# How Valid are Future Generations' Arguments for Preserving Wilderness?

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Abstract—We are often urged to preserve wilderness for the sake of future generations. Future generations consist of potential persons who are mute stakeholders in the decisions of today. Many claims about the rights of future generations or our present obligations to them have been vigorously advanced and just as vigorously denied. Recent theorists, however, have argued for a communitarian basis for these obligations, which emphasizes the need future generations will have for clean air, water, biodiversity, and the like. Such a move denies the traditional, liberal, anthropocentric reasons for wilderness preservation and sets up particular criteria for which lands should be preserved. In this paper, we review the arguments about future generations in relation to wilderness preservation. We conclude that these arguments are overly general and lack a solid rational base, making future generations arguments susceptible to misuse.

One of the most powerful, commonly invoked arguments for wilderness preservation is the idea that preservation will benefit future generations. Wilderness enthusiasts argue that population growth has placed unprecedented demands on resources worldwide, and that areas of unspoiled nature are growing increasingly rare. It follows, some suggest, that we should preserve wilderness to give future generations the opportunity to experience virgin or ancient forests, scientific benchmarks from which to judge ecological changes, and a host of other current benefits—clean air and water, biodiversity conservation, etc. Others, particularly the Deep Ecologists, are less concerned about human benefits, but they use future generations arguments to argue for the preservation of wild nature for its own sake (Sessions 1995).

How much credence should such arguments be given? It is difficult to oppose the idea of benefiting future generations; after all, where would we be today if our own forebears had not had the foresight to set aside Yellowstone, Yosemite, the Grand Canyon, the Bob Marshall Wilderness or the Boundary Waters Canoe Area? Yet despite such marvelous prudence, suspicion lingers that the future generations arguments we read in the literature or encounter at public meetings can be somewhat disingenuous, used simply as a

Advocates point to past successes such as the national parks and wilderness areas cited above, conveniently forgetting that future generations arguments also have been used to justify odious policies, such as the eugenics programs in Nazi Germany. Can some particular individual really have the audacity to presume to speak on behalf of all the yet-to-beborn? How can we know what future generations will need or want? How can we know who speaks disinterestedly on their behalf? In this paper, we explore the arguments about future generations in the context of the debate over wilderness preservation.

Despite the suspicions raised above, future generations

way to forward an individual's or group's particular agenda.

arguments tend to be treated very seriously. Why are we so susceptible to this line of argument? There are three sets of reasons. First, the development of the market economy and its attendant emphasis on the sanctity of the individual has eroded our faith in Providence, making us as individuals increasingly responsible for the welfare of future generations. For most of the past millennium, future generations, not to mention the fates of individuals, were considered to be in the hands of God. People were to do their best, of course. but Providence was the ultimate force in the world (Heilbroner 1987). This theological tradition was reinforced by social organization. The actual conduct of human affairs was guided by power, tradition or a combination of the two. Thus, kings might rule by might, but common people followed their parents into specific occupations. Life had a continuity that crossed generations; the same family worked the same fields, and most people lived in villages where they could contribute to works such as churches that would outlast individual lives. These factors contributed to a sense of transgenerational community, a sense we seem to have lost today (O'Neill 1993).

Through a series of developments that began in the 11th century, but were not complete until the 19th, markets began to evolve, becoming an ever increasingly important determinant of human affairs. The market itself did not flourish as a central controlling factor in human affairs until the 18th century, but when combined with the skeptical humanism of the Renaissance, it led to a concern for well-being in this world, which gradually took precedence over a concern for the next world. Liberalism arose, and the spread of democracy further eroded tradition and authority, giving individuals the ultimate responsibility for their own choices. The 19th century and the Industrial Revolution contributed a sense of optimism—a new faith in progress and in the ability of science to solve problems. This optimism persists today, but it is giving way to growing doubts, at least among Western intellectuals.

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Technology and technological solutions to problems are increasingly suspect, so that we no longer share Mr. Micawber's sense that "Something will turn up" (Hardin 1981).

Second, future generation arguments carry great weight because science and technology have given us enormous power to affect the fate of future populations. There is a growing sense of global ecological crisis among environmentalists, a crisis fueled by population growth, the spread of nuclear materials and wastes, pollution, global climate change, ozone deterioration and any number of other causes. There is likewise a sense that many of these factors, although sufficient to do damage in and of themselves, may ultimately interact with one another, causing huge harm to living biotic systems—a cost to be born by future generations of humans (Norton 1991).

Third, future generations arguments are powerful because future generations play a significant role in validating our own lives and works. The people of the future will sit in judgment over us, just as we judge the lives and works of those who preceded us. Our descendants will be the ones to determine if our own lives were successes or failures (O'Neill 1993), and most of us would like to leave a legacy that matters.

These factors—a decline of faith in both Providence and progress, the tremendous power we have to do damage, and the fact that future generations will sit in judgment on us—combine to give us a new sense of urgency about future generations. Arguments that involve the future are high stakes indeed, and as Passmore (1974) points out, ours is the first generation to bear the sole responsibility for choosing correctly. The moral weight is heavy.

#### Obligations to Future Generations Pro and Con

There have been many claims advanced in support of responsibilities to future generations, and just as many claims denying them. In this section, we review the major themes in both types of argument, beginning with the negative.

Perhaps the most common claim about future generations is that future people have rights which give them claims that the present generation must consider. Theories that involve rights and reciprocal duties and responsibilities are often termed "contractarian," in that they view the function of ethics as facilitating social exchange between members of a specific moral community. However, Golding (1981) argues that, since it is impossible to achieve any social contract or degree of reciprocity with persons who are only potential, they cannot be said to be part of our moral community. To express concern for them requires some notion of what would be good for them, and this is difficult, particularly for distant generations. Imagine, for example, that you were living in the year 1499; could you possibly have predicted what people living in 1999 would need or want? Furthermore, it makes little sense to ascribe rights to people who are only potential, since specific individuals cannot be identified (Macklin 1981); in contractarian theories, rights also imply reciprocal duties, and what duties could possibly be ascribed to people who are not actual?

A second, related line of negative reasoning argues that, since we cannot predict the path of science and technology, we have no idea of what resources and productive capacities the future generations will have. For example, both Rawls (1971) and Solow (1993) argue that what we leave behind is not only depleted resource stocks, but also productive capacity, including plants, equipment and technical knowledge that can solve problems and also create new resources. We can view these as investments that will enhance the capacity of future generations to resolve environmental problems. From Solow's perspective, the key is to not fritter away resources on current consumption without making corresponding investments in capacity.

A third objection to the validity of future generations arguments is based on social justice. Sustainability is really a matter of equity: How much current consumption should we forego in the present in order to share with future potential persons (Solow 1993)? There are poor people in the present generation for whom the importance of consumption far outweighs investment, and current trends show that social inequality in the U.S. has been increasing rapidly over the past 30 years (Cassidy 1995; Hurst 1998; More 1999). Setting aside large tracts of wilderness to benefit future generations is not likely to sit well with those struggling in the present.

A fourth argument against the necessity of preserving wilderness, national parks, sequoias and other components of wild nature for the future is that, once these things are gone, future generations will be unable to develop an appreciation for them and, hence, cannot be harmed by their absence (Beatley 1994). Are we harmed today because we can only know dinosaurs intellectually through imaginative reconstructions in movies or museums? Perhaps closer to the point, are we genuinely harmed by an inability to visit Hetch-Hetchy? Or do we simply lack the ability to appreciate what it once was? One of the real difficulties of future generations arguments is that we are unable to know the tastes, preferences or social and economic circumstances of future people. O'Neill (1993) counters that we have a duty to ensure that future generations are part of our moral community by ensuring that they have a common appreciation of our achievements--our arts, sciences and culture, which would include national parks and wilderness preserves. On the other hand, our inability to know their tastes, preferences and wants makes it extremely difficult to make specific policy decisions on their behalf. Will future generations of urban people really want wilderness, or would we be better off to use our limited resources to preserve natural areas in and around cities?

Lastly, with finite resources, and wilderness is often considered a finite resource, policy concerns involve complex questions about slicing and distributing a limited pie. As Beatley (1994) points out, the number of generations is potentially infinite. Consequently, the present generation's fair share is either indeterminable or infinitesimal, neither of which is very helpful for policy decisions. This is particularly a problem for depletable resources--coal, petroleum, etc. Protected wilderness is not depletable in the same way, unless it is alterable by human recreational use. However, unprotected wilderness may be depletable through development.

On the positive side, many philosophers have claimed that we do have obligations to future generations. Utilitarianism, for example, seeks to maximize utility, or happiness, across generations. In its classical version, however, this leads to the idea that we might condone indefinite population growth so long as the aggregate gains to well-being over the population offset losses in well-being due to crowding, a situation that could result in large numbers of people living near the subsistence level (Green 1981). Such conundrums have led some philosophers to reject classical utilitarianism and argue instead for a modified version of Rawls' (1971) theory of justice. Rawls deduces the principles of a just society by asking what choices rational individuals would make for a society if they could not know what position they would occupy within that society. While his concern is primarily with contemporaries, he believes that people are motivated by concerns for their immediate descendants. This would lead them to adopt a "Just Savings Principle" that ensured sufficient savings and investment to protect the future of just institutions. These savings include not only material wealth, but factories, machines, knowledge, culture, and skills. In this way, just institutions would be protected for future generations.

While Rawls (1971) himself tends to be concerned only with the immediate next generation, a number of other philosophers have sought to extend his conception to the problem of distributive justice across multiple generations (Norton 1991; Routley and Routley 1981). We cannot, in justice, it is argued, leave future generations to bear the costs of present consumption; they are mute stakeholders whom we have the power to harm, but who do not have the power to harm us. These theorists would extend Rawls' "original position" to include rational choices made in ignorance of the generation in which a person would live; what we owe to future generations is a matter of justice rather than of happiness, rights or obligations (de-Shalit 1995).

A third, more recent perspective is that of communitarianism (de-Shalit 1995). Communitarian theorists attempt to rebut the contractarians by arguing that people are members of a transgenerational community that extends over several generations and into the future, so that "... just as many people think of the past as part of what constitutes their 'selves', they do and should regard the future as part of their 'selves'. These are the relations that form the transgenerational community, which is the source of our obligations to future generations" (de-Shalit 1995, p. 16).

Under communitarianism, the welfare of the group as a whole takes precedent over the welfare of particular individuals. Traditional liberalism, by contrast, emphasizes individual welfare. The distinction is important to wilderness preservation because it can lead to differing motivations for preservation. For example, wilderness has often been justified as a place that provides solitude, spiritual experiences, a temporary escape from the strictures of contemporary social life, chances to recapture the pioneer spirit and so forth (Hendee and others 1968). Such justifications emphasize the personal benefits supplied by wilderness and thus fall well within the bounds of traditional liberalism. A communitarian approach, which includes future generations as part of our moral community, leads to a different set of justifications for preservation. While we may not know the specific tastes and preferences of future generations, we can

be reasonably sure that they will require clean air and water and stable ecosystems, as well as shelter and protection from environmental hazards (Beatley 1994). Under communitarianism the reasons for wilderness preservation tend to shift from the biological, psychological and social benefits of wilderness toward the physiological benefits like clean air and water—those that benefit people in the abstract and which are immutable across the generations.

Such a shift may call for modifications of management policy to protect these benefits; Sessions (1995), for example, bemoans the "Disneyfication" of wilderness in the form of Forest Service policy that encourages its recreational use. A focus on physiological benefits may also shift preservation debates. Instead of an emphasis on beauty or remoteness, the appropriate questions might have more to do with the ability of an area to produce clean air and water, or to protect biodiversity. It would be these values that would be most significant in a communitarian debate over wilderness, and we would need to identify which areas were most successful in producing them.

## The Shortcomings of Future Generations' Arguments

To be conservative, we can assume that most people do acknowledge some sort of responsibility for future generations. This may stem from a love of one's own children (Passmore 1974), from a rational sense of duty (de-Shalit 1995; Partridge 1981), or from a desire for self-fulfillment through a legacy left for the future. It may even be genetic. Homo sapiens is among the species that nurtures its young to maturity; this means that a concern for at least the upcoming generation is "hard-wired." Whatever the source, most thoughtful people are anxious to make a contribution that will leave the world a better place than they found it and, hence, are concerned with futurity. That said, however, the future generations literature has two significant shortcomings: (1) It fails to specify the specific kinds of obligations owed to future generations, and (2) the future generations it portrays are completely homogeneous, and undifferentiated either socially or psychologically. We would like to deal with both these problems.

While we may, in general, acknowledge that we have obligations to future generations, what exactly does this mean we should actually do? What actions should we take? Which lands should be preserved or which developed? As noted above, Solow (1993) argued that our obligations to the future require that we have savings, which could include land preservation in various categories, and investments. However, as an economist, he argues that different resources are at least partial substitutes for one another (fungible). Consequently, there is no particular thing that we owe to the future. In discussing the concept of sustainability he argues:

It is perfectly logical and rational to argue for the preservation of a particular species or the preservation of a particular landscape. But that has to be done on its own, for its own sake, because this landscape is intrinsically what we want or this species is intrinsically important to preserve, not under the heading of sustainability. Sustainability doesn't require that any particular species of owl or any particular species of fish or any *particular* tract of forest be preserved." (Solow 1993, p. 181, emphasis in original).

Alternatively, Beatley (1994) argued that two key obligations are to keep options open and to avoid making irreversible decisions; extinction, for example, is forever and forecloses all options. In terms of wilderness preservation, this begs the question raised by the social constructivists (Cronon 1995, Proctor 1998): Is wilderness a specific place that is growing increasingly scarce as the world population grows (Worster 1997), or is it a human concept that we impose on the natural world, susceptible to all the potential misunderstandings of the human mind? Clearly, a case can be made for both viewpoints; although we tend to favor the social constructivist perspective, the way people answer this question will be central to their willingness to preserve specific tracts of wilderness. Indeed, scarcity (or uniqueness) is a key element in many wilderness preservation arguments and might provide a valuable guide to action. This, too, is problematic, unfortunately. As O'Neill (1993) notes, it is possible to describe a particular tract of land in many different ways: as a landscape, an historical location, a watershed, a soil or vegetative type, an ecosystem, an industrial wasteland, a habitat and so forth. Consequently, it is perfectly possible to construct a description of any particular tract of land that will make it sound rare. Scarcity is not a value in and of itself; it amplifies value under a particular description. Consequently, without a broad social consensus, claims of scarcity are not necessarily a good guide to our obligations in specific instances. Setting aside fanciful claims for zoning the earth (Odum 1971, Sessions 1995), progress in wilderness preservation depends upon interested stakeholders sitting down at the same table and discussing the merits of alternative proposals. The interests of future generations are not irrelevant, but they clearly provide only a limited guide to action at best, and then only when supported by a broad social consensus.

The second shortcoming of future generations arguments concerns their lack of differentiation in social or psychological characteristics. It may be that in the very long run, perhaps for those generations over 100 years out, we can have only vague ideas of what these people and their cultures will be like. In the nearer term future, however, it is reasonable to assume that they will be born into particular groups—they will be black, white, brown, red or yellow (or, increasingly, some combination); they will be rich, middle class or poor; they will be born into particular locations; and so forth. A decision that benefits (or burdens) a particular group today will enhance (or depress) any future person who happens to be born into that particular group. Consequently, an understanding of the distribution of costs and benefits of the wilderness preservation of any particular tract is central to informed decisionmaking. Studies of actual wilderness users indicate that most come from a social elite (Bultena and Field 1978; Vaux 1975). A range of other studies documents wilderness benefits like existence, option and bequest values (Gilbert and others 1993; Krutilla 1967; Weisbrod 1964) that accrue to nonusers. Recently, however, there have been growing concerns about the conceptual foundations of some of these values (Bergstrom and Reiling 1998; More and others 1996). It is somewhat more difficult to estimate the social distribution of wilderness benefits associated with clean air and water, biodiversity, etc. On the one

hand, it could be claimed that these goods benefit everyone. On the other hand, there may be locally specific effects that could make wilderness preservation seem like building a public park in an affluent neighborhood. While we clearly need additional studies of benefit distribution, we also need to treat seriously claims that wilderness preservation will create burdens for some. It is not sufficient to claim that wilderness preservation will benefit future generations of nonspecific individuals. Clearly, given the existing information on the elite social status of current wilderness users, the financing of wilderness preservation and management needs to be made as progressive as possible (More 1999).

## **Conclusion: Future Generations and Wilderness Preservation**

In closing, we return to our original question: How valid are "future generations" arguments for preserving wilderness? There clearly are difficulties with their uncritical application. One set of problems stems from their generality. The future generations literature is probably at its most compelling when discussing specific costs—nuclear waste, global warming, population growth—that we impose on future generations. These are also areas in which there is a strong social consensus regarding cost. In areas of benefit, such as wilderness or historic preservation, the literature seems more vague: It is difficult to link the arguments with specific land areas and proposals; they project an undifferentiated future; and the social consensus is not as strong. The arguments often are so general that they could be appealed to by either side in any given debate, used to justify any number of mutually exclusive alternatives.

To overcome these difficulties, a number of economists have advocated a "safe minimum standard" decisionmaking strategy, in which the current generation refrains from undertaking irreversible action unless the social costs of doing so are intolerable (Berrens and others 1998; Toman 1992). With regard to wilderness, however, there is clearly a debate over whether actions are irreversible (Cronon 1995), and how is one to determine if the social costs are "too high?" Clearly, what is an intolerable cost for one group will seem a small price to pay for another.

A second set of problems stems from the use of rational argument itself. While a number of philosophers have attempted to construct rational arguments to include consideration of future generations in current decisionmaking, these arguments are opposed by other rational arguments. Unfortunately, this may be an area where rationality fails, much the same as arguments that attempt to prove the existence of God from rational premises. A certain level of faith may be necessary in both instances!

Both of these problems—the generality of the arguments and their lack of a solid rational foundation—can create situations that lends themselves to serious mischief. Future generations arguments can be played as a sort of moral trump card, designed to best the opposition by grabbing the moral high ground in a debate. When used in this way, the argument can create "good guys" and "bad guys," foreclosing rational debate on a topic. Although common, such uses are improper. Decisionmaking in wilderness preservation, as elsewhere, needs to be based on a rational consideration of

costs and benefits coupled with vigorous public debate. Clearly, we do need to look to the future; like Passmore (1974) and many others, we believe that we all have an obligation to try and leave the world a better place than we found it. However, the best guide to determining if an action will be right both today and in the future is still a rational weighing of alternatives.

#### References\_\_

- Beatley, T. 1994. Ethical land use. Baltimore, MD: The Johns Hopkins University Press. 302 p.
- Berens, R. P.; Brookshire, B. S.; McKee, M.; Schmidt, C. 1998. Implementing the safe minimum standard approach: two case studies from the U. S. Endangered Species Act. Land Economics. 74(2):147-161.
- Bergstrom, J.; Reiling, S. 1998. Does existence value exist? In: El-Swaify, S. A., and Yakowitz, D. S., eds. Multiple objective decision making for land, water, and environmental management: proceedings of the first international conference on multiple objective decision support systems (MODSS) for land, water, and environmental management: concepts, approaches, and applications; 1996 September; Honolulu, HI. Boca Raton, FL: Lewis Publishers: 481-491.
- Bultena, G.; Field, D. 1978. Visitors to national parks: a test of the elitism argument. Leisure Sciences. 1(4):395-409.
- Cassidy, J. 1995. Who killed the middle class? The New Yorker. October 16, 1995. p. 113-124.
- Cronon, W. 1995. The trouble with wilderness; or, getting back to the wrong wilderness. In: Cronon, W., ed. Uncommon ground: toward reinventing nature. New York: Norton: 69-90.
- de-Shalit, A. 1995. Why posterity matters. London: Routledge. 161 p.
- Gilbert, A.; Glass, R.; More, T. 1992. Valuation of eastern wilderness: extramarket measures of public support. In: Payne, C.; Bowker, J.; Reed, P., comps. Gen. Tech. Rep. SE-78. The economic value of wilderness: proceedings of the conference; 1991 May 9-11; Jackson, WY. Asheville, NC: USDA Forest Service: 57-70.
- Golding, M. 1981. Obligations to future generations. In: Partridge, E., ed. Responsibilities to future generations. Buffalo, NY: Promethus Books: 61-72.
- Green, R. 1981. Intergenerational distributive justice and environmental responsibility. In: Partridge, E., ed. Responsibilities to future generations. Buffalo, NY: Promethus Books: 91-102.
- Hardin, G. 1981. Who cares for posterity? In: Partridge, E., ed. Responsibilities to future generations. Buffalo, NY: Promethus Books: 221-234.
- Heilbroner, R. 1987. The worldly philosophers. 6th Ed. New York: Simon and Schuster.

- Hendee, J.; Catton, W.; Marlow, L.; Brockman, C. 1968. Wilderness users in the Pacific Northwest their characteristics, values, and management preferences. Res. Pap. PNW-61. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 92 p.
- Hurst, C. 1998. Social inequality: forms, causes and consequences. Boston: Allyn and Bacon. 438 p.
- Krutilla, J. 1967. Conservation reconsidered. American Economic Review. 57:777-786.
- Macklin, R. 1981. Can future generations correctly be said to have rights? In: Partridge, E., ed. Responsibilities for future generations. Buffalo, NY: Promethus Books: 151-156.
- More, T. 1999b. A functionalist approach to user fees. Journal of Leisure Research. 31(3).
- More, T.; Averill, J.; Stevens, T. 1996. Values and economics in environmental management: a perspective and critique. Journal of Environmental Management. 48:397-409.
- Norton, B. 1991. Toward unity among environmentalists. Oxford, England: Oxford University Press.
- Odum, E. 1971. Fundamentals of ecology. Philadelphia: W. B. Saunders: 227-244.
- O'Neill, J. 1993. Ecology, policy, and politics: human well-being and the natural world. London: Routledge.
- Partridge, E. 1981. Why care about the future? In: Partridge, E., ed. Responsibilities to future generations. Buffalo, NY: Promethus Books: 203-220.
- Passmore, J. 1974. Man's responsibility for nature. New York: Scribners.
- Proctor, J. 1998. The social construction of nature: relativist accusations, pragmatist, and critical realist responses. In: Annals of the Association of American Geographers. 88(3):352-376.
- Rawls, J. 1971. A theory of justice. Cambridge, MA: The Belknap Press. 607 p.
- Routley, R.; Routley, V. 1981. Nuclear energy and obligations to the future. In: Partridge, E., ed. Responsibilities to future generations. Buffalo, NY: Promethus Books: 277-301.
- Sessions, D. 1995. Ecocentrism, wilderness, and global ecosystem protection. In: Sessions, D., ed. Deep ecology for the 21st century. Boston, MA: Shambhala Publications: 339-355.
- Solow, R. 1993. Sustainability: an economist's perspective. In: Dorfman, R. and Dorfman, A., eds. Economics of the environment: selected readings. New York: Norton and Company: 179-187.
- Towman, M. A. 1992. The difficulty in defining sustainability. Resources (106). Winter.
- Vaux, H. 1975. The distribution of income among wilderness users. Journal of Leisure Research. 7(1):29-37.
- Weisbrod, B. 1964. Collective consumption services of individual consumption goods. Quarterly Journal of Economics. 78:471-477.
- Worster, D. 1997. The wilderness of history. Wild Earth. Fall, 1997:9-13.