

## **Representing Non-Human Interests**

**Alfonso Donoso**

### **Abstract:**

In environmental ethics, legal and political representation of non-humans is a widespread aspiration. Its supporters see representative institutions that give voice to non-humans' interests as a promising strategy to respond to worldwide illegitimate exploitation of non-human beings. In this article I engage critically with those who support this form of representation and address two issues central to any account concerned with the legal and political representation of non-human living beings: what should be represented? and what are the conditions of such a representation? The answers I provide to these queries count as a first step towards a comprehensive account of the institutional representation of non-human nature.

### **Keywords:**

Environmental ethics, non-human interests, political representation, biocentrism, individualism

## **Representing Non-Human Interests**

### **1. Introduction**

Representation of non-humans in court, parliament, and other institutions reflects the (generally) recurrent human tendency to enlarge its legal and political constituencies. This is an idea with some history in legal and political thought that theorists have defended by appealing, among other things, to the rights, moral standing, and non-instrumental value of at least some non-humans. Legal and political representation of non-humans also stands as a response to environmental challenges that need to be addressed through new forms of governance. If they are going to be effectively tackled, the degradation of global commons, trans-boundary pollution, and various widely shared national environmental threats require collective action that challenges traditional domestic and anthropocentric governance.

Christopher Stone's "Should trees have standing?" (1972) is a seminal piece in the recent history of the legal representation of non-humans. It argues that forests, oceans and other natural entities can have legal rights, should count jurally, and could be represented in court. Andrew Dobson (1996) offers another exemplary version of this ideal by defending the representation by proxy of the interests of non-human animals' constituencies. Robert Goodin (1996), in turn, appeals to a principle of equal protection of interests to defend the claim that natural objects are as deserving of protection and representation as are the interests of humans. In a similar spirit, Robyn Eckersley (1999, 2004) has argued for the recognition of nature's interests and the constitutional entrenchment of an environmental precautionary principle, whilst Tine Stein (1998) has proposed the creation of an Ecological Council empowered to delay legislation if this is required to protect the environment from serious harm. These are just a few examples of the diversity of views favouring the expansion of

legal and political constituencies to include non-human nature as a significant source of moral and political obligation. These are, in other words, attempts to use legal and political representation as a powerful mechanism against the illegitimate exploitation and depletion of the natural world and the organisms that constitute it.

These various voices, however, do not speak univocally. Many tensions exist between these proposals and it is unclear to what extent their various efforts can be articulated to reach a coherent basis for the institutionalization of the legal and political representation of non-human organisms. In this article I look at some of these proposals as a first step towards the more general project of offering a unified view of the representation of the interests of non-human beings. Thus, the primary purpose I pursue in this article is not to present a defence of non-anthropocentric legal and political representation of the natural world against the standpoint of anthropocentric theory. My goal here is much humbler: this article constitutes an internal critique of some aspects of non-anthropocentric theory, and my final aim is to offer a coherent account of the legal and political representation of the interests of non-human organisms that may be persuasive to those who already recognise the moral status of non-human members of the natural world.

The article has three main parts. In section two I offer a summary account of the interests of non-human organisms that follows Gary Varner's psycho-biological theory of interests. This is a non-anthropocentric approach which will lead me in the subsequent sections to address two questions central to any account concerned with the legal and political representation of the living: what should be represented and what are the conditions of such representation. The first question is addressed in part three, where I use a Burkean theory of representation to argue that the representation of non-human organisms is adequately conceived of as the representation of unattached interests, that is, interests that can be identified independently of the mental states and desires of the organisms that have them.

The second question is considered in part four, where I explore principles that provide guidance to resolve conflicts between human and non-human interests within a genuinely non-anthropocentric framework.

## **2. The Interests of the Living**

Let me start by unveiling a fundamental premise of my argument: legal and political representation is owed not only to human constituencies but also to non-human ones. This is not a new idea and for a while theorists concerned with the wellbeing of non-human animals have developed it with increasing sophistication.<sup>1</sup> As I defend it, a grounding element of this premise is that at least some non-human animals have interests and these interests are as deserving of representation as the interests of humans. This assumption, of course, is not self-evident and some deem it deeply problematic partly because it enlarges the number and kind of interest bearers in a way that seems morally inappropriate.

These doubts notwithstanding, at the basis of this article there is an even stronger and thus more contentious idea. I not only maintain that individual non-human animals are interest bearers, but that individual non-human living beings have interests that deserve legal and political representation. In what follows I advance a plausible articulation of this radical idea that will lead me later to address key questions on the institutionalisation of the representation of the interests of the living.

Legal and political representation is closely connected with the idea of relevant interests, that is, interests whose disrespect wrongs the individual that has them; if someone demands legal or political representation it is because she has interests whose protection or advancement would be favoured by such representation. Indeed, because an important rationale for having legal and political institutions is to institutionalise appropriate forms of

---

<sup>1</sup> For two recent examples see Garner 2013 and Donaldson and Kymlicka 2013.

respect for individuals, relevant interests are at the basis of legal and political representation. As I shall show, with some adjustments this intimate link between representation and relevant interests can also hold for non-humans, who are incapable of demanding the former.

The idea that non-humans deserve representation depends on the fact that they have moral standing, which in turn hinges on the recognition of non-humans as bearers of relevant interests. More formally, the argument for the legal and political representation of non-humans would state that:

- i.  $x$  has moral standing if and only if  $x$  has relevant interests.
- ii. If  $x$  has relevant interests, then  $x$  deserves legal and political representation.
- iii. Non-humans have relevant interests.

Therefore,

- iv. Non-humans have moral standing

and

- v. Non-humans deserve legal and political representation.

Premises (i) and (ii) follow rather easily from shared understandings. Generally, wrongly interfering with someone's interests counts as a regrettable act calling for moral condemnation, and advancing someone's interests or, less demandingly, not interfering with those interests, is at the basis of morally praiseworthy or permissible action. Furthermore, legal and political representation ought to serve those entities we recognise as having moral standing by protecting (at least some of) their interests. Thus, having some kind of interests – relevant interests – is both a necessary and a sufficient condition for an entity's having moral standing.<sup>2</sup>

---

<sup>2</sup> This is the case even though the moral standing of an organism cannot be always reduced to its having relevant interests. Such is the case of human beings, whose moral standing is sometimes articulated not only in terms of their having relevant interests but also, for example, on their acting virtuously or having an experience of themselves.

Premise (iii) of the argument requires further elaboration. To substantiate the idea that non-humans have relevant interests, think about the link between interest in general, moral standing, and wrongful action. Simply put, you can only wrong organisms that have moral standing and the moral standing of an organism *S* entails that *S* is morally considerable and deserves “the most basic forms of practical respect” (see Goodpaster 1978, 309). Now, to wrong *S* is to produce a setback in a particular class of *S*'s interests. This class of interests is what I have called relevant interests, that is, interests whose disrespect wrongs the organism that has them.<sup>3</sup> An implication of this is that an entity with no relevant interests is an entity that cannot be wronged (see generally Feinberg 1987). Relevant interests are thus crucial to determine the type of entities that are morally considerable.

This reasoning makes it is easy to defend that non-human animals are morally considerable because we can identify actions that setback their interests and can thus wrong them. But notice that my non-anthropocentric position is a version of individualist biocentrism, so I defend the view that not only conscious animals but also individual non-conscious living organisms are morally considerable.<sup>4</sup> This means that there must be a way to wrong not only animals, but also a tree in a forest, the cacti in the desert, or any other non-

---

<sup>3</sup> Put differently, the adjective ‘relevant’ marks the recognition, and underlines the existence, of non-relevant interests, that is, interests that if left unsatisfied do not wrong the organism that has them. A usual example of a non-relevant interest is the interest a thief has in breaking into a house. An example of a biologically-based non-relevant interest is, perhaps, and as suggested by an anonymous reviewer of this journal, the interest humans have in satisfying their reproductive functions.

<sup>4</sup> In my view, theories that endorse a narrower criterion of moral standing draw an arbitrary line between what is and what is not morally considerable. Is there really something in being rational that makes irrational beings (including young humans, the mentally ill, and most non-human animals) not morally considerable? Or, is there something in being sentient that should lead us to conclude that non-sentient beings (including humans in vegetative states and the vegetal kingdom) have no moral standing at all? I think no positive answer can be provided to these questions without, at the same time, falling into undesirable forms of “chauvinist” (Sylvan 1973) or “monstrously megalomaniacal” forms of argumentation (Wood 1998, 203). Of course, this is not to say that any two morally considerable entities are always equally significant. For this crucial distinction see Goodpaster 1978. For other forms of biocentrism see Schweitzer 1923, Attfield 1983, Taylor 1986.

sentient organisms of the living world. Since we have a strong duty not to wrong others, and we can only wrong entities that have interests, my claim that non-sentient organisms can be wronged requires providing an account of the interests of this type of organisms.

In my view, a relevant interest  $\phi$  of  $x$  is an interest whose satisfaction generates intrinsic value, that is, generates a state of affairs that is valuable and, therefore, deserving of respect, independently of the interests others different from  $x$  may have in the satisfaction of  $\phi$ . Thus, an interest  $\phi$  is a relevant interest if and only if the satisfaction of  $\phi$  brings about a better world – because more value is actualised – than one where  $\phi$  is not satisfied even if in that world no one else has an interest in  $\phi$ . Does this understanding of interest apply to non-sentient organisms?

Consider the following scenario. Imagine that you are on the earth and that millions of light years away there are two planets. The first one has no life in it (it resembles a huge asteroid in orbit around a star) and the second one is the same as the first one except that it contains a forest, and nothing else. Additionally, imagine you were forced by a perverse demon to eliminate one of these two planets through a powerful laser activated from the earth. The planets are millions of light years away, so neither you nor anyone else can make use of or benefit from any of the two planets. Moreover, the explosion of the planet, you are certain, will have no effect whatsoever on the earth or on any other known planet. Indeed, the destruction of either of them won't diminish in any way the wellbeing of present or future generations of humans. Under these circumstances, which one of these two planets should you destroy?

The biocentric tradition takes it that there are moral reasons not to destroy the second planet while we have no reason not to destroy the first one. According to the form of biocentrism I endorse, the right reasons not to destroy the second planet are related to the recognition of the moral standing of the trees of the forest, which constrain our decision and

determine what counts as a right action under the circumstances. In my view, such recognition depends on the plausibility of assigning some form of relevant interest to the trees of the forest. This is surely contentious; traditional theories associate interests with organisms capable of experience and complex mental states, nothing of which is recognisable in the trees of the forest (e.g., Feinberg 1974, 52-3). How can I then ground my claim about the reasons not to destroy the second planet?

Gary Varner has defended a non-conventional theory of interests that recognises interests in non-conscious organisms. The conventional position – the mental-states theory of interests – maintains that interests depend on the presence of mental states such as desires; an entity's desire, actual or hypothetical, is in this view pivotal to the determination of an interest. However, Varner has argued that this approach is problematic because in identifying all interests with desires, it “leaves out a familiar but fundamentally biological sense of what one's interests are” (Varner 1998, 58). I think we should take this suggestion seriously.<sup>5</sup>

Varner's crucial contribution is the recognition that, unlike what the mental-states theory can explain in various cases, an entity  $x$  can have a relevant interest without having at the same time a desire – or other mental state – to satisfy this interest. Crucially, interests extend beyond mental states to include biological needs and functions. Thus, in the same way as a 19<sup>th</sup> century mariner had an interest in a daily dose of ascorbic acid to recover from scurvy without knowing or desiring ascorbic acid, a non-conscious organism – e.g., a tree in our second planet's forest – has an interest in the fulfilment of its biological needs and

---

<sup>5</sup> Notice that Varner has desisted from his criticism of the mental state theory (see Varner 2003). He now thinks that an externalist account of individuals' well-being can accommodate the interests of non-human animals without having to introduce non-conscious, biological interests. However, as it will be seen in the paragraphs that follow, my argument is not concerned with whether or not the mental state theory is mistaken, but rather with the plausibility of the idea of non-conscious living organisms (animals or not) having relevant interests. Thus, whether or not the mental state theory errs is not especially relevant for the point I am making. Thanks to an anonymous reviewer of *Environmental Values* for making me to address this issue.



functions without desiring such things (see Varner 1998, 60). The crucial point is that the full set of relevant interests is not reducible to desires or any other mental or cognitive states, and an organism can have a relevant interest  $\phi$  without having a desire to fulfil  $\phi$ .

This might seem too quick.<sup>6</sup> From the previous paragraph someone could infer that the interests organisms have are those that they would have if they had mental states and were aware of their interests: the sailor would have had the desire for ascorbic acid had he known about its efficacy in fending off scurvy. Put differently, the sailor has that interest ‘all things considered’. The sceptical critic could then argue that the fact that an organism has no mental states is a morally relevant fact that undermines the claim at the centre of the psycho-biological theory.

To respond to these doubts, consider an example adapted from one provided by Varner himself (Varner 1998, 59-60). Islay, my dog, seems to have a strong desire to chase tennis balls, even if chasing them involves crossing a very busy highway. Does it make sense asking whether she would still have the desire to chase tennis balls were she aware of or understood the risks involved in such an activity? We have no way to make her understand the dangers involved in this activity so we have no way to know whether she *would* have had the desire not to chase tennis balls in busy highways had she known about the dangers involved. At this point we either have to deny that Islay has interests – which is obviously mistaken – or we take her desires and the desires of other non-human conscious organisms at face value and say that whatever they desire is in their interest.

With Varner I think that the second alternative – to take non-human animals’ desires at face value – is mistaken. We cannot equate relevant interests with desires because the latter can on many occasions go against the former. Islay has a desire to chase her ball irrespective of whether it is bouncing in the middle of a dangerous highway. Playing this

---

<sup>6</sup> I am thankful to Alejandra Mancilla for putting pressure on this point.

game would very likely have a negative impact in her basic functions and, thus, they would impede the satisfaction of some of her relevant interests. As it was already suggested, the best way to make sense of all this is by interpreting interests, at least some class of interests, as closely connected to needs. If needs which we are not aware of and whose satisfaction is essential to make us the type of beings we are are understood as relevant interests – which is what the cases of the sailor and Islay show – then the psycho-biological theory appears equipped to respond satisfactorily to the doubts posed by the sceptic and, thus, embracing this theory of interests turns out to be a plausible alternative.

Of course, the sceptic may accept most of what I have said so far and still deny that non-conscious living beings have relevant interests. My examples have included human sailors unaware of their needs and a dog unable to become aware of her needs even though she has mental states. What about the trees of the second planet? What about an humble apple tree in a field or an enormous sequoia in a forest? Do they have relevant interests? Again, if the satisfaction of certain basic biological needs and functions are essential to make apple trees and sequoias the class of beings they are, we should not deny that the satisfaction of these needs and functions are relevant interests for these non-conscious organisms. Although non-conscious living beings are simply not equipped to understand what is in their interests or to take an interest in the satisfaction of what is their own good, there are things that are in their best interests, such as satisfying her basic biological needs and functions. To insist that there is a difference between conscious animals and non-conscious living organisms regarding their having *relevant* interests – that is, interests that if left unsatisfied may wrong the organisms that have them – makes us worryingly closer to some form of speciesism and, thus, is a view that should be deemed indefensible.

In conclusion, this approach allows us to distinguish between two types of interests, those that depend on the desires and other mental states of an individual, and those that are

independent from them and that are defined in terms of biological needs and functions. To fulfil these needs and functions – e.g., the need for fresh water and air – is in our interest as much as it is in the interests of those who do not have mental states to fulfil their biological needs and functions: to not be burnt or chopped down is in the interest of a lemon tree even though the lemon tree cannot desire or take an interest in not being burned or chopped down (see Varner 1998, 71-74).

If we take seriously the psycho-biological theory of interests, as I think we should, an important normative consequence follows: moral agents have an obligation to act in ways that recognise, and thereby track, the relevant interest of both conscious and non-conscious living organisms, i.e., all those organisms whose existence generates intrinsic value. Such recognition is to be expressed in (although not necessarily reduced to) legal and political acts and institutions that are respectful of and/or are a contribution to the satisfaction of those relevant interests. The normative claim, then, demands that moral agents act in such a way as to respect, legally and politically, the interests of morally considerable organisms.

### **3. Non-Human Interests and Democratic Representation**

The preceding section gave us reasons for believing that non-sentient living beings have interests, but among political theorists it is not taken as a given that any conception of interests should be represented in legal and political institutions and then incorporated in democratic procedures. In this section I discuss some reasons that have been given for restricting the range of interests represented in a democracy, and I respond to them in defence of including institutional representation of the interests of non-sentient beings.

I undertake this task by looking at Hanna Pitkin's interpretation of Edward Burke's theory of representation. Her view is that the object of Burke's theory is a special kind of

interest, namely, unattached interests.<sup>7</sup> These are interests that are “objective and independent of anyone’s thoughts and wishes” and are the kind of interests that appear “where there are no relevant wishes to consult” (Pitkin 1967, 159 and 161). Unattached interests, I shall argue, adequately depict the kind of relevant interests of non-human animals and non-conscious living organisms, interests whose representation expresses adequate respect for these organisms even though such representation may seem in tension with standard democratic tenets.

It is clear, however, that neither Pitkin nor Burke was thinking about the representation of non-human interests. Rather, their focus of concern was on the idea of political representation. In Burke’s conservative view, a representative parliament is not to represent the interests of people within the political community, but rather the interests of the nation. These interests have an objective and unattached reality and, thus, are recognisable by the right sort of people – a natural aristocracy – without having to consult anyone else, not even the people comprising the nation.<sup>8</sup> In this view, to democratically elect parliamentary representatives is unnecessary because what really matters is the representation of objective unattached interests, which can be done without introducing democratic principles and practices.

Despite its original purpose, Burke’s theory of representation is helpful to articulate the representation of the interests of non-human beings. As it was seen in the previous section, these interests possess a reality that can be grasped and recognised independently of

---

<sup>7</sup> Although Pitkin’s reading of Burke is highly influential, whether her account of Burke’s views is really an account of Burke’s views is contestable (see for example Conniff 1994, 138). For an opposite view see Dustin 2000, 71). I do not address this controversy and simply take Pitkin’s interpretation at face value.

<sup>8</sup> In one of his famous speeches to the electors of Bristol Burke says “if the local constituent should have an interest or should form a hasty opinion evidently opposed to the real good of the rest of the community, the member for that place ought to be as far as any other from any endeavour to give it effect” (quoted in *The American Quarterly Review* 1829 vol V, n° 9, p.43 from Burke’s 1774 speech to the Electors of Bristol).

the organisms that have them. Consider the case of plants – akin to the case of the trees of the forest in planet two. According to the psycho-biological theory, the interests plants have depend on their etiology. This means that a precise knowledge of their interests requires complex evolutionary research which, ultimately, has an objective, non-arbitrary, nature (see, for example, Neander 1991; Dretzke 1995; Varner 1998). Indeed, we do not need to speculate or even consider what the interests of plants are had they the capacity to explain or take an interest in them. Instead, and precisely because they have unattached interests, all we need to do is focus on their evolutionary history and see why they have come to have their biological functions. This independence of non-human interests is aptly captured by the idea of unattached interests and I use this term to refer to the kinds of interests that representatives of the interests of nature would have to represent.

To some eyes, however, this characterisation of the relevant interests of non-human animals and non-conscious living organisms may be problematic. The legal and political representation of unattached interests takes place in the context of a democratic state requiring institutions whose norms and procedures comply with fundamental democratic principles.<sup>9</sup> This seems to raise a problem for my proposal to the extent that Burke's theory of representation, which I propose as the right conception of interest when dealing with the representation of non-human organisms, has dubious democratic credentials. Determining the interests of those who will be represented by legal and political institutions without consulting the interests bearers does not fit our idea of democratic and representative state institutions. Moreover, my proposal seems to privilege scientific knowledge as the way of understanding the interests of non-human organisms, which might be thought to render it elitist, neo-

---

<sup>9</sup> Of course, this is different from affirming that only democracies are to recognise the interests of nature. I am simply stating that representation of non-human individuals' interest is in this article explored within democratic contexts. How these interests ought to be represented in non-democratic contexts is not something I address here.

imperialistic and, ultimately, at odds with fundamental democratic values. To some, this may represent an irremediable tension between the representation of unattached interests and democratic practice. Yet I would like to show that what looks like an unsolvable contradiction between these two ideas can be avoided if we adequately specify a couple of central tenets of democratic theory.

One of the most basic questions in democratic theory is who should be enfranchised and, consequently, whose interests will be recognised and represented in the polity. This is the so-called boundary problem, whose most common theoretical solution is the all-affected-interests thesis: all those whose interests are affected by a political decision ought to be enfranchised and represented. This is so much so that it has been argued that the essence of democratic legitimacy is the capacity of those affected by a decision to deliberate in the production of that decision (see Dryzek and List 2003).<sup>10</sup> Is this thesis correct? Does democracy really hinge on the enfranchisement of all those whose interests are affected by state institutions' practice? The plausibility of an affirmative answer derives from the idea that the point and justification of democracy is to advance and protect the interests of those who are part of the constituency. If this is true, then it also seems to be the case that all those whose interests are affected by a democratic decision ought to be enfranchised.<sup>11</sup>

Endorsing these theses raises problems for non-anthropocentrism. If non-anthropocentric theorists hold that democracy depends on the enfranchisement of all those whose interests are affected by state policies – as both their democratic and non-anthropocentric commitments seem to require – they will have to explain how to enfranchise orange trees, cacti, and bees. As a consequence, the non-anthropocentric perspective falls

---

<sup>10</sup> For this point see generally Held 1995. See also Dahl 1979; Beitz 1990; Goodin 2007; Saunders 2011.

<sup>11</sup> This is of course a simplification. One could argue, for example, that political participation does not have to be conceptualised as an absolute category and can be understood in scalar terms (you can have it more or less). In that case, the power one has to decide in the polity ought to be proportional to one's interests at stake (see Brighouse and Fleurbaey 2010).

into a *reductio*. Instead, were they to answer that democracy is not to protect non-human interests, their position would seem to fall short of its non-anthropocentric character, since the protection of the interests of nature would be left to the good will of whoever votes and makes political decisions.

Yet non-anthropocentric theorists can avoid the *reductio* if they argue that the enfranchisement of non-humans should be done indirectly. Robert Goodin has argued along these lines when defending the claim that democracy requires strategies of internalisation of others' interests (Goodin 1996; Goodin 2000). In his view, genuine democracy entails the education and transformation of those who actively participate in the deliberative community, so in this process we all come to make ours the interests of those who are around us. The outcome of this internalisation is the representation of non-humans' interests in the democratic process.

Unfortunately, this argument will not do. Ben Saunders (2011) has rightly pointed out that Goodin is confusing who should be enfranchised with how those who are enfranchised should vote. Thus, the fact that we should seriously consider the interests of those who are disenfranchised does not mean that those who are disenfranchised should have the right to vote. For Saunders, behind this mistake there is a faulty conception of democracy that puts interests and their protection at the centre of democratic governance: "Democracy is not simply about the equal satisfaction of different parties' interests, but about giving people equal (and positive) *inputs* into what the decisions are" (Saunders 2011, 287).<sup>12</sup> In different words, democracy is mainly and primarily about agency, not about interests.

The implication of Saunders' argument is that the exclusion of moral patients from democratic practice, even if we recognise their relevant interests, does not impinge upon the quality of democracy – this is why we can legitimately disenfranchise children and the insane

---

<sup>12</sup> For a more elaborated account of this view see Estlund 2008.

without compromising our commitment for democracy. Indeed, democracy should be concerned with empowering all and only those who can participate as agents in the democratic process. Thus, if a democracy excludes from its democratic process those who are incapable of participating, it is not for that reason less democratic. This explains why the democratic deficit of the Burkean theory of representation is irrelevant when considering the interests of non-human organisms and this is why we do not need to explain why non-human animals and plants are disenfranchised even though we recognise they have interests that ought to be represented.

Ultimately, the representation of unattached interests I am proposing is not a concern for democratic theory. Instead, what is at stake is the practical respect owed to organisms with a recognisable moral standing, which, I contend, may be adequately expressed through legal and political representation. To be sure, this does not mean that the question of how the enfranchised should exercise their right to vote is not a fundamental question or that it is irrelevant in this context. Quite the opposite: precisely because some interest bearers are legitimately excluded from the democratic process (children, the insane, and all non-human living organisms) we should carefully determine how we ought to exercise our right to vote so that we do not wrongly affect the interests of the disenfranchised. This is required by the respect we owe to all non-human living organisms.

At this juncture doubts may arise regarding my claim that the internalisation thesis is not adequate to advance the case of non-human interests. Why not promote the internalisation of the interests of non-human nature to advance the respect owed to these organisms? To provide an answer it might be useful to consider the following analogy regarding the respect owed to basic human rights and the respect owed to morally considerable non-human organisms. It would be a good thing that no institution had to impose limits upon democratic rules and decisions through, for example, constitutional



principles and courts because citizens knew that democratic ruling and decisions would not contravene basic human rights. In that context, through processes of education and participation, human beings would have internalised the tenets of the fundamental respect owed to their fellow human beings and human rights. Similarly, it would be a good thing if each of us had come fully to internalise the interests of non-human nature so that our practices and decisions recognised and respected those interests. Unfortunately, such is not the case. Although we should not deny that we have progressed in the satisfaction of our obligation to non-human nature, the truth is that nature and the non-human individuals that are part of it are largely seen as resources for the satisfaction of human interests. We exploit nature to satisfy our needs and desires and if we sometimes conserve nature we do it for the sake of future generations of humans so they can also have the opportunity to satisfy their own needs and desires.

Thus, in a world like ours, the internalisation of the interests of nature is an aspiration to which we should move incrementally. My proposal – one that defends the representation of the interests of non-human nature not through internalisation of these interests but through an institutional structure – should be understood as a first step in that direction.

#### **4. What Are The Conditions Of Representation?**

In this section I consider an additional key question concerning the institutionalisation of the representation of non-human nature, namely, what are the limits and constraints of legitimate representation. This is important because our normative requirements – and thus, the normative requirements of those who would represent the interests of non-human organisms – are not reduced to legal and political representation of the interests of non-human individuals. This means that on many occasions, legal and political representation of these interests will be in competition, and sometimes in deep conflict, with other normative principles and values.

In answering the question on the conditions of representation we are thus looking for principled guidance to resolve these conflicts.

A helpful way to frame this discussion is in terms of the dispute between anthropocentric and non-anthropocentric principles and norms. While the latter set of principles embraces some form of moral equality between human and non-human interests – let us call this the equality claim – the former does not. To be sure, the term ‘anthropocentrism’ and, by extension, ‘non-anthropocentrism’, is used in various senses in various contexts, but in the context of evaluating legal and political institutions I intend it thus: non-anthropocentrism embraces some form of moral equality between human and non-human interests and the equality it embraces does not take a form that makes the resulting view indefensible because it is too demanding of human agents.<sup>13</sup>

Consider the following case: a developing country in dire need of natural resources to meet the basic needs of a large part of its population has within its territory natural gas reserves whose exploitation would solve most problems related to the provision of basic goods in the country. However, the exploitation of this resource would require the destruction of large patches of a tropical rainforest, which, in turn, would have a devastating impact on the animal species living in the rainforest as well as on the capacity of the rainforest to capture CO<sub>2</sub> emissions produced both within and outside the country. Losing this carbon sink, we are certain, would have some consequences for both humans and non-humans alike, even though it would solve the problem of providing for the basic needs of significant parts of present and future generations of citizens of that country.<sup>14</sup>

From a defensible anthropocentric perspective, and provided that no other avenue of action was reasonably open to satisfy their needs and no one else was responsible for the state

---

<sup>13</sup> I thank an anonymous reviewer of *Environmental Values* for inviting me to clarify this point.

<sup>14</sup> For a real world scenario consider the Yasuni National Park in Ecuador. The park contains around 800 million barrels worth of crude oil, which represent a fifth of Ecuadorean reserves.

of affairs that led the country to these circumstances, what the government of the developing country should do is to exploit the natural resources to fulfil its obligation to provide for the basic needs of the members of the political community. Given the moral asymmetry anthropocentrism assigns to humans over non-humans, this conclusion would be reached without much controversy among those who embrace anthropocentrism.

By contrast, in the same circumstances, non-anthropocentrists could argue that the developing country is under an indirect obligation not to exploit the reserves insofar as exploiting them would violate its direct obligation not to aggress against the non-human nature affected by the destruction of the rainforest.<sup>15</sup> This view would demand the representatives of the interests of nature to prevent the developing country from exploiting the sources of natural gas. In other words, this view would require representatives of non-human interests to prevent some humans from satisfying their basic needs because to satisfy them would aggress against the basic needs of non-humans.

Unfortunately, if what we look for is a morally defensible non-anthropocentric perspective, this conclusion does not seem to fit the bill. It is unreasonable to require someone to prevent any other human from satisfying his or her basic needs. The over-demandingness of this request can be explained by the fact that representatives of non-human interests are humans and, thus, they naturally and legitimately would tend to favour other members of their species. Let us call this the over-demandingness objection, which states that to require representatives of non-human interests to act in every circumstance following the

---

<sup>15</sup> It has been pointed out to me that this example plausibly treats non-human nature in a way that is at odds with the individualistic tenets I have presented throughout the article. This requires some clarification on my part: individualism in environmental ethics, as I understand it, is the view that individual organisms are the fundamental source of value. This does not entail that collectives or ecosystems have no value. It only entails that the value they have is derivative on the value they have for individuals. It is for this reason that I do not deny the existence of duties toward collective realities or complex ecosystems. Instead, I conceive of these duties as having an indirect nature. Thanks to Kerri Woods for forcing me to address this point.

interests of non-human beings, sometimes acting even against the satisfaction of basic needs of humans, is unreasonably demanding.<sup>16</sup> This objection is a serious problem for non-anthropocentrism and forces anyone interested in advancing a morally defensible version of such a theory to look for guiding principles that, without falling short of genuine non-anthropocentrism, avoid over-demandingness. If no adequate principles can be found, non-anthropocentrism should be deemed unreasonable and, thus, we would have conclusive reasons not to embrace it.

Is it then possible to come up with conditions of representation which are neither anthropocentric nor overly-demanding?<sup>17</sup> In a series of articles, James Sterba has answered these questions in the affirmative (Sterba 1994; Sterba 2005). His argumentative strategy has changed over the years, and here I only focus on the most recent and persuasive of them. His central claim is that a morally defensible non-anthropocentrism can be reconciled with reasonable anthropocentrism once a series of four principles are specified. The first one of these principles, a Principle of Human Preservation (PHP), states that

Actions that are necessary for meeting one's basic needs or the basic needs of other human beings are permissible even when they require aggressing against the basic needs of individual animals and plants, or even of whole species or ecosystems (Sterba 2005, 292).

---

<sup>16</sup> Note that this objection is exclusively directed to the relationship between humans and non-humans, where the basic interests of the latter are not satisfied for the sake of satisfying the basic interests of the former. Thus, this objection says nothing about the relationship between humans, where the basic interests of some humans are satisfied for the interests of other humans. In such kind of relationship it is unlikely that we would agree that it is always unreasonable to allow that some humans satisfy their basic needs even if this prevents other human beings from satisfying their own basic needs.

<sup>17</sup> Environmental ethicists have formulated different versions of this crucial question: "Can and ought we enforce environmental ethics if this benefits nature over against humans?" (Holmes Rolston III 2001, 360); "Is it possible to defend a generalised non-anthropocentric perspective while also agreeing with the 'humanist' response to their particular killing scenario, or is this contradictory?" (Eckersley 1998, 166).

A second principle forbids aggressing against non-human basic needs when human non-basic needs are at stake. This is a Principle of Disproportionality (PD) according to which “[a]ctions that meet nonbasic or luxury needs of humans are prohibited when they aggress against the basic needs of individual animals and plants, or even of whole species or ecosystems” (Sterba 2005, 294). A third element in Sterba’s theory is a Principle of Human Defence (PHD), a non-controversial rule analogous to self-defence in ethics and legal practice. The fourth and last principle is one of redress of violations against PHP, PD, and PHD. This is a Principle of Rectification (PR), according to which “[c]ompensation and reparation are required when the other principles have been violated” (Sterba 2005, 297).

Taken altogether, PHP, PD, PHD and PR account for Sterba’s non-domination proposal, which constitutes, or so Sterba believes, an adequate combination of principles to resolve conflict between the anthropocentric and non-anthropocentric perspectives. On the one hand, this proposal avoids the over-demandingness objection (or satisfies what Sterba calls the ‘ought’ implies ‘can’ principle) because it does not permit or demand humans to aggress against the basic needs of other humans for the sake of protecting the basic needs of non-humans (by PHP). On the other hand, Sterba makes clear that if non-humans count morally, then we cannot aggress their basic needs whenever this serves our non-basic or luxury needs (by PD). The kernel of Sterba’s non-anthropocentric perspective is that “counting morally rules out domination, where domination means aggressing against the basic needs of some for the sake of satisfying the nonbasic needs of others” (Sterba 2005, 295).

I think Sterba is on the right track. In my view, these principles represent an adequate general determination of the conditions of representation, especially in the face of the over-demandingness objection. However, I have doubts about the non-anthropocentric nature of his proposal. More precisely, I do not think Sterba’s articulation of these principles provides

adequate ground for the core non-anthropocentric claim that all species count morally. Let me explain why.

On the one hand, Sterba argues that the claim that members of all species count morally requires embracing PD: “if saying that species count morally is to mean anything, it must be the case that the basic needs of the members of non-human species are protected against aggressive actions that only serve to meet the non-basic needs of humans [...]” (Sterba 2005, 295). This must be right. We could not make sense of inter-species equality if some species could be sacrificed for the sake of the luxurious or superfluous needs of other species. On the other hand, can we make sense of this fundamental non-anthropocentric claim while simultaneously affirming the moral adequacy of PHP? Sterba answers ‘yes’, and the gist of his answer is that it would be unreasonable to ask and/or require any would-be human guardian of nature’s interests (or, more generally, any human) to prevent other humans from meeting their basic needs. This, in Sterba’s terms, would not accord with the ‘ought’ implies ‘can’ principle (see Sterba 2005, 286).

I have already conceded that it is unreasonably demanding to require any human to prevent other humans from satisfying their basic needs for the sake of non-humans. This idea, however, is so dominant in Sterba’s view that he ultimately falls short of its allegedly non-anthropocentric spirit. To advance a form of non-anthropocentrism consistent with the equality claim one should recognise that although it might be unreasonably demanding to ask or require some humans to prevent other humans from satisfying their basic needs, acts that aggress against the basic needs of any morally considerable being (human or not) are always wrong and call for redress. The basis of this principle is the idea that even if on occasions acting on certain moral principles may be too difficult or demanding, anyone who does not comply with these principles should be held accountable for her action and may be required to perform acts of redress for the wrong of aggressing against the basic needs of non-human

organisms. It is only under this different perspective that the equality claim can be genuinely honoured.

Thus, in order to both avoid the over-demandingness objection *and* honour the equality claim, I propose a different version of PHP, which I call a Principle of Human Preservation as Defence (PHPD). It states that

Actions that aggress against the basic needs of individual animals and plants are wrong and call for redress without exception, even though the aggressor may have a justification for his action if performed to meet his basic needs or the basic needs of other humans.

PHPD incorporates a justification clause, that is, a special kind of defence that an aggressor may advance to explain his or her aggression against non-human organisms. This defence may reduce how blameworthy an agent's action is and, for example, may preclude or reduce state retribution as the required response against the agent who performed the wrongful action.

A defence clause like this may prompt the following objection. Since a justification is a defence for one's action  $x$  so that  $x$  is tolerated even though under any other circumstances  $x$  would be intolerable, it is then the case that even though PHPD justifies aggressions against non-humans on grounds different from PHP, the conclusions reached by both principles are the same: according to PHPD, when human basic needs are at stake, we can justifiably give preference to our own species. Therefore, the objection goes, both principles reach the same practical conclusions – we can give priority to humans over non-humans and sacrifice the latter for the sake of the former – and, thus, they are materially indifferent from the point of view of non-anthropocentrism.

This objection, however, misunderstands the nature of the defence clause in PHPD. From a non-anthropocentric view, even in if an individual can justify why she aggressed

against the basic needs of non-humans, she is not excused for having so acted – as if in those circumstances the wrong was cancelled – and is still obliged to make redress. What is at stake here is the distinction between exculpatory and non-exculpatory defences.<sup>18</sup> Unlike non-exculpatory defences, exculpatory defences “describe those general defences which negate criminal culpability despite the presence of the definitional elements of an offence. Culpability may be negated because of the *actus reus* occurred in a special context, as in defences like self-defence or duress” (Colvin 1990, 381). This distinction helps to distinguish genuine non-anthropocentrism from alternatives and constitutes the key difference between Sterba’s PHP and my PHPD. More importantly, it generates a real difference for the equality claim and the satisfaction of the interests of nature.

To explain why this distinction is consequential, let us contrast PHPD and PHP. According to Sterba’s Principle of Rectification, when *any* of the principles he proposes is violated, compensation and reparation are required.<sup>19</sup> This means that compensation and reparation are required any time (i) a human being is prevented from satisfying his or her basic needs for the sake of non-humans – by PHP – and/or (ii) a human satisfies his or her non-basic needs by aggressing against the basic needs of non-humans – by PD.<sup>20</sup> Whilst a violation of PHP would entail reparation in favour of some humans, a violation of PD would involve reparation in favour of some non-humans.

As it stands, however, this set of principles says nothing about reparation or compensation in favour of non-humans when humans aggress against the basic needs of non-humans to satisfy human basic needs. Rectification is not contemplated by PHP in these circumstances, which suggests that the wrong of aggressing against the basic needs of non-

---

<sup>18</sup> See Fletcher 1978, ch.10. More recently see Colvin 1990; Gardner 2007; Duff 2007.

<sup>19</sup> What Sterba really says is that when a violation of the other principles of his theory occurs then compensation and reparation are required (see Sterba 2005, 297). However, to work as a feasible principle of rectification, Sterba must mean that when any of these principles is violated, rectification follows. Hence my reading of PR.

<sup>20</sup> For present purposes I leave aside the rather uncontroversial Principle of Human Defence.



humans is nullified – and thus exculpated – by the fact that the aggression is done for the sake of satisfying the basic needs of humans. Those forms of aggression against non-humans are thus left unrecognised and unaddressed.

In contrast, PHPD would never condone aggression against the basic needs of non-human nature, even if done for the sake of satisfying human basic needs. Although human aggressors may have a defence that explains their actions to other humans, a successful defence would not exculpate them for their aggression and, therefore, redress would still be in order. The point is that a genuinely non-anthropocentric principle of human protection has a merely justificatory nature, not an exculpatory one; it justifies a wrong, it does not deny it.

In light of these conclusions, let us come back to the case of the developing country in urgent need of natural resources to satisfy the basic needs of its population. As we saw before, Sterba's view would legitimate the intervention of the state to exploit the resources because this action would allow the satisfaction of the basic needs of the inhabitants of the country. Nothing in Sterba's formulation of PHP suggests that the aggressor would have to justify her action and compensate or rectify for the consequences of it. By contrast, a genuinely non-anthropocentric perspective would maintain as non-negotiable its commitment to the equality claim and, therefore, would always demand actions of redress when aggressions against the basic needs of non-human nature occur, even if done for the sake of the basic needs of humans. Indeed, PHPD would not condone the aggressor's action even though it would recognise the existence of a justificatory defence, which may reduce how blameworthy his aggressive action is.

As the previous analysis shows, although PHPD takes the equality principle seriously, it may seem not to fare well in the face of the over-demandingness objection. Such is the case because PHPD states that actions that aggress against the basic needs of non-human individuals are *without exception* wrong and *always* call for redress. This objection,

however, can be neutralised if we notice that PHPD leaves open the question of what kind of redress is called for in a given circumstance. Although exploring the precise contours of redress called for by PHPD is something that I cannot fully address here, it is important to precise that the view I endorse states that moral agents ought to atone for their wrongful actions against non-human living organisms as a matter of the moral respect owed to living organisms.

My account of PHPD, in other words, advances a moral conception of redress for aggressions against the basic needs of non-human nature. This conception of redress must involve some concern for the well-being of non-human living organisms. This means that relevant forms of redress should be consequential regarding the satisfaction of the basic interests of those organisms that have been aggressed against. In some circumstances, redress may entail full restoration of the state of affairs prior to the aggression. In many other cases this may not be possible because the organisms aggressed against have ceased to exist. This is analogous to what happens in the criminal law when a wrongdoer murders his victim. In those circumstances we still hold the wrongdoer accountable and punish him for the wrong committed, even if the victim cannot experience any form of reparation at all. Similarly, PHPD requires redress even if the organisms aggressed against no longer exists. This is what respect for non-human nature demands. In cases like these various actions of redress are available, including furthering the good of other members of the same species, or facilitating the well-being of organisms belonging to other species and even other ecosystems.<sup>21</sup> The

---

<sup>21</sup> An anonymous reviewer of this journal has cast doubts on whether this kind of redress is consistent with biocentric individualism or, rather, represents a form of holism. There are three aspects of this proposal that I believe makes it consistent with biocentric individualism. First, redress via furthering the good of members of the wronged individual's species (or of members of other species) is a legitimate alternative only when redress directed to the individual wronged is not possible. In other words, furthering the good of individuals different from the wronged organism conveys the required respect for the latter only if furthering its own good is no longer feasible. Second, in the cases considered here, favoring the good of other organisms is done in the name of the wronged individual. Even though all members of the biotic community of the earth have moral standing,

great variety of responses available for aggressions against organisms that no longer exist is a function of the multiple ways in which moral agents can express respect for the victims of their wrongdoings. The specific content of these various forms of redress is not a matter for philosophy, but for science, and what these specific forms of redress must not disregard, and therefore must convey, is the respect owed to non-human nature.<sup>22</sup>

In sum, the developing country may decide to exploit the rainforest to satisfy the basic needs of a large part of its population. However, in a system that recognises the moral considerability of nature, the representatives of the state would have to be called to answer for this aggression against the trees composing the rainforest (and against any other living organisms that inhabit it). Since *ex-hypothesi* the developing country aggressed against nature to satisfy basic needs in circumstances that no other avenue of action was reasonably open to satisfy those needs and no one was responsible for the state of affairs that led the country to these circumstances, PHPD would make available a defence for the country, even though it would still require that the wrong committed be redressed.

## 5. Conclusion

The aspiration that institutions represent non-humans is worth exploring and pursuing. Following this ideal, in this article I have defended the claim that non-human individuals have interests that ought to be institutionally represented and argued that these interests have an unattached nature: they can be determined without appealing to the desires and other

---

acts of redress via furthering the good of individuals that have not been wronged is a way to express the respect owed to the wronged individual. Third, even when acts of redress further the good of members of other or the same species as the wronged individual, these acts are performed to further the good of individuals, not of species or ecosystems, which is consistent with the basic tenets of the biocentric individualist stance of this article.

<sup>22</sup> Thanks to an anonymous reviewer of *Environmental Values* for making me address this important issue.

mental states of the organisms that have them. Indeed, they could be determined even if these beings had no mental states at all.

Moreover, I have offered an account of the limits of legitimate representation of non-human interests: aggressions against the basic needs and functions of non-human individuals are always wrong, even if these aggressions are done for the sake of satisfying the basic needs of other human beings. In these regrettable but common cases of conflict of interests, redress is always necessary, although the existence of non-exculpatory defences may considerably reduce how blameworthy these aggressions are.

It should be clear that the ideas I have presented here are by no means conclusive. I have said nothing, for example, about the constitution of the institutions that shall represent the interests of non-human nature. Will they be local, national or global? Would the representatives comprising these institutions be democratically elected or appointed? Would they represent some non-human individuals before other non-human individuals? These are only a few of the important and difficult issues still to be explored.

Be all this as it may, the arguments of this article point to an urgent and promising line of investigation within environmental ethics, in general, and biocentrism, in particular.

### **Acknowledgments**

Thanks to Tomás Chuaqui, Alejandra Mancilla, Cristian Perez, and Kerri Woods for helpful comments and suggestions on early versions of this paper, as well as to an anonymous referee of *Environmental Values*. I would also like to acknowledge the support of the Millennium Nucleus for the Study of Stateness and Democracy in Latin America (RS130002), supported by the Millennium Scientific Initiative of the Ministry of Economy, Development and Tourism of Chile.

## References

- Attfield, Robin. 1983. *The Ethics of Environmental Concern* (Oxford: Basil Blackwell)
- Beitz, Charles. 1990. *Political Equality: An Essay in Democratic Theory* (New Jersey: Princeton University Press)
- Brighouse, Harry and Fleurbaey, Marc. 2010. "Democracy and Proportionality", *Journal of Political Philosophy* 18/2: 137-155.
- Burke, Edward. 1774. "Speech to the Electors of Bristol", in *The American Quarterly Review* 1829 V/9.
- Convention on Biological Diversity. 2008. "Liability and Redress in the Context of Paragraph 2 of Article 14 of the Convention on Biological Diversity" (Bonn: UNEP)
- Colvin, Eric. 1990. "Exculpatory Defences in Criminal Law", *Oxford Journal of Legal Studies* 10/3: 381-407.
- Conniff, James. 1994. *The Useful Cobbler: Edmund Burke and the Politics of Progress* (New York: State University of New York)
- Dahl, Robert. 1979 "Procedural Democracy", in P. Laslett and J. Fishkin (eds.) *Philosophy, Politics and Society: 5th Series* (New Haven: Yale University Press), pp.79-133.
- Dobson, Andrew. 1996. "Representative democracy and the environment", in Lafferty W. and Meadowcraft J. (eds.), *Democracy and the environment* (Cheltenham: Edward Elgar), pp.124-39.
- Donaldson, Sue and Kymlicka, Will. 2013. *Zoopolis. A Political Theory of Animal Rights* (Oxford: Oxford University Press)
- Dretzke, Fred. 1995. *Naturalizing the Mind* (Cambridge, Mass.: MIT Press)
- Dryzek, John and List, Christian. 2003. "Social Choice Theory and Deliberative Democracy: A Reconciliation", *British Journal of Political Science* 33/01: 1-28.
- Duff, Anthony. 2007. *Answering for Crime. Responsibility and Liability in the Criminal Law* (Oxford: Hart Publishing)
- Dustin, William. 2000. *Toward an Ethic of Citizenship: Creating a Culture of Democracy for the 21<sup>st</sup> Century* (New York: toExcel Press)
- Eckersley, Robyn 1998. "Beyond Human Racism", *Environmental Values* 7/2: 165-82.
- Eckersley, Robyn. 1999. "The Discourse Ethic and the Problem of Representing Nature", *Environmental Politics* 8/2: 24-49.
- Eckersley, Robyn. 2004. *The Green State – Rethinking Democracy and Sovereignty* (Cambridge, Mass.: MIT Press)

- Estlund, David. 2008. *Democratic Authority: A Philosophical Framework* (Princeton, NJ: Princeton University Press)
- Feinberg, Joel. 1974. "The Rights of Animals and Unborn Generations", in William Blackstone (ed.) *Philosophy and Environmental Crisis* (Athens, Ga.: University of Georgia Press), pp.43-68.
- Feinberg, Joel. 1987. *Harm to Others – The Moral Limits of the Criminal Law* (Oxford: Oxford University Press)
- Fletcher, Georg. 1978. *Rethinking Criminal Law* (Boston: Little, Brown & Co)
- Gardner, John. 2007. *Offences and Defences. Selected Essays in the Philosophy of the Criminal Law.* (Oxford: Oxford University Press)
- Garner, Robert. 2013. *A Theory of Justice for Animals – Animal Rights in a Nonideal World* (Oxford: Oxford University Press)
- Goodin, Robert. 2007. "Enfranchising all affected interests and its alternatives", *Philosophy and Public Affairs* 35: 40–68.
- Goodin, Robert. 1996. "Enfranchising the Earth, and Its Alternatives", *Political Studies* XLIV: 835-49.
- Goodin, Robert. 2000. "Democratic Deliberation Within", *Philosophy and Public Affairs* 29/1: 81-109.
- Goodpaster, Kenneth. 1978. "On Being Morally Considerable", *Journal of Philosophy* 75: 308-25.
- Held, David. 1995. *Democracy and the Global Order* (New York: Cambridge University Press)
- Neander, Karen. 1991. "The Teleological Notion of 'Function'", *Australasian Journal of Philosophy* 69/4: 454-68.
- Pitkin, Hanna. 1967. *The Concept of Representation* (Berkeley: University of California Press)
- Rolston, Holmes III. 2001. "Enforcing Environmental Ethics – Civic Law and Natural Value", in James Sterba (ed.) *Social and Political Philosophy: Contemporary Perspectives* (London: Routledge), pp.349-69.
- Saunders, Ben. 2011. "Defining the Demos", *Politics, Philosophy and Economics* 11/3: 280-301.
- Schweitzer, Albert. 1923. *Civilization and Ethics*. J. Naish (trans.) (London: A&C Black).

- Stein, Tine. 1998. "Does the Constitutional and Democratic System Work? The Ecological Crisis as a Challenge to the Political Order of Constitutional Democracy", *Constellations* 4/3: 420-49.
- Sterba, James. 1994. "Reconciling Anthropocentric and Nonanthropocentric Environmental Ethics", *Environmental Values* 3/3: 229-44.
- Sterba, James. 2005. "Global Justice for Humans and for All Living Beings and What Difference It Makes", *The Journal of Ethics* 9: 283-300.
- Stone, Christopher. 1974. *Should Trees Have Standing? Towards Legal Rights for Natural Objects*. (Los Altos, CA: Kaufman)
- Sylvan, Richard. 1973. "Is There a Need for a New, an Environmental, Ethic?", *Proceeding of the XVth World Congress of Philosophy* (Varna: Sofia Press), pp.205-10.
- Taylor, Paul. 1986. *Respect for Nature: A Theory of Environmental Ethics* (Princeton: Princeton University Press)
- Varner, Gary. 1998. *In Nature's Interests? Interests, Animal Rights, and Environmental Ethics* (Oxford: Oxford University Press)
- Varner, Gary. 2003. "Nicholas Agar. *Life's Intrinsic Value*", *Environmental Ethics* 25/4: 413-416.
- Wood, Allen. 1998. "Kant on Duties Regarding Nonrational Nature," *Proceedings of the Aristotelian Society Supplement* LXXII: 189-210.