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ENVIRONMENTAL ETHICS, FUTURE GENERATIONS AND ENVIRONMENTAL LAW

Clark Wolf

I. Harms to Persons or Harms to the Environment? Justifying Environmental Law

According to a popular theory of legislation, usually associated with the work of John Stuart Mill, laws that limit people's liberty are justifiable only if their effect is to prevent *harm to others* (Mill 1982/1859). On this liberal view, which has recently been given careful examination and qualified defense by Joel Feinberg (1984–1988), it is unjustifiable *legal moralism* to employ the coercive powers of the state simply to compel people to do what others regard to be good or right. Those who accept this account of the moral limits of law may find themselves challenged to provide adequate justification for environmental regulations. While some environmental laws are clearly designed to protect people from harm, others focus on the environment itself as the object to be protected. This raises the question of whether many environmental laws may be an expression of an illiberal and possibly unjustifiable *moralism* on the part of those who enact and implement them. I will use the term *liberal environmentalism* to refer to the Millian view that environmental regulations are justifiable only when they prevent harm to others. *Environmental moralism*, by contrast, is the view that environmental regulations may be justified when they provide effective protection for the environment, whether or not this protection is necessary to prevent harm to human beings.

Those who hope to explain and justify environmental laws might seriously consider alternatives to liberal environmentalism, since other theories will permit a broader range of justificatory reasons for liberty-limiting legislation. Environmental moralism provides a simpler justification for regulations that protect environmental systems and species that may seem unconnected with human rights and interests. Many people believe that we have a moral obligation to protect the environment and that fulfillment of this obligation is sufficient justification for environmental-protection law. Environmentalists who find legal moralism unpalatable might instead argue that environmental laws are appropriate and effective as a means to protect people from harm. Thus Shrader-Frechette

(2005, 2010) documents the use of environmental legislation to protect people from negligently inflicted health hazards and other injustices associated with pollution and environmental destruction.

However, some present environmental damage might be presently harmless, and the activities that cause this damage may even provide net benefits for present and proximate generations of human beings. Such damage might nonetheless constitute a serious threat to the interests of more distant future generations. Writing in 1977, Toby Page cites a fictional example:

You are the director of the Office of Management and Budget. A proposal reaches your desk about a riskless project which will extract energy from the sun at an increased rate for 200 years. New production processes could use the energy to triple our GNP every year until 2180. Total project costs are negligible with one exception. The sun will explode [because of the project] and end life in 2180.

(Page 1977: 250)

Even though the people who would be harmed by this project are people who don't presently exist, it is still plausible to think that we have an obligation not to adopt present policies that doom them (along with all other living creatures) to an untimely demise. One might urge that policies that doom the distant future, or which are negligent or reckless with respect to the risks they impose in the distant future, are inappropriate and unjust because they will cause harm to *future* people, even though they may provide benefits for people who presently exist. While Page's scenario is fanciful, the essential elements are similar to contemporary arguments to mitigate the effects of global climate change by reducing the level of greenhouse-gas emissions: while current and proximate generations might benefit from present consumption of fossil fuels, the associated emissions may cause terrible human and environmental damage in the more distant future (IPCC 2007). Climate policy is often presented as a trade-off in which members of the present generation are asked to forego benefits for the sake of preventing harms to future generations (Gardiner 2011; Wolf 2009a). Thus a third strategy employed to support environmental regulations urges that such regulations are a necessary or appropriate way to protect the interests of distant future persons.

This article will begin in section II with a brief discussion of the status of future generations in environmental ethics and environmental law. Sections III and IV discuss two central grounds for skepticism concerning the possibility that future generations can have rights, and articulate several different argumentative strategies to address such skepticism. Section V very briefly considers whether liberal environmentalists who accept Mill's harm principle (or a close relative of Mill's principle) can accept liberty-limiting environmental legislation that aims to protect the rights and interests of distant future people. Then Sections VI and VII examine the status of future persons in contemporary theories of justice, with special attention in section VII to the work of John Rawls. Because Rawls's work focuses on needs, and on the ability of institutions to provide stable intergenerational protections for needs, section VIII evaluates several different conceptions of intergenerational sustainability, and the relationship between need, sustainability and intergenerational justice. Finally, sections IX and X consider the status of future generations in positive law, and prospects for future environmental legislation designed to guarantee just treatment for the members of distant future generations.

II. Future Generations, Environmental Ethics and Environmental Law

It is perhaps surprising that environmental ethicists have not given more careful attention to environmental obligations to future generations. Perhaps this is partly explained by the way the field of environmental ethics is often distinguished from other fields: some ethicists define the field of environmental ethics around the distinction between “anthropocentric” and “non-anthropocentric” theories. Anthropocentric theories of ethics are those theories that hold that all our obligations are, in the final analysis, obligations to other *persons*. Non-anthropocentric theories, by contrast, hold that we can have obligations that are not directed at persons, and that our obligation to preserve and protect environmental systems are best understood as obligations to promote the intrinsic or noninstrumental value these systems possess. Thus quite a lot of discussion in the field of environmental ethics has involved explication of the concept of intrinsic value and the development of arguments to show that environmental systems have this kind of value.

When environmental ethics is *identified* as the study of non-anthropocentric value systems, then consideration of our environmental obligations to future generations is excluded from consideration as a topic in environmental ethics. But many of our most important environmental obligations involve the pursuit of multiple objectives: if we pursue efforts to regulate mountaintop removal as a method of coal mining, we may, at the same time, hope to preserve mountaintop ecosystems, protect rural communities, insure the safety of mine workers, prevent stream runoff, maintain biodiversity and promote alternative methods of energy production. Some of these objectives may be non-anthropocentric, but these will at most be a subset of the total set of motives and interests that need to be taken into account in the articulation of an appropriate policy. Even if we do have fundamental and irreducible obligations to nature (or to natural systems), and even if one holds that these obligations are based on the intrinsic value of the subject to which they are directed, we need to place these values alongside other values and other kinds of values before we can properly understand the way in which they contribute to justify environmental laws and policies. As many contemporary environmental ethicists recognize, the fields of environmental ethics and environmental-policy analysis must address this broader range of concerns and objectives.

One salient reason for implementing policies for environmental protection is that these policies are necessary, or would be an effective way to protect the interests and perhaps to secure the rights of future people or future generations of people. But some people find it odd to think that we have obligations to people who don't yet exist, or that their future rights might constrain present liberties. The next sections will consider key challenges to the idea that present enforceable obligations might be linked to future claimants or to future rights.

III. Skepticism About Future Rights and Present Obligations

One view of legal rights is that they serve to secure or guarantee protection for moral rights. On this model, people have natural or moral rights—for example, rights against assault or theft—and the function of legal regulations is that they provide an enforcement mechanism that insures that the possessors of moral rights get the treatment they have a right to receive. While many people profess skepticism about natural or moral

rights, it is plausible to think that we have some obligations to people even when legal institutions do not enforce them. Moral rights may simply be identified with these obligations and the corresponding claims of those to whom they are owed. Another function of legal rights is that they can *create* claims and liabilities where no prior claims existed. Thus Thomas Jefferson, author of the first U.S. patent law, argued that there is no natural or moral right to intellectual property, but held that it is perfectly legitimate for a legal right to be created (Jefferson 1977/1813). In considering the status of the moral and legal rights of future persons, it will be important to consider each of these possibilities.

Because future persons do not presently exist, some writers are skeptical about the idea that they might have rights or that present persons might have obligations to them. Different grounds have been expressed for such skepticism. For example, Beckerman and Pasek write:

[P]roperties, such as being green or wealthy or having rights, can be predicated only of some subject that exists. Outside the realm of mythological or fictional creatures or hypothetical discourse, if there is no subject then there is nothing to which any property can be ascribed. Propositions such as “X is Y” or “X has Z” or “X prefers A to B” make sense only if there is an X. If there is no X then all such propositions are meaningless.

(2001: 15)

If one wishes to respond to this argument in defense of the rights of future persons, there are three principal strategies one might pursue: first, one could argue, *pace* Beckerman, that future persons do in fact have present rights. Second, one might argue that legislation may create legal rights for future persons, even though these rights would not be associated with any antecedent moral rights. Third, one might argue that present actions can be wrong because they violate *future* rights—the rights that future people *will* possess when they come to exist.

In support of the first strategy, it should be noted that the present nonexistence of future people does not make them imaginary like fictional people: they do not exist in an alternative possible world, but in a future state of our own world. In some contexts, we refer to future individuals by the properties they will or may come to possess, as when as-yet-nonexistent children are accommodated in a will. Further, possession of a right is not like current ownership or like the possession of a property. To say that A has a right against B is simply to describe a moral relation that holds between A and B. But perhaps relations can hold between individuals who exist at different times: for example, the “prior to” relation would seem to hold wherever A exists *prior to* B, and present persons exist *prior to* future ones. If the existence of a normative relation between present and future people is more like the existence of a *relation* between them, then it will not follow that future persons cannot have rights merely because they suffer the temporary present embarrassment of nonexistence. While this argument does not show that future persons have present rights, it may be sufficient to undermine Beckerman and Pasek’s argument against the possibility that they could.

A second strategy would be to urge that these rights can appropriately be created through a kind of legal fiction. There is no conceptual problem with the creation of legal rights in this way, though it might be difficult to know how they should be enforced, if the goal is to promote the interests of future people and prevent present actions that

could mar their lives. In some cases we may have a clear understanding of the interests of future generations—we can confidently predict that they will be worse off if earlier generations leave a toxic environment behind. But in other contexts it is more difficult to know what future people will need, and we might reasonably be skeptical of those who claim to speak for future interests. The legal enforcement of such rights might also raise concerns: if future people have only *legal* rights, then liberty-limiting legislation designed to promote these rights would seem moralistic, and inconsistent with Mill's harm principle.

A third strategy, consistent with the other two, and perhaps sufficient in itself, focuses on the rights that future people will have when they come to exist. On this view, present actions may be wrong and appropriately prohibited when they are likely to violate the legal or moral rights that people will come to possess in the future (Davison 2008; Feinberg 1986). In other legal contexts, such a view concerning future rights is relatively uncontroversial. For example, consider the following:

Scheme for future theft

Before Beth's birth, Alph works to set in place a scheme to steal money that would otherwise come to Beth as an entitlement when she reaches a certain age. As a result of Alph's scheme, Beth's money is later untraceably transferred to the account of Alph's children. Many years later, long after Alph himself has died, Alph's children innocently enjoy this windfall, unaware that it has been stolen.

It is plausible to think that Alph's wrongful action violated some of Beth's present rights, by changing her prospects. But it is also plausible to think that Alph's action results in the later violation of additional rights that Beth acquires when she comes of age. If someone noticed Alph's scheme and intervened to set things right, Alph would still have violated the earlier rights but the later rights would not have been violated at all. Obviously, legal measures that prohibit actions like these are fully justified by a legitimate interest to protect the rights that Beth will come to possess.

It is a short and highly plausible step to urge that present actions may be similarly wrongful when they lead to the violation of the rights future that people come to possess, even if the people who will possess these violated rights don't exist when the wrongful actions take place. On this view, legal prohibition of such wrongful actions would be justified by the need to prevent future rights violations and their associated harms. While the present enforcement of future rights might seem hypothetical, courts have sometimes found ways to accomplish it. For example, the Philippine Constitution asserts in Article II, section 16 that, "The state shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature." The Philippine Supreme Court ruled in 1993, in a case to be discussed at further length in section IX, that this right belongs to future as well as present generations of Philippine citizens. The court found that timber contracts that threatened destruction of the nation's forests were accordingly unconstitutional (*Minors Oposa v. Secretary of the Department of Environment and Natural Resources (DENR)* (1993) 33 I. L.M. 173). The courts of other nations have not, for the most part, found ways to follow this road, but there is no reason *in principle* why similar constitutional provisions or similar legislation could not be crafted to accomplish the same thing.

IV. The nonidentity problem

There is another well-known argument that is regarded by many people to call into question the idea that future persons may have rights, and even the more modest view that presently existing people may have obligations to the members of future generations. According to the *nonidentity problem*, present actions do not simply change the circumstances of life for future generations, they also change the *constituency* of future generations (Parfit 1984, ch. 16). That is, different people will exist, depending on our present choices. Any large-scale social policy will cause subtle changes in many people's lives, and as a consequence different people will meet and different children will be born. Over time, small changes create more and more differences between the actual world and the world as it would have been if the policy had not been put in place. Eventually, it is claimed, entirely different people will exist from those who would have existed otherwise. This argument is sometimes taken to undermine the view that present actions could violate distant future rights: can one be harmed by an action without which one would not have existed at all? For the same reason, this *nonidentity* argument is sometimes thought to undermine the view that present actions could set back future interests.

Some people find this argument persuasive (Heyd 1992). But as a reason for skepticism about rights or obligations, it is peculiar. Typically our obligations to other people accrue to them not because of their unique genetic identities but, as Annette Baier puts it, "because of the roles they fill, roles that relate to others. For example, children, *qua* children have obligations to and rights against parents *qua* parents. My obligations as a teacher are owed to my students whoever they may be" (Baier 1981: 173). Analogously, the obligation not to roll boulders down a mountain is owed to anyone who might be passing on the path below, and do not in any way depend on the specific identities or the genetic makeup of the persons who might be harmed by such an action (Wolf 2009b: 108). To set a boulder rolling is to set in motion a causal chain of events that may cause harm. Even if the boulder roller is lucky and no one is harmed, the act is wrong because it recklessly creates a risk of harm.

Policies that purchase present benefits at the cost of distant future harms are wrong in the same sense: they are like intergenerational "boulders" that threaten harm to people who will live in the distant future, and they are similarly wrong because of the effect they will have on the lives they may blight. In explaining why such actions are wrong, and in justifying legislation to prohibit them, we do not in any way need to refer to the identities of the people who might be on the path and whose rights might be violated if the boulder lands on them, or the people whose lives are blighted by our present environmental destruction. The relation that stands between present wrongful actions that result in harms to distant future persons, and the harms those actions cause, are relevantly similar. The future people whose lives might be blighted by our present pollution are wronged, and the wrong done to them does not in any way depend on their contingent identities. It rather depends on the relationship that holds between our present policies and the suffering these policies may cause. If we are reckless or negligent, failing to take future costs into account, we may properly be held responsible for our failing.

One might still ask, however, whether such laws benefit the people whose interests they aim to protect. If the passage of such a law is identity-determining for the human population of the earth, then those who come to exist are different people from the people whose interests would have been set back or flattened if we had adopted a

different policy. In response to this worry, however, we should carefully examine the conception of “identity” involved. If the identities of the people involved are a function of the characteristics these people possess and the circumstances of life they experience, then it is up to us to determine whether they are “the same people” or “different people” in the relevant sense. Since future people don’t have present identities at all, there are no facts of the matter concerning the identities they will come to have other than these characteristics they possess. In this context, the appropriate conception of “identity” may be one that simply identifies future persons as “the people who will live in the future, and whose lives will not overlap our own.” This definite description picks people out as the relevant object of our present obligations and the potential victims of present wrongs. Because of this, it is simply a mistake to use the nonidentity problem as an excuse to avoid thinking about the consequences of our present choices (Wolf 2009b). As long as there will be future people, this definite description will appropriately identify the aspects of their identities that are relevant from the moral point of view, and as a matter of policy and law.

V. Liberal Environmentalism and Future Harms

How might present legislation or legal action protect future interests? It is not likely that harms to future persons would, in many circumstances, constitute a cause of action to support a lawsuit. However, present legislation and present policies might be put in place to protect future interests. Indeed, one important reason for statutes that protect environmental resources is that these resources should be preserved for the benefit of future generations. Liberal environmentalists accept Mill’s harm principle as an appropriate constraint on legislative actions that limit individual liberty. Such environmentalists will regard environmental regulations to be unjustified if they are not necessary to prevent personal harms, but should not distinguish, in this respect, between present harms and future harms. Future harms may be less certain than more proximate harms, but to discount them according to their uncertainty is not the same as discounting them because of the time when they will occur. This distinction between the degree of uncertainty associated with a threat, and the time at which the threatened harm might occur, is well accommodated in other legal contexts, and should not create any special problem in the case of distant future harms. The arguments above provide some support for the view that present actions may be wrong, and may appropriately be made illegal, when they set back the interests or violate the rights of future persons. But to specify the content of obligations to future generations, we would need to fit these obligations into a broader theory of justice.

VI. Intergenerational Justice: Rights, Community, Contract and Cooperation

Not all theories of justice can easily accommodate the notion that norms of justice apply between people who are members of different and distant generations. While it may be easy to explain how we can have obligations of justice to people whose lives overlap, and who can therefore cooperate and interact, distant future generations cannot cooperate, and reciprocity between their members is impossible. Most contemporary theories of justice can be identified as one of three different general types: libertarian, liberal, and communitarian. This section will briefly introduce each of them, considering the problems the different kinds of theories face in the case of intergenerational justice.

Libertarian theories hold that justice essentially involves the protection of negative rights, and that political institutions exceed their legitimate authority when they enforce positive rights. Negative rights include claims against force and fraud but do not include any requirement of positive action to aid others who may be in need. For example, Alph's right to be free from violent assault is a negative right because it requires other people not to engage in violent assaults on Alph. Libertarians typically include property rights among the negative rights, since Beth's obligation not to take or interfere with Alph's property is similar, in many respects, to Beth's obligation not to interfere with Alph's person. Positive rights, by contrast, oblige action on the part of others. A child's right to an education, a disabled person's right to subsistence or a broader right to basic health care would all qualify as positive rights, since other people need to *provide* education, subsistence or health care in order to secure such positive rights.

Perhaps libertarians have a problem with intergenerational justice: the obligation to save resources for the future, for example, would seem to be a positive obligation. The view that this is an obligation of justice would imply, therefore, that future people have a positive right to the resources we might save for them. If the requirements of justice include no positive obligations, this would imply that members of the present generation cannot have an obligation to save resources for the future. Some libertarians do not regard this to be an objection. Perhaps libertarians should simply accept that future generations are not protected by norms of justice. But those who regard it to be a problem might adopt one of three different strategies to incorporate provision for the future. First, one might argue that we have obligations to future generations that are based on negative rights: perhaps we have an obligation not to use up resources they will need, and to avoid creating hazards that will undermine their well-being. One might argue that our obligation not to use up or destroy such resources is a *negative* obligation, since it involves a requirement *not* to act rather than a positive obligation to provide benefits. Perhaps such obligations are similar to the obligation not to assault future people by planting a time bomb scheduled to go off many generations hence. Second, one might argue that the market institutions that libertarians favor will adequately provide for the needs and interests of future generations even if they do not have rights and are not covered by a theory of justice. Indeed, many libertarians urge that market institutions are the institutions most likely to protect future interests, since they provide incentives for productive activities that will benefit the future (Nozick 1974; Beckerman and Pasek 2001; Cowen 2007). A third way favored by some libertarians is to argue that there are limitations implicit in property rights themselves, which prohibit us from acquiring rights that would leave others destitute. Thus in the *Second Treatise of Government*, Locke includes a proviso specifying that the appropriation of resources must leave "enough and as good" for others who must also have their chance to appropriate goods from the common (Locke 1963/1714). Several "left libertarian" arguments have been offered that base the claims of future generations on libertarian restrictions concerning the initial appropriation of resources (Wolf 1995; Steiner and Vallentyne 2009).

Communitarian theories are pluralistic and sometimes have few characteristics in common (Sandel 1982; de-Shalit 1995). But all of them emphasize the significance of particular relationships and the norms that bind people together in communities. Some communitarians hold that obligations are *restricted* to communities, and that the idea of an abstract theory of justice that is not based on community values must be too empty to command the allegiance of community members. Thus Avner de-Shalit (1995) argues that our commitment to future generations is based on our understanding that we and

they are members of the same transgenerational community. But more distant future generations may be very different from us, and it is not at all obvious that they are members of our community. Since the effects of our present actions may influence people's lives for tens of thousands of years, it is worth asking whether we can rightly consider the people who will live then to be part of a transgenerational community that includes us. To test this, it may be sufficient to compare the present international community with the trans-historical community that includes people who are equally distant in the past. When we go back far enough, however, perhaps we will find that our community bonds with present people in distant lands are stronger and more significant than our bonds to our most ancient ancestors. Community bonds dwindle and become thin as they stretch across long periods of time and over generations. This might make it difficult for a communitarian theory to account for any significant obligations to distant future generations. On the other hand, communitarians might incorporate the idea that we are an *intergenerational* community, and might incorporate concern for future generations in the interest that communities have to perpetuate themselves through time.

Liberal theories of justice, like their libertarian cousins, place a high value on individual liberties, but also include a role for positive rights, often to insure that people are *equal* in some specified respect. Thus Rawls (1971) argues that the principles of justice should articulate fair terms for cooperation, and that these principles will protect fundamental rights and liberties (the "equal liberty principle"), and insure fair equality of opportunity ("open offices principle"). Where it can be done without sacrificing rights or undermining fair equality of opportunity, social institutions are to be adjusted so that they are maximally beneficial for the worst-off members of society ("difference principle"). These principles are to be applied in an ordered hierarchy, with the principle of equal opportunity prior to the difference principle, and the equal liberty principle prior to both of the others. Because Rawls's view is both influential and controversial, it will be discussed further in the next section.

VII. Rawls on Intergenerational Justice

Rawls argues that the principles of justice embody fair terms of cooperation among different members of a pluralistic society, and that the appropriate principles are the ones we would adopt from an initial position which is intended to eliminate bias. This strategy, developing a theory of justice from an ideal of unbiased or impartial choice, has been employed by a number of different theorists including Harsanyi (1955), Vickrey (1960) and Mueller (1974), but is most famously associated with the work of Rawls (1971). In order to guarantee that the principles of justice will reflect the interests of every member of society, Rawls asks that we imagine the choice of principles of justice to take place among individuals who are blind to their identities. While they know general features of society, they do not know who they are or what their particular characteristics will be. This makes it impossible to select principles of justice on the basis of special advantages one might enjoy, or disadvantages one might suffer depending upon one's arbitrary characteristics. As Rawls argues, from this *original position* one would not select principles that are racist or sexist, because one must be aware of the possibility that one will be a member of the disadvantaged group. For the case of justice among contemporaries, Rawls posits that it would be rational to select two principles: the *equal liberty principle* specifies that every member of society is to enjoy the same fundamental liberties consistent with equal liberty for everyone. The *principle of tolerable inequality* has two

parts: the first part, the *open offices requirement*, specifies that positions of advantage in society must be open to all under conditions of equal opportunity. The second part, the *difference principle*, limits the range of acceptable social inequalities: inequalities are justified only if they are maximally beneficial to the least advantaged members of society.

Rawls argues that the difference principle is inappropriate as a principle of justice between generations. If we were to adopt the principle that generational inequalities are unjust unless they are maximally beneficial to the worst-off generation, he urges, then it would be impossible for one generation to *save* resources in order to insure that their descendants would be better off. Generational saving, as Rawls sees it, improves the prospects of later generations relative to those of earlier generations. Since no generation benefits from its own intergenerational saving, on Rawls's view, earlier generations would be the worst off, and an intergenerational difference principle would forbid sacrifices by earlier generations to benefit subsequent generations.

This argument is questionable at best: intergenerational saving can indeed benefit the savers, when generations overlap over long periods of time (Heath 1997). And where generations overlap, it is sometimes possible for the members of different generations to develop a cooperative system that will benefit *all* generations, including the first one (Wolf 2010). The ability to do this will depend, among other things, on the rate at which saved resources grow from period to period and between one generation and the next. If this is so, then Rawls may have abandoned the intergenerational difference principle for the wrong reasons.

The view Rawls articulates, however, is independently plausible and interesting in its own right (1971, 1999a–b): he specifies a two-stage process whereby earlier generations save so that later generations will be able to implement more effective protections for fundamental rights and liberties. Such saving is appropriate when an earlier generation is not sufficiently wealthy to insure the possibility for “a worthwhile life” for all citizens. In a relatively late work, Rawls writes:

The purpose of a just (real) savings principle is to establish (reasonably) just institutions for a free constitutional democratic society (or any well-ordered society) and to secure a social world that makes possible a worthwhile life for all its citizens. Accordingly, savings may stop once just (or decent) basic institutions have been established. At this point, real saving may fall to zero; and existing stock only needs to be maintained or replaced, and nonrenewable resources carefully husbanded for future use as appropriate.

(1999b: 107)

Rawls does not specify the amount that one generation should save for the next, but he does represent saving as a sacrifice for the earlier generations, to be undertaken for the benefit of those who come later. The saving rate cannot ask an unreasonable amount from the present generation, but should balance the claims of the present against those of the future. It is clear in Rawls's discussion that he regards intergenerational *dissaving* to be unjustifiable: the earlier generations may not consume so much that they leave *less* for subsequent generations than they themselves enjoyed.

In the spirit of Rawls's project, we might ask whether this two-stage scheme is fair to members of the earlier generation, who must save for the sake of their relatively wealthier descendants. It may be necessary to consider the question of saving from both the *intragenerational* and *intergenerational* perspectives: presumably the members of

the earlier generation who are required to save are those who are relatively well off. Of course, contributing their resources to *saving* rather than to the improvement of the situation of their worst-off contemporaries does mean that the worst-off members of the earlier generation will not be as well off as they would have been in the absence of any intergenerational saving at all. But if the goal for these resources is to mitigate the disadvantage of those who are worse off, that goal may sometimes be better served by devoting resources to *future* people who would be disadvantaged, rather than to those who are presently worst off. In that case, we might consider the complaint of the worst-off members of the present generation to their better-off contemporaries: "You could have done better for us," they might urge, "therefore your choice to save for later generations is unfair!" When intergenerational saving is just, perhaps the better off have an adequate reply to this complaint: "While it's true that you're worse off than you would have been," they might reply, "the people who are benefited by this saving are also badly off. We made the choice to benefit them rather than benefiting you, but by saving we can reduce the number of people who will have a legitimate complaint."

Is this response satisfactory? Rawls seems to have in mind the case where the saving of earlier generations enables subsequent generations to achieve a more perfectly just society. There is no guarantee, however, that the present people whose claims are overridden will not be still worse off than those in later generations who benefit from intergenerational saving. In this sense, the trade-off involved looks like just the kind of regressive move that Rawls usually prohibits.

There are at least two salient ways in which a Rawlsian might respond to this objection. First, note that the problem arises only when those who benefit from intergenerational saving are better off than the worst-off members of the present generation. This will not always be the case. Where imperfectly just institutions are passed from one generation to the next, the worst-off members of one generation may frequently be no better off, or even worse off, than the present worst-off group. While Rawls does not seem to have considered the details of this problem, it is possible that he might have specified that intergenerational saving is *only* just where those who benefit from it would otherwise be worse off than the worst-off members of the present generation. That move would be consistent with Rawls's overall theory and the conception of reciprocity he carefully develops. But in some circumstances the resultant account of intergenerational saving would permit the perpetuation of unjust (or imperfectly just) institutions from one generation to the next, which is a result Rawls clearly hopes to avoid.

A second possible response would permit some regressive intergenerational transfers for the sake of improving institutions over time. In several places in his later works, Rawls allows that one might articulate a *needs* principle, and make this principle lexically prior to the other principles of justice:

. . . the first principle covering the equal basic rights and liberties may easily be preceded by a lexically prior principle requiring that citizens' basic needs be met, at least insofar as their being met is necessary for citizens to understand and to be able fruitfully to exercise [their] rights and liberties. Certainly any such principle must be assumed in applying the first principle.

(1993: 7)

This passage considers a major change in Rawls's theory. But the spirit of this proposal is quite in line with other things Rawls writes in his discussion of intergenerational

justice: the purpose of intergenerational saving, he says in the passage quoted earlier, is to secure just institutions that make possible “a worthwhile life for all citizens” (1999b: 107). Since the satisfaction of basic needs might be identified as necessary for a worthwhile life, this sounds very much like a requirement that basic needs should be met.

VIII. Intergenerational Needs, Sustainability, and the Environment

There are several different reasons why one might regard meeting basic needs as a high-priority requirement of justice. First, a society that fails to meet citizens’ needs might not be defensible to all of its members, but people may have no reason to respect institutions that cannot be justified to them. People whose needs are unmet may have no good reason to respect other people’s property rights, for example. So if institutions of government are supposed, among other things, to provide a scheme of cooperation that supports justifiable property rights, it had better provide for basic needs. Second, satisfaction of basic needs is necessary for the meaningful exercise of the rights and liberties that justice protects. Rights to free speech and movement, for example, may be irrelevant to a person whose fundamental needs are unmet.

There are different ways to formulate a needs principle, and to connect such a principle to a theory of intergenerational justice. One might, for example, prioritize the claims of those who are worst off up to the point where needs are met. A concern with such a prioritarian view is that it might require overlooking the needs of many if there are a few people whose needs are very difficult to meet. Alternately, one might adopt a principle to minimize the number of people whose basic needs are unmet. The latter principle would allow *triage* decisions whereby the needs of those who are worst off might receive lower priority than those of people who may more easily be brought above the minimal level of need provision.

Intergenerationally, the view that meeting needs is a first priority of justice implies a sustainability requirement. The 1987 report of the World Commission on Environment and Development (WCED) specifies a conception of sustainable development that focuses on needs as a first priority. According to this report, usually called the Brundtland Report, sustainable development is development that “meets the needs of the present generation without compromising the ability of future generations to meet their needs” (WCED 1987: 43). This famous phrase can be formulated as a general criterion of sustainability:

Brundtland sustainability

Institutions are sustainable when they meet the needs of the present generation without compromising the ability of future generations to meet their needs.

More simply and generally, one might formulate this as a conception of *human* sustainability, which focuses on the ability of human institutions to continue to meet human needs:

Human sustainability

Institutions are humanly sustainable only if their operation does not leave later generations worse equipped to meet their needs than members of earlier generations.

While the requirement of human sustainability may be a plausible first principle of intergenerational justice, it may not be entirely adequate as a principle for environmental law or policy. While the goal to meet human needs and the goal of environmental preservation are often coincident, insuring human sustainability will not always guarantee appropriate environmental protections. For example, one way to assure that future needs will not go unmet would be to take steps to prevent the *existence* of future generations, or to take steps to diminish their number. In that case, the requirements of human need might diminish over time, and preservation of the environment might be *unnecessary* for the satisfaction of human needs.

If we have an independent interest in environmental preservation, it might be necessary to articulate that need in an independent principle of *environmental* sustainability, as opposed to human sustainability. As before, this conception will focus on human institutions and their effect on the environmental systems in which they exist:

Environmental sustainability

Institutions are environmentally sustainable when their operation leaves the environmental systems with which they interact or on which they depend no more damaged in successive generations than they were in earlier generations.

Application of this principle would require the development of a principle of environmental *damage*. This concept will itself be controversial, since one might articulate such a concept in terms of human interests, or in terms that are more directly non-anthropocentric.

Norms of justice apply between *persons*, and thus may simply be inadequate to account for our obligations concerning the natural world. Nonetheless, in many circumstances, environmental sustainability will also be a requirement of justice: we have every reason to believe that future generations will be worse off, and that many of their members will be unable to meet basic needs, if earlier generations destroy the natural systems of the world. But what should we conclude when we find cases for which human and environmental sustainability diverge? If environmental sustainability is not a principle of justice, will this imply that it must be a *low* -priority objective? Mill's Harm Principle implies that it is wrong to limit people's liberty for the sake of environmental sustainability. Noting this, fundamentalist Millian libertarians must conclude that the objective to promote environmental sustainability will not justify coercive legislation. Others may take this implication as sufficient reason to reject Mill's harm principle, counting the protection of the environment as a sufficient ground for the limitation of at least *some* liberties, even where this is not necessary to prevent human harms.

IX. Future Generations in Environmental Law

Legislators often refer to the interests of distant future generations when proposing and defending environmental legislation. But legal action expressly in defense of distant future interests is extremely uncommon. Some advocates urge that appropriate legal reform would include stronger protections for distant future interests, and some have urged constitutional reforms aimed at providing protection for fundamental rights of future people (Weston and Bach 2009). There have, however, been a few valiant attempts to incorporate protections for future generations into international and domestic legal regimes.

In a recent noteworthy case, briefly mentioned in section III above, the Supreme Court of the Philippines agreed to hear a suit in which the plaintiffs claimed to represent not only their own interests, but the interests of future generations of Philippine citizens. The Philippine Constitution expressly includes guarantees for the right to a “balanced and healthful ecology,” and in *Minors Oposa v. DENR* (1993) the court asserts that this right provides present protection for the interests of unborn generations of Filipinos. On this ground, the court voided existing timber-harvesting licenses on the ground that the proposed harvests would irreparably damage the environmental interests of present and future citizens.

Another noteworthy attempt to provide legal protection for future generations took place in 1893, when Britain and the United States conducted negotiations concerning the slaughter of fur seals. During the negotiations, United States representatives asked that the discussion should be governed by two underlying principles:

First, no possessor of property, whether an individual man, or a nation, has absolute title to it. His title is coupled with a trust for the benefit of all mankind.

Second, the title is further limited. The things themselves are not given him, but only the usufruct or increase. He is but the custodian of the stock, or principle thing, holding it in trust for the present and future generations of man.

(Carter 1893: p. 59; Weston 2008: 416)

Rights “in usufruct” are rights to the *increase* of a sustainable stock, but require that the stock itself be undiminished by the harvest of this increase. The view that human property rights are rights in usufruct is the view that owners may use resources at a sustainable rate, but may not consume them faster than they regenerate. The purpose of the Fur Seal Arbitration was to develop legislation that would regulate the slaughter of seals and protect fur-bearing animal populations from overexploitation. The U.S. representatives went on to assert as a principle of positive international law that:

. . . the title which nature bestows upon man to her gifts is of the usufruct only, is . . . but a corollary . . . for in saying that the gift is not to this nation or that, but to mankind, all generations, future as well as present, are intended. The earth was designed as the permanent abode of man through ceaseless generations. Each generation, as it appears upon the scene, is entitled only to use the fair inheritance. It is against the law of nature that any waste should be committed to the disadvantage of the succeeding tenants. . . . That one generation may not only consume or destroy the natural increase of the products of the earth, but the stock also, thus leaving an inadequate provision for the multitude of successors which it brings into life, is a notion so repugnant to reason as scarcely to need formal refutation.

(Carter, 1893: 65–66; Weston 2008: 417)

This theory of property and resource use was revolutionary, and might have had far-reaching consequences had it been accepted as proposed, as a principle of positive international law. Burns Weston writes, “Regrettably, but perhaps understandably from an 1893 perspective, the arbitrators did not accept this argument. It was a ‘novel’

argument, they said, insufficiently grounded in international law” (2008: 417). But as Weston notes, the arbitrators did not reject the proposed principles as the foundation for a theory of intergenerational justice and resource use, but only the more contentious claim that this conception of intergenerational equity was a settled principle of positive international law. The constituents of international law are often taken from precedent set by earlier negotiations, so if the Fur Seal Arbitration negotiators had accepted this view in 1893, it might very substantively have changed the resources presently available to international arbitrators when negotiating terms for environmental protection.

Relevantly similar negotiations are perpetually under way to govern the protection of the world’s oceans, the atmosphere, global protection of endangered species and greenhouse gas emissions. Because national interests frequently conflict, international environmental laws will always be controversial, and it may not be reasonable to expect international agreements to include actionable protections for distant future interests. In the context of domestic environmental law, where community interests are more likely to converge, the prospects might seem better. Smaller communities often have a direct interest in the protection of local environmental resources, and have sometimes been able to enact rules to protect these interests. It must be noted, however, that local communities are not always effective guardians of environmental interests and resources. Some communities regularly lobby *against* local environmental protections, when community members believe their economic interests to be at odds with their interest in preserving the natural world.

X. Conclusion

It is not likely that international or domestic environmental law will soon be reorganized around the values of human and environmental sustainability or the protection of the rights and interests of distant future generations. But legislative proposals for environmental legislation are often defended as protecting environmental systems from damage, and sometimes defended in terms of the interests or rights of future people. There is every reason to expect that our obligation to preserve environmental systems and valuable resources for future generations will continue to be an important motive for environmental legislation, and that the rhetoric of intergenerational justice may gain increasing legal significance as we gain a more articulate understanding of the influence of present actions and policies on the lives of people who will inherit the earth after the present generations have passed it on. If our obligation to preserve resources and environmental systems for future generations is not mere rhetoric, but a genuine requirement of justice, then we may hope that such regulations will be crafted to protect future rights and interests.

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Further Reading

For further reading, see: A. Gosseries and L. Meyer, eds. (2009) *Intergenerational Justice*, New York: Oxford University Press; T. Mulgan (2006), *Future People*, New York: Oxford University Press; D. Parfit (1984), *Reasons and Persons*, New York: Oxford University Press; M. Roberts and D. Wasserman, eds. (2009), *Harming Future Persons*, New York: Springer; J. Thompson (2009) *Intergenerational Justice*, New York: Routledge; E. Weis (1989), *In Fairness to Future Generations*, Tokyo: United Nations University Press; D. Gauthier (1986) *Morals by Agreement*, New York: Oxford University Press; and A. Leopold (1949) *A Sand County Almanac*, New York: Oxford University Press.

