

Intergenerational Equity and Rights of Future Generations⁽¹⁾

EDITH BROWN WEISS

Environmentally sustainable development inherently raises issues of fairness between generations in the care and use of our planet Earth.

The issues are in the first instance normative ones, which must be addressed if we are to develop and implement appropriate instruments for sustainable development. The major environmental economic instruments we use today start from the point of view of the present generation. Externalities, such as those caused by pollution, are based on the present generation's perspective. The discount rate, which is the primary tool by which we consider long-term effects, is ineffective in considering costs and benefits more than a decade or two away. But if we posit that future generations have a normative claim to the natural and cultural environment they inherit, then it will be essential to develop the appropriate mix of economic instruments to ensure effective representation of future generations.

Similarly our policies and institutions are often focused on short-term results, without sustained attention to long-term issues. But if future generations have rights and we have obligations to them in using the planet, then we will need to develop policies and institutions which can address the longer term concerns.⁽²⁾

Traditionally international law has focused on relations among members in the present generation or on the relationship of the present generation to past generations. But the new challenge in international law is to relate the present to the future. The 1972 Stockholm Conference on the Human Environment recognized this dimension, as have certain international legal instruments concluded since then.

(1) This presentation is adapted from E. Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Transnational, United Nations University, 1989), and E. Brown Weiss, "Our Rights and Obligations to Future Generations for the Environment", 84 *A.J.I.L.* 198 (1990).

(2) For purposes of analysis, the present generation consists of those people who are living at the present time. Certainly the content of the generation changes daily, as some are born and others die. But this does not affect the usefulness of the construct for analyzing the entitlement among generations.

The theory of intergenerational equity put forward here is that we, the human species, hold the natural environment of our planet in common with all members of our species: past generations, the present generation, and future generations.⁽³⁾ As members of the present generation, we hold the earth in trust for future generations. At the same time, we are beneficiaries entitled to use and benefit from it. All generations are equal in their normative position in relation to the natural system of which they are a part. There is no basis for favoring one generation over another.⁽⁴⁾

There are two relationships that must shape any theory of intergenerational equity in the context of our natural environment: our relationship to other generations of our own species and our relationship to the natural system of which we are a part.⁽⁵⁾

The human species is integrally linked with other parts of the natural system; we both affect and are affected by what happens in the system. The natural system makes life possible for us. It gives us the resources with which to survive and to improve human welfare. But the natural system is also hostile in many ways. Earthquakes, droughts, tsunamis, volcanoes, and glaciers can bring havoc to our species. Moreover, the natural environment can be toxic to our species, as through the natural toxicity of some plants and animals or the dramatic release of toxic clouds of carbon dioxide from Lake Nyos in the Cameroon, which caused 1700 deaths.

Our actions affect the natural system. We alone among all living creatures have the capacity to shape significantly our relationship to the environment. We can use it on a sustainable basis or we can degrade environmental quality and the natural resource base. As part of the natural system, we have no right to destroy its integrity; nor is it in our interest to do so. Rather as the most sentient of living creatures, we have a special responsibility to care for the planet.

The second fundamental relationship is that between different generations of the human species. All generations are inherently linked to other generations, past and future, in using the common patrimony of earth.

Every generation is in a position of equality to other generations in its relationship with the natural system. There is no reason to prefer one generation over another. This notion of equality among generations, and among peoples within

(3) E. Brown Weiss, *In Fairness to Future Generations*, *supra* note 1. The theory of intergenerational equity and the implications for international law are developed in detail in the book.

(4) This presentation does not attempt to analyze alternative approaches to future generations, ranging from maximizing consumption today to preservation of the natural system. See E. Brown Weiss, *In Fairness to Future Generations*, *Id.* at 21-23. For an insightful analysis from an economist's perspective of alternative approaches and the implications for economic instruments, see J. Rothenberg, "Economics of Intertemporal and Intergenerational Equity", *Global Commons: Environmental Challenges and International Responses* (N. Choucri ed. in press, 1992).

(5) The field of human ecology studies this relationship. See, e.g. *In Man, the Environment, and Human Ecology* (A.S. Boughey ed. 1973); R. & P. Watson, *Man and Nature* (1969).

generations, is deeply rooted in public international law. The Preamble to the Universal Declaration of Human Rights begins, "Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice, and peace in the world. . .". The reference to all members of the human family has a temporal dimension, which includes all generations. The reference to equal and inalienable rights affirms the basic equality of generations within the human family.

The United Nations Charter, the International Covenant on Civil and Political Rights, the Convention on the Prevention and Punishment of the Crime of Genocide, the American Declaration on the Rights and Duties of Man, the Declaration on the Elimination of Discrimination Against Women, the Declaration on the Rights of the Child, and many other human rights documents affirm the dignity of all people and the equality of their rights. The Declaration of the Principles of International Cultural Co-operation provides in Art. 1 that "each culture has a dignity and value which must be respected and preserved", and that "all cultures form part of the common heritage belonging to mankind".⁽⁶⁾ These documents express a fundamental belief in the dignity of all members of the human family and an equality of rights, which extends in time as well as space. Indeed, to license the present generation to exploit our natural resources at the expense of future generations or to starve the present generation to benefit future generations would be contrary to the purposes of the United Nations Charter and international human rights documents.

To define intergenerational equity, it is useful to view the human community as a partnership among all generations. In describing a state as a partnership, Edmund Burke observed that "as the ends of such a partnership cannot be obtained in many generations, it becomes a partnership not only between those who are living but between those who are living, those who are dead, and those who are to be born".⁽⁷⁾ The purpose of human society must be to realize and protect the welfare and well-being of every generation. This requires sustaining the life-support systems of the planet, the ecological processes and the environmental conditions necessary for a healthy and decent human environment.

In this partnership, no generation knows beforehand when it will be the living generation, how many members it will have, or even how many generations there will ultimately be. It is useful, then, to take the perspective of a generation that is placed somewhere along the spectrum of time, but does not know in advance

(6) Declaration of the Principles of International Cultural Cooperation, Resolutions, Gen. Conf. of UNESCO, Nov. 4, 1966 (Sess. 14).

(7) E. Burke, Reflections on the Revolution in France 139-40 (1790), in 2 *Works of Edmund Burke* 368 (London 1854).

where it will be located.⁽⁸⁾ Such a generation would want to inherit the earth in at least as good condition as it has been in for any previous generation and to have as good access to it as previous generations. This requires each generation to pass the planet on in no worse condition than received and to provide equitable access to its resources and benefits.⁽⁹⁾ Each generation is thus both a trustee for the planet with obligations to care for it and a beneficiary with rights to use it.

The theory of intergenerational equity finds deep roots in international law.⁽¹⁰⁾ Concern for future generations as well as present generations first emerged in the Stockholm Conference on the Human Environment. The Preamble to the Stockholm Declaration expressly refers to the objective of protecting the well-being of future generations: "... To defend and improve the environment for present and future generations has become an imperative goal for mankind - a goal to be pursued together with, and in harmony with, the established and fundamental goals of peace and of worldwide economic and social development". The Declaration's first principle provides that "man . . . bears a solemn responsibility to protect and improve the environment for present and future generations", while the second declares that the "natural resources of the earth, including the air, water, and, flora and fauna . . . must be safeguarded for the benefit of present and future generations through careful planning and management".⁽¹¹⁾ Explicit concern for protecting the natural (or cultural) environment for future generations was incorporated into several international agreements negotiated almost contemporaneously with the Stockholm Declaration and has appeared in subsequent international legal instruments, including in particular, the regional seas conventions.

While it is important to focus on future generations, it is equally important to address the equity concerns among communities within the present generation. In many instances intergenerational and intragenerational actions are consistent. But in some instances, there may be conflicts between immediate satisfaction of wants and long-term needs of sustainability.⁽¹²⁾

Intergenerational equity itself encompasses an intragenerational dimension. When future generations become living generations, they have certain rights and obligations to use and care for the planet that they can enforce against one another. These derive from the position of each generation as a member of the partnership of

(8) See J. Rawls, *A Theory of Justice* (1971), who applies this to social systems but does not address relationships with the natural system.

(9) The trust includes both natural and cultural systems, so that the passing on of knowledge, technology, and institutions to use the planet more efficiently, to develop resource substitutes, and to conserve its environmental services is included.

(10) E. Brown Weiss, *supra* note 1, at 25-26.

(11) Declaration of the United Nations Conference on the Human Environment, U.N. Doc. A/Conf. 48/141 (1972).

(12) For analysis of problems of intergenerational equity, See E. Brown Weiss, *In Fairness to Future Generations*, *supra* note 1, at 5-15.

generations across time. Were it otherwise, members of one generation could allocate the benefits of the world's resources to some communities and the burdens of caring for it to others and still potentially claim on balance to have satisfied principles of equity among generations.

Moreover, the fulfillment of intergenerational obligations requires attention to intragenerational equity. Poverty is a primary cause of ecological degradation. Poverty-stricken communities, which by definition have unequal access to resources, are forced to over exploit the resources they do have so as to satisfy their own basic needs. As an ecosystem begins to deteriorate, the poor communities suffer most, because they cannot afford to take the measures necessary to control or adapt to the degradation, or to move to more environmentally robust areas. Moreover, they have neither the capacity nor the desire to fulfill intergenerational obligations when they cannot even attain basic human needs from the earth today.

Thus, to implement intergenerational equity, countries need to help poor communities to use the natural environment on a sustainable basis, to assist them in gaining equitable access to the economic benefits from our planet, such as potable water, and to help protect them from degraded environmental quality. As beneficiaries of the planetary legacy, all members of the present generation are entitled to equitable access to and use of the legacy. The future nationals of all countries will benefit from efforts of the present generation to protect the general planetary environment for future generations. Conversely, all will suffer if the present generation does not make such efforts.

Three basic principles of intergenerational equity are proposed.

First, each generation should be required to conserve the diversity of the natural and cultural resource base, so that it does not unduly restrict the options available to future generations in solving their problems and satisfying their own values, and should also be entitled to diversity comparable to that enjoyed by previous generations. This principle is called "conservation of options". Fulfillment of this principle can be accomplished not only by conservation of the resources directly but also by new technological developments that create substitutes for existing resources or that exploit and use resources more efficiently.

Second, each generation should be required to maintain the quality of the planet so that it is passed on in no worse condition than that in which it was received, and should also be entitled to planetary quality comparable to that enjoyed by previous generations. This is the principle of "conservation of quality". In implementing this principle, trade-offs will be inevitable. For example, we may exhaust more reserves of a natural resource and increase pollution in an area, but pass on a higher level of income, capital and knowledge sufficient to enable future generations to develop substitutes for the resource and methods to abate or remove the pollutants. A framework must be developed which uses baseline measurements and predictive indices to evaluate planetary quality.

Third, each generation should provide its members with equitable rights of access to the legacy of past generations and should conserve this access for future generations. This is the principle of "conservation of access". This principle gives the present generation a reasonable, nondiscriminatory right of access to the natural and cultural resources of the planet. Its implementation raises difficult issues which underlie part of the debate about sustainable development.

These principles, options (diversity), quality, and access, allow future generations the flexibility to operate within their own value systems and do not require one generation to predict the values of another. They promote equity among generations by respecting both the rights of future generations not to be deprived by the present generation's preference for its own well-being and the rights of the present generation to use the environment free from unreasonable constraints to protect indeterminate future needs. The principles are reasonably definite and clear in application to foreseeable situations. Finally, they are generally shared by different cultural traditions, and generally acceptable to different political and economic systems.

These principles of intergenerational equity form the basis of a set of intergenerational obligations and rights, or planetary rights and obligations, that are held by each generation. These rights and obligations derive from each generation's position as part of the intertemporal entity of human society. They are complemented by a set of intragenerational rights and obligations among members of the present generation, which derive the intergenerational rights and obligations.

Planetary rights and obligations are integrally linked. The rights are always associated with obligations. They are rights of each generation to receive the planet in no worse condition than did the previous generation, to inherit comparable diversity in the natural and cultural resources bases, and to have equitable access to the use and benefits of the legacy. They represent in the first instance a moral protection of interests, which must be transformed into legal rights and obligations.

Planetary rights and obligations coexist in each generation. In the intergenerational dimension, the generations to which the obligations are owed are future generations, while the generations with which the rights are linked are past generations. Thus the rights of future generations are linked to the obligations of the present generation. In the intragenerational context, planetary obligations and rights exist between members of the present generation. They derive from the intergenerational relationship that each generation shares with those who have come before and those yet to come. Thus, intergenerational obligations to conserve the planet flow from the present generation both to future generations as generations and to members of the present generation, who have the right to use and enjoy the planetary legacy.

Intergenerational rights of necessity inhere in all generations, whether these be immediately successive generations or ones more distant. There is no theoretical

basis for limiting such rights to immediately successive generations. If we were to do so, we would often provide little or no protection to more distant future generations. Nuclear and hazardous waste disposal, the loss of biological diversity and ozone depletion, for example, have significant effects on the natural heritage of more distant generations.

Intergenerational planetary rights may be regarded as group rights, as distinct from individual rights, in the sense that generations hold these rights as groups in relation to other generations past, present and future.⁽¹³⁾ They exist regardless of the number and identity of individuals making up each generation. When held by members of the present generation, they acquire attributes of individual rights in the sense that there are identifiable interests of individuals that the rights protect. However, those interests derive from the fact that those living now are members of the present generation and have rights in relation to other generations to use and benefit from planet Earth. The remedies for violations of these rights will benefit other members of the generation, not only the individual.

More broadly, intergenerational rights may provide a theoretically attractive framework for linking a number of disparate rights which have inherently a temporal dimension. These include cultural rights and rights to development, which implicitly assume that there are continuing processes that are to be protected.

It has been argued that future generations cannot have rights, because rights exist only when there are identifiable interests, which can only happen if we can identify the individuals who have interests to protect. Since we cannot know who the individuals in the future will be, it is not possible for future generations to have rights.⁽¹⁴⁾

This paradox assumes the traditional conceptual framework of rights as rights of identifiable individuals. But planetary intergenerational rights are not in the first instance rights possessed by individuals. They are, instead, generational rights, which must be conceived of in the temporal context of generations. Generations hold these rights as groups in relation to other generations - past, present and future. This is consistent with other approaches to rights, including the Islamic approach which treats human rights not only as individual rights, but as "rights of the community of believers as a whole".⁽¹⁵⁾ They can be evaluated by objective criteria and indices applied to the planet from one generation to the next.

(13) For a thoughtful analysis of group rights in relation to goods that are enjoyed together, see J. Waldron, *Can Communal Goods Be Human Rights?* (paper delivered at Conference on Development, Environment and Peace as New Human Rights, Oxford University, Oxford, England, May 28-31, 1987).

(14) This has been referred to as Parfit's paradox and was developed in D. Parfit, "On Doing the Best for Our Children", in *Ethics and Population* 100 (M. Bayles ed. 1976) and D. Parfit, *Future Generations, Further Problems*, 11 *Phil. & Pub. Aff.* 113 (1982).

(15) M. Khaduri, *The Islamic Conception of Justice* 233 (1984).

To evaluate whether the interests represented in planetary rights are being adequately protected does not depend upon knowing the number or kinds of individuals that may ultimately exist in any given future generation.

One might still ask whether it is not preferable to speak only of planetary obligations toward future generations without corresponding intergenerational rights. Can intergenerational obligations exist without rights?⁽¹⁶⁾ While rights are always connected to obligations, the reverse is not always true. Theoretically, an obligation need not always entail a right. For example, a moral obligation of charity does not give those who benefit a right to charity. The legal positivist Hans Kelsen hesitated to find a legal right connected to certain legal obligations.

If obligated behavior of one individual does not refer to a specifically designated other individual . . . but refers only to the legal community as such, then . . . one is satisfied . . . to assume a legal obligation without a corresponding reflex right: for example in the case of the legal norms that prescribe a certain human behavior toward some animals, plants, or inanimate objects by pain of punishment.⁽¹⁷⁾

John Austin described some obligations as absolute duties, which exist independently of any correlative right. He defined absolute duties as those prescribing actions toward parties other than the one obliged, who are not determinate persons, such as members generally of an independent society and mankind at large.⁽¹⁸⁾

If we were to follow this analysis, we would contend that the obligations of the present generation to future generations constitute obligations or duties for which there are no correlative rights, because there are no determinate persons to whom the right attaches. Similarly, in the intragenerational context, obligations to conserve diversity, quality and access would be viewed as absolute duties for which there are no correlative rights.

While this approach may be attractive, it ignores the fundamental temporal relationship that each generation has to all other generations and that gives rise to the rights of each generation to share equitably in the use the planet and its natural resources. These rights focus discussion on the welfare of generations, what each generation is able to have and to enjoy, in a way that obligations cannot. If obligations of the present generation are not linked with rights, the present

(16) It has been argued that if one accepts the model of rights as limited to individual rights, it is preferable to recognize general obligations toward the integrity of environmental systems rather than to discuss environmental protection in the framework of rights, since this framework cannot encompass such categories as future generations, whose individual members are still contingent. B. Norton, "Environmental Ethics and the Rights of Future Generations", 7 *Soc. Theory & Prac.* 319, 337 (1981).

(17) H. Kelsen, *Pure Theory of Law* 62 (M. Knight trans. 1969).

(18) J. Austin, 1 *Austin's Jurisprudence, Lectures on Jurisprudence* 413-15 (1973).

generation has a strong incentive to bias the definition of these obligations in favor of itself at the expense of future generations. Intergenerational rights have greater moral force than do obligations. They provide a basis for protecting the interests of all generations in a healthy and robust planet.

The content of intergenerational rights is framed by the principles of intergenerational equity. Within this constraint, each generation has the responsibility to set criteria for defining the actions that infringe upon these rights. Appropriate criteria would be whether activities have a significant impact, either spatially or over time, whether the effects are irreversible or reversible only with unacceptable costs, and whether the effects will be viewed as significant by a substantial number of people.

Certain categories of actions can be identified as likely infringing upon these. They include the following:

- wastes whose impacts cannot be acceptably contained either spatially or over time, with confidence
- damage to soils so severe that it makes them incapable of supporting plant or animal life
- tropical forest destruction sufficient to diminish significantly the overall diversity of species in the region and the sustainability of soils
- air pollution or land transformations which induce significant climate change on a large scale
- destruction of knowledge essential to understanding natural and social systems, such as residence decay times of nuclear wastes
- destruction of cultural monuments which countries have acknowledged to be part of the common heritage of mankind
- destruction of specific endowments established by the present generation for the benefit of future generations, such as libraries and gene banks.

Some international agreements already obligate countries to guard against such actions. These include the London Ocean Dumping Convention, which controls dumping of hazardous and nuclear wastes in the marine environment, the Antarctica Treaty and the new Environmental Protocol, the World Soils Charter, the Montreal Protocol on Substances That Deplete the Ozone Layer, and the World Heritage Convention.

Intergenerational planetary rights may also be linked to certain procedural norms, which are important to achieving the substantive norms. For example, generation of and access to information, public participation, and long-term impact assessments from the perspective of future generations are emerging as potentially important instruments for achieving intergenerational equity.

Enforcement of intergenerational planetary rights is appropriately done by a guardian or representative of future generations as a group, not as future

individuals, who are of necessity indeterminate. While the holder of the right may lack the capacity to bring grievances forward and hence depends upon the representative's decision to do so, this inability does not affect the existence of the right or the obligation associated with it.

Developments in international law outside the field of the environment make acceptance of intergenerational rights a natural and desirable evolution. Indeed, international human rights law - the Genocide Convention, and the prohibition against racial discrimination, to cite two examples - are arguably directed as much to the protection of future, as to present, generations. The extinction of, for example, an entire people is more odious in law than the murder of an equal number of people constituting a minority of each of several groups. Similarly, discrimination denies an "equal place at the starting gate" not only to the generation of the suppressed group, but (by implication) also to future generations. Provisions in other human rights agreements refer to rights of children and of the elderly, and to education and training, which are implicitly temporally oriented.

The existence of intergenerational planetary rights also has significant implications for policy. For example, it may be argued that population policies are linked to fulfillment of intergenerational rights. If the earth's population continues to grow rapidly, the amount of diversity and degree of quality that must be passed on will be higher than if the population in the future were at the same level or less than it is today.

Certainly the existence of intergenerational planetary rights may affect the population policies of present and future generations. But whether a generation chooses to meet its obligations by curtailing exploitation, consumption and waste or by constraining population growth is a decision each generation must make. The fact that future generations have a generational right to receive the planet in a certain condition puts constraints on the extent to which a present generation can ignore this choice.

It has also been argued that if we intervene to conserve the environment to protect future generations, we cannot succeed in protecting them because our intervention will cause a different group of individuals to emerge.⁽¹⁹⁾

Certainly the composition of future generations cannot be known in advance, in part because it is affected by actions of the present generation. Virtually every policy decision of government and business affects the composition of future generations, whether or not they are taken to ensure their rights under the guidelines enunciated above. Decisions regarding war and peace, economic policy, the relative prosperity of different regions and social groups, transportation, health, education - all influence the demographics and the composition of future generations by affecting the lives and fortunes of the present generation: who will succeed and

(19) A. D'Amato, "Do We Owe a Duty to Future Generations to Preserve the Global Environment", 84 *A.J.I.L.* 190, 192-4 (1990).

prosper, who will marry whom, who will have children, and even who will emigrate.

The theory of intergenerational equity presented here takes the view that planetary obligations to future generations are owed to all the earth's future human inhabitants, whomever they may be. This opens the possibility that these decisions, too, deserve to be scrutinized from the point of view of their impact on future generations. It offers a useful and broadly acceptable theoretical underpinning to sustainable resource development. The possibility that intergenerational equity may place limits on our actions is an important new area of human rights research.

Such limitations should be applied very narrowly, lest the rights of future generations be an instrument for thwarting change. But surely long-term environmental damage is a good place to begin. Future generations do have the right to be assured that we will not pollute ground water, load lake bottoms with toxic wastes, extinguish biologically important habitats or change the world's climate dramatically - all long-term effects that are difficult or impossible to reverse - unless there are extremely compelling reasons to do so, reasons that go beyond profitability.

Finally, it is essential to develop effective techniques for ensuring representation of future generations in the market place. Once the underlying normative allocation between generations in relation to the natural system is clear, then the appropriate economic instruments should be able to be developed which take account of the entitlement.

Planetary rights of future generations provide a normative framework for implementing environmentally sustainable development. They mean that we do not have to rely on a sense of noblesse oblige by the present generation⁽²⁰⁾, but rather that we are implementing a fundamental entitlement of future generations. It is an entitlement which we ourselves, as members of the present generation, held in relation to our ancestors and which we need now to protect for our descendants.

(20) See J. Rothenberg, *supra* note 4.