justice, we nevertheless have moral reasons to refrain from contributing to extinctions.

Three individualists' views on species

A common criticism levelled at advocates for the rights of animals is that conventional animal rights approaches cannot accommodate concerns regarding the value of species, nor can they articulate the moral wrong brought about by a species going extinct, especially if this happens through anthropogenic means. This attitude is typified by claims such as those of Tom Regan: "That an

individual animal is among the last remaining members of its species confers no further right on that animal, and its right not to be harmed must be weighed equitably with the rights of any others who have this right" (Regan 2004, p.359). A distinction is made between individuals, who are assumed to be the kinds of things of whom it can be meaningfully said that they are subjects of a life, and collective entities, of whom this is much less clearly the case. Since animal rights advocates are concerned with harms inflicted upon individuals, it is hard to see how they can also accommodate concerns regarding harms done to collective entities such as species. Although Regan's rights view supports efforts to save endangered species, it does so because the forms of exploitation and rights violation that lead to their endangerment or extinction are themselves wrong, rather than due to any value conferred on the species as a result of its members' scarcity (pp.360-361). As noted in previous chapters, Regan is particularly vociferous in his opposition to concern for collective entities, particularly where these kinds of concerns are intended to eclipse duties to individuals: concern for the species or the ecosystem at the expense of the individual is, Regan alleges, 'ecofascism' (p.362).

Another broadly individualist approach that provides a somewhat similar way of looking at species is Paul Taylor's. Like Regan, Taylor does not consider a species itself to be the sort of thing regarding which we can have duties, because individual lifeforms are, for Taylor, the sort of things that can be harmed: the "population has no good of its own, independently of the good of its members" (Taylor 2011, p.69). However, Taylor does allow that we can heuristically make sense of the statistical well-being of a given *species-population*, by which term he refers simply to a group of organisms of the same species. Although a species (*Felis sylvestris*, for example) is a category and cannot have a good of its own, we can intelligibly talk of a species population possessing a level of well-being that is simply defined as the median level of the good of all of its individual members (p.69). Thus, when we say that *Felis sylvestris* is faring poorly, this can be understood statistically to mean that the average degree of flourishing among the population of wildcats in question is low. Furthermore, not only does Taylor deny that species are entities, but also claims that even if they were to be construed as entities – for example, as genetic lineages – then they still would not be the

sort of entity towards which we can have direct moral duties. This is because genetic lineages, unlike the individuals who instantiate them, do not have a discernible good of their own: a genetic lineage “will continue to exist until the last organism whose gene structure embodies it dies” (p.69n). It cannot therefore be benefited or harmed: it is the *occurrences* of the lineage, the individual creatures that make it up, that can be benefited or harmed. As a result, a species, even on this view, is not pursuing any good, and therefore does not meet Taylor’s criterion for possession of what he refers to as ‘inherent worth’ (pp.69-70n).

Nussbaum’s consideration of this issue is in a similarly individualistic vein to that of Regan and Taylor: the continuation of species *per se* is of little direct relevance as a matter of justice, when isolated from the fact that extinction often occurs due to the deprivation of individual species members’ conditions of flourishing (*FJ*, p. 357). Additionally, we can allow that the reduction of species populations below their optimum level may have adverse effects on the surviving species members, even if they themselves are not personally at threat from poaching or habitat destruction: for example, reduction in numbers may result in loss of opportunities for reproduction or group affiliation, or result in inbreeding, or render the existing population more vulnerable to disease. Nussbaum is happy to allow that concerns such as these might justify our placing a species-population’s members or habitat under protection: as discussed in Chapter II, recognising that the flourishing of an individual tends to take place in the context of some kind of community.³⁵ She makes a comparison here between the protections of this kind granted to members of endangered species and those granted to religious groups such as the Amish, whose right to withdraw their children from compulsory public education two years early was upheld on the grounds that doing so was necessary to preserve their way of life, and that this was covered under their right to free exercise of religion (*FJ*, p.358). Similarly, by acknowledging that individual animals and plants can be harmed through the endangerment of their species, the capabilities approach can justify granting

³⁵ The term ‘community’ is being generously applied here to refer even to such loosely-knit groupings as a population of moles or tigers: a plurality of mostly solitary individuals whose lives occasionally intersect for the purposes of mating and child-rearing.

species legal rights without granting that they are the sorts of things that can possess moral rights (in fact, the rights are being granted to individuals who are members of a particular category). By focusing on the capabilities of animals, Nussbaum reminds us that these can be thwarted by means other than harms inflicted directly by human agents. Being a member of an endangered species may in itself be bad for the flourishing of an individual animal. Nevertheless, Nussbaum does not allow that a species is the sort of thing that we can ourselves have duties to, nor does she recognise a species as an entity such that one can say that it is capable of flourishing, or that things can go better or worse for it, and, therefore, it seems difficult for her to countenance any claim that we ought to protect endangered species as a matter of capabilities justice (p.358). This seems to be direct ancillary of the claim held in common by Nussbaum, Regan and Taylor that if we remove assumptions of human supremacy – that is, if we deny that we can grant humans moral priority simply by virtue of their being members of the human species – then we cannot value particular species of non-human animals more highly purely on the grounds of their species membership, either.

On the other hand, the capabilities approach is not intended to comprise the entirety of our moral conception – in fact, it is not even intended to comprise the entirety of our conception of justice. The fact that any moral obligations that we might possess towards species are not easily articulated with reference to the capabilities approach alone ought not to preclude us from responding to the value of species if that value can be identified. Nussbaum is open to the possibility that species may possess “aesthetic significance, scientific significance, or some other sort of ethical significance” (*FJ*, p.357).

Russow and aesthetic significance: preserving creatures ‘like that’

Regarding the first of these: Lilly-Marlene Russow has suggested that we can base a claim that

species possess intrinsic value³⁶ on the grounds that they possess aesthetic value. Russow suggests that what motivates our concern for endangered species is a notion that, if they become extinct, then something valuable is lost from the world, just as would be the case if the Grand Canyon, or a great work of art was to be destroyed: the extinction of the species, like the destruction of these objects, would mean the closing off of human experiences that are 'inherently worthwhile' (Russow 1981, p.142). If we wish to preserve the existence of the Highland wildcat, for example, we may justify taking steps to do so on the grounds that the cats are inspiring and enigmatic creatures in possession of admirable characteristics (grace, striking appearance, and so on). Russow is making use of a broad interpretation of 'aesthetic value' here to include not only appreciation of beauty but also awe, curiosity, or appreciation of historical significance and rareness. This aesthetic value therefore forms the basis for a kind of intrinsic value that is nevertheless overridable in some cases, in accordance with certain very strong moral intuitions that we might possess. Russow uses an analogy with artworks: an individual who destroyed a work of art for narrow, venal reasons ought to be judged differently from one who rescued their children from a housefire but left a priceless painting to burn. More generally, we might be justified in destroying an artwork or wiping out a species if doing so can enable us to obtain other very valuable goods (examples might arguably include regulating hate speech or eradicating a disease, respectively) (p.142).

However, Russow quickly reveals that she has not departed as far from individualism as initial appearances might suggest. A species, she points out, *cannot* in fact possess aesthetic value because species themselves are not beautiful (or majestic, or of scientific interest): these are characteristics of individual organisms (p.143). On this, she is presumably in agreement with Taylor and Regan: species themselves lack the requisite characteristics to be considered as possessing value directly. Rather, Russow suggests that our intuitions regarding the preservation of species have more to do with our wishing to maintain the presence of creature 'like that' – more to do with, for

³⁶ By 'intrinsic value', Russow seems to mean any value that an entity possesses on its own merits, i.e., not in virtue of its being instrumental in realising some other good. As shall be seen, she does not try to suggest that species should be considered as possessing value independently of any entity capable of valuing them.

example, ensuring that there continue to be creatures like existing wildcats, rather than protecting an entity called *Felis sylvestris*. These creatures deliver experiences that we value, and therefore we are motivated to protect them, both for ourselves and for future generations. The urgency with which a given species ought to receive protection will depend on various factors, not least of which will be the amount of aesthetic value we judge its members to possess.

In order that Russow's thesis be evaluated, let it be divided into two separate aspects: the first, that what motivates our concern to preserve endangered species is aesthetic value, and the second, that this value attaches to the individual species members and not the species as an entity in itself. To begin with the first claim: it seems uncontroversial to suggest that we do admire many nonhuman animals for characteristics that we find aesthetically pleasing, such as Russow's suggestions of beauty, majesty, scientific interest, or even simple rarity. However, it does not follow from this that this aesthetic value is or ought to be the sole basis for our showing concern for other species.

One might question whether Russow really has, as she claims, identified a reliable basis for the protection of species in aesthetic value. What motivates us to protect a species is the realisation that, should it become extinct, we will no longer be able to access certain experiences. It follows from this that only those species that really do provide us with experiences that we consider valuable will be considered worthy of protection: as a result, Russow's thesis provides a justification for protecting only those species whose members are lucky enough to be judged by human beings to possess aesthetically pleasing traits. If this really does represent the basis for our concerns regarding species extinction, then our concerns appear to be unreliable and self-serving. Russow admits that on her account, some species may simply be seen as not worth preserving, without further comment (p.142). This may not appear to be a catastrophic problem at first: it may be of concern to environmentalists who wish to maintain that all species are worthy of preservation, but it seems to sum up the sentiment of most moderate individuals that some species are particularly urgent candidates for preservation due to their charisma, beauty, symbolic value and so on.

However, this inconsistency reveals a deeper issue to do with the co-location of species value and aesthetic value. Russow effectively reduces the value of preserving species to the retention of specifically human goods – valuable encounters with aesthetically pleasing animals and plants. The preservation of other species, then, becomes one more source of goods to be traded off with any other source of good. Viewed in this light, the aesthetic value of members of other species is clearly shown not to be something that they possess simply for themselves. It is not simply that they would not possess this value independently of a human valuer to assign it to them (in other words: it is *anthropogenic*): rather, the problem arises because this form of value seems *anthropocentric*, resting on the ability of the animals in question to provide goods for humans. Valuing species for their ability to deliver worthwhile experiences when we encounter them is as narrowly self-serving as valuing them for their ability to produce foodstuffs or medically valuable compounds.

It is worth conceding at this point the possibility that we will be unable to find a genuinely non-anthropocentric account of the value of other species. If this turns out to be the case, then there is probably something to be said for framing the value of species in terms of Russow's account of aesthetic value. Unlike justifications for species preservation that make reference to animals' or plants' resource-value, or their contribution to biodiversity, an account based on aesthetic value does at least make reference to something good about the organisms themselves: we recognise certain qualities in them, which we wish to see persist in the world. If the extent of our concern for other species is bound up in their providing us with aesthetically valuable experiences, then at least our appreciation involves some kind of reference to the way that they are, and the way that they go about pursuing their existence (this appears to be absent in an appreciation that focuses purely on resource value, value as markers of ecosystem integrity, and so on). Nevertheless, identifying a species' value in terms of the worthwhile experiences that it can provide for us raises the question of whether, as Rolston puts it, we are motivated to protect species *from* exploitation, or *for* exploitation. Rolston holds that an account that pleads for the protection of other species on the

grounds that extinction causes a loss of things that are valuable from a purely human perspective – whether it is as an object of aesthetic appreciation, scientific interest or resource value– is ultimately ‘sub-moral’ (Rolston 1988, pp.129-130). It is certainly true that Russow has framed her argument in a particularly anthropocentric way, using a formulation that explicitly references goods that humans derive from allowing species to persist. Nevertheless, it is worth questioning whether an appeal to the aesthetic properties of a species or its members is always unavoidably anthropocentric.

It is presumably fairly uncontroversial to suggest that the idea that something is valuable implies an action of evaluation on the part of some subject somewhere. But, as Cooper points out, it does not follow from this that what is valued only possesses its value due to its being instrumental to some end of the valuer (Cooper 1998, p.102). The qualities that inspire aesthetic devotion from us are qualities that belong to the species, and while they only acquire their aesthetic significance “in virtue of some capacity to affect us” (and thus they are, as Cooper puts it, *formally* anthropocentric), it is the creatures themselves who possess them. Cooper argues further that a purely instrumental approach to aesthetic appreciation, whereby the valuer acts as a passively consuming aesthete, interested only in the experiences that can be offered by a work of art or natural object, is ultimately a shallow and unconvincing one. We do not have to subscribe to Eric Katz’s contentious account of the autonomy of natural objects to recognise that valuing forests or rock formations purely for the experiences that one can glean from them is evidence of an impoverished sense of what is worth preserving in the world. As Cooper observes, it is only under a purely instrumental account of value that plastic trees become just as valuable as real ones. A genuine appreciation of a forest will take into account the complex natural history that constitutes its formation, as well as other historical factors such as its interaction with humanity (although, as will eventually be seen, these elements may be the target of other virtues as well) (p.105). The same can be true of aesthetically valuable artefacts: the agora of Athens might be prettier without the light railway line that runs beside it, but, at the same time, the juxtaposition of the dignified ruins with the trains carrying commuters can be interpreted as a symbol of the historical development of the city. When faced with entities that

manifest poignancy, tragedy, majesty or complexity, there is a sense in which we are *compelled* to respond to these things, and tend to think worse of people who do not.

Aesthetic appreciation, on Cooper's reckoning, is less a pastime than a virtue, with philistinism as its corresponding vice (p.104). Cooper is not alone in suggesting that an appreciation of aesthetic values is necessary for a morally developed character: 'aesthetic sensibility' is also named by Ronald Sandler as a 'virtue of communion with nature' (Sandler 2007, p.82). Although he rejects the suggestion that species possess a good of their own to the extent that they can be considered possessors of direct moral worth themselves, Sandler, like Nussbaum, does observe that species (as well as ecosystems) may possess "historical, cultural, scientific or aesthetic value" such that "being attentive and responsive to those values can be beneficial and enriching as well as respectful to those who care about them" (p.80). It is not entirely clear from Sandler's discussion whether his virtue of 'aesthetic appreciation' is as deep as that outlined by Cooper or whether it has more in common with the more shallow, 'worthwhile experience-based' account suggested by Russow. In any case, another virtue identified by Sandler, wonder, seems to encapsulate the more profound sense, through which a virtuous agent will manifest appreciation for the form granted to an organism by its species over time. 'Wonder' may also encapsulate more unconventional forms of environmental appreciation, including realisations that might not always be welcome: the reaction elicited by an organism may be more readily categorised as 'awe', a sense of dread or of the uncanny when confronted with particularly powerful, vast or disturbing natural objects or organisms. Thus, James Hatley seems to display an appropriate sensitivity to what is involved in an encounter with a bear when he suggests that to "look into the eyes of a creature plotting to feed itself upon me is to find myself claimed in a way that is quite unsettling" – in this case, the encounter reminds the agent that their flesh is capable of sustaining other creatures or plants, that while their body may be part of them for now, it has the potential to sustain others and thus become a part of someone or something else (Hatley 2004, p.21). Similarly, someone with an appropriate sense of awe will appreciate the indifference of a glacier or the violence of a volcanic eruption (without necessarily

seeking to emulate such objects or identify with the volcano at the expense of those living in its shadow). Whether a sense of awe is a component of a sufficiently broad virtue of wonder or whether it comprises a separate virtue on its own is unclear. Possibly, awe and wonder are facets of a broader virtue of engagement with the natural world.

One misgiving we may have about classifying some forms of aesthetic appreciation as virtues is that opportunities for its development may be less fairly distributed than some other virtues. We may be reluctant to call morally wrong the actions of an agent whose alleged philistinism has been brought about by their being deprived of an education, upbringing or time for reflection that would allow them to develop a fully-fledged sense of nature as being more than a set of beautiful experiences. Such a judgement appears straightforwardly classist. There are at least three responses to this point. First, one might respond that it is patronising to assume that individuals of a certain socioeconomic class are more likely to lack a given virtue than others: there are, after all, plenty of people with opportunities to develop virtues or capacities who fail to use them; the working-class neighbourhood who raise funds to protect their community mural or nature reserve arguably show significantly greater aesthetic appreciation than someone who visits an expensive gallery exhibition because the artist is known for being controversial. Second, even if we argue that aesthetic sensibility *is* unevenly distributed, it is not obvious that this is any truer of this virtue than it is of others. Finally, and most importantly, a morally virtuous person is likely to take these things into account when evaluating the actions of another. Sneering at the lack of aesthetic sensibility of someone who has had to devote most of their life's effort to subsisting is hardly the attitude of a virtuous individual. More generally, a person possessed of virtues such as humility or openness is likely to want to avoid putting themselves in the role of 'judge' over others, especially if they recognise themselves to be the beneficiaries of certain privileges. They are likely to recognise that when people are not able to develop capacities such as appreciation of beauty, wonder or awe, they are often likely to have been disadvantaged by unequal systems of opportunity distribution that can be changed by campaigning. This brings us back to the capabilities approach: Nussbaum considers

opportunities to develop *Senses, Imagination and Thought* to be a key component of human flourishing, and therefore a requirement of justice (FJ, p.76). Thus, virtues of compassion, benevolence or openness can converge, perhaps not surprisingly, with capabilities justice: the virtuous agent will presumably support measures to promote and support the development of the virtues among others.

Non-anthropocentric accounts of the value of species: Rolston and Johnson

So it seems that an argument from aesthetic value can be salvaged if the focus of the discussion is moved away from the value that species provide in the form of aesthetically profound experiences, and deepened by moving it more squarely within the realm of virtue-based morality making particular reference to virtues of aesthetic appreciation. However, we have yet to examine properly the question of whether the capabilities approach can properly include concern for species within the auspices of justice. This may yet be possible if it can be shown that a species is an entity capable of pursuing a good of its own, just as in the case of nonsentient creatures: if a species is a teleological entity then there may yet be space for it in the approach. In order to adopt this position, it is presumably necessary to demonstrate what Taylor explicitly denies: that species are historically persisting entities that possess and defend a good of their own, and are therefore the kinds of entities towards which we can and do have direct moral duties (precisely what is denied by Taylor and others). Such an account is defended by Rolston, as well as by Lawrence Johnson.

Rolston and Johnson on the good of species

Rolston and Johnson are concerned from the outset to establish that a species possesses a good that is independent of the good of its members. The arguments put forward to establish this are not easy to follow: nevertheless, the main claim in each case appears to be that events can harm individual species members while benefitting the species as a whole. Rolston provides several examples which ostensibly illustrate this point: for example, he suggests that the species 'elk' benefits from the

deaths of individual elk due to predation, or that a species benefits overall from maintaining a wide variety of genes as 'genetic load', even though this leads to decreased health in a given generation (Rolston 1988, p.147). Perhaps more persuasively, reproduction, a process that is often unpleasant and dangerous for the individuals concerned, enables the species to persist as a lineage, negotiating its environment in the process. By reproducing, the species 'defends' its way of life against the environment and other species (p.148). Johnson also asserts that a species, defined as a genetic lineage that persists over time, can have interests that are separate from those of its individual members. The interests of the human race would not be served if it were to continue to "exploit the environment while reducing its numbers accordingly", even if this would promote the interests of the individual remaining humans. This is because it would not be in the human race's interests to be "out of balance with the environment", even if the human population was sufficiently small that current living standards could be maintained without threatening environmental catastrophe. Similarly, the extinction of *Homo sapiens* would not be in that species' interests (Johnson 1991, pp.158-159).

Both of Rolston and Johnson are somewhat unclear when it comes to the subject of what makes a species' interests morally considerable, though Johnson has the clearer account of the two: he starts with the premise that a species meets the criteria to be considered a "living system", since it is "an ongoing coherent organic whole...with past, present, and orientation and drive toward the future" (pp.156-157). Furthermore, a living system "tends to achieve or maintain states that are optimal in terms of the inherent nature of that life process" (p.156). The implication seems to be that a species is somehow goal-directed, and that it possesses certain features that are not possessed by its individual members – the example provided by Johnson is that *Homo sapiens* possesses cultures, which are composed of "complex interactions between people" rather than merely being "the summation of what individuals are doing" (pp.157-158). Furthermore, the species *Homo sapiens* possesses many of the same traits that supposedly render human beings morally significant – rationality, autonomous, capability of moral agency, sentience and the ability to exist in

interpersonal relationships (pp.159-160). It is not at all clear from Johnson's account what it actually means to say that *Homo sapiens* is rational: according to him, humanity is rational because it engages in science, philosophy, cultural history, laws and languages – but no evidence or clarification is provided to demonstrate that humanity, rather than individual humans, really does engage in these pursuits. Similarly, Johnson provides little in the way of support for his other claims, and nothing to suggest that he is not doing something analogous to claiming that the species *Panthera tigris* has stripes and eats meat in the way that individual tigers do (Belshaw 2001, p.163).

Assuming that species really are entities for a moment, it may yet be possible to produce a capabilities-based account of justice that can acknowledge them. If species are entities that actually do things, and which are goal-directed, then they may be counted into the capabilities approach for the sake of consistency. First of all, it appears necessary to consider the goal or goals towards which a species may be directed: Rolston suggests that species “defend a form of life” (Rolston 1988, p.144); Johnson claims that a species' interests include continued existence through time and existence in equilibrium with its environment (p.158). It is true, if we take Rolston's example of reproduction, that something that looks somewhat like a capability is being exercised here: the individual members of a species sacrifice themselves to perpetuate the existence of the lineage. Similarly, when species members fall to predation or deprivation, with the result that the better adapted species members prosper, this does look somewhat like a process by which the species' relationship with its environment (as well as other species) is refined and developed, with the result that the species presumably becomes more capable of navigating adversity. So perhaps species exercise Nussbaum's capabilities of Life and Practical Reason,³⁷ in a way. If that is the case, then presumably they can intelligibly be spoken of as subjects of justice (if the conclusions of the previous chapter are correct and we can indeed speak of justice extending beyond the sentience barrier).

However, there are numerous obstacles to this initially plausible suggestion. Regarding the

³⁷ If it seems odd to talk of a species possessing reason in adapting to its environment, perhaps we might respond that the capabilities list ought simply to be revised in order to make it less 'sentientist'.

possibility of species being capable of something analogous to practical reasoning in negotiating their environment, the most obvious objection might be that this is simply a metaphor: genetic material is largely passed on by chance, and evolution occurs in a haphazard manner; species occasionally evolve themselves into a corner, and in some cases, adaptations become disconnected from the environmental conditions that produced them.³⁸ We know what practical reasoning looks like when individual creatures perform it; it is not clear that a species is capable of the same thing. Furthermore, it is not clear that the benefits of being a prey species (for example) do require reference to the good of a genetic lineage in order to be made intelligible. It may be true that having weaker members eliminated by predation will result in a greater representation of fitter animals among the species-population, but presumably this can be plausibly accounted for merely by referencing the fact that, over time, the individual members will become more adept at negotiating their environment, and that this is simply better *for them*. The issue therefore becomes a matter of the sacrifice of currently existing individuals to provide better conditions for future individuals (see Palmer 2009, p.592; Belshaw 2001, p.161). Of course, it may be that what happens to a species when its members become better adapted to their surroundings is that its chances of persisting into the future are increased: the species can therefore still be said to be defending its form of life by sacrificing individual members, and negotiation of environment may be viewed as a method by which the species exercises the capability of Life.

If it can be intelligibly said that species develop in such a way as to preserve their own existence, can their interests be thought of as a matter of justice? Recall Taylor's objection to this idea: a genetic lineage persists for as long as the information that constitutes it is manifested in the existence of individual species members: when there are no more species members, the species becomes extinct. It is not clear that there is any good that is thwarted here. In the case of individual organisms we can see why death is generally considered a harm: it represents the loss of future

³⁸ For example, if a predatory species is rendered extinct by humans, the adaptations its prey used to escape it may suddenly become redundant.

opportunities for flourishing (*FJ* pp.384-386).³⁹ Even very simple organisms have capabilities beyond merely staying alive (reproduction, for example), but it is not so clear that this is the case with species: *all* of their capabilities appear to be bound up in ensuring continued existence. It is not clear that there is any flourishing present for the capabilities approach to protect. It appears, therefore, that even if we are prepared to entertain the possibility that a species really is an entity we still cannot include it within the scope of capabilities justice. This is not entirely a bad thing: the commitments produced by the capabilities approach are complex enough as it is, especially if we include nonsentient organisms within its scope: adding another layer of commitments to species, collective entities whose interests frequently conflict with those of individuals, looks set to produce an entanglement of competing claims.

'That-ness'

This still leaves us with aesthetic concerns as an explanation for our intuition that some wrong is brought about when a species is wiped out. As we have seen, discussion of aesthetic consideration can be quite deep, and need not rest on a superficial desire to keep things in the world merely because looking at them provides pleasurable or inspiring experiences. Nevertheless, one might still feel uneasy about basing our entire sense of what is wrong about extinction on the fact that something of aesthetic value will be lost. Certainly, this seems to be an inappropriate way to view the demise of an individual: we might rightly lament the cutting short of Jimi Hendrix's or Sylvia Plath's creative output, but would surely look askance at anyone who claimed that that was the only loss that those deaths represented. Valuing something for *purely* aesthetic reasons appears shallow when that thing possesses other values of its own. Of course, in order for an objection along these lines to have any weight, it is necessary to demonstrate that species *do* possess value that does not

³⁹ In the case of more complex animals there may be other reasons as well – the thwarting of ongoing projects, for example.

solely reside in their aesthetic properties (or rather, the aesthetic properties of their members).

At this stage, I wish to return to Russow's claim that our concern regarding species is based on a judgement that creatures 'like that' (i.e., like the species' existing members) ought to remain in the world (Russow 1981, p.111). The 'that-ness' of a particular species may not only refer to those of its properties that are aesthetically valuable: potentially, there may be plenty of other things that are lost when there are no longer creatures 'like that'; indeed, it is hard to find a discussion of extinction that does not provide multiple examples.⁴⁰ Most of these are what might be considered straightforwardly anthropocentric concerns – various forms of resource value, for example – or ecological values (which, depending on how reductive our account of the value of ecosystems is, may also turn out to be anthropocentric). The loss of 'thatness' in itself actually appears to be a point recognised by both Russow and Rolston, whose discussion of extinction as a form of superkilling seems to target a similar concern (although, admittedly, Rolston takes things considerably further, claiming that rendering a species extinct destroys an *essence*, beyond killing individuals) (Rolston 1988, p.144). This may be a step too far; more modestly, we may recognise that, if we destroy the habitat of *those* two-hundred tigers (for example), then the fact that *there will be no more tigers* seems to have a moral weight over and above the fact that two-hundred individual animals will perish (even though that would nevertheless be a very bad thing).

There is a form of 'that-ness' that is lost when the last breeding members of a species die out, and which is more general than any specifically valuable characteristics of the animals in question. This is simply the totality of their characteristics – including external characteristics – taken together to constitute a particular way of being in the world. Rather than identify a specific characteristic that is constitutive of the 'that-ness' of a species population, the collected attributes of the organisms represent an account of a particular form taken by life on Earth. The accounts will differ for each species (though in some cases the difference will be relatively slight) with the effect

⁴⁰ See, for example, Rolston 1988, pp.127-131.

that each is, presumably, unique.⁴¹ In fact, unique accounts may occur at a level below that of the species: the domestic cat differs substantially from its likely progenitor, *Felis sylvestris*, such that they possess a markedly different ‘that-ness’ (Driscoll *et al* 2007, p.519). It may even be possible that geographically separate populations of the same species might quickly develop different ways of life: the life of an urban fox might be sufficiently different from that of a rural wild fox that they constitute separate forms of life, representing separate forms of ‘that-ness’. A broad recognition of this is evident in Nussbaum’s work, in her discussion of the ‘species norm’: the account of an animal’s key capabilities that provides the information used to formulate what it requires as a matter of justice. Of course, the species norm as it is presented in *Frontiers of Justice* is a device used to inform what it means to do justice to individuals: there is no suggestion anywhere that Nussbaum holds that a particular species norm has any value of its own. It seems possible that an individual concerned with a commitment to protecting the dignity of a wide variety of different organisms might form an intuition to the effect that the forms of dignity themselves are good, but it is difficult to see how this might be supported by argument. In any case, the account of an organism’s ‘that-ness’ described above is broader than the species norm itself, incorporating as it does the totality of what makes up the creature’s way of existing in the world, rather than those capabilities it has that are essential for flourishing.

Responding to ‘that-ness’: virtue theory and species

Thus, the value of a species still appears to remain outside the bounds of the capabilities approach. Nevertheless, there seems to be more to the notion that a species represents a particular form of being: if this conception of a species cannot be made relevant to Nussbaum’s partial account of justice, perhaps it can be represented by reference, once more, to moral character. The capabilities approach reminds us, through the device of the species norm, of the uniqueness of different ways of

⁴¹ Since an account like this presumably includes historical details as well as the biology and ecology of the organism itself, this will be true even if species are cloned and placed into artificial habitats.

life: perhaps there is something that we specifically object to in the conduct of an individual who destroys something that is unique. Maybe this is another claim regarding aesthetic value, but perhaps there are other virtues in play as well. When a species is rendered extinct, as when a culture is wiped out or a language dies with its last speaker, there seems to be something particular to lament in addition to the suffering or rights violations that typically accompany these events: a particular way of navigating or negotiating the world has been lost. Beneath the account provided by the species norm there is an underlying reference to the fact that the organism in question has its own particular mode of existence – effectively, its own specific world – informed in large part by the kind of thing that it is.

For an initially promising candidate for a virtue that might be concerned with this, one might wish to consider Sandler’s virtue of communion with nature, wonder (Sandler 2007, pp.50-51, 82). A view that represents species as describing ways of life may provoke a sense of wonder in at least two ways. First, the multitude of different forms of life may be an appropriate source of wonder. We may think less of the sensitivity and perceptiveness of someone for whom all flying things are either ‘bird’ or ‘plane’, given the startling variety of winged creatures to be encountered in a suburban back garden.⁴² It is not merely the fact that species are unique that ought to draw our wonder, but the fact that there are *so many* unique things. Second, the intricacy of a given form of life may also be an appropriate source of wonder. The mechanisms and behaviours employed by members of a given species to solve the various environmental problems that they face are frequently overwhelmingly specialised – for example, hummingbirds who have gradually evolved astonishingly long beaks so that they have access to flowers of a specific shape and depth. Recognition of the fact that this complexity is bound up in the everyday lives of creatures who, from the viewpoint of a casual observer might do relatively little, or are relatively drab in appearance, seems necessary for a genuinely appreciative awareness of other species, to be contrasted with the individual whose

⁴² It is interesting that there does not appear to be a corresponding intuition regarding someone who can only identify two or three models of aircraft – or, at any rate, if there is, it is not one that I share.

concern is directed only towards animals and plants with bright plumage, outlandish behaviour or obvious beauty. In fact, both of these forms of wonder can interact: not only is life multifarious, it is *also* intricate, and it seems strange to imagine someone who grasped one of these facts without appreciating the other.

Thus, awareness that the world contains hundreds of millions of other species, all of whom are engaged in negotiating the world in their own unique manner, certainly seems to be required of an individual with an appropriate sense of wonder. There seem to be several senses in which an awareness of what a species represents will interact with a sense of humility, as well. The first of these is actually referred to by Rolston, though he does not present it as an appeal to moral character: given the multitude of different species in existence, whose ways of being in the world presumably hold an equal degree of intensity to ours, we ought to exercise restraint towards other organisms (Rolston 1988, p.144). We should be mindful of the gravity of what we do when we extinguish another way of life, not only because we would not seek our own race's extinction, but because we should be wary of taking for ourselves the power to remove a way of being in the world from existence altogether. Rolston wishes to use this as an argument for the existence of direct duties on the part of human beings and species, but without an account of how a species can be an entity with morally significant interests, the claim seems to have little weight. But the disappearance of a way of life appears to be something about which a genuinely humble person would be concerned: they would be reluctant to claim for themselves the authority to say that there ought to be no more organisms of a particular variety (or that it does not matter if there are no more).

There is at least one further aspect of humility as it relates to species. This sense centres on the status of a species as something that persists over a great deal of time or, rather, on the status of the current form taken by the species as something that has taken a great deal of time to evolve (James 2013, p.16). James suggests that a humble person will display respect to inanimate objects of great age: in particular, they will be unwilling, for the most part, to effect any drastic changes in them. This is at least partly because they will recognise the extensive narrative properties that such

objects tend to hold, and will be reluctant to take any action that would result in their playing a disproportionately large role in those narratives themselves (pp.11-13). In the case of species, a humble person will be aware that by contributing to a species' extinction they are taking part in the destruction of something that has taken millions of years to achieve its current state.⁴³ Indeed, they will probably also be aware of the organism's status in a wider narrative, not only of life on Earth, but also of the development of the solar system, galaxy and universe. Viewed from a sufficiently distant vantage point, the current form of a species has been *aeons* in the making. A genuinely humble individual will not take it upon themselves to cut such an existence short, or wreak other dramatic changes upon it. Furthermore, such an awareness encourages the individual to recognise that species are part of an ongoing process. In driving a species to extinction, we do not only destroy something that stretches back for millions, if not billions of years, but also erase the possibility of the same thing stretching *forward* into the future. We do not only destroy the current form and our links to the forms of the past, but also the forms of the future. A truly humble individual, needless to say, will be reluctant to claim for themselves this degree of influence on the shape of the world without very good reason.

Conclusion

In conclusion, it appears that the capabilities approach cannot accommodate a concern for species as a matter of direct justice. Although there are some superficial similarities between species and organisms possessed of a good, it is not clear that species are entities in the first place, nor that, if they are, then they possess interests, nor that, if they do possess interests, that these are the kinds of interests that possess moral significance. As a result, it does not appear to be possible to extend capabilities justice over them in the same manner as nonsentient organisms. Nevertheless, there are

⁴³ In some cases – spiders or crocodiles, for example – the concern might be that the agent is interfering with something that has existed in its current state for millions of years. It is not obvious that they will respond especially differently to more or less recently emerged species: in the case of a recently emerged species, the narrative will tell of the variety of different forms in which the species was instantiated before reaching its current one; in the case of an older species, the narrative will tell of the resilience or efficiency of the form that the creature has held. Both sets of narrative properties appear to be worthy of respect.

several promising respects in which morality has something to say about the extinction of species. Aesthetic appreciation is revealed to be a fuller concern than is initially evident from Russow's discussion of it: as Cooper and Sandler have argued, there do appear to be important moral aspects to the aesthetically valuable features of a species' members that will not be ignored by an individual possessing the virtues of aesthetic sensibility and a sense of wonder. Furthermore, the virtue of humility also appears to be relevant in this case. A humble person will recognise that *Homo sapiens* is one species among many, and will be reluctant to take on the authority to decide that other species are not worth preserving. They will also have an appropriate level of appreciation for the narrative properties of a given species, and will recognise that rendering a species extinct involves cutting short a process that has been ongoing for millions of years, and which will potentially stretch far into the future. Acknowledging these narrative properties, they will not seek to bring about great changes in the 'story' of a species.

Chapter VI: The Capabilities Approach and Ecosystems

There has been some debate as to whether the capabilities approach might provide a suitable account of justice for ecosystems. David Schlosberg and Andrew Armstrong, in particular, have suggested that the 'integrity' of an ecosystem, like the dignity of an animal, is a matter of exercising certain capabilities or, as Armstrong puts it, 'consideranda' – that is, there are functions that an ecosystem needs to be able to fulfil in order to maintain the level of integrity necessary for an existence of worth. In what follows, I will examine the plausibility of Schlosberg's and Armstrong's proposal, eventually concluding that it falls into difficulty due to the lack of any clear explanation as to why one state of affairs ought to be considered better, from an ecosystem's point of view (if an ecosystem can even be said to have a point of view), than another. Lawrence Johnson's ecocentric analysis of the issue is examined next, and is found to run into similar difficulties: it is not clear that an ecosystem has a good of its own. In an effort to dispute this point, various environmental ethicists have attempted to suggest that the language of ecosystem health can imbue the various states in which ecosystems exist with normative value: after examine various arguments to this effect, I eventually side with John Nolt's assessment that what the ecosystem health argument can achieve at best is to prove that some states in which ecosystems can be found are good; however, the ecosystem health argument does not seem to be able to show that maintaining or bringing about these states is directly an issue of justice. As was the case with species, I conclude that the most powerful argument for caring about the health of ecosystems is that doing so is part of proper exercise of the virtues.

The capabilities of ecosystems: Schlosberg and Armstrong

David Schlosberg has attempted to demonstrate that the capabilities approach has the potential to play a key role in expanding our notions of justice to govern interactions between humans and non-

human nature; although Schlosberg seems to think that similar rationales exist for extending justice to nonsentient beings, species and ecosystems, much of his discussion seems to focus in particular detail on ecosystems (and, perhaps, the biosphere more generally). Of particular concern for Schlosberg is finding ways in which theories of justice can be adapted to support and reflect the existing practices and concerns of activist groups in the social, environmental and ecological justice movements (Schlosberg 2007, pp.3-5). Finding a vocabulary with the potential to be used by theorists and campaigners alike, and to address problems of justice occurring between groups of humans and between humans and the non-human environment, will contribute substantially to this goal: Schlosberg thinks that the capabilities approach represents a body of theory that provides important elements of such a vocabulary (pp.32-34). Like Johnson, he recognises the potential for confluence between animal ethics on the one hand and holistic ethics on the other that arises when we move away from concerns of psychological wellbeing or self-respect, such as the concept of 'dignity' relied upon by Nussbaum, and rather use a more general term such as 'integrity' or 'flourishing'. This does not seem to be too much of a stretch for the capabilities approach: nothing important seems to be lost if we move away from discussion of living a dignified life to talk instead about an organism living to reach its potential, or living in such a way that its life has a particular kind of wholeness or unity (p.146). Doing this may even make it easier for us to discuss doing justice to individual animals: it is possible that some animals do have a sense of their own dignity such that is possible for them to feel humiliated or stifled, but it seems unlikely that this is true even of all sentient creatures, let alone nonsentient organisms.

Having suggested that lack of sentience ought not to bar an entity from consideration as a subject of justice, Schlosberg goes on to suggest that there is an underlying reference to ecological communities present in Nussbaum's discussion of animals in *Frontiers of Justice*, specifically underpinning many of the characteristics that go to make up the species norm. Schlosberg emphasises what Nussbaum has already alluded to: the species norm is not a list of properties that

are intrinsic to the individual animals in question. Rather, a particular animal's species norm will make reference both to other members of its species, and to members of other species, and to physical processes at play within the ecosystem and the wider biosphere (pp.147-149). Upholding justice does not happen on an 'individual-by-individual' basis; we cannot take one gazelle, see to it that it has all that it needs, move on to the next gazelle, then move on to start providing justice for lions, and so on. Gazelles flourish within a herd, which itself flourishes within the context of a savannah and the broader context of the biosphere. We cannot make sense of what it means to flourish as a gazelle without making reference to the plant life on which they graze, the various ways in which individual gazelles interact with one another, or the ways in which they are adapted to the regional climate and the other species surrounding them. The forms of flourishing of the individual organisms have a kind of self-identity of their own, yet also contribute to and are dependent upon the broader identity of the community. Failure of wild organisms to achieve their potential (that is, to flourish) can frequently be attributed to some factor affecting the ability of the ecosystem to reach *its* potential. Thus, Schlosberg has identified a holistic undertone to some of what Nussbaum says regarding non-human animals, despite her own claims to strict individualism. To draw this point out a little more: in acknowledging that individuals flourish best within a community, one needs to have some conception of what constitutes a community. We could remove the gazelles and lions from the savannah and put them in an enclosure in a zoo; the animals would continue to exist as discrete entities, but they would cease to contribute to the functioning of the savannah itself. The conclusion that Schlosberg seems to want us to draw is that, in addition to the conception of flourishing that we have for the lion and for the gazelle, there is an additional conception in the background: the conception of the savannah's flourishing. In order for the lion and the gazelle to flourish in a manner that is truly characteristic of their species, they require an ecosystem that is itself flourishing. There is a sense in which the ecosystem flourishes independently of or prior to the flourishing of the individual creatures that inhabit it.

Schlosberg suggests in his chapter on capabilities and ecological justice that it should be possible to produce capability lists for ecosystems and species, now that we have ostensibly established that they are capable of flourishing. An attempt to formulate a general list along these lines has been made by Adrian Armstrong (Armstrong has also produced a separate capabilities list for the biosphere as a whole). Like Schlosberg, Armstrong uses as his starting point the fact that Nussbaum's capabilities list for non-human animals makes frequent reference to the communal context within which they are situated, although he does not explain in detail how this can render ecosystems themselves into direct subjects of justice (Armstrong 2012, p.115). Armstrong uses the term 'consideranda' rather than 'capabilities' to refer to the features of ecosystems that require 'moral consideration': these include five entitlements of ecosystems themselves (continued existence, continued functioning, integrity, freedom from interference and representation) and five requirements of human interaction with their environment (respect, sharing, protection, land use and human population). In brief, these consideranda ground familiar policies within the environmental movement: the minimisation of human impact on ecosystems, the provision of 'space for nature', limitation of human activities in wild areas, protection of ecosystems' abilities to develop according to their own natural processes, responsible gathering and usage of natural resources, and so on (pp.117-120).

There is quite a glaring problem with Schlosberg's analysis and Armstrong's addition. We can accept that a polluted river may have fewer species, and presumably therefore less 'going on' in it, than would otherwise be the case. Yet it does not necessarily follow from this that the river is not reaching its potential or flourishing: these terms would suggest that one state of affairs is better than the other. More importantly, they suggest that one of them is better *for the river* than the other. It may well be the case that the pollution renders the river uninhabitable for many animals and plants, and clearly the capabilities approach can acknowledge that this is an unjust state of affairs, because the organisms so uprooted (or, more likely, killed) have had their flourishing

impeded. It is not obvious, though, that the *river* has suffered any injustice: there is no clear reason as to why a river with many native species inhabiting it is any better off than one populated by just one species of invasive water snail. If a river has the capacity to carry small populations of many species, why should this fulfil its potential any better than if it were to carry many members of one species? The fact that Nussbaum's description of the species norm makes reference to the state of the species, ecosystem or biosphere does not entail that there are any criteria available to us for judging one state to be better than another beyond the contribution each state makes to advance the flourishing of individuals. Indeed, the passages quoted by Schlosberg to advance his argument do not suggest that ecosystems are entitled to any kind of protection for their own sake: Nussbaum quite explicitly states that the reason that we should be concerned about the flourishing of ecosystems is that that is the context within which individual animals flourish (pp.149-150). Schlosberg makes no convincing argument as to why we should ground concern for ecosystems on anything other than concern for the flourishing of individuals. He is right to emphasise the capabilities approach's ability to account for the fact that individuals flourish within communities, and may even be correct when he claims that "systems themselves might be considered agents for the work they do in providing the various capacities for their parts to function" (p.148).⁴⁴ There may be a set of things that they need to be able to do in order to remain sufficiently stable as to support diverse organisms: in this sense, Armstrong's list of *consideranda* represents a useful contribution to the literature. It may be a useful device to use the idea of a flourishing ecosystem as a metaphor to describe the state in which the various organisms involved are interacting with one another in the optimal way, and in which the characteristic flourishing of the organisms involved tends to be upheld. Nevertheless, the provision of these *consideranda* seems to have little value beyond forming the context within which organisms flourish: it is far from clear that the ecosystem is pursuing any good of its own, in the way that even a mussel pursues its good. If an ecosystem's capabilities are all

⁴⁴ 'Agency' is probably too strong a term for what ecosystems do, since it is frequently taken to imply ratiocination. Following Eric Katz, we might allow 'subjects' instead, acknowledging that ecosystems develop according to their own processes, without assigning them any powers of rational deliberation.

being exercised to an adequate level, then that is good for the organisms that it supports: it is not obviously any better for the ecosystem itself.

Ethical holism: Johnson on ecosystems as ‘living systems’

Schlosberg and Armstrong have attempted to work within the framework of the capabilities approach to identify a way of addressing some of the concerns of holistic environmental ethicists regarding ecosystems. Among the clearer of the holistic accounts of what value ecosystems might have is that provided by Lawrence Johnson. Johnson provides a reiteration of the problem posed by Callicott, and it is helpful at this stage to revisit this question, since it provides the context according to which the problem of predation discussed earlier can be related to the issues now under consideration. The problem is that of whether the concern for collective entities that typifies holistic environmental ethics can be accommodated in or, at the very least, be made to co-exist with the capabilities approach. Recall the central thesis of Callicott’s “Animal Liberation: A Triangular Affair”: individualistic approaches to justice for non-human animals have a great deal more in common with mainstream anthropocentric ethics than is frequently stated,⁴⁵ and the true challenge to anthropocentrism is in fact holistic environmentalism as represented by the Land Ethic (Johnson 1991, pp.230-232). Johnson is optimistic that the apparent gulf between the two ethics is not unbridgeable, as Callicott seems to think:⁴⁶ he suggests that Callicott’s position may have been overstated as a result of his particular focus on Peter Singer as his example of a ‘humane ethic’. Johnson agrees with Callicott that an ethic based on disvaluing pain (or satisfying preferences) will fail to do justice to ecosystems but, importantly, points out that “neither hedonism nor preference

⁴⁵ To be fair, perhaps this should not be surprising: a common approach employed by animal rights advocates is to emphasise how small a leap from our existing moral premises it is to the conclusion that we ought therefore to concern equal moral concern to animals.

⁴⁶ And again, it should be observed that Callicott has since climbed down considerably from the position taken in *A Triangular Affair*.

ethics can do justice to anything” (p.233-234). This first obstacle to integrating the two approaches appears easily overcome by the capabilities approach, as discussed in particular detail in Ch. IV: since justice for Nussbaum is a matter of protecting and promoting capabilities, rather than preventing pain or satisfying preferences, there appears no particular reason as to why it should struggle to accommodate the flourishing of entities lacking preferences or the capacity for sentience. In principle, then, we can at the very least suggest that the capabilities approach is a more promising candidate as an attempt to articulate concerns of justice for ecosystems than any approach based on sentience or preference satisfaction. The details of Callicott’s discussion of pleasure and pain have been discussed in some detail in Chapter II: my current endeavour is therefore to determine whether Johnson’s optimism is well-founded. This presents two significant tasks: first, to establish whether ecosystems, as holistic entities, are the sorts of things of which it can be said that they fall under the purview of justice and, if so, whether their interests can be reconciled with those of individuals.⁴⁷

As one might anticipate from the above and from his stance on species outlined in the previous chapter, Johnson is firmly of the mind that ecosystems have morally considerable interests. His position is derived from a consideration of what it means to say that an entity is alive, borrowed from James Lovelock: what appears to characterise living entities is that they are systems possessing a degree of order, or negative (or at least, reduced) entropy whereby they extract energy from the environment and use it to maintain themselves; furthermore, living beings are distinguished from objects such as flames and whirlpools by their possession of self-regulating (‘cybernetic’) systems

⁴⁷ Callicott does provide an additional argument for the moral status of wholes in his more recent work, *Thinking Like a Planet*: this is that human beings and other multi-celled organisms are communities themselves, colonised by a bewildering array of microorganisms and comprised of organs, tissues, cells, organelles. Perhaps, therefore, it is true to say that *some* ecological wholes have moral worth, are capable of agency, of dignified existence and self-respect (2011, pp.293-294). It hardly follows from this, however, that all wholes possess the same value or that a virtuous agent ought to respond to them in the same way as they would to a ‘human holobiont’. If we respond to a ‘human holobiont’ in a manner that makes reference to our moral concerns, then it is probably the humanity of the holobiont to which we are responding, not the other way around. So, at best, we seem to be able to say that being a collective entity is not an absolute bar to being a recipient of direct moral duties. Whether ecosystems are the sorts of holistic entities regarding which we can have moral duties is another question entirely; it appears that ecosystems must still possess some other source of moral worth in order for them to be the direct subject of moral duties.

that maintain their existence in a rough balance with their environment (in other words, *homeostasis*) (Johnson 1993, pp.203-204). Further separating living systems from self-regulating machines is the fact that “a living system has self-identity”: in other words, “what it is and what serves to maintain it is determined by its own nature” (p.205). This is to say that a living thing has an organised unity, under which the totality of the life processes of its own component parts are integrated into the life process of the total entity: the cells of a daffodil, for example, have life processes of their own, but all of them are subsumed into the life processes of the plant itself. This is contrasted with the members of a committee, whose interests and life processes extend far beyond, and in fact have relatively little to do with, the putative ‘life processes’ of the committee itself (pp.206-207). Furthermore, the life process of a living entity is the *integration* of the life processes of its individual components. A living entity is not simply ‘thrown together’ from whichever parts will do the job, in the way that a machine is.⁴⁸ As Johnson puts it, “the same four people could be a steering committee, a book-swapping club, or a bridge team” (p.207): the components of a daffodil cannot be rearranged or repurposed to produce a primrose.

One might take issue with some or all of these points. Recall the robotic ‘organism’ discussed in Ch. IV: this ‘creature’ was designed to adapt its programming to solve problems that it encountered in a way that at the very least superficially resembles learning, and also to regulate its internal parameters and to take action to avoid hazards such as moisture, loss of power, extremes of temperature and so on. As described, the robot seems to maintain a sort of homeostasis and, indeed, undergoes some sort of development that looks a bit like a life process (indeed, as its parts start to wear out and become less efficient, a suitably sophisticated robot will presumably enter

⁴⁸ Within limits: when the brake pads of my bike wear out, I can replace them with another set as long as they are of the right type; furthermore, I could obtain the new pair by cannibalising somebody else’s bike. Furthermore, the brake pads are presumably not limited to a life as brake pads, either: I could attach some brake pads to a strap or ‘c’-shaped strip of metal to produce a tool for opening stubborn jars, or use them as the non-slip tips to a pair of tongs. This distinguishes them from transplantable organs: one might be able to donate a kidney, but it can only function as a kidney. That said, there is a sense in which *no* living entity possesses complete self-identity: this comes about as a result of consumption and digestion. Part of any organism’s identity is the fact that it can potentially become part of another organism – see James Hatley’s “The Uncanny Goodness of Being Edible to Bears” (2004, pp.21-22).

something resembling old age, spending less time exploring its environment and more time in the sun recharging its batteries). As it is, it is not clear that the machine has self-identity, however; it could be taken apart and reassembled or reprogrammed to be a different sort of 'creature'; furthermore, its parts presumably do not themselves have life-processes of their own; in this sense they are different from cells and organs. Allow us to make some modifications, then: the robot is comprised of small modular units, each of which has mechanisms for maintaining a sort of homeostasis of its own in addition to constituting the 'organs' of the robot, converting sunlight into electricity, monitoring external conditions, providing mobility, manipulating objects, or anything else that the robot requires. Furthermore, one or more of the modules comprises a 3-d printer, allowing the machine to repair itself or potentially reproduce given appropriate raw materials. Finally, each module is provided with some mechanism making it unique to the robot to which it belongs. If I have understood Johnson's criteria correctly, a machine like this appears to satisfy the conditions of a living being. This might simply be a testament to human ingenuity: one route we could take would be to declare that the robot is indeed possessed of a kind of life (whether it is worthy of moral consideration is another question).

On the other hand, there may yet be a sense in which Johnson's criteria can exclude even sophisticated machines that are specifically designed to mimic organisms. It is true that what the robot is and what its life processes serve are determined by the way in which it is composed – the materials, mechanisms, tolerances, and so on. The identity of the robot is therefore, in a straightforward sense, determined by the kind of thing that it is. We can compare the information carried in the machine's programming, and in the programming of the individual robotic 'cells', with its behaviours, attributes and development in the same way in which we can compare genotype to phenotype in living organisms: the way the object of examination is organised appears to translate into the way it behaves and develops. Nevertheless, we may wish to question whether the same thing is going on here. One difference between the goldfinch and the robot is that one appears to be

the product of a spontaneous process of self-development while the other is the product of a human designer. Perhaps this is the crucial sense in which the goldfinch's self-identity is *its own*, whereas that of the robot depends on the ends and designs of a human agent (see my discussion of Eric Katz's distinction between natural objects and artefacts in Ch. III).

This distinction appears not to stand up to scrutiny, however (or at least, it does not appear to properly distinguish between living and non-living entities). It is easy to find examples of living entities that nevertheless reference in their nature the ends of a human designer: battery-reared turkeys with too much meat on their frames to breed without assistance, for example. As Callicott has been quick to point out (Callicott 1980, p.330), these are living artefacts or, at the very least, living entities with a substantially artefactual nature. Artefactuality therefore cannot be a condition excluding entities that possess it from the status of living beings; there are some non-organic beings that meet the criterion.

Perhaps this does not spell the end for Johnson's criteria altogether. It is probably worth conceding that in order to find an apparently non-living artefact that met the definition, it was necessary to dream up a machine that significantly mimicked existing organisms. If we wanted to create life, or a facsimile of it, through the application of robotics, we could do worse than to aim to satisfy Johnson's criteria. It is also worth recalling the terminology that Johnson uses: he is concerned with defining what constitutes a 'living system', not a living organism. After all, Johnson's concern is to make the case that an ecosystem – obviously not itself an organism – is alive, not to prove that it is in fact its own sort of creature. And ecosystems, it seems plausible enough to suggest, also meet the criteria outlined above as well as the robot. Barring catastrophe, ecosystems, Johnson suggests, maintain a level of homeostasis in the relationships between their constituent parts (which is to say, the species-populations and physical forces that make them up) (Johnson 1993, pp.216-218). If the population of one species (bears in a stretch of coastland, for example) collapses due to overhunting, this will cause repercussions for the other parts of that ecosystem,

causing it to depart from its characteristic status as the regulatory processes (predation of salmon, scavenging opportunities for seabirds, and so on) that govern its various elements break down, changing its identity (p.218). We can presumably draw a parallel with the body of a living organism: when lost body fluids are not replaced, the resulting dehydration perturbs the body's various systems, resulting in a loss of overall functioning. We might also make a comparison with our imaginary robot: if an environmental hazard such as salt water invades one or more of the robotic 'cells', damaging its circuitry, we would expect one or more of its functions to be impaired.

What comes next is to prove, presumably, that the functioning of an ecosystem is the sort of thing of which it can be intelligibly said that it can appropriately be termed an issue of justice. This is at least superficially a plausible suggestion, given the conclusion of chapter IV, *viz.*, that sentience was not a reasonable basis on which to exclude an organism from being a subject of justice if it possessed other capabilities. Furthermore, it was hopefully established that the robot that possessed capabilities was *not* a plausible candidate since, although it possessed features that were analogous to capabilities as discussed by Nussbaum, its 'flourishing' essentially amounted to its ability to fulfil the purposes assigned to it by its human designers and/or users. The same seems true even of the 'upgraded' model discussed above, although if it was able to produce copies of itself, which in turn developed on their own and reproduced in a manner mimicking the process of evolution, this judgement might be called into question. At the moment, however, it looks as though there are some living systems (ecosystems and robots) that are not living organisms, and also that there are some living systems (robots) whose flourishing does not appear to be a matter of justice, since their good is not their own. Since it does appear to be the case with at least some ecosystems that their functions are not determined solely with reference to human purposes but rather that they may possess some kind of level of flourishing of their own, it seems possible that, if we can determine that they have capabilities, then these might require protection as a matter of justice.

Ecosystem health: Callicott and Rapport

Currently, it appears that the possession of one's own good is a characteristic that remains solely the possession of organisms. Yet this conclusion seems to be at odds with the way in which we typically view ecosystems. Claims about how well or poorly an ecosystem such as a river is faring seem to make a kind of sense; if we observe that pollutants leaking into the river are causing a drop-off in the number of breeding populations of fish in the water, it does not seem to be a great leap to suggest that the river itself is not doing well. One explanation for this might be that, when we talk of a river as being badly off, particularly perhaps when we use the language of health, we are simply speaking metaphorically, portraying the hypertrophication of the water as a symptom of sickness or poisoning. This view of the concept of ecosystem health has been taken up by commentators with differing views regarding the usefulness of this vocabulary. Callicott and Rapport have both defended this use of the language of health. For Rapport, biomarkers such as the reduction in size of a native species-population or the appearance of an alien species can be viewed as being symptomatic of an underlying syndrome, which might require symptomatic or, more likely, preventive treatment (Rapport 1995, pp.300-301). Rapport is particularly clear that his usage of the concept of health is metaphorical, suggesting that its two main advantages are that it "has provided a powerful language by which to convey major environmental concerns in a focused, action-oriented way" and that it "has encouraged the transfer of concepts and analytical methods from the health sciences to ecosystem sciences (and to a lesser extent, conversely), including importantly, a focus on preventive as well as curative health practices" (p.304). As it stands, this application of the language of health to ecosystems has relatively little bearing as far as the extension of justice to ecosystems is concerned. It may, and probably does, aid us in enacting justice towards wild organisms: if we assume that part of what it means to do justice to a creature is that it should exist within the context of an ecosystem that supports it (and which it supports in turn), then the 'health' of the ecosystem is of concern to enactors of justice just insofar as a healthy ecosystem provides a rough balance of

capabilities provision for the organisms involved. The metaphorical health of the ecosystem certainly does not constitute a *capability* for good health in the same way that the genuine health of a cat declines if it suffers dehydration, and therefore presumably does not in itself generate duties on the part of human agents.

Callicott also seems to regard the language of health as applying metaphorically to ecosystems, holding that the concept is literally applicable only to organisms: since ecosystems do not possess or replicate DNA, and since they are not recognisable units of natural selection, they cannot literally be healthy or unhealthy (Callicott 1995, p.348). Nevertheless, he seems also to consider health to be a concept capable of providing action-guiding norms. To be sure, the processes by which ecosystems cycle nutrients, water and energy can be described in simply mechanistic terms without any normative content, but this is also true of the life-processes of organisms – obliterating, in the process, the reason for describing a person as possessing good health. His suggestion is, therefore, that the language of 'health' serves as shorthand for certain value-possessing states of both organisms and ecosystems: terms denoting sickness and health are 'thick' descriptors carrying their own axiological content: health is, in other words, an intrinsically valuable condition. We cannot think of healthiness being, *prima facie*, bad for the entity that possesses it any more than we can imagine a (*prima facie*) good act of brutality (Callicott 1995, pp.352-353; Nelson 1995, p.313).⁴⁹ Nelson provides more detail: thick concepts acquire their axiological nature because they contain some level of assessment of the values contained in the entities involved. Thus, to use Nelson's example, when we claim that a father beats his child brutally, the value-judgement attached to the brutality of the beating comes about because of the value that we assign to children and to fatherhood (Nelson 1995, p.316). Similarly, good health acquires its goodness because of the role it plays in assuring the flourishing of entities about which we tend to make judgements to the effect

⁴⁹ The goodness of health is of course overridable. If my asthma prevents me from being conscripted into the military I might, overall, be better off with the condition than without it, even if in most other sets of circumstances I might jump at the chance of a cure.

that they have a value. If it is the case with ecosystems that they possess intrinsic value, then (even metaphorically) 'healthy' states – states in which the ecosystem functions in a 'healthy' way – seem to be good. And if ecosystems are entities to the extent that they can be intelligibly said to be capable of possessing good health, then presumably there is a case for saying that they are of direct concern as a matter of justice.

One could easily find oneself arguing in circles here. Let us reiterate more concisely Callicott and Nelson's argument: speaking in terms of health provides us with a normative vocabulary for describing certain states of entities. This vocabulary takes its normative character from the fact that the states that it describes are good or bad for things that themselves have (non-instrumental) value. It is therefore presumably uncontroversial to say that the health of humans is good because it is good for entities, humans, who possess value in themselves. But it is circular to argue that ecosystems have the capability to be healthy, and that this capability is of axiological importance (rather than just being a descriptive account of various states in which an ecosystem can exist), because ecosystems have an intrinsic value as subjects of justice owing to the fact that they possess, like animals, the capability of having good health. More generally, we might be tempted to argue that being intelligibly said to be healthy or unhealthy implies that ecosystems possess a good, and that this grounds some level of moral standing. But if ecosystem health acquires its normative status by virtue of the fact that it describes states that are good for entities with intrinsic value, then the source of this value must come prior to, and therefore must be different from, the ecosystem's supposed moral standing if we are to avoid circularity. This version of the argument, based on Callicott's stronger conception of ecosystem health, still fails to provide the justification for including ecosystems within the purview of the capabilities approach. In order for the treatment of ecosystems to be a direct question of justice, it needs to be shown that ecosystems possess capabilities, for which ecosystem health initially appeared to be a promising candidate. But in order for concepts of health to apply meaningfully to ecosystems, they need to describe states that are

actually good or bad for entities. In order to establish that we ought morally to care about ecosystem health, we must establish firstly that things can be good or bad for ecosystems, and then secondly, that ecosystems have some sort of intrinsic value. Both of these elements currently remain elusive.

Ecosystem health revisited: McShane on rational care

Nevertheless, there is one more account of the value of ecosystem health that looks relevant to the purposes of the current inquiry. Katie McShane has provided a more recent contribution to the literature surrounding the concept. Her approach departs from the previous discussion in a number of ways: most notably, McShane argues that health can be literally, rather than only metaphorically, predicated of an ecosystem. She maintains that in order to be a bearer of health an entity must fulfil three conditions: it must maintain a structure, possess parts with functions, and be capable of being better or worse off (McShane 2004, p.230). Possession of a structure relates to health, according to McShane, in that health-possessing entities have a particular structure “that is appropriate to them in their particular circumstances” (Ibid.). The organs, cells and, ultimately, sub-cellular structures of an organism are organised in a particular way when the organism enjoys perfect health. A second condition of health is proper functioning: a healthy entity’s parts will carry out the functions that are appropriate to them – that is to say, those functions that come about because of those parts’ existence (for example, the function of a healthy mammal’s heart is to circulate blood: if it weren’t for the necessity of this function, the heart would not have evolved. Were an animal to evolve beyond the need for circulation, the heart would presumably become a vestigial organ along the lines of the human appendix) (p.231). Although I do not wish to assume that it has been established with total clarity that ecosystems meet these first two conditions, it is the third that separates McShane’s account most distinctly from the rest of the literature and which merits further discussion.

McShane suggests that the language of health describes states in which the entity in question is better or worse off. As discussed above, we have reason to be suspicious of the claim that being full of many species of birds, fish, invertebrates, plants and microorganisms, all of whom interact in complex fashion to cycle energy, oxygen, nitrogen and so on, is actually better for a river than is being comparatively sterile or filled with an overabundance of one particular species. Unlike sentient creatures, a river does not possess, as far as we can tell, an experiential welfare of its own: if a keystone species inhabiting the river dies out, the river presumably does not 'feel' this loss. More generally, it is hard to suggest that an ecosystem's activity is really goal-oriented, rather than something that simply happens (largely as part of the goal-oriented activity of the organisms making it up, combined with the ateleological activity of physical forces), as would be required in order to claim recognition for ecosystems under the criteria of either the capabilities approach or Paul Taylor's respect for nature. Rivers do not have an interest in containing a complex web of species; they do not appear to care whether or not they dry up altogether. If it is not possible to say that one state is better for the river than the other, then it seems as though the language of health is inappropriate when applied to them.

McShane attempts to resolve this problem by employing a definition of '*good for*' (welfare) that avoids making reference to the welfare of the entity in question. Her analysis is taken from Stephen Darwall, and locates part of the normativity of welfare in its "relation to a concern for someone for that person's sake" (Darwall 2010, p.8, Loc.153). Darwall's 'rational care theory of welfare' therefore holds that what is good for an entity will be identical with what one who cared about the entity for its own sake would rationally be able to want for it (p.9, Loc.162). It is worth noting how Darwall's theory seems to interact with Nussbaum's 'objective-list' theory of justice as embodied in the capabilities approach: Nussbaum holds that we cannot determine what is in individuals' interests simply by referring to what they state their preferences to be; rather, the capabilities approach determines that to which a human being ought to be entitled by attempting to

imagine what a flourishing human being would not be without. Thus, we can formulate an idea of what is good for human beings while circumventing questions of which preferences adequately map to things of genuine value (Nussbaum 2011, pp.81-84). In effect, Nussbaum assumes that we are already adopting the position of the carer central to Darwall's approach when we consider what an individual ought to be entitled to. As McShane points out, this allows us to sensibly talk about what is good for beings without a subjective viewpoint on the world, including those entities whose activity appears to be ateleological (McShane 2004, p.234). From the perspective of someone who cares about an ecosystem – let's stick with our river – for its own sake, then, there *are* structures and functions that the river can possess that are good for it. Such a carer will (given that they are properly informed about how ecosystems operate) view particular ways in which nutrients flow through and around the river as being particularly valuable; they will not want to see it polluted, or for the interactions between its native species disrupted by the arrival of an aggressive imported organism.

In the conclusion to her article, McShane acknowledges that establishing that things can be good for an ecosystem does not establish that we *ought* to be concerned about those goods (p.245). However, if her account of ecosystem health holds water, it appears to provide the solution to the problem identified with Callicott's and Nelson's analysis. Recall that in this case, using the language of health to describe ecosystems was supposed to generate duties towards ecosystems because discussions of good or bad health supposedly described states of affairs that were good or bad for entities with intrinsic moral value. However, as the grounds for possessing moral value were absent from this analysis, the argument appeared to run into danger of either circularity or question-begging. If things cannot be good or bad for an ecosystem – if ecosystems do not have interests – then it appears that health does not provide an appropriate descriptive vocabulary for the states of an ecosystem. The same is true if it cannot be shown that ecosystems have intrinsic value: if this remains the case, then it does not really matter morally if some states are better for them than

others, in the same way that it does not matter morally if some states are better than others for a piece of machinery. McShane's account seems to take care, arguably, of the first problem: if it can be said that something can be good for an entity if a carer would want that something for the entity for the entity's own sake, then it seems that, as long as we can conceive of people caring about entities for their own sake, we can talk about the good of the entity without having to worry about whether the entity cares about what happens to it.

This may not satisfy ethicists such as Rolston, who wishes to claim that the '*systemic value*' of ecosystems is greater than the sum value of the individual organisms from which they are constituted (Rolston 1988, p.188). For Rolston, the values embodied in ecosystems are *discovered* by human valuers and exist independently of them (p.231). Someone adopting Rolston's position might want to say that what makes something good for an ecosystem just is the fact that it is good for the ecosystem: of course this will converge with what a carer would want for the ecosystem's sake, but this is effectively a coincidence. Our caring about an ecosystem cannot *make* things good for it. Thus, a key element seems to be missing from the formula if the language of ecosystem health is to apply, and to apply in such a way that it has any persuasive normative power. While we might cautiously accept that things can be good or bad from an ecosystem's perspective, it is far from clear whether the state of an ecosystem can be described in terms of health, in the thick, normative sense of the word described by Callicott and Nelson, unless we can provide an account of the intrinsic value possessed by ecosystems that explains why we ought to care about them.

John Nolt has provided an analysis of various proposed environmental ethics that mirrors the conclusions of the preceding discussion. According to Nolt, the ethics of Rolston, Taylor and others involve two inferences: first, an inference from *is* to *good*, and second, an inference from *good* to *ought* (Nolt 2006, pp.355-357). For example, Rolston claims that the study of ecology leads to discover in nature things that we already value: "unity, harmony, interdependence, creativity, life support, conflict and complement in dialectic, stability, richness [and] community". According to

Rolston, “an *ought* is not so much *derived* from an *is* as discovered simultaneously with it” (Rolston 1988, pp.230-232). As far as our discussion of ecosystem health goes, I would tentatively suggest that we have established that it is possible in the case of ecosystems to make a valid inference from *is* to *good*, as long as we are happy that the good established is a *good for* something (the ecosystem) (Nolt 2006, p.359). McShane’s analysis suggests that we might be justified in saying that something can sensibly be said to be better or worse for an ecosystem, from the perspective of those who care about the system for its own sake, but, as she acknowledges, it does not establish that we necessarily have any reason to adopt the position of such a carer. As a result, McShane’s analysis provides an inference from *is* to *good* without making an inference from *good* to *ought*.

Bridging the good/ought chasm: Virtue ethics and ecosystems

One way in which we might be able to successfully add the missing inference to our existing account is suggested by Nolt: we might take an ‘Aristotelian’ - by which Nolt means virtue ethical – view on which the transition from good to ought is based on our conception of what behaviours are required from us in order to flourish as human beings. Nolt suggests that one thing required in order for human agents to reach their potential is a degree of ‘self-transcendence’ – that is, the extension of concern beyond the narrow boundaries of the self. Caring for nature represents the most widely dispersed form of self-transcendence, since it involves the extension of care to entities often at a significant remove from and very different from oneself. Transcending the self enables the human agent to live a life that is not petty or narrowly centred on the self (Nolt 2006, p. 372). Just as caring about those immediately around oneself represents an advance over allowing one’s own wellbeing or comfort to occupy one’s moral horizon, so too does acknowledging the appropriateness of care for the natural environment prevent the narrowing of one’s moral viewpoint towards merely human concerns. Nolt seems to position self-transcendence as an end in itself for human existence. Without wishing to deny that this might be a plausible way of conceiving of it, I would like to suggest that

self-transcendence is rather part of what Swanton would refer to as the 'profile' of one or more virtues connected to a broader project of human flourishing – that is, caring about things beyond the confines of one's own immediate existence is an element of several of the traits that a person of virtuous character will possess, although other character traits that such an agent would also possess may have nothing to do with care for other entities. According to Swanton, a virtuous agent will respond in various different ways to the values they encounter in the world around them: the accumulated modes in which a potential virtue is expressed with regard to the values in its field make up that virtue's profile (Swanton 2003, pp.21-22). On this account, pettiness is one of the vices at work in one who was unmoved by the prospect of a despoliated ecosystem, contrasted with virtues not only of benevolence but also of a kind of openness to the existence of entities different to oneself. Cooper has suggested that an indifference or hostility to nature is often accompanied with a more generalised stuntedness of personality (Cooper 1995, p.145). Expressing care for ecosystems can therefore be seen as part of the profile of a virtue of openness that is not available to us if we do not extend this care, or if we care about ecosystems purely for their resource value or aesthetic properties. Furthermore, someone who did genuinely care for an ecosystem could very easily find themselves describing its operation using the language of health to describe the nature of their concern. The viewing a watercourse choked with pollutants might yield a form of distress for them that would be experientially similar to encountering a person with a debilitating illness.

The values embodied within ecosystems may also engage with other virtues. An individual possessing the virtue of temperance, for example, might be reluctant to live in such a way as to impose a substantial burden on the Earth's ecosystems. An awareness of the role played by ecosystems in providing the Earth with the systems that support human life may cast humans as holding a debt of gratitude towards ecosystems that necessitates their careful treatment (Sandler 2007, pp.12, 41, 82). And, as is the case with species, a sense of humility may hold human beings back from making substantial changes to ecosystems, recognising their potential to exist and

develop as part of an ongoing history that predates not only human beings but sentient life altogether. The current form of an ecosystem exists as a chapter in the narratives surrounding a particular place, which narratives are capable of stretching on into the future. A humble person is likely to perceive the interplay between the various elements of an ecosystem and judge that it might better, if possible, to allow them to continue to develop free or relatively free of intervention, or that it is up to human beings living in the midst of these ecosystems to make compromises with their surroundings rather than insisting that the natural entities around them make way for them. On the other hand, humility might occasionally merit intervention, particularly in the form of 'rewilding', or allowing the ecosystem's natural processes to take centre stage once more: a person with an appropriate sense of humility will be able to tolerate, or even actively value, the unfolding of narratives in which they are not the 'main character'; they will therefore appreciate areas of the world that are not centres of intensive human activity. This may require actively stepping back from an ecosystem, or engaging with it in a drastically different, far less impactful manner.

Conclusion

This chapter began by considering a proposal somewhat similar to that extrapolated from Rolston and Johnson's positions in the previous chapter: that of whether it might be possible that another collective entity, ecosystems, might qualify as a subject of capabilities justice. Such a position has been advocated for by David Schlosberg and Adrian Armstrong who, between them, have proposed that ecosystems can be construed as possessing capabilities ('consideranda', for Armstrong) that might sufficiently similar to those of animals to allow for the capabilities approach to be extended to include them. The initial difficulty with this proposal was a familiar one: as with species, we can possibly argue that certain states of affairs contribute to the ecosystem's longevity, or its persistence in remaining in a certain state; what is lacking, however, is an account of what is actually good about the ecosystem's persistence. As this problem resurfaced, I considered whether the debate

surrounding the concept of ecosystem health might provide us with some useful vocabulary. Given the typically value-laden language used to describe healthy or unhealthy states, if it could be shown that these states could meaningfully be attributed to ecosystems, then this might demonstrate that they possess a good of their own. After considering several alternatives, I suggested that the most helpful account of the normativity of ecosystem health is that provided by Katie McShane: that something can be considered good (healthy) for an entity if someone who cared about the entity for its own sake would want that for it. Even so, although McShane may be able to establish that things can be good for an ecosystem in certain respects, what is missing is an explanation of why we should be concerned about what is or is not good for ecosystems. Identifying this final component required that we return to our discussion of virtue: there are various reasons why a virtuous agent will be the person to care about an ecosystem for its own sake. Thus, they will act with care and humility to ensure that the health of the ecosystem may be preserved.

Chapter VII: Justice and virtue

So far, I have examined what Nussbaum's capabilities approach does and does not require of us in relation to wild and non-wild sentient animals, nonsentient organisms, species, and ecosystems. In the case of wild animals, I suggested that Nussbaum's speculation that justice might require that we 'police nature' would be ruled out by a virtuous agent in possession of humility; such an agent would be reluctant to impose the rule of justice over individuals currently outside the community in such a way that it would result in comprehensive human control over non-human nature. In the case of species and ecosystems, although the capabilities approach does not seem to be able to provide any moral protection for these entities under the canopy of justice, I suggested that a virtuous agent might nevertheless be compelled to acknowledge various morally relevant features of ecosystems and species and that this might therefore coherently motivate providing them with protection.

There is the idea that we can in some cases derive norms from consulting Nussbaum's account of capabilities justice (such as when we wish to know whether it is just to breed and slaughter pigs for their meat) and in others consult an account of virtue ethics (such as when we wish to know whether it would be acceptable to blast a roadbed through a mountain range to cut twenty minutes off a commute). This rough juxtaposition of two accounts of right action that in some cases seem contradictory requires some explanation. In what follows, I shall begin by examining cases in which accounts of virtue and accounts of justice seem to support one another, before moving on to discuss possible ways in which we might make sense of the claim, put forward in Ch.III, that justice might in some cases be tempered by considerations of virtue. This will be followed by a discussion of the possibility that justice is itself a virtue, and therefore that conflicts between justice and humility ought to be approached in the same manner as any apparent conflict between virtues. Finally, I will look at the suggestion that a purely virtue-ethical account of right action is unacceptably agent-centric and does not adequately accommodate the value of moral patients. This concern will be met

with Sandler's response that this concern rests on a misunderstanding of the respect in which virtues are excellences of character, and that part of what it is to act in a virtuous manner is to respond to the value of other entities. I will argue that his process of perception and expression also takes place at the community level: the way in which the community is composed is itself expressive of virtues on the part of the community members, so that the constitution and projects of the community can express virtues of justice or humility.

Justice in support of virtue

There are a number of different ways in which justice and virtue might interact positively. Nussbaum herself seems to suggest that one of the responsibilities of a just society is to promote, or at the very least, not impede, citizens' projects of being good people. In her *Women and Human Development*, Nussbaum examines several women from impoverished communities in India who have benefited from, as she sees it, the promotion of their basic capabilities. One way in which she observes the quality of life of one of these women, Vasanti, to have improved is the fact that, after a micro-credit scheme has helped her to achieve financial security and independence, she is able to give support to others by participating in a project to improve handling of domestic violence cases (Nussbaum, *WHD* p.107).⁵⁰ To reiterate this difference in negative terms: Vasanti's previous unjust circumstances not only impaired her quality of life by causing her suffering: her quality of life was also impaired through constraints on her ability to express her generosity and follow her conception of what it is to be a good person. Nussbaum therefore describes an insidious aspect of the effect that poverty and other injustices exert on the individual: by impairing one's exercise of the virtues, injustice can diminish human dignity. More generally, one might say that Nussbaum holds in common with most other liberal political philosophers that the purpose of justice is to allow a large variety of individuals

⁵⁰ Nussbaum makes this observation very neatly in this passage: "Interestingly, [Vasanti] now felt that she had the capacity to give to others, something that the narrow focus on survival had not permitted her to do."

the space to pursue their own conceptions of the good life. Our political conception ought not therefore stand in the way of the development or exercise of the virtues, since these represent a key element of our conception of what it means to be a good person. This is probably the simplest and most obvious interaction between virtue and justice, although perhaps things are particularly clear in the case of the capabilities approach, where Nussbaum's assertion that promoting flourishing is a matter of justice and the characteristic virtue ethical claim that virtuous action is key to flourishing as an individual seem to support one another.

There is a compelling case for believing that a just community can foster the development and exercise of virtue in humans; it is worth speculating as to whether the same can be said for nonhuman animals. Mark Rowlands has suggested that at least some non-human animals are capable of being what he calls 'moral subjects' – that is to say, while they may not be capable of every mental process we associate with full moral agency, they nevertheless can experience mental states with moral content (Rowlands 2012, p.71, loc.1025). Rowlands identifies moral heroism (rushing into a burning building to save someone trapped inside, for example) as a form of moral behaviour that may have little to do with the ratiocination associated with principle-based ethical theories. Similarly, Donaldson and Kymlicka use anecdotal examples to support their contention that animals existing in community with humans exhibit behaviour that expresses concern for others, often in the form of what we might consider acts of moral heroism; they recount the case of Lulu, a pig who, on discovering her human companion in the throes of a heart attack, ran out of the house to lie in the road until a car stopped, then led the driver inside back into the house to provide aid (Donaldson and Kymlicka 2011, p.119). Individuals who carry out heroic acts rarely bother to carry out hedonic calculations or check whether their actions accord with maxims that can be willed into universal laws; indeed, an agent who did show considerable deference to ethical principles in their emergency decision-making is likely to invite questions as to their moral competence. It seems possible, therefore, that there might be some forms of moral action of which non-human animals

are capable: if this turns out to be the case, then presumably these forms of moral acknowledgement and expression ought to be given some degree of protection by a capabilities-based conception of justice.

Virtue in support of justice

So there is a clear case that living in a just society can be conducive to a human developing and exercising virtues and, more speculatively, it may be possible that the same can be said for some nonhuman animals: more generally, one might say that for those organisms capable of moral feeling and action, living in a just or unjust community will affect the extent to which an individual is capable of living in accordance with their own moral concerns, including concerns of virtue. However, the inverse may also be true: if a society is to be just, then there may be a minimum extent to which its members need to possess certain virtues (or be free from certain vices). These might be thought of as 'virtues of citizenship' or something similar, although the specific virtues themselves may not be that different from those that we think of as conventional moral virtues: for example, correcting injustices in one's society may require courage, perseverance, fortitude, patience or self-discipline, all of which also contribute to the flourishing of the individual possessing them. Establishing capabilities justice in a given community where it is lacking, therefore, represents a specific challenge; when Sandler and Swanton talk about the virtues as "character traits that enable their possessor to meet well the demands of the world" (Sandler 2007, pp.74-75), we might see the fight to secure the capabilities of individuals for whom they have previously been denied as an arena in which the world is particularly demanding. The work of the Civil Rights Movement required significant exercise of the virtues from its members, as will Vasanti's participation in the anti-domestic violence initiative. The establishment of just conditions is probably the most obvious case in which justice makes demands upon the virtues of individuals; fighting and, subsequently, preventing injustice is an easily recognisable moral challenge.

What I would like to consider in more detail is the possibility that being a citizen in a just society – even a well-established just society – requires a commitment in terms of virtue from its members in the way in which they go about their daily lives. As a form of liberalism, the capabilities approach aims to describe a framework within which individuals of differing abilities and inclinations can pursue a plurality of different conceptions of what it is to live a good life. The members of such a society ought therefore to strive to meet well the demands of a world in which they are likely to encounter and be expected to live alongside individuals with whom they have relatively little in common in terms of background and life goals. And it seems the case that this is a demand that an individual will fulfil better or worse depending on their possession of one or more character traits. At the bare minimum, this seems to require a certain amount of tolerance from the members of the community in question. Individuals who are disinclined to accept that other people have needs and projects that are as valid as their own are unlikely to thrive in a plural community composed of a plurality of ways of life: more destructively, individuals who are particularly lacking in tolerance are likely to create an environment in which the ability of other community members to pursue their own forms of the good is hampered. Thus, a community containing a large number of intolerant individuals is unlikely to be a just one. On the other hand, ‘tolerance’ may be too passive a term for the virtue (or perhaps it is a family of similar virtues) required in order to maintain a just society. Perhaps if we could rely on all of our fellow citizens to be suitably tolerant, then it would be enough to cultivate a virtue that is primarily occupied with ‘minding one’s own business’: in the real world, where these ideal conditions do not typically obtain, a more robust virtue may be necessary, particularly where there is continuity between past injustices and the marginalised conditions of contemporary peoples (in, for example, the post-colonial context). In such cases, a virtue of tolerance ought to be paired with a more vigilant and reflective virtue that resembles a sense of fairness.

The virtue referred to by Aristotle as justice consists partly simply in being law-abiding⁵¹ but also in fairness, in the form of not 'over-reaching' (Aristotle also refers to this as the component of 'specific justice' as opposed to 'general justice', i.e., right action as a whole – Aristotle 1999 p.69 1129b §15). Aristotle claims that an unjust person may carry out actions that are typically associated with another vice (he uses the example of adultery), and that what makes such an action unjust is that it is carried out for profit and, particularly, personal profit (whereas an action carried out through another vice – intemperance, say - can frequently result in one incurring an expense): thus, unfairness for Aristotle is related somewhat to acquisitiveness (*pleonexia*), and seeking unjust profits. This conception of fairness as a virtue could be an attractive one for a liberal virtue ethicist, seeming to incorporate as it does both a willingness to make space for the needs of others (in this respect it remains somewhat similar to tolerance) and a more contemporary awareness of dynamics of power and privilege. It may be a stretch to suggest that every individual with a sense of fairness will specifically endorse the capabilities approach to justice when it comes to issues of distribution; nevertheless, they will be interested in finding the best answers to questions with which Nussbaum is concerned, such as how one can set up a society that provides justice for all of its members, including those who have been historically disadvantaged, and so they will presumably give the capabilities approach serious consideration as one of a number of potential answers. For a member of an already privileged group to insist on a larger share of society's resources than the rest (as do racial supremacist groups, for example) could be interpreted as seeking an unjust profit, as would

⁵¹ Following the law may still be recognised as part of a virtue of citizenship if we interpret it as a kind of willingness to abide by laws that are just and that are made in good faith – laws that promote the overall flourishing of community members, or which have positive practical implications, for example. This qualification hopefully allows us to avoid any suggestion that, say, participating in a campaign of civil disobedience (as discussed above) should preclude a person from being considered virtuous. Aristotle appears to operate under the assumption that being virtuously lawful can never conflict with being virtuously fair (Aristotle 1999, p.68, 1129b §8: "Hence the just will be both the lawful and what is fair, and the unjust will be both the lawless and the unfair" – however, later, in 1130b §9, there seems to be some acknowledgement of a split: "But the unfair is not the same as the lawless; it is related to it as part to whole, since whatever is unfair is lawless, but not everything lawless is unfair."): this is presumably because Aristotle takes himself to be describing the justice of an individual living in a community whose laws are already fair (Ibid., p.336; a helpful discussion of the relation between the just individual and the law can be found in MacIntyre 1981, pp.176-182).

attempting to deny reparations for a historically marginalised group, or assistance needed by a currently disadvantaged individual seeking to achieve their basic level of flourishing. We would, for example, tend to consider an able-bodied person extremely perverse if they were to insist on being allocated the same resources as a wheelchair user. Humility can also play a role in citizenship; recognising that one of the reasons one's life is going well may be due to one's being the recipient of privilege, or that one's experience cannot necessarily be generalised to others.

These all seem to be virtues that can broadly be classed as virtues focused on 'keeping one's distance', being prepared to compromise on one's projects to accommodate the flourishing of other society members, and recognising that one inhabits a community with other members whose needs, abilities and opportunities are different from one's own. They have as a prominent common component what Swanton, following on from Kant, identifies as respect, one of the two 'great moral forces' that are in equilibrium in virtuous character (Swanton 2003, pp.99-101). Swanton suggests that all moral virtues ought, if they are to be properly exercised, to strike a balance between an 'attractive' force, love, and a 'repellant' force, respect. Respect seems to play a prominent role in the function of the virtues mentioned previously: it is clear that if we can coherently talk of virtues of citizenship, then many of the behaviours and attitudes that we consider desirable in citizens of a liberal community are those that evince respect for other community members. It is less clear as to what role, if any, love (as 'coming close') should play. We might think it sufficient that we simply require, in terms of the shape of the moral character of the 'good' citizen, that we are prepared to accommodate the flourishing of others. Already, the way I have described the role of respect in humility, fairness and tolerance delineates a standard of which many people already fall short: if everybody was able to develop and exercise these virtues, then that would arguably result in significant progress on its own accord, given the number of injustices that seem to arise primarily from individuals failing to 'leave one another alone'. Given that even this development may strike us as excessively utopian, the idea that being a member of a community might require us to love one

another needs careful articulation if it is not to violate credibility. Swanton explains that she thinks of the equilibrium between love and respect as being a matter of “love (the more demanding form of moral response) being limited by respect” (Swanton 2003, p.100), which is to say that our positive regard for others, or for ourselves or our projects, ought to stop at a sensible distance from its targets before it becomes jealous, controlling, smothering, or excessively territorial.

One way of making sense of this compromise between love and respect in the civic sphere might be to introduce an analysis of what might be called the science of ethics. Nussbaum makes it clear that she is concerned to move away from the historical contractualist emphasis on mutual self-advantage as the motivation of the several parties to the social contract, instead emphasising the fact that human beings arrive in society as members of existing networks of care and dependence (*FJ*, pp.90-91). What the capabilities approach seeks to do, she argues, is to start from the ‘sentiments of benevolence’ that individuals feel towards one another and seek to “render them stable through the development of a compassion that is attuned to the political principles for which we have argued [using independent arguments from human dignity]” (p. 91). In other words, Nussbaum is not producing a (partial) liberal account of justice from an imagined, atomistic ‘state of nature’, but rather views the capabilities approach as establishing principles that protect the dignity of individuals who are already members of communities bound together by the moral concern that individuals feel for one another. Thus, the ‘love’ component of our virtues of citizenship is present in the concern for others that causes human beings to come together to form communities. Partial support for this model can be found in Callicott’s analysis of the ‘science of ethics’. Citing Hume and Darwin, Callicott proposes that the origin of ethics in humans is located “in other-regarding feelings, not in reason alone” (Callicott 2013, p.121), those feelings having been genetically selected for due to the evolutionary advantage conferred by social cohesion and cooperation (p.112). Feelings of concern and care can be traced back to their utility in securing the survival of their individual possessors; their extension to individuals outside kin-bonded societies is due, according to Callicott,

to their nature as ‘crude, blunt instruments easily deflected from the *teloi* they evolved to serve” (p.121).⁵²

Clearly, to extrapolate wholesale the importance of other-regarding virtues from Callicott’s theory of the ethical science would invoke Hume’s Is/Ought dichotomy. It does not follow from the fact (if it is a fact) that natural sentiments have an evolutionary basis that they are themselves ethically desirable. As Callicott points out, moral sentiments, like our fight-or-flight responses, can be engendered by inappropriate stimuli, or fail to register in relevant situations (p.119). We would not want to defer to unexamined moral sentiments as the sole basis for ethical judgement. As mentioned above, Nussbaum holds that part of her aim in delineating the capabilities approach is to start from our other-regarding impulses and make them a stable model for a society based on the universal recognition of the dignity of the individual. As Callicott observes, other-regarding sentiment seems to be a part of human animality (pp.58-59); Nussbaum starts from those aspects of human animality that are best able to support a life worthy of dignity and integrates them into a community model that promote the flourishing of all of its members (*FJ*, p.70). The model, therefore, is very similar to Swanton’s characterising of the roles of love and respect in the virtues of the individual: a liberal society requires that individuals respect and provide space for the flourishing of other citizens (in other words: that they maintain a certain distance from one another) while acknowledging that without community bonds of positive regard there is no community to begin with. Part of what it is to flourish as a human, Nussbaum insists – part of what is worth protecting in human animality – is to live with regard for others: this is a key element of human life (2000, p.92).

⁵² Donaldson and Kymlicka make a similar point, although they do not endorse a capabilities approach: they start from the fact that many residents of existing communities are in fact non-human, and argue that this is where many of those animals (especially domesticated animals) belong: justice for animals therefore requires that we recognise the place of these animals by granting them citizenship of the communities into which they have been placed, and to which they have become adapted. Similarly, many animals, though not intentionally welcomed into communities as domesticated animals have been, have adapted to the environment that human beings have built and call it home (Donaldson & Kymlicka 2011, pp.86-88). Co-habitation and symbiosis between humans and animals is taken as a starting point in Donaldson and Kymlicka’s account of the rights of animals, not as a deviation from a ‘natural’ state in which humans and non-humans kept out of one another’s way.

Likewise, Swanton maintains that many of the virtues required for an individual to meet well the demands of the world contain a love for others as a component. This does not necessarily manifest as a desire to be well-disposed to other people all the time, or never wishing to be alone; often for Swanton, love may simply be a thinner, agapeic lack of indifference or coldness (Swanton 2003, pp.107). Furthermore, Swanton highlights one aspect of love that is of particular import for a citizen of a liberal community, especially a capabilities-based community. Swanton discusses a form of love based on Iris Murdoch's notion of attentiveness: in this respect, love becomes a way of perceiving the world such that the features of what one perceives are beheld in a receptive manner. A hostile gaze, Swanton suggests, hampers one's ability to be attentive to the positive features of those around the beholder and invites "the distortions of one's own ego needs" (pp.111-113). Such receptivity is particularly in tune with the spirit of the capabilities approach: for an individual to do well as a citizen of a capabilities based-community, it will help if they are able to be receptive to the positive features of their fellow citizens and, especially, to apply moral imagination to what an unprepossessing subject might nevertheless be able to do. A tendency to write people off or focus on their detriments is characteristic of a hostile gaze, according to Swanton: someone who maintains such an assessment of their fellow community members is likely to be cynical regarding what the community can achieve, what it has to offer them in particular, and what they in particular have to offer other community members. Animals are particularly susceptible to underestimation in this respect: there is a historical tendency to view even advanced animals in terms of their resource value; according to this view, natural mating behaviour between cows and bulls is an inconvenience if it conflicts with production schedules, chickens are an economic liability once they have stopped laying, and moles ought to be killed or displaced if they damage one's lawn. Learning to look with love on non-human community members, so that we take in what they are typically capable of and inclined to do in conditions that are optimal for them, is highly conducive to any attempt to provide justice for them.

Justice and virtue in conflict

Thus, establishing and maintaining a just community can be seen to make several demands on the virtue of the community's members. Since it is composed of people who meet or fail to meet the demands of the world based on their possessing or failing to possess certain character traits, the virtues, it seems plausible to suggest that part of what might make the community itself succeed or fail is the character of its decision makers and citizens. Yet this does little to answer the question posed at the start of the chapter. Hopefully it can be seen that justice and virtue can in many cases support one another: people are in a better position to develop and exercise the virtues in a just society, and justice is made more robust if supported by individuals in possession of good moral character. However, we are no closer to knowing how to make sense of situations in which the requirements of justice and the demands of virtue come into conflict, as they appear to when Nussbaum's commitment to justice for wild animals seems to require acts that go against humility.

One way of viewing this conflict has already been touched on in the discussion above: perhaps justice can be articulated in solely virtue-ethical terms. For Aristotle, justice is a virtue possessed by individuals and, although Aristotle's account of justice is not easily recognisable to a contemporary audience, there is enough convergence between the two accounts to suggest that this may be a workable way of viewing things. A significant part of what Aristotle refers to as 'particular justice' is, as already noted, bound up in a recognition of fairness. The preceding treatment of fairness has suggested that an account of a just society can be augmented by an account of a set of civic virtues: this view still makes use of a distinction between a free-standing set of norms, 'justice', on the one hand, and an account of good moral character, 'virtue', on the other, which sometimes converge and sometimes conflict. However, we may be able to go further and suggest that the policies established by the capabilities approach are part of what is required of a virtuous individual: the approach obtains its ethical force from the fact that acting according to its principles is

ostensibly part of what it means to flourish in the world. Thus, what makes justice good is that it represents, like all of the other virtues, a characteristically excellent way of responding to certain challenges posed by human existence. I have already argued that an agent in possession of the virtue of fairness will not seek (as Aristotle says) to make an unjust profit: translated into ‘capabilities-speak’, this means that they will not seek to advance their own interests to such an extent that they impinge on the flourishing of other community members. A sense of fairness also seems compatible with Nussbaum’s commitment to heterogeneous accounts of flourishing: rather than a ‘naïve’ sense of equality in which all community members are afforded an equal allotment of primary goods, a fair distribution can take into account the fact that different community members require different allowances: while domestic cats may be able to flourish in a typical family home, a troupe of former research chimpanzees will require a large habitat with many opportunities to explore and improvise. Perhaps it would therefore be worthwhile to consider dissolving the distinction between the demands of virtue and a free-standing account of justice: rather, we would say, what makes a just action or state of affairs just is simply the fact that it is in line with the content of the virtue, justice.

Viewing justice purely in terms of virtue presents a particular advantage when it comes to examining the apparent conflict between justice and humility at play in the previous chapters’ discussion of policing nature, in that it allows this conflict to be addressed in the same manner as any other conflict between two or more virtues. This process usually involves an appeal to *phronesis*, or practical wisdom. It is not enough that a person should be compelled to treat others fairly: this sense of fairness should be exercised in an appropriately wise fashion. Wisely exercised virtue exists for Aristotle as a mean between vices of excess and scarcity: to judge where this mean falls in a given situation therefore requires that one possess and apply *phronesis* (MacIntyre 1981, pp.180-181). In the case that one’s account of justice appears to require that one ought really to take control of as much of the natural world as possible in order to secure justice for individual wild

animals, consulting one's sense of practical wisdom will reveal that such a course of action is in fact morally undesirable: expanding the community so that it includes all animals, wild or domesticated, is to affirm that human values are universally applicable throughout all of nature, a stance that smacks strongly of hubris, a vice. Practical wisdom reminds the agent that there are values to be found in wildness, such as the autonomy of wild animals, for which we ought to make a space in the world; that human beings comprise one species among a plethora of others inhabiting the earth; and that the moral disposition of an individual or community who sought to spread the rule of law over the entire planet is that of the conqueror or autocrat, not the citizen (this argument is explored in detail in Ch.III). Practising justice in a way compatible with wisdom need not require that we seek to make the just community as large as possible; we would do better to limit our concerns to those animals for whom we are more closely responsible.

Resolving the conflict – two possibilities

There are two routes by which we might proceed to make sense of the apparent contradiction between the virtues of humility and justice. The first is the more optimistic: Hursthouse suggests that the wise moral agent resolves conflicts between the virtues not so much by seeing that (in our case) humility requires that we sometimes tolerate injustice (i.e., a matter of two virtues being at loggerheads), but rather that once practical wisdom is applied to the situation, we become aware that the conflict is only apparent (Hursthouse 1991, p.231):⁵³ in fact, we are not really being just if we take on the task of 'supplanting the natural by the just'. There is some room for this view in the account of justice as a virtue of fairness that I have sketched above: being able to apply one's values to those who not only do not subscribe to them but exist well outside the community within which they (the values) were formulated is a kind of privilege: an unearned advantage. Even if it appears to

⁵³ The example Hursthouse uses to make this point is of an inexperienced person deliberating whether they should tell an upsetting truth to a friend, or lie to spare their feelings. Hursthouse suggests that what the agent would realise, if they possessed practical wisdom, is "not that honesty or justice sometimes requires one to act unkindly or cruelly, but that one does people no kindness by concealing this sort of truth from them" (Ibid.)

us that the individuals over whom we are extending our values will be better off for it, such an action requires that we place ourselves in a position of authority over these others. It could therefore be the case that being just (*qua* possessing justice as a virtue) does not require that we police nature (in the process claiming such an advantage).

The second, less optimistic view of conflict between the virtues might be termed the 'Sophoclean' view (the view described by Hursthouse being more in line with that of Aristotle) and is described by MacIntyre. Conflict, both between virtuous agents and the virtues held by a given agent, is on this account a genuine possibility. While on Hursthouse's account we might only police nature if we lack the practical wisdom to see that this is not what the virtue of justice requires of us, for Sophocles, we can possess *phronesis* and still be torn between justice and humility. Thus, the conflict between what justice demands and what humility forbids becomes a tragic dilemma: we cannot realise one set of goods without forfeiting the other (MacIntyre 1981, p.165-166). It should be noted that Hursthouse's optimistic model may be true of a great many situations without it necessarily being the case that there are no genuine conflicts between virtues. Although I have suggested that there is a plausible definition of justice as the virtue of fairness that does not conflict with humility and attentiveness towards the natural world, it may be the case that there are other ethical situations, environmental or otherwise, that do take on the character of tragic dilemmas, nevertheless. Furthermore, even if I am wrong, and the question of policing nature is indeed a tragic scenario, the fact that one virtue, justice, may not be the clear favourite over another (humility) still renders the question of whether or not we should extend the capabilities approach to wild animals less urgent. Without providing a conclusive refutation of Nussbaum's proposal regarding wild animals, the suggestion that this aspect of the approach creates a tragic conflict between justice and humility nevertheless casts doubt on any assertion that policing nature is obviously the right thing to do: practical wisdom requires that we engage in further reflection on this matter before embarking on a course of action. Finally, although this approach may not immediately yield a clear account of

what policy we ought to follow, it nevertheless seems to resolve the issue of meta-ethical 'mismatch' raised throughout this chapter. If being just is primarily a matter of exercising virtue, then the answer to the question of how we should proceed when humility and justice tell us to do different things can potentially be resolved in the same manner by which we would approach any other apparent conflict between two virtues. In other words, the conflict may or may not remain real, and may or may not be resolvable, but it is at least made more intelligible than would be the case if it were a matter of disagreement between one set of norms derived from justice and another set derived from a different basis altogether.

Still, it would be good if we could advance at least some portrait of what a constitution that acknowledged that both justice and humility were important factors governing our relationships with animals might look like. I propose that such a community would acknowledge, as Donaldson and Kymlicka point out, that it contained many non-human citizens who deserve the protection of justice. These animals' ancestors have been brought into the community without their consent and adapted to fit into it; therefore, they should be considered to have a right to exist in it and to enjoy its protection on equal terms with other community members (Donaldson & Kymlicka 2011, pp.78-80). They should therefore be covered by whichever entitlements we think are appropriate for members of our community: I hope that I have made a reasonable case throughout this thesis for choosing the capabilities approach. So the sheep, cows, dogs, cats, pigs and other domesticated animals living in the community would have a right to have their exercise of their capabilities protected and promoted up to a reasonable threshold level. I would add that, analogous to what Nussbaum suggests with regard to wheelchair users, some modification of public space would be required to facilitate the integration of these individuals into the community and to make it clear that these are community members in good standing whose dignity is recognised by the constitution, as well as simply aiding them in the ways in which they live their lives. Within the community, then, it looks as though justice proceeds more-or-less according to what Nussbaum

specifies in *Frontiers of Justice*, although, as outlined in Chapter 1, I am inclined to interpret the capabilities of animals in a way that provides somewhat stronger protections against being eaten or treated as property than she does. Furthermore, the framers of this constitution will recognise that the borders of this community are somewhat porous: they have let in many of what Donaldson and Kymlicka refer to as ‘liminal animals’ – foxes, rats, mice, pigeons and so on. They suggest that the right of these animals to exist in our communities should be respected where there is no conflict between these ‘denizens’ and the community’s permanent residents; although there is not the same scope for cooperative community membership as there is in the case of domesticated animals, they similarly make their homes in the same space as us, and they do not lose their rights to be here simply because humans have chosen to build in their habitats (pp.243-244). Again, this may involve changes in human behaviour and adaptations to public space to, for example, allow these animals access to what they need. These adaptations can also be related to these animals’ capabilities. Although there is potential for liminal animals and humans to come into conflict, this should be managed through campaigns of public education, careful disposal of food waste, and other schemes to try and accommodate liminal animals in ways that minimise risk (pp.244-246).

Furthermore, such a community will maintain a good sense of its boundaries. As Donaldson and Kymlicka point out, the boundaries between built communities and the territories of wild animals are not contiguous in the way that sovereign human states are; nevertheless, it is possible for us to set aside a “mix of designated territories and corridor/right of way rights” (p.189). This is because a community with a sense of humility, as well as justice, will not see the existence of areas that are not under its control as a challenge to be met, but rather as something that ought to be preserved. Agents and institutions governed by humility may well be sympathetic to Donaldson and Kymlicka’s portrayal, discussed in Chapter 3, of wild animals as citizens of sovereign territories, and accord this status far more so than if they viewed the situation of wild animals purely in terms of justice (though, as I have suggested above, viewing the territory of wild animals as a vacuum on

which to impose the value of justice may itself be in violation of the sense of fairness discussed by Aristotle). Thus, they will be inclined to halt, or even roll back (through projects of 'rewilding') the process of human intervention in the lives of wild animals, ceding them more territory in which to flourish (or even fail to flourish) on their own. Focusing on the fact that the mixed human-animal community and the sovereign territories of animals have boundaries may be the best way of resolving the conflict between humility and justice here: justice is generally, as already noted, seen as regulating behaviour between individuals in communities; it has nothing on its own to say about expanding the boundaries of the community to accommodate as many individuals who may benefit from being subjects of justice as possible. Perhaps, then, this conflict at least can be resolved in the manner suggested by Hursthouse – the genuinely virtuous agent or institution will understand that justice is a virtue primarily oriented towards relations within a community, and that not only does 'policing nature' go against the constraints required in order to exercise humility, but that such a policy is not really a requirement of justice either.

Finally, something should be said about how such a community will view other human (or, rather, mixed human-animal communities). These are presumably also sovereign communities; does this therefore mean that our primary obligation towards them is to leave them alone? Perhaps, in some cases, but it should be noted that there is far greater scope for cooperation between human communities such as nation-states than there is between wild animals and humans. Human communities can consent to cooperate with one another in all manner of endeavours – they can sign up to international conventions on the use of torture or financial regulation, participate in researcher exchange programmes, joint space exploration missions, or famine relief operations. Even when we feel compelled by justice to aid a country suffering from underdevelopment or natural disaster, we would generally think twice about doing so if we did not have the cooperation of at least some of the people who would be affected by our actions. The fact that other communities can consent to cooperate with our own makes the issue of helping those in need

somewhat clearer, or at least, less odd, in this case than in the case of policing nature. Additionally, the fact that members of other human communities tend to be in communication with us and can tell us what they are going through lends the issue of, say, disaster relief a greater immediacy than in the case of animals suffering in the wild. In this sense, it is more like the case of the beached whale discussed in Chapter 4: we are confronted with suffering here in a way that does not factor when we are contemplating the suffering of animals ‘out there’ in the wild. So a community possessed of both justice and humility will be careful as to how it goes about offering aid to other communities – it would not want to unduly foster dependence, for example – but it will be prepared to help nonetheless, and will not see this as contradicting the constraints of humility if done properly.

Objections to the shift to virtue: Rolston and Callicott on virtue, value and self-interest

The claim that all of the ethical norms under discussion are best conceptualised as being derived from claims about virtue and character has been the source of misgivings among environmental philosophers.⁵⁴ Rolston in particular holds that virtue ethics represents at best an incomplete conception of right action, due to its supposed focus on the moral agent as the measure of moral value. For Rolston, what is lacking in a purely virtue-ethical account is the necessary consideration of the value of the other: that is to say, while we may exhibit human excellences when we preserve an endangered species, we ought also to make reference to the value of the organism saved (indeed, Rolston seems to take the position that this is the more important motivation). According to Rolston, it “seems unexcellent – cheap and philistine – to say that excellence of human character is what we are after when we preserve these endangered species” (Rolston 2005, loc.1807); to assert that

⁵⁴That is, those norms pertaining to the just treatment of humans and certain nonhumans, as well as those norms regarding virtuous treatment of other sorts of entities such as ecological wholes. There are plenty of other ethical norms, of course – those concerned with familial relationships, friendship, custodianship of important artefacts, exercise of spirituality and membership of other institutions such as professions, for example. All of these areas seem to involve norms that can also be articulated in terms of virtue ethics; perhaps, however, there are some ethical fields that might yet not derive their norms from an account of the virtues.

virtue comprises the whole of our account of environmental ethics, for Rolston, is to mistake the byproduct of right action (human excellence) for the correct target of right action (the value of natural objects). Although Callicott seems to view this as a less urgent problem than Rolston, he also seems to take the view that virtue-ethical accounts of ethics prescribe actions that promote or exhibit or constitute excellent states, and self-respect on the part of a human individual, craft or community (I will return to discuss this unusual last element later): “Virtue ethics is all about character, reputation, and *self*-respect. It is ‘agent-based’ rather than patient-based. A virtuous person chooses to be just, for example, “primarily to exemplify excellence of character and only secondarily to give fair consideration to the interests of others” (Callicott 2013, p.157; original emphasis).⁵⁵ Though they may disagree as to how severe a failing this is, both writers seem to conclude that virtue ethics tends to describe ultimately anthropocentric concerns: the point of being virtuous, it seems, is to realise a purely human good.

A similar misgiving might be directed at any attempt to describe justice in virtue-ethical terms. The point of being just, one might argue, is not to realise a particular state of excellence or self-respect on one’s own part, but because other community members have value that entitles them to certain minimum standards of respectful treatment. Although one might very well realise excellences of character when treating others justly, the primary purpose of justice is to outline what is due to an individual as a result of their belonging to a community. As already discussed, it may be easier to treat others in a just manner if one possesses particular virtues, but an account of justice provides a set of norms that are free-standing from an account of what it means to be a virtuous agent.

⁵⁵ I say that Callicott views virtue ethics’ anthropocentrism as less of a problem not because Callicott is an anthropocentrist in all things but because he maintains separate ethical bases for his ‘Land ethic’ and his ‘Earth ethic’. While Callicott seems still to hold that ecological wholes have values that motivate the land ethic, when it comes to constructing an ethic that covers humanity’s relationship with the Earth *in toto* he suggests that an anthropocentric ethic may suffice. Although it is hard to see how a deontological or consequentialist ethic could support injunctions against mistreating an entity, the Earth, that is far too resilient to be meaningfully harmed, Callicott suggests that we may still be capable of treating the Earth in a manner incompatible with our own *self*-respect (Callicott 2013, p.301).

Sandler addresses Rolston's concerns directly, and his response is instructive in this case as well. It is probably not too difficult to anticipate: the approach to virtue described by Rolston would indeed be inadequate as a full account of how we ought to respond to the values we encounter in nature, but it is not Sandler's approach, because Rolston is conflating what makes a character trait a virtue with the motivations of a virtuous agent. The 'excellences' that Sandler's virtues represent are not sought because they are goods in themselves, but because they are excellent ways in which *creatures like human beings* relate to the world in which they find themselves (Sandler 2007, pp.112-113). Although part of what makes a character trait a virtue is that it is an excellence in being in the world as a human being, this is not the motivation of the virtuous agent, and Rolston is incorrect to treat it as such. Part of what it means to perceive the world in a virtuous way is to perceive the value that is saved by preserving an otherwise unprepossessing species of plant: the value of the plant is part of what an agent concerned about species preservation is *responding to* - preservation is one of the "constellation of modes of moral responsiveness or acknowledgement" (that is to say – morally appropriate ways of responding to value in the world) of virtues like humility or fairness (Swanton 2003, pp.3-4).⁵⁶ In Swanton's moral psychology, the virtuous individual's 'foreground motivation' of preserving the species for the species' sake is distinct from their 'background motivation' of being virtuous (p. 29). When a virtuous agent campaigns to save the plant's habitat, what they are *doing* is right because it represents an excellent way of being in the world, but what motivates them is concern for the value that would be lost if that species were to go extinct. The moral attention is directed outward towards the species, not inward towards the agent's own character. Rolston and Callicott describe what might be thought of as a 'Cub Scout' approach to virtue, where the agent checks off their moral achievements as though collecting merit badges. In the process they would, paradoxically, fail to realise their virtues fully: even their other-regarding actions would be self-directed. Such an agent would not only fail to be fully moral in Rolston's sense, they would also fail

⁵⁶ See Ch. VI for a discussion of how a virtuous agent ought to take the value of species into consideration, as well as a critique of Rolston's account of the naturally occurring (agent-independent) value of species.

to satisfy the criteria for right action provided by virtue ethicists like Swanton and Sandler, for whom being virtuous is a matter partly of perceiving the world in an appropriate way (as it were, perceiving the demands of the world in order to meet them – see Swanton 2003 on attentiveness, pp.110-111).

Persuasiveness and normative force – a problem for justice in particular

So far as this question pertains to justice, some misgivings may remain. If what we mean by justice is a set of norms informed by what it is for an individual to possess a sense of fairness, there seems to be a disconnect between an account of individual morality and what Nussbaum actually wants the capabilities approach to do, which is to form part of the structure of a community that promotes the flourishing of all of its members. It is all very well to say that individuals ought to respect other community members because that is what is required by virtues of justice and fairness, but in the event that not everybody is necessarily inclined to act according to those virtues there must be some structure in place to protect potential victims of injustice (in capabilities terms, these are those individuals who have their flourishing impaired because they are not able to exercise their capabilities to the minimum level). If justice is solely an individual virtue then it may be that those who commit injustices are bad people, but it is beyond the power of individual just agents to adequately prevent or compensate injustices. Producing a just society on this model seems excessively utopian, placing an unrealistic burden on just agents to seek out and address justice wherever they encounter it. A conception of justice that was reliant solely on individual community members being just seems unlikely to remain stable over time: there may be too few virtuous individuals to make a difference, or the virtuous individuals may not be in a position to change unjust institutions. Nussbaum herself accepts as a genuine concern the possibility that the capabilities approach is too reliant on a high level of benevolence on the part of community members towards individuals (*FJ*, p. 408). Part of the appeal of basing our conception of justice on universal principles is the economy of such an approach: it does not require that community

members strive to realise good moral character themselves but rather makes reference to principles that rationally self-interested parties can supposedly endorse, *whether they are possessed of any particular concern for other community members or not*. Because the principles of justice are supposed to be impartial, and to hold for all individuals, it may seem inadequate to base them on appeals to character traits possessed by particularly excellent people.⁵⁷

Relating this back to the question of virtue, then, perhaps we might respond that a theory of justice is an attempt to articulate part of what an agent seeking to be just might aspire to. If a just agent does not seek unfair profits, then society ought to be organised in such a way that no particular group or individual's conception of the good is unduly promoted or suppressed. Thus, the content (or part of the content) of the virtue of justice is expressed in the community's constitution, forming principles of justice that are intended to promote the politically relevant capabilities of the community members. There may be aspects of being a just individual that are not easily articulated in terms of general principles, because they depend too greatly on the particulars of individual moral situations and on the other characteristics (abilities, authority, other commitments) of the agent in question: nevertheless, although it may be that we are unable to formulate principles describing

⁵⁷ That Nussbaum does not spend a great deal of time doing this is interesting. As discussed in Ch. I, *Frontiers of Justice* does not include a great deal of argument as to why animals possess value that a conception of justice ought to recognise. Rather, Nussbaum claims that one problem with existing (particularly contractualist) accounts of justice is that they do not adequately handle justice for nonhuman animals and proceeds to describe how the capabilities approach can accommodate them. Discussing the prospects for overlapping consensus, Nussbaum admits that a clear account of the moral value of animals "raises profound metaethical issues that go beyond the arguments of [FJ]" and beyond her "current understanding" (p.389). Importantly, however, Nussbaum does not hold that this prevents her from including norms regarding the capabilities of animals in her partial account of justice. She seems to think that there is at least potential for an overlapping consensus among different human conceptions of the good that can, or at least will in the future, support justice for animals if we interrogate them rigorously (pp.390-391). Although a small minority of people are vegetarian or vegan, very few people genuinely believe that we can do whatever we want to animals, that ethics does not enter the picture at all. Proper exploration of why it is that the question of ethics continues to adhere to our discussion of how we treat nonhuman animals may well lead to more widespread acceptance of their being included under the protection of a theory of justice.

This does not necessarily require that humans ought to agree on the specific value of the life of a nonhuman animal, however. Nussbaum is clear that the principles put forward in the capabilities approach are political, not metaphysical: the claim that animals deserve protection as members of communities regulated by justice is not intended to be taken as a claim to, say, biospherical egalitarianism (p.391). They are intended to be *expressive* of a broad position adopted by a community that its members' lives are worthy of their characteristic forms of dignity: in a sense, the principles adopted by a community ultimately describe the ways in which the community perceives and responds to value in the world (ideally, at least).

every conceivable manner in which the virtue of justice may guide an agent's actions, we can nevertheless identify certain actions that a just agent will never take (unfair discrimination, for example) and articulate these terms on the expectation that they will be followed by all community members. Thus, the community as a whole can take the position that although an individual member does not have to internalise and express justice as a virtue in every aspect of their conduct with others, there is nevertheless a standard that they are required to meet.

Another factor affecting the persuasiveness of the account I have produced is that of whether it can still seriously be considered to be an account of political liberalism. We must acknowledge that viewing justice in this way takes us some distance from what Nussbaum has in mind when describing her version of the capabilities approach, and from the way in which justice is typically construed by political liberals in general. Claiming that justice is a virtue possessed either by individuals or by institutions (as will be discussed shortly) looks suspiciously like a claim to the effect that we ought to ground our account of justice in one particular moral theory. We run the risk of promoting one conception of the good above the others in giving such a prominent role to the virtue-ethical account of justice in this way. Favouring an Aristotelian account of justice as fairness risks rendering our account of justice inaccessible: we look like we are claiming that virtuous agents alone are capable of understanding the true meaning of justice and it is their judgement that we will trust in this matter. I hope, however, that the specific account of the virtue of justice that I have provided above is formulated in such a way as to appease this concern. It is true that the Aristotelian account of justice dictates a particular standard of behaviour, but this is a public standard: like other accounts of political liberalism, the Aristotelian virtue-based account I have sketched above can be formulated through public deliberation. Community members are capable of negotiating an overlapping consensus regarding whether justice really can be described in terms of a virtue of fairness, what the standard of fairness is, and whether given actions or institutions meet that standard, as well as what ought to be done about it if they do not. We may decide that a white supremacist ought not to be prevented from sitting in their home and hurling abuse at their

television screen, or even publishing a blog documenting their thoughts, even though we may agree that their attitudes and words are at odds with the spirit of fairness (i.e., they wish to promote the status of their race at the expense of others, seeking an unfair profit). Still, we would feel that their conception of the good is not one that we would want to incorporate into the functioning of our just institutions, and that if their beliefs motivated them to take actions that went beyond reasonable provisions for freedom of speech and assembly then the state might intervene on grounds of constitutional protection. The content of the virtue of fairness can hopefully be defined in terms that can be tested and debated by individuals possessed of reasonable conceptions of the good (for example, individuals not seeking an unfair profit for themselves) using public reasons, much in the same way as principle-based theories of justice such as that of Rawls. Like these theories, the virtue of fairness rests upon overlapping consensus between citizens possessing reasonable conceptions of the good, constructed using public reasons – that is, those reasons that can be reasonably expected to be compatible with other reasonable conceptions of the good (Brooks 2015, pp.142-143). Even if virtue must be defined with respect to the actions of the virtuous agent, our account of the virtuous agent, and what they would do, can be subject to debate using public reasons: thus, we can rule out a conception of fairness that hinged upon the virtuous agent believing in God, as this does not rest on arguments that can be endorsed by individuals adhering to all reasonable conceptions of the good. However, all individuals engaging in society in good faith (all those possessed of a reasonable conception of the good) will hopefully be able to agree that the virtuous agent will avoid seeking to profit at the expense of others, and that our institutions ought to be structured in such a way as to reflect this key element of justice.

Individual vs. collective virtue

We began discussing virtues under the assumption that they are character traits possessed by individuals: if justice is a virtue, then the individual possessing it will not seek to make unfair profits at the expense of other community members. Thus, justice has a profile, comprised of the various

objects and situations in which it comes into play and the actions and attitudes that these objects ought to engender: a just society, it was argued above, will be structured in accordance with the profile of this virtue. One may question whether this is a coherent transition: if justice is a character trait, how can a community possess it or act according to it?

This transition from talking about the values espoused by just individuals to statements made on the part of the community about the worth of individual community members may look as though it is the actual *agency* that is transferred: that the state or community is conceived of as a sort of 'super-agent' capable of possessing character traits. This is a view examined briefly by Callicott in relation to the question of whether collectives can do moral right or wrong. When talking about, for example, climate change, Callicott asks, can we coherently say that a community as a whole is wanton or wasteful or non-self-respecting (Callicott 2013, p.259)? He suggests that maybe it does, but does not provide any very conclusive argument to support this suggestion beyond the fact that Plato and Socrates believed that the soul was a microcosm of the *polis* (pp.263-265). Callicott therefore demonstrates that the idea of a society possessing virtues, and therefore presumably a character (or something analogous) of its own has a philosophical pedigree, without producing much in the way of argument in favour of its propagation. Elsewhere in this thesis (particularly Chs. V & VI) I have adopted a position of scepticism regarding the ontological status of holistic entities: neither Callicott nor Rolston, I have argued, produce an especially convincing argument for the claim that communities (whether human communities or herds, species, or ecosystems) have any wellbeing beyond the aggregated or averaged wellbeing of their individual members, and this seems to hold true of character or self-respect as well. To claim that they do seems straightforwardly to invoke the fallacy of composition.

A more modest proposal might be the following: linguistically, it may be the case that we refer to a community being unjust, wasteful, short-termist, and so on. The most sensible way of parsing this, however, is probably to say either that a large proportion of community members happen to possess the character traits in question, or that those responsible for outlining or

enforcing the principles of justice possess them, or that the principles themselves are in line with those character traits, or that the institutions surrounding the formation or enforcement of the principles are composed in such a way as to promote those traits.⁵⁸ More generally, the virtue terms used to describe the community are probably best interpreted as referring to the virtue expressed in the laws, constitution or institutions of the community. A community that outlaws, for example, same-sex marriage is unjust partly because those laws limit the capabilities of LGBTQ community members, admittedly, but those laws are also worthy of criticism because they are taken to represent the community taking the position that same-sex relationships are of lesser value compared to mixed-sex relationships: thus, they are at odds with the virtue of fairness, since they place heterosexual relationships on a higher footing than others (Nussbaum 2011, pp.148-149). But the agents making this judgement, ultimately, are the community's individual members (or their representatives) acting collectively, and not the collective (the community) itself. While justice may not be a virtue that individuals may easily practice in isolation, when they act collectively - by participating in and contributing to the community - then considerations of justice become an important part of any evaluation of their actions. However, just as is the case when they act individually, the collective actions that community members take are subject to a wide range of virtue concerns. We may find that our commitment to justice for all community members is not compatible with a commitment to expand the community to cover wild animals: properly interrogating our beliefs may reveal that fairness does not permit us to promote our values in ways that are overbearing or dictatorial, or that we face a tragic dilemma where we must choose between a commitment to justice or to humility, as described above.

Conclusion

In conclusion, the suggestion made throughout this thesis - that a capabilities-based account of justice may be tempered or complemented by considerations of virtue - may be rendered intelligible

⁵⁸ These propositions are not presented as mutually exclusive.

if we interpret a commitment to justice as a necessary component of good moral character. Claims about what is just and unjust can therefore be interpreted as being based on an account of what an agent in possession of the virtue of justice would or would not do, in order to adequately meet the demands of the world. The agent here is not, however, understood as an individual acting alone, but as an entity whose attitudes and actions take place in the context of their belonging to, and partly constituting, communal institutions that can express the virtues of their members. When it appears that justice requires that the community embark on a course of action, such as policing nature, that seems to be in conflict with other aretaic concerns (such as humility), the conflict should be conceived as being of a similar nature to supposed conflicts between more easily recognisable virtues such as kindness and honesty. Exactly how, and if, these conflicts can be resolved is a matter for further debate; however, it is rendered more intelligible by the fact that they are no longer thought to involve virtue concerns on the one hand and another, free-standing set of norms on the other; rather, they take place within one more-or-less coherent ethical universe.

Chapter VIII: Concluding remarks

In this thesis, I have attempted to address both a narrow question – that of whether the capabilities approach requires us to ‘police nature’ – and a broader question of whether one can simultaneously maintain a commitment to justice for wild animals while endorsing the goals and values of the environmental movement. These questions are not posed in isolation of one another; rather, the former can be viewed as a specific instance in which a commitment to individual rights appears to be at odds with a commitment to environmentalist values. Thus, in addressing this question first, I have generated answers that I hope are applicable to the broader study of environmental ethics.

The conclusion reached through the second and third chapters of this thesis is that the capabilities approach, as it is presented by Nussbaum in *Frontiers of Justice*, with its commitment to extending justice even to wild animals, is at odds with a proper appreciation of aspects of the non-human world that environmentalists wish to preserve or promote. The idea that we ought to maintain ‘nature’ with a view to keeping it as close as possible to a real or imagined state of pristine wilderness is dismissed by Nussbaum as ‘nature worship’ (*FJ*, pp.366-368), and there seems to be some justification for her claim that ecosystems do not necessarily persist harmoniously without human interference, or that there exists any longer a state of nature unsullied by human presence. Thus, whether we adhere to the capabilities approach or whether we accept some form of ‘real’ environmentalism (such as ethical holism), we seem to be required to intervene in ‘nature’ to arrange it in accordance with our ethical criteria. In the case of the capabilities approach, the necessary intervention seems to be ‘policing’ nature in order to ensure that individual animals do not come to undue harm; in the case of the ethical holist, the prescribed intervention might involve reintroducing species into areas where they have previously been extirpated, or culling invasive species to protect indigenous wildlife. Thus, it appears that the capabilities approach requires us to recognise drastically different priorities from those endorsed by the ethical holist, to the point where one cannot coherently affirm both positions. One can endorse capabilities justice for non-human

animals or one can campaign on behalf of the integrity of ecosystems and the continuation of species: however, it looks as though one cannot do both.

The fact that the capabilities approach generates drastically different policy commitments to those favoured by environmentalists suggests, as many commentators have previously claimed, that the two positions are founded on irreconcilable sets of values. Certainly this is the conviction held by the environmentalists I considered in Chapter II, and it seems to be the position held by Nussbaum herself. In this chapter, I considered the claims of Callicott and Hettinger: that valuing nature properly requires that we value pain and predation, that protecting individuals will interfere with the functioning of valuable natural wholes such as ecosystems, that an animal rights position such as the capabilities approach is merely an extension of historically anthropocentric ethics and cannot provide the radical change in perspective required to properly do right by the non-human environment. In some cases, such as Hettinger's suggestion that one must uncritically value predation in order to value nonhuman nature (or indeed, according to Hettinger, human nature), previous commentators have shown that this is simply an invalid inference: we can identify many cases where something valuable (a culture; a person) is the product of an unpleasant event or process (genocide; a sexual assault), but are not compelled to uncritically value the process in order to value the product. So some of the environmentalist objections covered in this chapter were seen to be spurious in their own right. However, even those claims that cannot be straightforwardly thrown out may nevertheless prove unpersuasive in the light of Nussbaum's 'nature worship' argument. Even if it were shown that it *was* impossible to value nature without endorsing death and suffering, as Hettinger and Callicott suggest, one might well ask why one might want to value nature to this extent in the first place. If environmentalism requires that we endorse suffering, one might say, then so much the worse for environmentalism. Thus, although I am happy in this chapter to concede that Callicott's and Hettinger's styles of environmentalism are at odds with the capabilities

approach, this is only of concern to capabilities theorists if ecological holism is itself a philosophy of any merit.

One might conclude at this point that the capabilities approach simply wins out over the ethical holists. Such a conclusion would presumably require that we endorse as far as practicability allowed Nussbaum's proposal that we 'supplant the natural by the just', committing to the policing of nature as an eventual goal. I suggest that this is not a satisfactory conclusion for several reasons. First of all, some of the concerns raised by environmentalists are widespread even amongst those of us who are not convinced ecological holists. Many of us – myself included – feel that there is something lost when a species is rendered extinct, something that is explicitly not captured in the individualistic language used by Nussbaum. When it comes to contemplating the broader question addressed in this thesis – that of whether one can coherently be a capabilities advocate and an environmentalist – my task here was to attempt to reconcile commitments to two competing and apparently contradictory sets of values.

This was the focus of Chapter III, in which I considered whether there was an iteration of environmentalist concerns that rested on principles that Nussbaum might be able to endorse. I took as my starting point the concept of autonomy, supposing along with Ty Raterman that the loss of autonomy incurred by animals brought under human protection might outweigh the benefits such a policy might offer. Nussbaum is a liberal, after all, and stresses the importance of autonomy in directing one's own life as a matter of human justice: plausibly, therefore, this might be a good place to direct one's inquiry next. Although Nussbaum holds that the autonomy of non-human animals plays a much reduced role in their flourishing compared to human beings, the exact role that it ought to play in determining their just treatment remains open to interpretation. I considered, therefore, whether the very strong treatment of autonomy discussed by Eric Katz might provide us with a reason to leave natural objects alone. If Katz is correct in suggesting that the autonomy of a wild object confers upon its possessor moral subjecthood and, further, if such subjects can be

considered to fall under the protection of a liberally-applied version of the categorical imperative, then actions that undermine their autonomy are, *prima facie*, prohibited.

However, these are two very large 'ifs'. As we saw, Katz's deontological defence of wild nature is not a persuasive argument against policing nature: when conceived as a harm that is inflicted upon moral subjects, erosion of autonomy can be weighed against the benefits that human protection can bring to wild animals.⁵⁹ Hence, because Nussbaum considers the autonomy of wild animals to be less central to their flourishing than that of humans, it is quite plausible to conclude that the very significant harms from which we would be protecting them are a far greater threat to their dignified existence than a decrease in their ability to construct and pursue their own good. However, Katz's treatment of autonomy does suggest another perspective from which to evaluate Nussbaum's proposal. Rather than viewing the erosion of autonomy from a purely patient-based point of view, one might consider what adopting a policy of policing nature would say about the human agents involved. Endorsing such a policy is, I suggest, at odds with a fully developed and properly virtuous moral character: although it may be consistent with the letter of what Nussbaum puts down in the capabilities approach, there is something overly literal about the idea that all animals, regardless of context, are suitable candidates to be brought under the auspices of a uniquely human concept of justice. Such a concept is central to the way in which most of us conceive large human communities to function; furthermore, as Clare Palmer has noted (Palmer 2010, p.66), such large communities also contain non-human members who exist in complex relationships with us – relationships that can and ought also to be governed by justice. But in the case of wild animals, a comprehensive canopy of human justice – an expansion of the community to include all outsiders – reveals, I would suggest, some deeply disturbing attitudes. The idea that human beings can discern what is best, not only for themselves and for those animals for whom we have direct responsibility,

⁵⁹ And even this assessment relies on a very generous reading of Katz's work – one that does not, for example, subject to heavy scrutiny his distinction between natural objects and artefacts, and which accepts his claim that a the weathering of a rock formation counts as autonomous change that can qualify the formation for subjecthood.

but for those whose contact with us, while it may be significant, is typically incidental, is not many degrees removed from the imperialistic or managerial attitude towards the non-human world that is decried by both animal rights theorists and environmentalists (even if its goals are broader and longer-term than those typically ascribed to ruthlessly anthropocentric ethics). Note that this objection remains pertinent even if for technological reasons or through failure to generate an ‘overlapping consensus’ a scheme to make nature just was never able to get off the ground: being a thwarted imperialist still exhibits vice. A virtue ethical approach can therefore tell us what would be wrong with policing nature even if we are never in a position to enact it as a policy, and suggests that we ought not look for solutions to the problems involved. If we refrain from policing wild animals because to do so would require control over the ecosphere in excess of what we are capable, there is always the possibility that we can go back to the laboratory in order to increase our capabilities. What a character-based account of ethics reminds us is that seeking control – seeking to become omnipotent – is not necessarily desirable, and that we ought not to assume that we will use such power responsibly (although we might think that we are doing good at the time). Thus, I suggest that what a virtue-ethical evaluation of the ‘gradual supplanting of the natural by the just’ shows us is that such a policy evinces the virtue of hubris: an improper weighing of our own moral authority.

Having introduced the virtue-ethical perspective, I move on to the what I have identified as the broader inquiry, and consider whether a virtue-ethical account proves useful in other areas where the capabilities approach seems to be at odds with environmentalists’ values and objectives. I identify three areas where Nussbaum’s proposals seem to be at odds with those of various environmentalists. Beginning with the most straightforward area, I discuss whether Nussbaum is correct to exclude non-sentient lifeforms from the protection of justice, and point out the similarities between some of the language used by Nussbaum and that of biocentrist environmental philosophers such as Paul Taylor. I suggest that non-sentient life can coherently be viewed as possessing at least some capabilities and that therefore such lifeforms can be treated in ways that

are meaningfully just or unjust: this is less a matter of virtue and more one of logical consistency (though, as Nussbaum points out, even one who did not think that the survival of non-sentient creatures was a matter of justice might find something unpleasant in the character of someone who, for instance, went out of their way to trample plants or squash insects (*FJ*, p.359)). Given that, therefore, all forms of life seem to be entitled to at least some basic level of respect as beings with meaningful forms of the good, I suggest that the contribution made by bringing virtue ethics into the discussion at this point is in determining when to stop. Most (if not all) human activities require the destruction of non-sentient life, and there are many nonsentient organisms whose existence actively hampers human flourishing (bacteria, viruses, parasitic invertebrates, agricultural pests or weeds). Virtue plays a role, therefore, in determining which non-sentient organisms we need to kill, and whether we have a responsibility to curtail the destruction of some of these organisms when it is carried out for trivial purposes (for example, we might reconsider whether to cut live flowers to present as a gift, or use a tropical hardwood to make a table).

I suggest that a consideration of the demands of virtue plays a greater role when considering two types of entity that are excluded by Nussbaum from the protection of the capabilities approach: species and ecosystems (covered in Chapters V and VI, respectively). After first considering whether these entities might be considered to possess capabilities in the same way that individual organisms do, I conclude that these entities are not readily incorporated into the capabilities approach. Nevertheless, we ought to consider our behaviour in regard to them a moral matter capable of being governed by virtue. In the case of species, I suggest that although a species is not the sort of entity for which things can go well or badly, it is nevertheless of value partly due to its narrative properties. A species represents the story of a particular way of being in the world: it describes how a particular form of life came to be, what its origins were, how its constituent organisms have been shaped by their environment and what they will be like in the future. Anthropogenic extinction therefore involves the premature end of these narratives, in the process removing from the world a particular

way of existing that has been shaped over lengthy periods of time. While it is probably an unreasonable stretch to suggest that this is a matter of justice, indifference to the extinction of species demonstrates that there is something wrong with one's character: philistinism, self-involvement, rapacity or excessive materialism, for example.

With ecosystems, the discussion took a somewhat different route. I tentatively concluded that McShane's claim – that ecosystems might be said to have a good to the extent that there are things that someone who cared about them for their own sake might want for them – was a plausible one, but that although people certainly do care about ecosystems, it was not clear that those who don't care, ought to (following Nolt's discussion of the gaps between *is* and *good*, and *good* and *ought*). Again, a discussion of the virtues seems to give someone who is primarily committed to the capabilities approach a reason to join environmentalists in their concern for ecosystems: we ought to care about ecosystems because of what doing so says about our moral character. Some of the elements involved in an evaluation of ecosystems are similar to those related to species: like species, the state of an ecosystem has arisen from the interplay of natural processes in a particular area, and this can be expressed as a narrative that stretches out into the future. A virtuous person will care about whether these unique narratives proliferate or whether they are rendered stale and ubiquitous through development. Part of what it means to possess the virtue of humility, I would suggest, is an ability to tolerate, and even appreciate, the existence of stories that are not about oneself. For this reason, a virtuous individual is likely to want to preserve many areas of the world for their own sake, and to encourage natural processes to continue to change the world into the future.

Such an attitude will aid the virtuous agent in the account of a just society that I briefly sketch in Chapter VII, too. I suggest that at least part of what it means for a society to be just is that its institutions will be set up in such a way as to ensure that no particular group is unfairly advantaged

in society, and that such a set-up is partly constituent of an account of civic virtue. The citizen who is well-adjusted to the just community will, like the virtuous protector of ecosystems, appreciate the value and dignity of their fellow community members: they will not demand that the 'narrative' of their gender, race, class, sexuality or religion (or other identity) be given undue prominence: to do so would be to engage with the rest of the community in bad faith. Such, I suggest, is the attitude of the narrow anthropocentrist toward the non-human inhabitants of the planet: there is an insistence on the primacy of the human narrative (in fact, on a few specific strands of the human narrative) over that of any other species, an assumption that the primary value of non-human organisms is their utility as a resource. The capabilities approach certainly improves upon this outlook by incorporating concern for the well-being of sentient animals, recognising that they can be subjects of a community governed by justice. However, in Nussbaum's vision of a 'truly global justice' there remains a lingering sense of hubris. Rather than resources, non-humans are cast as the charges of a benevolent human administration: thus, the non-human world is still made to reference human ends and values. What I suggest the capabilities approach is missing, therefore, is a consideration of the virtues, both to rein in some of its excesses (as in the case of 'the gradual supplanting of the just') and to 'flesh out' those areas, such as ecosystems and species, on which it currently offers no advice. Using virtue ethics, I have tried in this thesis to affirm the overall structure of the capabilities approach as an account of justice for humans and non-humans while rendering it able to co-exist more peacefully with other concerns in environmental ethics. The result is, I hope, in tune with the egalitarian sentiment expressed by Leopold in *A Sand County Almanac*, which I have tried to bear in mind throughout:

"A land ethic changes the role of *Homo sapiens* from conquerer of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such." (Leopold, 1949, p.204)

Bibliography

- Aristotle, 1999. *Nicomachean Ethics*. 2nd ed. Indianapolis: Hackett.
- Armstrong, A., 2012. *Ethics and Justice for the Environment*. Abingdon: Routledge.
- Barnard, N. & Kieswer, K., 2004. Vegetarianism: The Healthy Alternative. In: S. S. Sapontzis, ed. *Food for Thought: The Debate over Eating Meat*. New York: Prometheus Books, pp. 46-56.
- Belshaw, C., 2001. *Environmental Philosophy: Reason, Nature and Human Concern*. Chesham: Acumen.
- Botkin, D., 1996. Adjusting Law to Nature's Discordant Harmonies. *Duke Environmental Law Policy Forum*, 7(1), pp. 25-38.
- Brooks, T., 2015. The Capabilities Approach and Political Liberalism. In: T. Brooks & M. C. Nussbaum, eds. *Rawls' Political Liberalism*. New York: Columbia University Press, pp. 139-173.
- Callicott, J., 1989. Animal Liberation and Environmental Ethics: Back Together Again. In: J. B. Callicott, ed. *In Defense of the Land Ethic: Essays in Environmental Philosophy*. Albany: New York State University Press, pp. 49-59.
- Callicott, J. B., 1980. Animal Liberation: A Triangular Affair. *Environmental Ethics*, 2(4), pp. 311-338.
- Callicott, J. B., 1995. The Value of Ecosystem Health. *Environmental Values*, 4(4), pp. 345-361.
- Callicott, J. B., 2013. *Thinking Like a Planet: The Land Ethic and the Earth Ethic*. Oxford: Oxford University Press.
- Clark, S. R., 1979. The Rights of Wild Things. *Inquiry*, 22(1-4), pp. 171-188.
- Cooper, D. E., 1995. Other species and moral reason. In: D. E. Cooper & J. A. Palmer, eds. *Just Environments: Intergenerational, International and Interspecies Issues*. London: Routledge, pp. 137-148.
- Cooper, D. E., 1998. Aestheticism and environmentalism. In: D. E. Cooper & J. A. Palmer, eds. *Spirit of the Environment*. London: Routledge, pp. 100-112.
- Cooper, D. E., 1998. Intervention, Humility and Animal Integrity. In: A. Holland & J. A. eds. *Animal Biotechnology and Ethics*. London: Chapman & Hall, pp. 145-155.
- Cowen, T., 2003. Policing Nature. *Environmental Ethics*, 25(2), pp. 169-182.
- Craig, WJ; Mangels, AR; American Dietetic Association, 2009. Position of the American Dietetic Association: vegetarian diets. *Journal of the American Dietetic Association*, 109(7), pp. 1266-1282.
- Crescenzo, D., 2012. The Problem of Predator-Prey Relations and Predator Flourishing in Nussbaum's Capabilities Theory of Justice. *Environmental Ethics*, 34(2), pp. 177-197.
- Darwall, S., 1977. Two Kinds of Respect. *Ethics*, 88(1), pp. 36-49.
- Darwall, S., 2010. *Welfare and Rational Care*. Kindle ed. Princeton: Princeton University Press.

- Donaldson, S. & Kymlicka, W., 2011. *Zoopolis: A Political Theory of Animal Rights*. Oxford: Oxford University Press.
- Driscoll, C. A. et al., 2007. The Near Eastern origin of cat domestication. *Science*, 317(5837), pp. 519-523.
- Dwyer, J. T. & Loew, F. M., 2004. Nutritional Risks of Vegan Diets. In: S. S. Sapontzis, ed. *Food for Thought: The Debate over Eating Meat*. New York: Prometheus Books, pp. 57-67.
- Everett, J., 2004. Vegetarianism, Predation and respect for nature. In: S. S. Sapontzis, ed. *Food for Thought: The Debate Over Eating Meat*. Amherst: Prometheus Books, pp. 302-314.
- Food and Agriculture Organisation of the United Nations, 2006. *Livestock's Long Shadow: Environmental Issues and Options*. [Online]
Available at: <http://www.fao.org/docrep/010/a0701e00.HTM>
[Accessed 12th January 2013].
- Francione, G., 2000. *Introduction to Animal Rights: Your Child or the Dog?*. Philadelphia: Temple University Press.
- Fulfer, K., 2013. The Capabilities Approach to Justice and the Flourishing of Nonsentient. *Ethics & the Environment*, 18(1), pp. 19-38.
- Hatley, J., 2004. The uncanny goodness of being edible to bears. In: B. V. Foltz & R. Frodeman, eds. *Rethinking Nature: Essays in Environmental Philosophy*. Bloomington and Indianapolis: Indiana University Press, pp. 13-31.
- Hettinger, N., 1994. Valuing Predation in Rolston's Environmental Ethics: Bambi Lovers versus Tree Huggers. *Environmental Ethics*, 16(1), pp. 3-20.
- Horta, O., 2010. The Ethics of the Ecology of Fear against the Nonspeciesist Paradigm: A Shift in the Aims of Intervention in Nature. *Between the Species*, 13(10), pp. 163-187.
- Ilea, R., 2008. Nussbaum's Capabilities Approach and Nonhuman Animals: Theory and Public Policy. *Journal of Social Philosophy*, 39(4), pp. 547-563.
- James, S. P., 2013. Why Old Things Matter. *Journal of Moral Philosophy*, pp. 1-16.
- Jamieson, D., 1998. Animal Liberation is an Environmental Ethic. *Environmental Values*, 7(1), pp. 41-57.
- Johnson, L., 1991. *A Morally Deep World: An Essay on Moral Significance and Environmental Ethics*. Cambridge: Cambridge University Press.
- Katz, E., 1997a. Artifacts and Functions: A note on the value of nature. In: E. Katz, ed. *Nature as Subject: Human Obligation and Natural Community*. Lanham: Rowman & Littlefield, pp. 121-133.
- Katz, E., 1997b. Is There a Place for Animals in the Moral Consideration of Nature?. In: E. Katz, ed. *Nature as Subject: Human Obligation and Natural Community*. Lanham: Rowman & Littlefield, pp. 13-32.

- Katz, E., 1997c. Imperialism and Environmentalism. In: E. Katz, ed. *Nature as Subject: Human Obligation and Natural Community*. Lanham: Rowman & Littlefield, pp. 133-148.
- Katz, E., 1997d. The Big Lie: Human restoration of nature. In: E. Katz, ed. *Nature as Subject: Human Obligation and Natural Community*. Lanham: Rowman & Littlefield, pp. 93-108.
- Key, T., Appleby, P. & Rosell, M., 2006. Health Effects of Vegetarian and Vegan Diets. *Proceedings of the Nutrition Society*, 65(1), pp. 35-41.
- Kheel, M., 1995. License to Kill: An Ecofeminist Critique of Hunters' Discourse. In: C. J. Adams & J. Donovan, eds. *Animals and Women: Feminist Theoretical Explorations*. Durham & London: Duke University Press, pp. 85-125.
- Krieger, M. H., 1973. What's Wrong with Plastic Trees? Rationales for Preserving Rare Natural Environments Involve Economic, Societal, and Political Factors. *Science*, 179(4072), pp. 446-455.
- Leopold, A., 1968. *A Sand County Almanac, and Sketches Here and There*. Paperback ed. London: Oxford University Press.
- Light, A., 2000. Ecological Restoration and the Culture of Nature: A pragmatic perspective. In: R. Gobster & R. Hull, eds. *Restoring Nature: Perspectives from the Social Sciences and Humanities*. Washington: Island Press, pp. 49-70.
- MacIntyre, A., 1981. *After Virtue: A Study in Moral Theory*. 3rd ed. London: Bloomsbury Academic.
- McShane, K., 2004. Ecosystem Health. *Environmental Ethics*, 26(3), pp. 227-245.
- Murdoch, I., 1970. *The Sovereignty of Good*. Abingdon: Routledge.
- Nelson, J. L., 1995. Health and Disease as 'Thick' Concepts in Ecosystemic Contexts. *Environmental Values*, 4(4), pp. 311-322.
- Nolt, J., 2006. The Move from Good to Ought in Environmental Ethics. *Environmental Ethics*, 28(4), pp. 335-374.
- Nussbaum, M., 2006. *Frontiers of Justice: Disability, Nationality, Species Membership*. Cambridge: Belknap Press.
- Nussbaum, M. C., 2000. *Women and Human Development: The Capabilities Approach*. New York: Cambridge University Press.
- Nussbaum, M. C., 2006. *Frontiers of Justice: Disability, Nationality, Species Membership*. Cambridge, MA: Belknap Press.
- Nussbaum, M. C., 2011. *Creating Capabilities: The Human Development Approach*. Cambridge: The Belknap Press of Harvard University Press.
- Palmer, C., 2009. Harm to Species? Species, Ethics and Climate Change: The case of the polar bear. *Notre Dame Journal of Law, Ethics and Public Policy*, Volume 23, pp. 587-603.
- Palmer, C., 2010. *Animal Ethics in Context*. New York: Columbia University Press.

- Pluhar, E., 2004. The Right not to be Eaten. In: S. S. Sapontzis, ed. *Food for Thought: The Debate Over Eating Meat*. Amherst: Prometheus Books, pp. 92-107.
- Rapport, D. J., 1995. Ecosystem Health: More than a Metaphor?. *Environmental Values*, 4(4), pp. 287-309.
- Rateman, T., 2008. An Environmentalist's Lament on Predation. *Environmental Ethics*, 30(4), pp. 417-434.
- Rawls, J., 1971. *A Theory of Justice*. Kindle (reprint of original) ed. Cambridge: Belknap.
- Regan, T., 2004. *The Case for Animal Rights: Updated with a New Preface*. Berkely: University of California Press.
- Robeyns, I., 2003. Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities. *Feminist Economics*, 9(2-3), pp. 61-92.
- Rolston, H., 1988. *Environmental Ethics: Duties to and Values in the Natural World*. Philadelphia: Temple University Press.
- Rolston, H., 2005. Environmental Virtue Ethics: Half the Truth but Dangerous as a Whole. In: C. P & S. R, eds. *Environmental Virtue Ethics*. Lanham: Rowman & Littlefield, pp. loc.1561-2060.
- Rowlands, M., 2009. *Animal Rights: Moral Theory and Practice*. 2nd ed. Basingstoke: Palgrave MacMillan.
- Rowlands, M., 2012. *Can Animals Be Moral?*. Kindle ed. New York: Oxford University Press.
- Russow, L.-M., 1981. Why do species matter?. *Environmental Ethics*, 3(2), pp. 101-112.
- Sagoff, M., 1993. Animal Liberation and Environmental Ethics: Bad marriage, quick divorce. In: M. Zimmerman, et al. eds. *Environmental Philosophy: From Animal Rights to Radical Ecology*. Englewood Cliffs: Prentice Hall, pp. 84-95.
- Sandler, R. L., 2007. *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics*. New York: Columbia University Press.
- Schinkel, A., 2008. Martha Nussbaum on Animal Rights. *Ethics and the Environment*, 13(1), pp. 41-69.
- Schlosberg, D., 2007. *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford: Oxford University Press.
- Schmidtz, D., 1998. Are All Species Equal?. *Journal of Applied Philosophy*, 15(1), pp. 57-67.
- Schmidtz, D., 2011. Respect for Everything. *Ethics, Policy and Environment*, 14(2), pp. 127-138.
- Scruton, R., 1998. *On Hunting*. South Bend: St. Augustine's Press.
- Scruton, R., 2004. The Conscientious Carnivore. In: S. S. Sapontzis, ed. *Food for Thought: the Debate over Eating Meat*. Amherst: Prometheus Books, pp. 81-91.

Sen, A., 1993. Capability and Well-Being. In: M. Nussbaum & A. Sen, eds. *The Quality of Life*. Oxford: Oxford University Press, pp. 30-53.

Sen, A., 2004. Capabilities, Lists, and Public Reason: Continuing the Conversation. *Feminist Economics*, 10(3), pp. 77-80.

Stone, C., 1987. *Earth and Other Ethics: The Case for Moral Pluralism*. New York: Harper & Row.

Swanton, C., 2003. *Virtue Ethics: A Puralistic View*. Oxford: Oxford University Press.

Taylor, P., 2011. *Respect for Nature: A theory of environmental ethics*. 25th Anniversary ed. Princeton: Princeton University Press.

Varner, G., 1998. *In Nature's Interests? Interests, Animal Rights, and Environmental Ethics*. New York: Oxford University Press.