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Ecological Justice and Law

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A. Introduction

The notion of ecological justice (or 'eco-justice') is fairly new[1] and not widely known among lawyers. This is in stark contrast to environmental justice, one of the most commonly used terms in the general environmental debate.[2] What is the difference between these aspects of justice and why is ecological justice important for environmental law?

This chapter argues that environmental law should be informed by ecological justice in much the same way as law in general is informed by justice. Generally understood conceptions of 'justice' are concerned with fair distribution of social goods and burdens. Distributional concerns are in the centre of most theories of justice. They are also in the centre of justice theories with respect to environmental protection. However, there are two different relational aspects to be considered here: the justice of the distribution of the environment among people, and the justice of the relationship between humans and the rest of the natural world.

The former is usually captured by the term 'environmental justice'. What about the latter? Whether or not the relationship between humans and the rest of the natural world has anything to do with 'justice' is controversial. Those who agree speak of 'ecological justice' as a concept to include both relational aspects. Those who disagree insist that our relationship with the rest of the natural world is a matter of ethics and morality, but not justice. For them, 'environmental justice' is the only term available to describe distributional problems with respect to environmental protection.

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[1] First termed by N Low and B Gleeson Justice, *Society and Nature* (Routledge, 1998) 2; K Bosselmann, 'Justice and the Environment: Building Blocks for a Theory on Ecological Justice' in K Bosselmann and B Richardson (eds), *Environmental Justice and Market Mechanisms: Key Challenges for Environmental Law and Policy* (Kluwer, 1999) 30.

[2] The Google Internet search brings up nearly 500,000 references for environmental justice compared to 6,000 for 'ecological justice'.

Traditionally, legal relationships—including those of justice—are perceived as relationships purely between people: people have no legal obligations towards nature, and nature has no rights towards people. Environmental law has been moulded in this anthropocentric perception of law. However, since the early 1970s this anthropocentric perception has been challenged from an environmental ethical point of view. The dichotomy between anthropocentric and ecocentric positions continues to influence theoretical conceptions of environmental law.

More recently, environmental ethics has taken an interest in theories of justice. As mentioned—and in line with the general environmental law debate—there are two broad approaches. One is to keep ethics and justice strictly separate, the other is to reconceptualise justice in the light of environmental ethics. While each approach can be associated with either an anthropocentric or ecocentric perspective, it is important to note that the eco-justice debate does not entirely follow this divide. There have been serious attempts to accommodate some form of ecocentrism within the liberal, Rawlsian[3] conception of justice, which considers justice to apply to relations only among people, not between humans and non-humans. One of the key issues in the current eco-justice debate is whether our responsibilities towards the future and the rest of the natural world can be fully addressed by extending the liberal idea of justice.

The first section of this chapter explores how liberal positions and ecological positions have tried to accommodate environmental ethics in the idea of justice. Although there is some common ground between them, liberal extensionism cannot explain why individual freedoms such as property rights should be restrained for ecological reasons. Rather than adding duties to rights, ecological realities urge us to consider re-definitions of rights themselves.

For a theory of eco-justice it is not enough to call upon environmental ethics. Unless we see all the various conceptions of justice as reflections of ethics, we will not be able to transform them. But even if we agree that 'all claims of justice are rooted in certain values other than justice itself',[4] the problem of reaching sufficient commonality of values remains. Can a commonality of values simply be assumed or would it merely be the result of a public discourse? This question leads us to the problem of how ecocentric norms can be institutionalised in ways that are consistent with democratic process. As will be shown in Part B, ecocentrism neither can be imposed nor will it emerge naturally from a discoursive democracy. Ecocentrism needs to be reasoned to make sense, although making sense does not necessarily emerge from reasoning in a pretext of liberal democracy.

An important argument in favour of eco-justice is the notion of sustainability. Despite the ongoing confusion surrounding the meaning of 'sustainable development', a good argument can be made that sustainability is an ethical concept rooted

[3] Named after its main proponent, John Rawls: J Rawls, *A Theory of Justice* (Oxford UP, 1993).

[4] A Heller, *Beyond Justice* (Basil Blackwell, 1987) 120.

in ecocentrism. Ecological sustainability implies acknowledgement of the intrinsic values of 'non-human others', and the need to express such intrinsic value in political and legal concepts, not the least of which is the idea of justice. Part C will, therefore, explore the intersections between sustainability and justice.

The core argument in favour of eco-justice is that it best expresses the ethics of ecological sustainability. Its key elements can help to define environmental law for sustainability. The final part of the chapter will show how eco-justice has informed recent trends in environmental and sustainable development law and how it can help to guide future trends.

The following section presents some theoretical approaches to ecological justice. They reflect differing political ideologies depending on how individuals are placed in their social and ecological context. The various positions will then be evaluated. As we will see, the defining criterion for a theory of ecological justice is the degree to which ecological concerns inform justice rather than ethics. The relationship between justice and ethics is at the heart of the eco-justice debate.

B. Liberal and Ecologist Approaches to Eco-Justice

1. Emergence of Environmental Justice Theories and Practices

Environmental policy and ethical debates around the world have increasingly been informed by various concepts of justice.[5] The term 'environmental justice' first rose to prominence through the environmental justice movement in the United States, which began in the 1970s.[6] It focused mainly on the unjust distribution of benefits and burdens in the context of environmental use and protection. Hofrichter's *Toxic Struggles* book publicised the inequities of siting locally undesirable land uses such as landfills and hazardous industries in the poor, often non-white communities.[7]

The growing political salience of environmental justice was reflected in President Clinton's famous Executive Order 12898, requiring government agencies to identify and address health and environmental effects on minority and low-income populations.[8] In Australia, environmental justice concerns first materialised in the

[5] See, by way of introduction, ZJB Plater, 'From the Beginning, A Fundamental Shift of Paradigms: A Theory and Short History of Environmental Law?' (1994) 27 *Loyola of Los Angeles L Rev* 981.

[6] D Faber (ed), *The Struggle for Ecological Democracy: Environmental Justice Movements in the United States* (Guilford Press, 1998).

[7] R Hofrichter, *Toxic Struggles: The Theory and Practice of Environmental Justice* (New Society Publishers, 1993); RD Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Westview Press, 1999)).

[8] Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (11 Feb 1994).

'Green Ban' movement in Sydney. Trade unions and community groups allied to halt environmentally and socially harmful developments, eventually winning rights of public participation in development decisions that might disproportionately harm certain localities or communities.[9]

A large literature on the subject emerged in the 1970s and 1980s, as academics, environmental activists and community groups demanded greater attention to environmental justice in government, economy, society and personal life. In general, this scholarship and activism did not address the question of the role of law or reform of environmental law. The 'deep ecology' movement attempted to construct a comprehensive ecocentric world view and way of life based on the equality of all forms of life and the rejection of all forms of domination, especially human domination of nature.[10] The 'social ecologists' emphasised the impacts of social hierarchy, ie domination over other humans on environmental health.[11] The animal rights movement contributed to the debates by pushing to extend the notion of justice beyond human beings.[12] 'Ecofeminists' highlighted the connections between patriarchy, environmental degradation and social injustice.[13] Not all commentators agreed, however, that it would be possible to forge shared conceptions of environmental justice in a 'postmodern' world comprised of heterogeneous and discordant societies.[14]

These were largely Western debates. The connections between human rights, environmental protection and justice were also taken up during the 1980s and 1990s by indigenous peoples' movements and environmental community groups in developing countries. A vast potpourri of environmental philosophies and practices relevant to environmental justice has been documented around the planet.[15] Of acute concern are the inequities of access to land, which have been commonly linked to deforestation and environmental mismanagement as the landless etch out a meagre living in environmentally marginal areas.[16] Environmental justice concerns were thus central to the 1993 rebellion of the

[9] M Burgmann and V Burgmann, *Green Bans, Red Union: Environmental Activism and the New South Wales Builders Labourers' Federation* (UNSW Press, 1998).

[10] See A Naess, *Ecology, Community and Lifestyle* (Cambridge UP, 1989); B Devall and G Sessions, *Deep Ecology: Living as if Nature Mattered* (Peregrine Smith Books, 1985).

[11] M Bookchin, *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy* (Cheshire Books, 1982); C Spretnak and F Capra, *Green Politics* (Bear and Company, 1986).

[12] See P Singer, *Animal Liberation* (Random House, 1965); T Regan and P Singer (eds), *Animal Rights and Human Obligations* (Prentice-Hall, 1989); E Hargrove, *The Animal Rights—Environmental Ethics Debate* (SUNY Press, 1992).

[13] See V Plumwood, *Feminism and the Mastery of Nature* (Routledge, 1994); CJ Cuomo, *Feminism and Ecological Communities* (Routledge, 1998); K Warren (ed), *Ecofeminism: Women, Culture, Nature* (Indiana UP, 1997).

[14] AE Gare, *Postmodernism and the Environmental Crisis* (Routledge, 1995).

[15] JB Callicott, *Earth's Insights: A Multicultural Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback* (U California P, 1994).

[16] N Myers, 'World's Forests: Problems and Potentials' (1996) 23 *Environmental Conservation* 156.

Chiapas peoples of Mexico deprived of access to their traditional lands,[17] as well as to India's Chipko village movement of the 1970s that sought to reclaim community control of local forests.[18] The well-being of indigenous peoples worldwide from Sarawak to Siberia has also increasingly been framed in terms of the relationships between environmental protection and social justice.[19]

All of these disparate arguments and concerns form the background to the particular philosophical debate that is the focus of this chapter: namely, the possibility of a truly ecological conception of justice. Much of this debate has centred around the distinction between what Rawls termed 'public reason arguments' and 'comprehensive ideals'.[20] The former refer to the construction of a framework of basic constitutional principles that might be seen as neutral, allowing all reasonable people to agree to them. The latter refer to competing conceptions of the substantive 'good' drawn from moral, religious or philosophical doctrines that might be argued out in a process of democratic deliberation or discursive democracy. Developments in the eco-justice debate can be considered broadly under two heads: the liberal approach and the ecological. Liberals tend to be satisfied with liberalism's conventional definition of environmental issues as comprehensive ideals that may compete democratically. Ecologists, by contrast, attempt to introduce non-humans into the community of justice, the body charged with the construction of society's institutional and constitutional framework, thereby guaranteeing the consideration of nature's concerns.

2. The Liberal Approach to Eco-justice

Democratic liberals attempt to extend a liberal theory of justice to include environmental concerns. They reject the contention that ecologism and democratic liberalism are incompatible. The central concern of the liberals is to reconcile liberalism's preoccupation with the individual, self-interest and state neutrality with a commitment to good environmental practice. The aim is to further environmental goals through the paradigm of liberalism in preference to a replacement. This tends to result in contingently green policy, reliant on democratic majorities, rather than a strong state commitment to ecologism.

[17] N Harvey, *The Chiapas Rebellion: The Struggle for Land and Democracy* (Duke UP, 1998).

[18] H Rangan, 'From Chipko to Uttaranchal: Development, Environment, and Social Protest in the Garhwal Himalayas' in R Peet and M Watts (eds), *Liberation Ecologies* (Routledge, 1996); R Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in Himalaya* (U California P, 1989).

[19] See D Hyndman, *Ancestral Forests and the Mountain of Gold: Indigenous Peoples and Mining in Indonesia* (Westview Press, 1994); LE Sponsel, *Indigenous Peoples and the Future of Amazonia: An Ecological Anthropology of an Endangered World* (U Arizona P, 1995).

[20] Rawls, above n 3.

(a) Bell

Derek Bell focuses upon the Rawlsian distinction between public reason arguments and the separate concept of comprehensive ideals, seeking to demonstrate that environmentally friendly policies may be justified under both heads. He notes that a weak form of sustainability and a conception of environmental justice may be justified by two of the public reason arguments Rawls identifies; life-sustaining properties and human health.[21] More however can be achieved through comprehensive arguments where majority support can be found. Thus, according to Bell, Rawls's approach permits adherence to ecocentric arguments where constitutional essentials and questions of basic justice are not at issue.[22]

Bell mounts a defence of this 'environmentally friendly' liberalism by responding to objections that Rawls's theory precludes a liberal state from adhering to environmental policies even under comprehensive ideals. The objections relate to Rawls's 'difference' principle and commitment to neutrality. In relation to the former it has been argued that the difference principle, as a pre-eminent political value, requires that any action taken by the state benefit the worst-off in society. This would rule out environmental policies in circumstances where they are not of direct benefit to the impecunious in terms of income and wealth enhancement. In Bell's opinion, this is inaccurate, as the principle is concerned not with growth but with the distribution of income between social groups. A fair distribution of resources is more important than overall wealth maximisation.[23] Because distribution is not offended by state commitment to environmental goods, neither is Rawls's difference principle.

The neutrality objection claims that the advancement of comprehensive arguments through democracy conflicts with Rawls's commitment to neutrality. It is argued that the market is a more impartial regulator than a democracy, where a minority may have their options curtailed by the majority.[24] In response Bell argues that market regulation, unlike democratic liberalism, is not fundamentally neutral. A market-based approach erroneously assumes that all resources are from personal income and private wealth, ignoring the existence of collectively owned resources.[25] A market approach can be defended only through a liberal individualistic comprehensive ideal and therefore, unlike democratic liberalism, is not fundamentally neutral.[26]

Bell's thesis illustrates that liberalism and environmentalism are not incompatible. It is not clear, though, that beyond basic environmental goods, provided

[21] D Bell, 'How can Political Liberals be Environmentalists?' (2002) 50 *Political Studies* 703, 707–8.
[22] *Ibid*, 707.
[23] *Ibid*, 715–6.
[24] *Ibid*, 716.
[25] *Ibid*, 719.
[26] *Ibid*, 719–20.

through public reason arguments, a liberal state in practice will embrace environmentalism. As Bell notes, Rawlsian liberalism is a 'contingently' rather than an 'intrinsically' green liberalism. The adoption of green policies by the state is dependent on majority support.[27]

(b) Barry

John Barry has also considered the compatibility of a state's embracement of environmental goods with Rawls's commitment to neutrality. Barry separates out classical and social liberalism, noting that whilst the former is inconsistent with a sustainable society the latter is not. He writes that, provided the political institutions and values of a liberal democracy can be divorced from the capitalist market-based economy, a greened liberalism is feasible.[28] In his view social liberalism contains many of the requisite tools for a commitment to environmentalism. Specifically, Barry contemplates a role for the precautionary principle in relation to irreplaceable natural resources, providing environmental protection in the face of scientific uncertainty.[29] Employment of the precautionary principle is, he asserts, consistent with Rawls's insistence on neutrality. Claims to the contrary reflect too narrow a view of neutrality, ignoring the way environmental protection can enhance liberty through protecting options.[30] He argues that because his conception of the precautionary principle does not prescribe avenues of action, but rather rules out certain decisions and uses, the requirement of neutrality is not offended.[31]

The harm principle is also central to Barry's exposition. He sees it as redefining the notion of private property in land.[32] This involves recognition that the impact of individuals' decisions relating to their private property can affect in such a way that those decisions cannot be considered to be of a private nature.[33] The growth of regulations relating to land use is seen as an example of the state's perception of land as common not private property.[34] Barry, though, is careful to emphasise that strict justification is required for the invocation of state intervention to avoid impinging upon the liberty of individuals.[35] The tools Barry identifies as offered by liberalism do little more than place loose limits on the destructiveness of 'progress'.

[27] *Ibid*, 721.
[28] J Barry, 'Greening Liberal Democracy: Practice, Theory and Political Economy' in J Barry and M Wissenburg (eds), *Sustaining Liberal Democracy: Ecological Challenges and Opportunities* (Palgrave, 2001) 67.
[29] *Ibid*.
[30] *Ibid*, 68.
[31] *Ibid*, 71.
[32] *Ibid*, 72.
[33] *Ibid*, 75.
[34] *Ibid*, 74.
[35] *Ibid*, 78.

(c) Wissenburg

Marcel Wissenburg also identifies tools that might serve to make liberalism capable of responding to environmental needs. He focuses his argument for a greener democratic liberalism on Rawls's 'savings principle'. The savings principle developed by Rawls aims at creating intergenerational justice through an acknowledgement by those in the original position (ie, the first generation) that it is in their mutual interest to require the protection of primary goods for the next generation. Wissenburg seeks to demonstrate that the savings principle is applicable to all liberal theories, not just Rawlsian or contractarian ones.[36] This is accomplished, in his view, first by recognising that generations do not exist in linear formation but contemporaneously.[37] At any one time up to six generations may be interacting. Secondly, Wissenburg notes a new condition added by Rawls in *Political Liberalism* to those in the original position; all generations must have followed a similar principle aimed at 'savings'.[38] In light of these two conditions, Wissenburg asserts that the savings principle must be accepted as the only rational option, because it leads to mutual advantage, is in the self-interest and supports individual liberty. The savings principle is to the advantage of every next generation. This makes its rejection it irrational; therefore it is a necessary condition for a just society. Conversely if the savings principle were absent from a given society that would render the society unjust, as there would be a bias in favour of previous generations.[39]

Wissenburg then expands the conditions implicit in Rawls's original position that are needed to reach an agreement around the savings principle. In doing so he moves beyond the veil of ignorance, demonstrating that a savings principle is applicable to all liberal theories because it appeals to the bedrocks of liberalism; mutual advantage, self-interest and individual liberties.[40] In this way the savings principle is presented as a precursor to the existence of a just liberal society.

Having demonstrated the necessity of the 'savings principle' to democratic liberalism Wissenberg considers what form the 'savings principle' might take in practice. He develops a principle of 'Restraint', entailing a commitment to avoid destroying goods in cases where they are irreplaceable.[41] Such a stance is defended through appeal to liberal aims of benefit maximisation; options are better left open on the ground that the present generation cannot foresee whether a resource might be put to better use at a future time.[42] In situations where necessity

[36] M Wissenburg, 'An Extension of the Rawlsian Savings Principle to Liberal Theories of Justice in General' in A Dobson (ed), *Fairness and Futurity: Essays on Environmental Sustainability and Environmental Justice* (Oxford UP, 1999) 174.
[37] *Ibid*, 177.
[38] *Ibid*, 175–6.
[39] *Ibid*, 180–1.
[40] *Ibid*, 183–90.
[41] *Ibid*, 193.
[42] *Ibid*, 194.

demands the destruction of a resource and an equivalent is unavailable, 'proper' compensation should be paid.

Acceptance of the restraint principle in Wissenburg's view would have significant implications for liberalism. The principle would operate to challenge the absoluteness of private property rights.[43] There would be a shift in the burden of proof to those destroying elements of the natural world to justify their destruction and provide a replacement or compensation. Wissenburg contends that a principle of restraint would solve many of the debates around the conflict between intra- and intergenerational justice by ensuring that all attempts are made to protect the environment without sacrificing the needs of the present generation.[44] Finally Wissenburg sees the principle as responding to concerns relating to non-human nature, because the principle protects the natural world insofar as where it is unavoidable no ecological being should be damaged.[45]

3. Ecologists

What is referred to here as 'ecologists' stands for a group of theorists with ecological thinking as their base. Rather than seeking to fit environmental concerns into existing social systems, such as law and justice, ecological theorists aim for transforming social systems themselves. The ecological crisis is seen as a profound challenge to human perceptions and social institutions.

The concern of most theorists in this group is for an ecological ethic that penetrates social and legal norms. The inclusiveness of such an ethic is widely shared among indigenous people, Non-Western cultures and environmental philosophers, yet attempts specifically to relate ecological ethics to justice are rare. Philosophers tend to focus on issues of ethics, while lawyers tend to focus on issues of justice with little common ground between them.

However, the following social and political theorists have aimed for common ground. They do not accept the traditional boundaries between ethics and justice, nor do they see the Rawlsian concept of justice as adequate for our time. Ecological positions are characterised by their attempt to reconceptualise justice altogether.

(a) Low and Gleeson

Nicholas Low and Brendan Gleeson argue that limiting morality to the human species is no longer defensible in light of scientific developments and the growing awareness of the interdependence between humankind and nature.[46] In response

[43] *Ibid*, 197.
[44] *Ibid*.
[45] *Ibid*.
[46] Low and Gleeson, above n 1, 155.

they posit two overarching principles of ecological justice to guide decision-making. First, 'ecological justice is that every natural entity is entitled to enjoy the fullness of it's own form of life'. Secondly, 'all life forms are mutually dependent and dependent on non-life forms'.[47] Noting that the principles may operate in practice to create conflict in decision-making they are qualified by three distinctions.[48] The first is that life has moral precedence over non-life, the second is that individualised life forms take moral precedence over life forms that exist only as communities and, finally, humans take precedence over other life forms.[49] These conditions are aimed at resolving competing values and ensuring a moral distinction between human and non-human life remains. Accepting these moral rules of thumb, Low and Gleeson consider the institutional and constitutional processes for putting ecological justice into place. Rejecting the present system as incapable of delivering ecological justice in this form they consider new models of governance.[50]

It is important to note that Low and Gleeson view justice not as absolute, but dialectic. Thus there are no universal principles but an evolving debate about the bases of justice.[51] Conflicts are conceived of as a matter for human moral judgement as resolved by the institutions developed for such a purpose.[52]

(b) Baxter

In preference to requiring ecologists to develop their own theory of distributive justice, Brian Baxter attempts to extend Brian Barry's theory of distributive justice, justice as impartiality,[53] to meet ecological concerns. This approach is chosen on the grounds, that it is the most defensible of distributive justice theories.[54] Barry takes his starting point from Scanlon's modification of Rawls's original position. Scanlon's position operates not by mutual consensus but by the veto of members of the community of justice. In his conception a liberal democratic framework is among the basic constitutional rules reasonable people will not object to. Through this democratic framework conceptions of the 'good' compete for acceptance. Where a majority accept ecological justice as a 'good' worthy of support the state may legitimately apply it. However, conversely, this means that were a majority to support the extermination of whole species this would not constitute an injustice.[55] Baxter finds such a position untenable and attempts to extend Barry's theory to ensure that such an outcome is not possible.[56] He

[47] *Ibid*, 156.
[48] *Ibid*, 156–7.
[49] *Ibid*, 157.
[50] *Ibid*, 189–93.
[51] *Ibid*, 197.
[52] *Ibid*, 200.
[53] B Barry, *Justice as Impartiality* (Clarendon Press, 1995).
[54] BH Baxter, 'Ecological Justice and Justice as Impartiality' (2000) 9 *Environmental Politics* 43, 45.
[55] *Ibid*, 49.
[56] *Ibid*, 50.

achieves this through an expansion of those involved in the formulation of the basic structure of impartial justice to include non-humans. Baxter contends that Barry has largely neglected the issue of who should comprise the community of justice, incorrectly defining members. Barry describes his theory as solving the concerns of 'how people with competing conceptions of the good may be brought freely to live on terms which all can accept as reasonable'.[57] This conception mandates that those belonging to the community of justice must have competing conceptions of the good, thereby ruling out non-humans. Baxter objects, noting that the inarticulate in the form of children and the disabled have interests that must be protected by the community of justice without ever having competing conceptions of the good.[58] The possession of a competing conception of the good is not therefore a necessary requirement.

Introducing the inarticulate into the community of justice, however, does not solve the question of representation. Baxter asserts that a solution could lie in allowing the inarticulate, whether human or non-human, to have their interests protected through the use of proxies.[59] Members of the community of justice may act as guardians, speaking on behalf of non-human nature and future generations.[60] Including non-humans within the community does not impede Barry's notion of neutrality. This is because the act is independent of notions of the 'good' and is concerned instead with criteria of admission into the community.[61] This position, Baxter emphasises, does not require an equality of consideration between human and non-human interests; instead it merely requires that the interests of the non-human world be considered prior to decisions being made.[62]

(c) Eckersley

Robyn Eckersley, noting the failure of Rawls's theory of democratic liberalism to respond to green concerns, takes her starting point from Habermas.[63] The latter advances a dialogical approach to developing a theory of justice whereby the focus is on the debate through which principles of justice are constructed. This contrasts with the monological approach employed by Rawls where the fundamental principles that govern the basic structure of society are developed in advance of the discourse. Dialogical theories aim to reach mutual agreement around the superior argument insisting that all those affected by decisions should be active participants in the dialogue leading up to those decisions.[64] The central issue for

[57] *Ibid*, 52.
[58] *Ibid*, 53–4.
[59] *Ibid*, 55.
[60] *Ibid*.
[61] *Ibid*, 57.
[62] *Ibid*, 60. See also BH Baxter, A Theory of Ecological Justice (Routledge, 2004).
[63] R Eckersley, *The Green State: Rethinking Democracy and Sovereignty* (MIT Press, 2004) 141.
[64] *Ibid*, 116.

dialogical theorists is the limits on the discourse. Central to the successful workings of discursive democracy is free and open communication.[65]

Eckersley identifies ecological interests as 'generalisable' interests; these are by definition not sectional, private or selfish.[66] Generalisable interests, she notes, are protected by the mode of communication presupposed by the discourse ethic where political communication is not distorted by power imbalances. In such an environment, generalisable interests may be successfully defended publicly against narrower sectional interests. Although more likely to deliver green policies, Eckersley believes that this is not guaranteed and is in fact contingent upon the superiority of ecological arguments.[67] In light of this, her key concern is to bring non-human and future generations into the speech community. This requires tackling the hurdle of the discourse ethic's resistance to allowing individuals to speak on behalf of others. In the context of nature Eckersley responds to the criticism that humans are incapable of speaking for non-humans because of the risk that humans are unable to move beyond their inherent anthropocentricism.[68] This obstacle is overcome by an acknowledgement that the human view of nature is incomplete, culturally filtered and provisional, and therefore care must be taken in relations with nature.[69] Once she achieves a place for non-humans in the speech community she turns to the more difficult issue of how their speech can be represented.[70] Eckersley advances a form of trusteeship held by humans for nature. She also introduces another option, a basic rule of thumb to guide human decision-makers away from damaging the environment that cannot speak for itself. She suggests the precautionary principle as such a norm that would achieve the goal of protecting those incapable of participating actively in the discourse.[71] The principle, she argues, could be entrenched constitutionally to ensure systematic consideration is granted to ecological concerns.

(d) Schlosberg

David Schlosberg focuses on the meaning of justice, seeking to have it expanded from issues of distribution to encompass notions of recognition and participation.[72] This wider conception of justice flows from an acceptance of Iris Young's view of injustice as institutionalised domination and oppression.[73] Injustice can only be

[65] *Ibid.*
[66] *Ibid*, 117.
[67] *Ibid*, 119.
[68] *Ibid*, 123.
[69] *Ibid*, 125.
[70] *Ibid*, 127–38.
[71] *Ibid*, 135.
[72] D Schlosberg, 'The Justice of Environmental Justice: Reconciling Equity, Recognition, and Participation in a Political Movement' in A Light and A De-Shalit (eds), *Moral and Political Reasoning in Environmental Practice* (MIT Press, 2003) 79.
[73] *Ibid*, 81.

solved through this tripartite notion of justice rather than, as has been traditionally assumed, through questions of distribution alone. Recognition is central to human dignity and involves acknowledgement that some communities are unfairly affected by environmental degradation.[74] Political participation through inclusive decision-making is seen as achieving more just outcomes for communities in question.[75] Schlosberg is hopeful that a tripartite view of justice might help to forge links between the environmental justice movement and other social justice movements.[76]

Schlosberg has also recently extended his argument to encapsulate elements of ecological justice. He sees a lack of recognition of the natural world as a central cause of humankind's oppression and domination of nature.[77] The application of recognition to nature is defended against the objection that the self-worth of nature cannot be adversely affected by non-recognition because of an inability to suffer psychological harm. He rejects the objection on the ground that the central element of injustice on the due to non-recognition is not the psychological harm suffered by the subject but rather the lack of recognition by a society.[78]

Schlosberg then identifies two directions that might be taken in constructing a framework for recognition of nature. The first would respond to nature's intrinsic worth. The second would focus on the importance of nature for humans.[79] Recognition of nature can, according to Schlosberg, be defended under both criteria. Physical abuse, he notes, is a key element of disrespect that in turn is an aspect of non-recognition.[80] The further ground of human self-interest in the face of environmental catastrophe also supports respect for nature.[81] Schlosberg further considers whether recognition of nature is a violation of the central principles of liberalism. He contends that including the natural world into the community of justice through recognition does not devolve into a notion of the good. It is the procedural conditions for justice that are affected, rather than any particular definition of the good. Certain notions of the good may no longer be available, for example, destruction of species.

After defending the expansion of recognition to nature, Schlosberg turns to considering how participation of nature might be achieved. For this to occur he asserts it is necessary to consider the institutional biases against nature that lead to unequal distributions.[82] These can be overcome through more open and

[74] *Ibid.*
[75] *Ibid*, 92.
[76] D Schlosberg, 'Three Dimensions of Ecological Justice' (paper prepared for *Political Research Annual Joint Sessions*, Grenoble, France, 6–11 Apr 2001), available at www.essex.ac.uk/ecpr/jointsessions/grenoble/papers/ws6/schlosberg.pdf (draft), forthcoming in R Eckersley and J Barry (eds), *Environmental and Ecological Justice: Theory and Practice in the US* (MIT Press, 2005) 20.
[77] *Ibid*, 12.
[78] *Ibid*, 14.
[79] *Ibid.*
[80] *Ibid*, 15.
[81] *Ibid.*
[82] *Ibid.*

participatory structures of environmental decision-making that encourage greater political engagement and a diversity of viewpoints to be expressed. An increase in diverse human participation is thus central. Thus, widening public standing to the courts, greater access to environmental information and more rights for public consultation in environmental decision-making (eg, environmental impact assessment submissions and public hearings) are the kind of reforms that Schlosberg would applaud.[83] Nature itself has a more direct role to play through signals that may be interpreted by humans. Similarly, in this connection, Christopher Stone earlier argued that trees and other components of nature should have 'standing' in our legal systems, to be articulated through democratically chosen environmental guardians.[84] Schlosberg also picks up on Dryzek's call for a consideration of nature's signals expressed through disruptions to nature's integrity. Examples include global warming, droughts, floods, species extinction and other physical occurrences.[85] Schlosberg thus places emphasis on involving both the human and the non-human world in the democratic discourse.

4. Evaluation

The various approaches to eco-justice all aim for integrating the non-human world in environmental decision-making. Principally, the integration can be pursued either through the ethical discourse or through the justice discourse. It would not matter if both discourses would equally lead to better decision-making. But do they? According to Rawls, justice is based on a commonly agreed discourse and, therefore, facilitated by institutions (law and governance). Ethics, on the other hand, reflect comprehensive ideals that cannot per se be communicated through institutions. Ethics may inform justice, but cannot guide decision-making in ways that the institutions of justice are offering.

The categorical distinction between justice and morality determines all liberal conceptions of justice. The inherent assumption is that issues of justice are different from, and superior to, moral values. Justice represents the values of an assumed public rationality (individual freedom and rights) that disassociates itself from a morality of compassion and empathy. No matter how importantly the non-human world may be regarded by humanity, it stays outside its *justitia communis*.

Rawls has always been clear about this exclusion: 'the status of the natural world and our proper relation to it is not a constitutional essential or a basic question of justice'.[86] While he acknowledged 'duties' in this regard, he described them as

[83] See NP Spyke, 'Public Participation in Environmental Decisionmaking at the New Millennium: Structuring New Spheres of Public Influence' (1999) 26 *Boston College Environmental Affairs Law Review* 263; J Steele, 'Participation and Deliberation in Environmental Law: Exploring a Problem-solving Approach' (2001) 21 *Oxford Journal of Legal Studies* 415.

[84] C Stone, 'Should Trees Have Standing?' (1972) 45 *Southern California L Rev* 450.

[85] Schlosberg, above n 76, 17.

[86] J Rawls, *Political Liberalism* (Oxford UP, 1993) 246.

'duties of compassion and humanity' rather than duties of justice. Any 'considered beliefs' morally to include the non-human world 'are outside the scope of the theory of justice'.[87] Rawls' 'original position' cannot assume a morality without a moral agent. An agent can be a person living today or a fictitious person living tomorrow, but has to be a 'person'. Interestingly, non-human entities can qualify as persons—a corporation for example—but non-human living entities cannot.

Liberal approaches to justice are bound to exclude the non-human world. Attempts for an extension of justice can be made, of course, but they can hardly be marginalised as a 'green twist' (Wissenburg) of Rawls' original position. Why should Rawls or any liberal throw the baby out with the bath water? Their anthropocentric bias prevents them from expanding inter-human justice to include 'inter-species' justice.

Legal theories of justice traditionally suffer from avoiding the moral debate. That is why no legal theory has ever embraced an eco-ethical concept of justice.[88] Ethics, in whatever form, ought to be understood as informing *any* idea of justice. There is no justice without some underpinning morality, just as there are no human rights without ethical assumptions. For example, whether or not property rights should be defined to include obligations is not a matter of the 'law', but of ethical reasoning underpinning it. Most constitutions define private property as a combination of guaranteed individual freedom and limiting social responsibility. Property cannot be protected in abstract, but only in a social context.

It can, therefore, be reasoned that human rights are limited, not solely by their social context, but also by their ecological context. Individual freedom is determined not just by laws of society, but also by laws of nature. The ecological approach to human rights has influenced human rights theory, constitutional development in Germany[89] and international law.[90]

It is worth comparing the justice debate to the rights debate. Fundamentally, the objections against a concept of ecological justice are the same as those against ecological rights. Central to the liberal idea of justice has been the liberal conception of rights. And even though neither Rawls nor Ronald Dworkin nor any other leading liberal theorist of justice has argued for the possibility of extending rights to animals and plants,[91] it would be possible to do so, at least

[87] J Rawls, *A Theory of Justice* (Oxford UP, 1993) 448.

[88] To my knowledge, apart from myself and other members of the IUCN's Environmental Law Commission Specialist Group on Ethics, there is no lawyer among ecologically minded theorists of justice.

[89] K Bosselmann, 'Human Rights and the Environment: Redefining Fundamental Principles?' in B Gleeson and N Low (eds), *Governance for the Environment* (Palgrave, 2001) 118.

[90] P Taylor, 'From Environmental to Ecological Human Rights: A New Dynamic in International Law' (1998) 10 *Georgetown Environmental L Rev* 309; K Bosselmann, *Ökologische Grundrechte* (Nomos, 1999).

[91] With the possible exception of Joseph Raz who writes: 'Rights ground requirements for action in the interest of other beings': J Raz, *The Morality of Freedom* (Oxford UP, 1986).

structurally. Whether or not non-human entities like animals or plants can have rights is a matter, not so much for lawyers, but for philosophers to decide. From a legal perspective rights can be attributed to all sorts of entities like, for example, companies and states. From a philosophical perspective, on the other hand, the issue becomes more complex and many have written about nature's rights. There is, in fact, a tradition of rights for nature since ancient times (Stoic School) including such names as Spinoza, Leipnitz, Goethe, Schopenhauer, Bentham and, in our days, Jonas, Meyer-Abich or Singer. All of these are philosophers, but it was Christopher Stone[92] who triggered a broad public debate on rights and social change. After 30 years of debate it can be concluded today that nature's rights are acceptable only to liberal theorists, but not to those of an ecocentric persuasion.

At a closer look, rights and ecocentric ethics are ultimately opposed to one another. Take, for example, Giagnocavo and Goldstein,[93] who have argued that the concept of nature's rights is tantamount to a 'quick legal fix', which, like many other legal solutions, precludes the deep questions necessary for genuine world change.[94] Giagnovcavo and Goldstein reject rights theory as a 'false claim' as they give the holder some advantages, but this amounts to valuing only by legal institutions, not society at large.[95] This and other criticisms of the political weakness of rights are often directed against Stone. Ironically, Stone himself explicitly recognised the limitations of his 'rights' theory and has repeatedly stressed the crucial importance of a changed environmental consciousness. An ecological reform of environmental policy and law will not happen without 'a radical shift in our feelings about 'our' place in the rest of Nature'.[96]

The importance of the rights debate was that, for the first time, modern legal theory was forced into a discussion on fundamental ethical issues. Without Stone and like-minded lawyers we would not today be in a situation where it becomes possible to contemplate a theory of ecological justice.

If a mere extension of rights is not delivering ecological decision-making, why should an extension of justice help us? Applying liberal principles more widely only reinforces individualism and anthropocentrism. Instead, we need to examine the principles themselves. If they are 'blind' of the ecological context of human existence, they need to be reconsidered.[97]

[92] C Stone, 'Should Trees Have Standing?' (1972) 45 *Southern California L Rev* 450; see also C Stone, *Earth and Other Ethics: The Case for Moral Pluralism* (Harper and Row, 1987).

[93] C Giagnocavo and H Goldstein, 'Law Reform or World Re-form' (1990) 35 *McGill L J* 346.

[94] *Ibid.*

[95] *Ibid*, 357.

[96] Stone, above n 92, 495 ; see generally 489–501.

[97] It should be conceded, though, that we need more debate on whether a liberal approach to eco-justice is a step in the right direction or further way from it. See B Almond, 'Rights and Justice in the Environmental Debate' in D Cooper and J Palmer (eds), *Just Environments—Intergenerational, International and Inter-Species Issues* (Routledge, 1995) 6; Bosselmann, above n 1, 39.

C. Incorporating Environmental Ethics in Justice

Relating the environmental ethical discourse to the justice discourse automatically raises a few important questions. One is: can the ecocentric approach be reconciled with the anthropocentric approach, or are they mutually exclusive? A second question concerns the ethical discourse itself. How could ecocentrism be accepted as a basis for eco-justice? Can it be 'assumed' in a similar way as anthropocentrism and individual autonomy are assumed for the liberal approach to eco-justice? Or can ecocentrism only be achieved through a public dialogue, ie promoted as discourse ethic?

1. Anthropocentrism or Ecocentrism?

As indicated above, the relationship between anthropocentrism and ecocentrism is not one of gradual difference, but one of paradigmatic dichotomy.[98] This does not mean, however, that they cannot co-exist in law. As we will see later, there are many examples in domestic and international environmental law where traditional anthropocentric instruments of 'natural resource' management co-exist with modern ecocentric instruments of ecosystem management. Environmental law can accommodate ethical pluralism in much the same way as it can reflect political pluralism.

There are limits however. In law, 'moral pluralism'[99] can work only as long as there are no irreconcilable positions at the same 'conflict level'.[100] An example is the protection of endangered species and biodiversity. The panda bear can well be protected for anthropocentric reasons, while biodiversity requires an ecocentric approach, at least, potentially. Ecosystem protection, including that of humans and the non-human world, is a lot more complex, ultimately requiring us to think ecocentrically. As J Baird Callicott observed, you cannot follow a 'happy-go-lucky moral pluralism' switching from Bentham's utilitarianism to Schweitzer's reference for life on to Leopold's land ethic and back to Kant's categorical imperative without reflecting on what might be at stake.[101]

What, then, is at stake when considering 'ecological' rather than 'environmental' justice? The complexities of the 'environment' are best captured by the term

[98] The dichotomy is, of course, not total. There are many shades of anthropocentric ethical positions as well as a variety of non-anthropocentric, ie ecocentric positions. For a comprehensive discussion of the various positions and their importance for environmental law, see K Bosselmann, *When Two Worlds Collide: Ecology and Society* (RSVP, 1995) 317–40; K Bosselmann, 'The Concept of Sustainable Development' in K Bosselmann and D Grinlinton (eds), *Environmental Law for a Sustainable Society* (NZCEL, 2002) 89–96.

[99] Stone, above n 92.

[100] *Ibid*, 205.

[101] JB Callicott, 'The Case Against Moral Pluralism' (1990) 12 *Environmental Ethics* 99, 115.

'ecological integrity'. It reflects the view that there are natural processes necessary to maintain the Earth's life support systems that humans and all life depend on. In other words, it is not the environment, but the interactions between the various life forms—including human beings—with which we should be concerned. This view is not 'objective', but reflective of observations made. Those observations include ecological systems, evolutionary and other processes. But no observation can be made without some form of reflection or interpretation. We could ask, for example, why is there scientific interest in the environment at all? Quite obviously, environmental research followed the realisation that there are problems with the environment (pollution, degradation, etc). There is a close nexus between perceptions, observations and reflections. Our knowledge will never be 'objective', ie purely based on 'facts'.[102]

We can conclude, therefore, that notions such as 'ecological integrity' or 'ecological sustainability' express perceptions of ecological realities, not ecological reality itself. But so does the notion 'environment'! It expresses the perception of something surrounding us: here are we, the environment is the 'other'. The adjective 'environmental' does not connect both spheres in the way the adjective 'ecological' does. This term acknowledges not only the complexities of the natural world, but also the fact that humans are part of it.

Such terminological differences are not only of linguistic interest, they are also reflective of an ethical dilemma. The Western anthropocentric tradition, in which the term 'environment' was moulded, is reinforced if we continue to perceive human-nature complexities as merely 'environmental' relationships. Closer to the—scientific—truth would be to speak of ecological relationships. The former favours ethical anthropocentrism, the latter ethical ecocentrism.

The conceptual differences between environmental and ecological terminologies may well disappear over time. For many, 'environmental' relationships are already perceived as holistic, ecological relationships. It is important, though, to avoid confusion. As long as there is no generally accepted view that the 'environment' includes the communality of humans and the natural world, it is better to distinguish between environmental (anthropocentric, liberal) and ecological (ecocentric) approaches to justice.

The ecological approach to justice is based on ecocentrism. But how can this basis be communicated? Why should it have more validity than the anthropocentric basis?

2. Ontological or Discourse Ethic?

All theories of justice claim validity for modern democratic societies. In fact, the justice discourse has, for a long time, assumed that justice and democracy are

[102] B Mackey, 'The Earth Charter and Ecological Integrity' (2004) 8(1) *Worldviews* 76; Bosselmann, above n 98, 291–315.

mutually reinforcing. A democratic society is more 'just' than an undemocratic society and will strive for justice as a key objective. Likewise, justice can flourish only in a democratic society and will encourage ever more democratic forms of decision-making.

The assumption has been that the members of society are equipped with individual freedoms and equal rights. Each member has the same right of access to justice and decision-making. The members of society alone are entitled to organise their political system. Consequently, the system of justice results from a—hypothetical—dialogue between free individuals.

This liberal approach to justice found its best expression in Rawls's theory. Its central constructs of 'original position' and 'veil of ignorance' allow for a justice concept without presupposed ethics. The appropriate rules of justice will emerge from this hypothetical dialogue. As no-one is to know their individual future fate, each member will aim for rules that are acceptable for everyone. The individual fear of ending up as one of the worst-off members of society ultimately shapes the rules and values of justice.

The geniality of Rawls's theory lies in guaranteeing basic equal rights (the 'first principle of justice') without attempting further to define what these rights may entail. Such non-ethical, 'secular' approach reinforces the pluralism of modern liberal, democratic society. The only 'problem' is that only liberal, democratic society benefits from Rawls's theory of justice. Effectively, Rawls's theory locks society into a permanent liberal future: any move towards a more communitarian or collectively organised society ends at the barrier of individual rights.

The 'hidden' liberal ideology in Rawls is widely criticised. The question is, however, how far this critique needs to be taken to accommodate the concern for the environment. Is it sufficient to add some basic concerns such as a 'no harm' principle or 'savings principle' to an otherwise untouched veil of ignorance? Or is it necessary to unveil the assumed ignorance?

Structurally, these questions can be answered by examining the means under which socially binding norms are identified. They can be identified either through reasoning (monological or ontological approach) or through public debate (dialogical or discourse approach). Monological approaches to justice presuppose some idea of how society ought to be organised. Presupposed basic individual rights and democratic principles are examples of monological approaches. These rights and principles can also be part of dialogical approaches; however, the assumption here is that they result from a public dialogue free of tyranny (Habermas) and not from any political ideology. The difference that discourse ethic is trying to make is the rejection of liberal theory as the only valid basis of society.

Politically, the discourse principle aims for emancipation from the liberal state. In doing so it emphasises the role of procedure. Nothing can be accepted unless being derived from rational, free discourse. In Habermas' words: '[a]ccording to

the discourse principle, just those norms deserve to be valid that could meet with the approval of those potentially affected, in so far as the latter participate in rational discourses'.[103] The limitation of this discourse approach to norms is its fixation with 'rational' discourse. Does rationality necessary exclude the non-human world from the discourse?

Habermas shares the basic assumption of Rawls and his environmentally minded followers that norms can be derived only from rationality. They all stand in the tradition of Modernity that accepts rationality as the sole guide for ethics. It can be found in utilitarianism, Kant's imperative and contemporary contractual theory. In this tradition, the ethical discourse will always follow the rational discourse, for example, of justice.

The argument against ethical rationalism is that it has not stopped us from fundamentally changing the conditions that make human life possible. The development of modern civilisation and technology has altered human behaviour in such a way that traditional ethics can no longer provide necessary orientation. In Einstein's famous words, '[t]he means for solving a problem cannot be the same as the ones that brought about the problem in the first place'.

Nobody has formulated the ecological challenge towards ethics and justice more precisely than Hans Jonas. In his seminal text on the imperative of responsibility,[104] Jonas showed that the key assumptions made by traditional ethics are no longer valid, namely that the *conditio humana* is unchangeable, that human behaviour can be calculated on the basis of rational analysis and that human responsibility is limited to social context (ethics and justice). These assumptions expressed themselves in a rigid anthropocentrism that entirely excluded the non-human world from ethical and moral categories.[105]

If we assume, therefore, that the current ecological crisis has its roots in the *conditio humana* of European civilisation,[106] we need to re-visit both the procedural and normative aspects of ethics and justice. Neither monological nor dialogical approaches are in themselves sufficient; the former tend to be too presumptuous, the latter too unambitious.

Following the concepts of self-reflective discourses on justice proposed by Young,[107] Tully[108] and Kingwell,[109] we need a justice discourse that allows for both

[103] J Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy* (trans W Rehg, Polity Press, 1996) 127.

[104] H Jonas, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age* (trans H Jonas, U Chicago P, 1984).

[105] *Ibid*, foreword.

[106] R Bahro, *Avoiding Social and Ecological Disaster: The Politics of World Transformation* (Gateway books, 1994), Part II, ch 6; Bosselmann, above n 98, 71.

[107] I Young, *Justice and the Politics of Difference* (Princeton UP, 1990).

[108] J Tully, *Strange Multiplicity: Constitutionalism in an Age of Diversity* (Cambridge UP, 1995).

[109] M Kingwell, *A Civil Tongue: Justice, Dialogue and the Politics of Pluralism* (Pennsylvania State UP, 1995).

openness and transformation. Considering the systemic character of the crisis that we are in we should be able to incorporate ecocentric values when thinking about justice without assuming that they can be inscribed, like individual rights have been inscribed in modern theories of justice. I call this the ecological justice discourse.

Eckersley's concept of 'green justice'[110] adequately describes this discourse. She argues that the transformation of notions of justice to accommodate nature must be undertaken within the broader context of our system of democracy and public government. Justice is an inherent part of the modern democratic state, and yet in urgent need of revising. Liberal justice theories ignore the close nexus between liberalism, anthropocentrism and environmental degradation. They cannot capture the ecocentric concept of justice. Equally, we cannot rely on mere discourse ethic. No matter how 'free of tyranny' this discourse is, it will not itself produce the required ecological discourse.

The main limitation of discourse ethic is its own anthropcentric tradition. If this tradition behind the rational discourse goes unquestioned we will not be able to move beyond the Kantian and contractualist framework. In this framework, only moral agents count. From a non-anthropocentric perspective the limitation of moral theory to *agents* is unacceptable; rather it is enough that a being receives recognition as a moral *subject*. That such beings may not have the capacity to communicate (directly) or reciprocate moral favours should not matter.

What should matter, instead, is the capacity of humans to act not only for themselves, but also for those who cannot act for themselves. In this way potentially all beings affected by environmental decisions, but not actively participating in the moral dialogue, would have their voices heard. Whether this concern for 'the others' requires institutional representation—for example, through agencies of guardianship[111] or trusteeship[112]—or whether it can be internalised in some other way[113] is an interesting subject of debate. For the acceptance of ecocentrism and eco-justice, however, it is necessary only to internalise what has remained externalised in theories of justice todate.

[110] R Eckersley, 'Green, Justice, the State and Democracy' 2001, available at www.arbid.unimelb.edu.au/envjust/papers/allpapers/eckersley. See also Eckersley, above n 63.

[111] On guardianship models used or proposed in several countries see K Bosselmann, 'A Legal Framework for Sustainable Development' in K Bosselmann and D Grinlinton (eds), *Environmental Law for a Sustainable Society* (NZCEL, 2002) 145, 151–2.

[112] On trusteeship models in international law, see P Taylor, *An Ecological Approach to International Law* (Routledge, 1999) 283–5; P Sand, 'Trusteeship for Common Pool Resources: Zur Renaissance des Treuhandbegriffs im Umweltvölkerrecht' in S von Schorlemer (ed), *Praxishandbuch UNO* (Springer Verlag, 2002) 201.

[113] On the importance of the precautionary principle in this regard see Eckersley, above n 63, 136–7; Bosselmann, above n 111, 153.

D. The Three Principles of Ecological Justice

Having seen how environmental ethics can influence and shape the justice discourse, we can now focus on contents. What does the concept of ecological justice entail? Can it be sufficiently defined to provide guidance for the development of environmental law?

The proximity of ecocentrism to ecological sustainability provides the most promising basis for a workable theory of ecological justice. Environmental law is increasingly influenced by the concept of sustainable development. And despite the never-ending debate on how this concept could be defined, there is a worldwide consensus on some of its core ideas. These ideas form part of the concept of ecological justice. To become a truly ecological concept, justice needs to reach out into the non-human world. As we will see, the 'missing link' in both the sustainable development debate and the justice debate is the recognition of ecological integrity. It is not enough to care for humans living today and those living tomorrow when the natural processes that sustain life are at risk. There is a need to identify and recognise the ethical and legal importance of ecological integrity.

The famous Brundtland definition[114] contains two ethical elements that are widely accepted as being essential to the idea of sustainable development: concern for the poor (intragenerational justice or equity); and concern for the future (intergenerational justice or equity). *The concern for the poor* includes all social and minority groups discriminated against by the social and economic system. Conflicts between rich and poor, white and non-white, Western lifestyle and indigenous cultures and North and South belong here. The environmental justice movement in the United States has its origins in those conflicts. The concern for the poor (social justice) represents the social dimension of ecological justice and can usefully be termed *intragenerational justice*. The importance for a theory of ecological justice is to determine the relationship between intragenerational and intergenerational issues as there are competing claims and priorities.

The concern for future generations is a familiar feature in international and environmental law. Since Edith Brown Weiss' influential classic text,[115] rights and interests of future generations have been incorporated in international agreements and national legislation. The notions of 'justice for future generations' and *intergenerational justice* may be less familiar, but both have become increasingly popular in recent years, obviously reflecting a broader acceptance of the idea that justice spans past, present and the future. One of the issues to be discussed here is

[114] Sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs': World Commission on Environment and Development (WCED), *Our Common Future* (WCED, 1987) 8.

[115] E Brown Weiss, *In Fairness to Future Generations* (Transnational Publishers, 1989).

whether intergenerational justice is to be seen as an anthropocentric concept or whether it has ecocentric implications.[116]

However, these two elements leave us with a crucial question. What do they mean with respect to the environment? If we are to share environmental goods and burdens fairly among us living today and also leave something for the future, what exactly do we preserve? The integrity of the planetary ecosystem (the 'natural stock') or our current knowledge about natural resources and ways to use them (the 'capital stock')?

For reasons of principle we are unable to determine the needs of future generations. Only more or less informed guesses are possible about the options that future generations may justifiably expect. The reasonable choice, therefore, is for a duty to pass on the integrity of the planetary ecosystem as we have inherited it (ecological integrity). Uncertainty requires precaution, and there seems no better precautionary measure than assuming that future generations would like the planetary ecosystem as bountiful as we have found it.

And yet, such an obvious duty is neither suggested by the Brundtland definition nor favoured by governments or big business. As their morality is confined to traditional social ethics, they do not consider the importance of an environmental ethic to incorporate nature or the planetary ecosystem. Instead, the standard view is that society, economy and environment are somehow of equal importance. As a result, sustainable development is perceived as a balancing act between economic, social and environmental goals, with trade-offs as a necessary outcome. There is no guidance that could ensure, for example, a preference for ecological sustainability or the needs of future generations. Without such guidance, policies may become more integrated, but they will make little difference to existing unsustainable patterns of production and consumption.

This business-as-usual approach is commonly known as 'weak sustainability'. If associated with moral obligations to the future, weak sustainability policies consider it our sovereign decision what kind of assets, 'stock' or legacy we wish to leave for future generations. It could be the 'natural stock', but it also could be its substitute, for example, the knowledge to alter the natural stock (eg, through genetic engineering). Such 'capital stock' gift to the future implies the very possibility of destroying the planet's conditions of life. We simply do not know and possibly never will.

To preserve the integrity of the planetary ecosystem is the only reliable alternative and may, in fact, be a desirable goal for most people. However, this goal needs moral and legal recognition in order to become 'internalised'. Only then will the

[116] See eg D Tladi, 'Of Course for Humans: A Contextual Defence of Intergenerational Equity' (2002) 9 *South African Journal of Environmental Law & Policy* 177, on the one hand, and K Bosselmann, 'Strong and Weak Sustainable Development: Making the Difference in the Design of Law' in M Kidd (ed), *Environmental Law Foundations for Sustainable Development* (MCN, forthcoming 2005), on the other.

'weak' become the 'strong'; and thereby resolve the weaknesses of the Brundtland report's definition of sustainable development. A third element, therefore, needs to be added to the two mentioned above:[117] concern for the non-human natural world (interspecies justice or equality).

The concern for the non-human natural world is in the centre of environmental ethics. The question here is which idea of justice could accommodate such concerns best. As we have seen, from a liberal, anthropocentric point of view the non-human world is outside the *justitia communis*. From an ecocentric point of view *justia communis* includes both the human and non-human world. It may already be seen as an important step that, today, there is vivid discussion of 'justice for the non-human world'[118] and *interspecies justice.*[119] This term resembles affinities with intra- and intergenerational justice. The inclusion of an elaborate concept of interspecies issues is certainly crucial for a theory on ecological justice as distinct from mere social justice.

Interspecies justice (or concern for the non-human natural world) is not mentioned in the standard definitions of sustainable development of any of the international agreements related to sustainable development (eg, 1992 Rio Declaration, Agenda 21, 2002 Johannesburg Declaration). However, this may be due to the fact that the anthropocentric notion of sustainable development has dominated the political debate. In literature, environmental or ecological sustainabilty has emerged as an ecocentric conception that includes the recognition of intrinsic values. This ecocentric conception stands against a technocentric conception of sustainability[120] promoted by the UNCED process and most governments. As Andrew Dobson has observed, the ecocentric approach marks the point at which economists leave the sustainability debate.[121]

At the heart of the conflict between the technocentric and the ecocentric approach lies the ambivalence of the word sustainability[122] which—not unlike the word 'love' or 'justice'—causes uniform agreement, yet great confusion as to what it actually means. It is widely accepted, though, that ultimately there are just two possible meanings. One starts from the argument that 'sustainability is not

[117] Bosselmann, above n 111, 145, 147–56.

[118] Almond, above n 97, 18.

[119] *Ibid*, 15; see also J Palmer, 'Just Ecological Principles?' in Cooper and Palmer, above n 97, 31–2; A Johnson, 'Barriers to Fair Treatment of Nonhuman Life' in *Ibid*, 165; and T Hayword, 'Interspecies Solidarity: Care Operated Upon by Justice' in T Hayword and T O'Neill (eds), *Justice, Property and the Environment* (Ashgate, 1997).

[120] See D Pearce, *Blueprint 3: Measuring Sustainable Development* (Earthscan, 1993) 18–19.

[121] A Dobson, 'Environmental Sustainability: An Analysis and Typology' (1996) 5 *Environmental Politics* 401, 416.

[122] C Mitchum, 'The Sustainability Question' in R Gottlieb (ed), *The Ecological Community* (Routledge, 1997) 359; also W Beckerman, 'Sustainable Development: Is it a Useful Concept?' (1994) 3 *Environmental Values* 191; J Pezzey 'Sustainability: An Interdisciplinary Guide' (1992) 1 *Environmental Values* 321.

enough'.[123] The concern here is that sustainability too readily denotes stasis and equilibrium whereas life is about change and growth. From this perspective development is the important dynamic element, making sustainable development a concept which ensures lasting economic growth and energy production or—in the words of the World Bank—simply a 'development that lasts'.[124] Opposed to this philosophy of more-is-better lies the philosophy of different-not-more. It asks the question 'sustainability of what?'. The concern here is that sustainable development simply means to sustain the Western way of life at the expense of the poor and of future generations. To be sustained are not the economic, but the ecological conditions requiring substantial changes in economy and society. From this perspective the central issue is environmental sustainability[125] and not development, making a concept of a sustainable society preferable, perhaps, to sustainable development.[126]

The (anthropocentric) market-based approach and the (ecocentric) equity approach to sustainable development represent different political agendas.[127] It is, therefore, not possible *a priori* to define the relationship between sustainable development and ecological justice. However, an analogy can be drawn between both concepts. 'Ecological' can be understood as modifying 'justice' in much the same way as 'sustainable' can be understood as modifying 'development'. On this basis, the only permissive paths to development are those that are ecologically sustainable. Likewise, the only permissive paths to justice are those that recognise ecological sustainability.

The importance of ecological sustainability cannot be overestimated. For example, it gives further guidance on the meaning of intragenerational justice. Concern for the poor, essentially, the support for development in the Third World, is a high priority. In fact, since the 2000 UN Millennium Goals and the 2002 Johannesburg Summit there has been an agreed consensus among states that eradication of poverty and economic development in poor countries should have priority over other goals associated with sustainable development. Such priority can, however, not mean to allow unsustainable development. Ecological sustainability requires discouraging of unsustainable energy sources, for example, as opposed to sustainable, ie renewable energy sources. The ecological integrity of planetary systems should be a benchmark for any form of development. Similarly,

[123] V Ruttan, 'Sustainability is Not Enough' (1988) 3 *American Journal of Alternative Agriculture* 607.

[124] World Development Report 1992 (World Bank, 1992) 34.

[125] E Brown Weiss, 'Introductory Note' (1992) 31 ILM 814. See also Art 1 of the Draft International Covenant on Environment and Development, prepared by the Commission of the World Conservation Union (IUCN) on Environmental Law (Mar 1995): 'The objective of this Covenant is to achieve environmental conservation and sustainable development by establishing integrated rights and obligations'.

[126] See L Brown, *Building a Sustainable Society* (Norton, 1981) and the annual *State of the World* reports of the Worldwatch Institute on progress toward a 'sustainable society'.

[127] Dobson, above n 121, 423.

interspecies justice should be a benchmark for any form of ecological justice. As it implies the recognition of the intrinsic value of the non-human natural world, interspecies justice can be very effective in law.

The example of the law related to biotechnology can illustrate this. At the international level, biotechnology became the subject of international law through the 1992 Convention on Biological Diversity.[128] Along with a general trend in recent international environmental law, the Biodiversity Convention takes the approach of ecosystem protection (ie protecting entire habitats rather than individual species as such).[129] It does so by introducing (in its Preamble) an 'intrinsic value of biological diversity', in addition to 'the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components'. This is recognition of the distinction between (ecocentric) intrinsic values and (anthropocentric) instrumental values of the environment. Article 19 of the Biodiversity Convention calls for the Contracting States to take legislative measures towards controlling biotechnological research activities. The problem is that the Convention, like most treaties, leaves the means of implementation totally to the discretion of states.

At the municipal level, several countries have introduced such controlling legislation, among them Germany with its Gene Technology Law (*Gentechnikgesetz*) of 1990. Such legislation regulates details of notification and licensing of genetically modified products (like, eg, the release of those products into the environment), but it always does so on the basis that there is a fundamental right to conduct genetic engineering in the first place. The principle of free production and sale is the rule; any restrictions are the exception. The burden of proof, therefore, is not with the producer introducing a new risk potential (eg, for biological diversity), but with the general public represented, for example by expert commissions such as the Environmental Risk Management Authority in New Zealand or various ethical commissions in the UK. Whether or not activities of genetic engineering are acceptable is determined by weighing up social costs and benefits. The problem is that such social costs and benefits are exclusively determined by values of human utility. As there are no intrinsic values of ecosystems and their components to be considered, the only relevant counterweight comes from possible infringements on rights of health protection, ie human health risks associated with genetically modified products. Once these concerns are met nothing could stop genetic engineering from fundamentally altering the natural genetic structures. The recognition of nature's intrinsic values would have, at least, the potential to rectify such grave imbalances and provide the counterweight necessary for more balanced decisions.

Apart from those reasons of improving the *results* of decision-making there are reasons of improving the *basis* for decision-making. Before today's complete

[128] UN Doc 6.10. 31 IL 818 (1992).

[129] A Kiss and D Shelton, *International Environmental Law* (Transnational Publishers, 1991) 11.

breakdown of ethical agreement—the 'moral catastrophe' (Alasdair MacIntyre) modernity has witnessed[130]—there was once a well-established ethical basis for decision-making. We could go back to the beginning of modern civilisation and remind ourselves of the close links between ethics, justice and law. In Aristotle's quest for justice,[131] for example, we find the directive of 'the good life' and some of the virtues associated with such a life: imagination, openness, empathy. The life of someone who is unimaginative, closed-up and rigid *may* be 'good', of course, but it is reasonable to suggest that such a person is indifferent towards fellow humans and non-human life around him/her. Being alienated and cut off from the natural world has become a dominant feature of modernity. So, following the precepts of Aristotle's 'good life' and its virtues may help to rediscover, for example, what empathy is all about.[132] It seems to me that there is no contradiction between empathy for the natural world and the good life of humans. There is a lot to suggest that the tragedy of modernity has been to create a dichotomy between autonomy and dependence; we badly need a more sophisticated sense of human interdependence.[133] A sense of interconnectedness may well be the key for future decision-making.

Ultimately, there are no 'reasons' why we should adopt intrinsic values of nature. Ethical reasoning can only help in clarifying some arguments. Ultimately, we have to rely on our ability to learn from past experience and see things differently. Interspecies justice is a new concept which cannot simply be attached to the idea of justice. The 'barriers to fair treatment of non-human life'[134] are deeply embedded in the psyche of modernity and can be removed only by re-visiting both the idea of justice and our place in the world.

The elements of ecological justice are now before us, and we may have enough building blocks for a possible theory. However, since the building blocks sit on ecocentric foundations they cannot claim to be universally acceptable. They may be useful, though, to facilitate further discussion. The aim should, in any case, be to work on a conception which does justice to humans and nature alike. The idea of eco-justice is, however, far from being speculative. Recent developments in international and municipal law give an indication how eco-justice is being implemented in environmental policy and legislation.

[130] A MacIntyre, *After Virtue; A Study in Moral Theory* (Duckworth, 1981).

[131] See J Urmson, *Aristotle's Ethics* (Oxford UP, 1988); W Hardie, *Aristotle's Ethical Theory* (Oxford UP, 1980).

[132] A connection between ecocentric awareness and 'the good life' is made by D Cooper, 'Other Species and Moral Reason' in Cooper and Palmer, above n 97, 137, 145–7.

[133] See J Tronto, *Moral Boundaries* (Routledge, 1993) 101.

[134] Johnson, above n 119, 165–79.

E. Ecological Justice as a Guide for Environmental Law

There is no example of a conscious, deliberate attempt to implement ecological justice in legislation. This should not be surprising, however, considering not only the novelty of this idea, but also the function of justice as a fundamental concern. Law will always reflect some sense of justice, but not in a direct manner as it would, for example, implement a specific principle. What is 'fair' and 'just' depends on the subject matter of the law, its ideological and political context and the importance that may be given to specific aspects of justice.

The practical use of eco-justice is its focus on the wider ecological context that legislation, administration and judicial review operate in. If we are conscious of the three principles of eco-justice, we have a more informed view of how environmental law should be designed and interpreted.

Some examples in the area of domestic and international environmental law can illustrate how eco-justice has already influenced legislative developments.

1. New Zealand Resource Management Act 1991

New Zealand's environmental legislation is often hailed as one of the world's most advanced,[135] although this may be true for its ambition rather than its current operation. The Environment Act 1986 and the Conservation Act 1987 espouse an ecocentric approach by providing holistic definitions for the 'environment' (including humans and nature) and recognition of 'intrinsic values of ecosystems'. The actual implementation of this approach occurred during a reform period between 1984 and 1991 when the Resource Management Act (RMA) was adopted. The RMA is the legal framework for integrated and sustainable management of natural and physical resources, and has the 'ethic of sustainable management'[136] at its core. The RMA is a remarkable example of efforts to incorporate sustainable development into law as it integrates socio-economic and environmental issues.[137] It is also a good example of applied ecological justice as it provides for a definition

[135] One political historian described the reforms as 'the greatest changes anywhere, anytime, in any democracy' quoted in P May *et al* (eds), *Environmental Management and Governance* (Routledge, 1996) 43; see also M Kloepfer and E Mast, *Das Umweltrecht des Auslandes* (Duncker and Humblot, 1995) 301–10.

[136] S Upton (Minister for the Environment), 'The Resource Management Act, Section 5: Sustainable Management of Natural and Physical Resources' (Second Annual Conference of the Resource Management Law Association 1994); see also K Grundy, 'Sustainable Management: A Sustainable Ethic?' (Third Annual Conference of the Resource Management Law Association, 1995).

[137] The overall objective of Agenda 21 (and elaborated in 8 chapters) is to restructure decision-making so that consideration of socio-economic and environmental issues is fully integrated. Apart from this, the Brundtland definition of sustainable development (see, above n 114) was considered by the legislators, but the term 'management' was preferred to 'development' because of a lesser degree of social equity and global distribution issues inherent in the RMA.

of sustainable management that espouses aspects of the three principles of eco-justice. Also relevant is the RMA's affirmation as a policy matter of 'national importance' the 'relationship of Maori and their culture and traditions with their ancestral lands, waters, sites',[138] as well as the Maori stewardship principle of 'Kaitiakitanga',[139] to which government decision-makers must have regard, when implementing the legislation.

The RMA identifies two major functions of 'sustainable management', the *management* function and the *ecological* function. The object of the management function is the use, development and protection of resources, which includes social, economic and cultural well-being and the health and safety of people and communities. The object of the ecological function is sustaining the potential of resources, safeguarding the life-supporting capacity and avoiding adverse environmental effects as described in paragraphs (a), (b) and (c) of subsection 5(2) of the RMA.

The word 'management' is a neutral term and sets no particular values and priorities. However, use, development and protection of resources are equally important and to be managed simultaneously. It is in this context that both intragenerational and intergenerational justice appear. Under section 5(2) decisions regarding the distribution of resources must sustain the needs of future generations. Distribution does not follow a quantification of such needs, but rather the criterion of absolute equality. Despite the reference to 'the reasonably foreseeable needs', resource distribution is determined by sustaining the potential of resources *in view* of future needs, rather than by those needs themselves. This would be consistent with the ethical approach to intergenerational equity as defined above, thus *potentially* consistent with an ecocentric interpretation of future generations.[140] The proper reading of future generations—whether reduced to humans or life as a whole—depends very much on the reading of the overall ethics shaping sustainable management.

While the management functions are essentially anthropocentric in character, the ecological functions are not. Paragraphs (b) and (c)—and arguably even (a) (concerning future generations)—of section 5(2) of the RMA express long-term considerations on the basis of ecocentrism. However, crucial for this interpretation is the proper meaning of the little word 'while' between management and ecological functions[141] and the proper linking of the remaining sections (6 to 8).

[138] RMA s 6(e).

[139] *Ibid*, s 7(a).

[140] K Bosselmann and P Taylor, 'The New Zealand Law and Conservation' (1995) 2 *Pacific Conservation Biology* 113, 119–20.

[141] The relevant passage of s 5(2) reads: 'Managing the use . . . of . . . resources in a way . . . which enables people and communities to provide for their . . . well-being . . . *while* (a) sustaining the potential of . . . resources [for] . . . future generations; and (b) safeguarding the life-supporting capacity . . .; and (c) avoiding, remedying, or mitigating any adverse effects' (emphasis added).

There has been a lot of debate whether 'while' introduces the ecological functions as being superior or as being subordinate to the management functions.[142] The former is referred to as 'ecological bottom-lines', the latter as an 'overall judgement approach'.[143]

A grammatically correct interpretation would suggest 'while' to mean 'by way of' rather than a non-committed 'and' or 'also'. Consequently, all management functions are to be conducted in an ecologically sound way as defined in paragraphs (a) to (c).[144] Interspecies equity can be seen as being addressed in these paragraphs and further defined in the 'other matters' of section 7 for which decision-makers are to 'have particular regard'. Among theses matters are the 'intrinsic values of ecosystems' (paragraph (d)) and the 'concept of katiakitanga' (paragraph (a)) which, in relation to a resource, includes the 'ethic of stewardship based on the nature of the resource itself'. Recognition of intrinsic values and reference to guardianship clearly espouse an ecocentric understanding of interspecies equity.

Leaving aside the number of difficulties that have occurred in practice,[145] the RMA is by no means value-free. The ethics and values expressed in the definition of sustainable management carry the elements of eco-justice.[146] Intra-generational, intergenerational and interspecies equity are all being addressed, albeit not always in a language clear enough to define the interrelations between them and ethical principles underlying them. Yet, ecocentrism clearly defines the ecological functions, thereby helping us to understand that environmental justice is, essentially, justice for those who cannot speak for themselves.

2. Ecosystem Regimes and Management

In a broader sense, environmental law has been increasingly informed by ecology and ecosystem approaches. The science of ecology is concerned with a number of

[142] See B Pardy, 'Planning for Serfdom: Resource Management and the Rule of Law' [1997] *New Zealand LJ* 69; DAR Williams, *Environmental and Resource Management Law* (Butterworths, 1997) 75.

[143] In relation to the former see *New Zealand Rail Ltd v Marlborough District Council* [1993] 2 NZRMA 449 470; *Marlborough District Council v Southern Ocean Seafood Ltd* [1995] NZRMA 220 227. In relation to the latter see *North Shore City Council v Auckland Regional Council* [1997] NZRMA 59 93–4; *RFBPS of NZ Inc v Manawatu-Wanganui Regional Council* [1996] NZRMA 241 269; *Transit NZ v Auckland Regional Council* Environment Court (A/100/2000) Aug 2000, not yet reported, 36.

[144] Bosselmann and Taylor, above n 140, 117. It should be noted that various policy papers seem to favour more of a 'balance' between management and ecological functions; on the other hand, Environment Court Judge S. Kenderdine speaks of 'cumulative safeguards' supporting the view expressed here; *Foxley Engineering Ltd. v Wellington* CC [1994] W 12/94.

[145] These led, in Nov 1998, to proposals by the government to remove some of the procedural obstacles within the RMA.

[146] See also A Gunn and C McCallig, 'Environmental and Social Justice in an Urban Setting—Sustainable Management and the New Zealand Resource Management Act 1991' ('Environmental Justice' conference, University of Melbourne, Oct 1997).

levels of relationships between organisms and their environment.[147] These levels include genes, individuals, populations, communities, ecosystems, landscapes to, ultimately, the entire Earth. Historically, ecologists confined their work to one ecological level and very few forms of interaction with other levels. However, there has been a growing trend of ecologists to look at more complex interactions among a number of levels. This trend is increasingly reflected in environmental laws becoming more integrated and wider in their approach.

Generally speaking, environmental laws and regulations seek to control human interactions with ecosystems. If these interactions are seen from the viewpoint of an autonomy of human life, then both the scientific explanation through ecology and the control mechanisms through law will be comparatively simple: the environment appears separate from humans and will be protected insofar as necessary to maintain quality of human life. Essentially, the autonomous self is retained intact and affected by only certain impacts (pollution, water scarcity, etc).

If, by contrast, the interactions are seen from the viewpoint of relationships between humans and nature, then the environment appears as more fundamental to human life. The more the complexities of these relationships are understood, the more emphasis will be given on interdependences between humans and nature. This second viewpoint of humans regards the self as a momentary concretisation of components and processes of a large ecosystem. In other words, the boundaries between the human and the natural sphere disappear.

Currently the development of environmental law is somewhere between the first and the second viewpoint. Recent trends towards ecosystem regimes suggest that environmental law may reach this second viewpoint at some point in the future. The ecosystem approach to legal regimes[148] is visible in the use of terms such as 'carrying capacity', 'biodiversity' or 'ecosystems', but also in the increased use of normative principles such as integrated environmental management, the precautionary principle or the concept (ecologically) sustainable development. Ecosystem regimes have an inherent tendency towards greater comprehensiveness and higher complexity. Along with this tendency the interdependences between

[147] For good overall discussions of ecology and its various subdivisions see R McIntosh, *The Background of Ecology: Concept and Theory* (Cambridge UP, 1985); M Begon *et al, Ecology: Individuals, Populations and Communities* (Blackwell Science, 1996) and M Bush, *Ecology of a Changing Planet* (Prentice Hall, 2000).

[148] See eg O Young, *Resource Regimes: Natural Resources and Social Institutions* (U California P, 1982); E Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge UP, 1990). See also B Pardy, 'Changing Nature: The Myth of the Inevitability of Ecosystem Management' (2003) 20 *Pace Environmental L Rev* 675 (arguing that all present ecosystem management regimes are of an instrumental, rational and anthropocentric nature). But see also the rejoinder by JB Ruhl, 'The Myth of What is Inevitable under Ecosystem Management: A Response to Pardy' (2004) 21 *Pace Environmental L Rev* 315.

humans and nature will be more obvious, and with them the need for ecological justice.

The rise of ecosystem regimes[149] has been gradual, but steady. Early examples of legal regimes mandating an ecosystem approach to environmental protection include the 1978 Great Lakes Water Quality Agreement between Canada and the United States,[150] and the 1980 Convention on Antarctic Marine Living Resources.[151] During the 1990s, ecosystem management reached a certain stage of maturity. The New Zealand RMA is one prominent example, but most OECD countries concerned themselves with similar integrated and ecosystemic environmental law regimes. Typically, ecosystems such as marine and coastal areas, regional areas (eg, water catchments, forestry), biodiversity, even climate systems lead to more comprehensive statues and regulations involving broader concepts ('sustainability'), integrated management plans and new institutions. Several countries including the Netherlands, Scandinavia, Germany and Australia adopted new general environmental codes informed by sustainable development.[152] In addition, most European countries created institutional frameworks for sustainability in the form of Green Plans (Netherlands, Sweden, France) and National Strategies (UK, Germany, etc).[153] Similar strategies were adopted in Canada, USA, Australia and New Zealand.[154]

Exactly what principles the various ecosystem regimes follow is not always clear. There is certainly no consistent set or hierarchy of guiding principles. Sometimes the emphasis is on procedural management issues, sometimes on substantive goals of ecological integrity; one law may emphasise resource use, another precaution and a third the needs of future generations.[155] It is obvious, however, that all the various principles touch upon eco-justice issues. In some way or other they are all concerned with issues of intragenerational, intergenerational and interspecies justice. The further development of ecosystem laws—and environmental law in general—would greatly benefit from a new jurisprudence with eco-justice at its core.[156]

[149] R Brooks *et al, Law and Ecology: The Rise of the Ecosystem Regime* (Ashgate, 2002) 2.

[150] Agreement between Canada and the United States of America on Great Lakes Quality, 1978: US Environmental Protection Agency Great Lakes Water Quality Agreement, available at www.epa.gov/glnpo/glwqa/1978/.

[151] (1980) 19 ILM 841.

[152] See JC Dernbach, 'Sustainable Development as a Framework for National Governance' (1998) 49 *Case Western Reserve L Rev* 1; NA Robinson, 'Legal Structures and Sustainable Development: Comparative Environmental Law Perspectives on Legal Regimes for Sustainable Development' (1998) 3 *Widener Law Symposium* J 247.

[153] See M Jänicke and H Jörgens, 'National Environmental Policy Planning in OECD Countries' (1998) 7(2) *Envtl Politics* 27; HD Johnson and DR Brower, *Green Plans: Greenprint for Sustainability* (U Nebraska P, 1997).

[154] Eg Environment Canada, *Canada's Green Plan* (Ministry of Supply and Services, 1990).

[155] Some regimes combine several of these competing tendencies simultaneously, eg Conference of the Parties to the Convention on Biological Diversity, Decision V/6, 'Ecosystem Approach' in Report of the Fifth Meeting of the Conference of the Parties to the Convention on Biological Diversity, UN Doc UNEP/CBD/COP/5/23, Annex III (22 June 2000).

3. International Sustainable Development Law

Ecosystemic approaches to law-making are also known in international law. Treaty law recognises intrinsic values of the natural world, for example, with respect to biological diversity.[157] To some extent the Convention on Biological Diversity[158] has pushed the frontiers of international environmental law further than ever before, expressly incorporating the precautionary principle,[159] common concern of humankind[160] and common but differentiated responsibilities,[161] and including reference to intrinsic values.[162]

Apart from the Biodiversity Convention many environmental agreements have recognised the intrinsic value of the biosphere. Examples include the 1991 Protocol on Environmental Protection amending the 1959 Antarctic Treaty,[163] the 1982 World Charter for Nature[164] and a number of treaties related to the preservation of ecosystems[165] and endangered species.[166] Mention should also be made of the 32 so-called 'Alternative Treaties', which several hundred non-governmental organisations negotiated at the 1992 Earth Summit in Rio de Janeiro. For example, in response to the failed UN Earth Charter—substituted by the anthropocentric Rio Declaration—the non-governmental organisation (NGO) delegates

[156] Such new, ecological jurisprudence suggests that legal rules should be closely tied to scientific findings ('ecology') and ethical norms ('justice'): M Fondacaro, 'Toward an Ecological Jurisprudence Rooted in Concepts of Justice and Empirical Research' (2000) 69 *University of Missouri at Kansas City Law Review* 179. Another promising approach focuses on the relationship between ecological integrity and justice: D Pimentel, L Westra and R Noss (eds), *Ecological Integrity: Integrating Environment, Conservation and Health* (Island Press, 2000); P Miller and L Westra (eds), *Just Ecological Integrity: The Ethics of Maintaining Planetary Life* (Rowman and Littlefield, 2002).

[157] Bosselmann, above n 1, 50.

[158] Convention on Biological Diversity (1992) 31 ILM 851.

[159] Note that reference to the precautionary principle is in the Preamble only, an express article included in the fifth negotiating draft was removed: see A Boyle, 'The Rio Convention on Biological Diversity' in M Bowman and C Redgwell (eds), *International Law and the Conservation of Biological Diversity* (Kluwer, 1996) 37.

[160] Preamble.

[161] Eg Art 6.

[162] Preamble.

[163] (1991) 30 ILM 1455, recognising the intrinsic value of the Antarctic ecosystem,

[164] (1983) 22 ILM 455, stating, in its preamble, that '[e]very form of life is unique, warranting respect regardless of its worth to man and, to accord other organisms such recognition, man must be guided by a moral code of action. . . '.

[165] Eg Convention on Wetlands of International Importance Especially as Waterfowl Habitat (1971) 996 UNTS 245; Berne Convention on the Conservation of European Wildlife and Natural Habitats [1983] BGBL 372, recognising intrinsic value of wild fauna and flora.

[166] Examples include the Convention on International Trade in Endangered Species and the recently amended regime on whaling: D'Amatao and SK Chopra, 'Whales: Their Emerging Right to Life' (1991) 85 *American Journal of International Law* 21.

adopted an 'Earth Charter' based on an ecocentrically defined responsibility for the earth.[167] The 1995/2001 IUCN Draft International Covenant on Environment and Development follows a similar approach.[168]

Since the mid-1990s the Earth Charter had been negotiated by many hundreds of civil society groups representing the world's cultural, ethnic and religious diversity. Through the various Earth Charter Community Summits, individuals and NGOs have been working towards an agreement on a comprehensive ethical framework for sustainable development, unlike that offered by any existing state-based treaty regime.[169] In 2000, the Charter was adopted in The Hague and has since been endorsed by a number of international organisations and states.[170] The Charter takes a systemic view on peace, security, social and ecological justice, human rights and democracy. None of these can be achieved without the others, and they all need to be developed to reflect the Charter's idea of sustainable development. Its principles are, therefore, guidelines for the entire way nations and people ought to conduct their affairs. This makes the Earth Charter a suitable constitution for a new world order.

The Charter provides the 'values and principles for a sustainable future'.[171] It assumes the validity of the Brundtland definition for sustainable development, but clearly identifies the 'missing link' of ecological sustainability mentioned above. Principle I(1) ('Respect Earth and life in all its diversity') reflects the core of ecological justice 'Recognise that all beings are interdependent and every form of life has value regardless of its worth to human beings'. The first set of principles I(1) to (4) on ('respect and care for the community of life') and principles II(5) to (8) ('ecological integrity') further describe interspecies justice that have been missing in the general discourse on sustainable development. Principles III(9) to (12) ('social and economic justice') and IV(13) to (16) ('democracy, non-violence, and peace') then describe intragenerational and intergenerational justice.

The Earth Charter thus illustrates the potential of the NGO sector to step ahead of states and forge new environmental norms to guide future international environmental law. International environmental law is increasingly recognising aspects of interspecies justice. It is timely, therefore, to adopt a systemic approach and shape future sustainable development law along the lines of ecological justice.

[167] Published in Pacific Institute of Resource Management (ed), *Commitment for the Future: The Earth Charter and Treaties agreed to by the International NGOs and Social Movements* (Pacific Institute of Resource Management, 1992).

[168] Eg Art 2 establishes the principle of respect for all forms of life, available at www.iucn.org/themes/law/pdfdocuments/EPLP31ENsecond.pdf.

[169] See Earth Charter Community Summits, at www.earthchartersummits.org.

[170] See eg UNESCO Resolution 32 C/COM.III/Dr.1 (adopted 16 Oct 2003) and IUCN Resolution CGR.REC003 (adopted 24 Nov 2004).

[171] Earth Charter Commission, Earth Charter: Values and Principles for a Sustainable Future 2002, available at www.earthcharter.org.

F. Conclusion

This chapter has examined the notion of 'ecological justice', and its differences from the more widely known concept of 'environmental justice'. It has argued that environmental law should be informed by ecological justice, in much the same way as law in general is informed by justice. It has shown how traditional liberal and anthropocentric conceptions of justice are wholly inadequate as a basis for justice in an environmental law context. Some developments in international environmental policy (eg, the Earth Charter) or national law (eg, New Zealand's Resource Management Act) suggest some ways by which ecological justice is beginning to be embodied in environmental law.