

Ethics in Geologic Time: Should We Care about Distant Future Generations?

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Disclaimer

I would like to start by making clear that I am not a philosopher. My training is in physics but in thinking scientifically about many of the environmental threats to the well-being of our posterity and in thinking politically about how scientific knowledge can be used most effectively in guiding public policy decisions, the tools philosophers give us are essential to helping me try to think clearly. Thus, I will be speaking tonight not as a producer of philosophical wisdom, but as a consumer.

My Goals

As I discuss the ethics that apply over enormous spans of time, I will not seek to find a universal rational principle to dictate our obligations to distant future generations. I will take my starting point from David Hume, who noted that ethics requires a combination of empirical and theoretical work. The ends we seek are to be found in empirical observation of our moral sentiments and a

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rational account of the circumstances in which these sentiments blossom and produce fruit.

To someone who has no moral feeling for the distant future, my account will not change his or her mind, but I hope that my ruminations can clarify what we argue about when we dispute the existence or the nature of such obligations. Thus, I take as my starting point my personal sense that distant generations matter, ask whether this sentiment is widely shared, and then, having seated it in a broader tradition, study different perspectives on the nature of this affinity, asking which are more or less useful to understanding it clearly.

I will dodge the more difficult questions of degree and of balancing conflicting obligations to the present, to the near future, and to the distant future but discuss whether non-negligible obligations to the distant future exist at all.

Geological Time

Before I talk about ethics in geological time, I must describe what I mean by geological time. Earth scientists grow accustomed to thinking casually about spans of time that, from the perspective of a human life, are quite incomprehensible except as immense numbers. The earth was born 4.6 billion years ago. This seems a very big number, but so would 4.6 million years ago—a time when the earth looked very similar to the way it looks today. The continents were very close to their present positions and shape; the dinosaurs had been extinct for 60 million years, and mammals had decisively emerged as the dominant large land animals. Humans did not exist, but our forebears and those of the modern chimpanzee had already diverged from their common ancestor.

True deep geological time extends far beyond millions of years, to the time scales for forming mountain ranges—tens of millions of years; the time scales for major continental drift—hundreds of millions of years; and the time scales on which the grand transformations of life, land, sea, and air have transpired—billions of years. I will not explore the deeper scales of time, but will confine myself to looking no further ahead than a few million years. I choose this span of time because it characterizes the outer reaches of our generation's likely chemical impact on the environment. There is a pleasing symmetry to this: *homo erectus*, perhaps the first of our forebears to live socially as hunter-gatherers, emerged slightly less than 2 million years ago, although this is purely coincidental to my reason for selecting this time frame.

But even a million years, a blink of God's eye to a geologist, is almost incon-

ceivable in the human span of time, so I will begin by describing millennia.

Millennia themselves may seem incomprehensibly immense. If a human generation takes 30 years, a millennium represents roughly 30 generations. Someone born 1000 years from now, trying to trace their lineage from those ancestors alive today would have over a billion ancestors to keep track of (of course, those would not represent a billion distinct people, as many lines of descent would intersect and overlap). However, many things living on earth today are thousands of years old.

Ethics of the Past

Recently, scientists studying bacteria that live in sediments deep below the ocean floor found species that live so slowly they reproduce on average once every thousand years.¹ Many species of trees live hundreds of years and several live over a thousand. The oldest living things we know of are bristlecone pine trees, which live in the mountains in and around the Great Basin, from Colorado to California. The oldest known tree that is still living has been named Methuselah and is 4,773 years old. An even older tree, named Prometheus, was 4,862 years old when it was killed in 1964. And this seems a good place to begin talking about ethics. If we have obligations to the distant future, we might begin by considering as well our obligations to the past.

The Prometheus tree was, I am ashamed to say, martyred to science. Late in the year 1964, a young geographer studying the climate and glaciers of North America during the past 400 years came upon this ancient tree and wanted to study the tree's rings, which would tell him about temperatures and rainfall during that period. He had a coring drill that would allow him to take a small sample of the tree's rings without seriously injuring the tree, but in his excitement he broke the drill. It would have taken months to obtain a replacement, and with winter coming on, he would not be able to return to the site until the following summer, so he requested and received permission from the Forest Service to cut the tree down with a chainsaw. Therewith, the oldest living thing on earth was killed in the name of environmental research.²

¹B.B. Jørgensen & S. D'Hondt, "A Starving Majority Deep Beneath the Seafloor" 314 *Science* 932 (2006).

²Galen Rowell, *High & Wild: Essays and Photographs of Wilderness Adventure*, 106-08 (Bishop CA: Spotted Dog Press, 2002); Leonard Miller, THE ANCIENT BRISTLECONE PINE web site, www.sonic.net/bristlecone/home.html; Michael P. Cohen, "Oldest Living Tree Tells All," 3(2) *Terra Nova* (2004), www.terrain.org/essays/14/cohen.htm.

When the story of the death of Prometheus reached the public, some years later, there was outrage and protest that the oldest living thing could have been so casually dispatched. Worldwide, somewhere around ten thousand trees are felled every minute.³ But there is something special about those rare trees that survive for thousands of years that touches people's sympathy and imagination.

Names and Memory

The death of something that stands out, something unique, makes us reflect on our own mortality. In his book *The Ethics of Memory* Avishai Margalit reflects on the importance of names in establishing our moral and ethical obligations. The Israeli memorial to the victims of the Shoah is called Yad Vashem, which Margalit explains

is based on the verse in Isaiah which promises a memorial even to the pious eunuch . . . who is a “dry tree” in the sense that no one will carry his name after his death. “Even unto them I will give in mine house and within my walls *a place and a name* [yad vashem] better than of sons and daughters: I will give them an everlasting name, that shall not be cut off.”⁴

Margalit observes that here and elsewhere, the Bible makes great use of woody language to describe the loss of one's name to posterity: “dry tree,” “cut off” (Josh. 7:7), “rot” (Prov. 10:7).⁵ I believe this is more than mere coincidence because the ramifications of arboreal imagery—the tree of life, the family tree, and so forth—give an ancient tree emotional force that would not be there had the world's oldest living thing been a fungus. It is no coincidence that people have named these ancient trees, calling them “Methuselah” and “Prometheus” in addition to their numerical designations.

Margalit writes of names and memory to understand moral witness and forgiveness for the past, but his ideas have rich application as well in the environment and the future. Margalit writes,

³E. Harris, “World is felling trees at ‘alarming’ rate,” *Boston Globe* (3 Feb. 2008) (60 acres per minute of tropical rain forest is cleared); J. Hjerpe *et al.*, “Tropical Rain Forest Recovery from Cyclone Damage and Fire in Samoa,” 33 *Biotropica* 249, 251 (2001) (Tree density is 400–500 per hectare); so around 11,000 trees are felled per minute.

⁴A. Margalit, *The Ethics of Memory*, 22 (Harvard, 2002). Referring to Isaiah 56:5.

⁵*Id.* at 23.

[P]ersonal names and their cognates [are] the last barrier from the abyss of oblivion. ... The human project of memory ... is basically a religious project to secure some form of immortality.⁶

Later, he writes

We dread the idea of dying without leaving a trace. ... The problem is how to devise a notion of a trace that does not commit us to a metaphysical belief in an afterlife but still satisfies our yearning to avoid oblivion. One candidate is being remembered after our death, at least by those we care about.⁷

The poet Charles Simic puts this more evocatively. Reviewing Daniel Mendelsohn's *The Lost*, about a search for the stories of six relatives who perished in the Holocaust, Simic writes,

He wanted stories about the people in the few photographs the family still had of them, some little anecdote that would rescue them from their anonymity, their generic status as victims, and restore to them their reality as particular human beings. ... It is sobering to realize that one little story can keep someone living on in a descendant's memory. Once even that is forgotten, the person vanishes as if he never existed.⁸

Our recollection of past generations and our veneration of the singularly aged represent in part the role of tradition in carrying our lives and our stories forward into the distant future, just as we honor the names and memories of those who came before us.

But how do environmental ethics and environmental obligation enter into this?

Our Impact on the Future

Modern industry is producing large quantities of materials that are either directly hazardous because they are toxic or radioactive or indirectly hazardous

⁶*Id.* at 25.

⁷*Id.* at 91.

⁸C. Simic, "Back to the Beginning," New York Review of Books Oct. 5, 2006. www.nybooks.com/articles/2006/10/05/back-to-the-beginning/.

because they can change the environment in dangerous ways. Radioactive waste products from the nuclear weapons and nuclear energy programs will remain very dangerous for thousands of years.

Carbon dioxide from burning fossil fuels currently remains in the air for 100–150 years, but if we go on burning fossil fuel until all the known coal reserves are depleted the chemist James Kasting has calculated that it will take tens to hundreds of thousands of years for the atmosphere to recover.⁹ We may also be close to a point of climatic instability beyond which climate change will accelerate and become self-sustaining even if we cut further greenhouse gas emissions. A recent paper by James Hansen claims that we have already crossed such a tipping point,¹⁰ but that paper remains very controversial even among expert climate scientists. Even if we have not yet crossed this tipping point, if we do nothing to reduce fossil fuel use, it is possible, but not certain, that by 2100 global warming will have set one third of the world's plant and animal species on the path to extinction.

Apart from climate change, overfishing has depleted the population of one third of commercially fished species by 90% or more and has depleted the population of 90% of the fish species by at least half.¹¹ In earth's past history, when mass extinctions have occurred it has taken many millions of years for biodiversity to recover, so we risk condemning thousands of generations to life in an impoverished ecosystem.¹² Will there be insects to pollinate their crops? Will there be predators to keep pests that spread disease or spoil crops under control? What is the future of fishing, which is a vital part of many nations' food supply?

Our actions today in managing hazardous materials, husbanding natural resources, and interacting with the earth's climate and ecology, can have significant effects over scores or even hundreds of generations. At the same time, while many of these environmental threats may hurt us or our immediate descendants (children, grandchildren), many of these predominantly affect very distant generations.

Environmental concerns over the proposed nuclear waste repository at Yucca

⁹J.F. Kasting and J.C.G. Walker, "The Geochemical Carbon Cycle and the Uptake of Fossil-Fuel CO₂," *AIP Conference Proceedings* 247 (1), 175–200 (1992).

¹⁰J. Hansen, "Tipping Point: Perspective of a Climatologist," in E. Fearn (ed.), *State of the Wild 2008–2009: A Global Portrait of Wildlife, Wetlands, and Oceans* (Island Press, 2008).

¹¹B. Worm *et al.*, "Impacts of Biodiversity Loss on Ocean Ecosystem Services," 314 *Science* 787, (2006).

¹²S.A. Bowring *et al.*, "The tempo of mass extinction and recovery: The end-Permian example," 96 *Proc. Nat'l. Acad. Sci.*, 8827, 8827 (1999).

Mountain, Nevada, focus on hazards to people living thousands of years in the future. Although the effects of global warming are becoming apparent as we speak, the kinds of catastrophic harm that could justify massive efforts to eliminate fossil fuel consumption are unlikely arrive before the end of this century. While we fear the complete melting of the polar ice caps, which would cause a 260-foot sea-level rise that would put all of Florida and Louisiana and most of our coastal cities under water, that may not happen; and if it does, even in the worst case it would not happen for several centuries. The threats are real, although uncertain, but because they will not materialize for so long a surprising number of scholars conclude that we do not owe our distant posterity very much consideration.

The distinguished economist Wilfred Beckerman dismissed obligations to future generations: "Suppose that, as a result of using up all the world's resources, human life did come to an end. So what? What is so desirable about an indefinite continuation of the human species, religious convictions apart?"¹³ Can we take this moral sentiment seriously? I reject it and address myself to those who do likewise.

To many, the distance of those future generations diminishes their claim upon us. Out of sight is, if not out of mind, at least far from our attention. Where Hume's comment that "'Tis not contrary to reason to prefer the destruction of the whole world to the scratching of my finger" is meant to reduce *a priori* ethics to absurdity, Adam Smith notes that a "man of humanity" would lose sleep over the prospect of losing his little finger tomorrow, but would sleep soundly after reading of the deaths of a hundred million Chinese in a distant earthquake. Consider, then, whether this same man would sacrifice those hundred millions to save his finger. "Human nature startles with horror at the thought," Smith writes, "and the world, in its greatest depravity and corruption, never produced such a villain as could be capable of entertaining it." The difference, according to Smith, between our "sordid and selfish" passive sentiments and our noble and generous actions is not reason, but conscience: "the love of what is honorable and noble."¹⁴

¹³Wilfred Beckerman, "The Myth of Finite Resources," 12 *Business & Society Review*, 22 (1975), quoted in R. Heilbroner, "What Has Posterity Ever Done For Me?," in E. Partridge (ed.), *Responsibilities to Future Generations: Environmental Ethics*, pp 191-192 (Prometheus, 1981).

¹⁴Heilbroner, *id.* at 192-193.

Ethics of Posterity: Three Approaches

There are many approaches to the ethics of posterity. I will consider three of these, and because of limited time, I will only be able to present the barest sketch of each and will fail to do justice to its strengths or to plausible responses to my arguments against them. I will address utilitarian, contractarian, and communitarian views of posterity. In so doing, I am walking largely in the footsteps of Avner de-Shalit, whose book *Why Posterity Matters* is one of the major contributions to intergenerational ethics.

Utilitarianism

The dominant school of utilitarian thought regarding environmental ethics focuses on economic wealth as a proxy for utility. If we can assume that economic wealth will grow exponentially without bound, then future generations will be incomprehensibly rich. If the world economy grows at a paltry 3% per year after inflation, the global average person living 1000 years from now will earn around 50 quadrillion dollars a year and thus will have so much disposable income that he or she will easily be able to clean up any mess our generations have left behind.

Of course, this same sort of logic applied to real estate prices led many people to make profligate use of home equity loans and we should be cautious about assuming that the future will take care of itself.

Stemming global warming, safely disposing of nuclear waste, preserving habitats for wildlife, and reducing fish catches to sustainable levels all require real sacrifices today. Moreover, none of these matters is a binary decision. We can spend different amounts of money to purchase differing degrees of environmental security for the future.

There is also serious poverty and suffering today. Bjorn Lomborg and others see poverty and disease in the developing world as more serious and certain evils than the rather uncertain and temporally remote consequences of global warming. How, Lomborg asks, can we allow millions of children to die of malaria, AIDS, or starvation today in order to protect future generations from environmental hazards of uncertain magnitude?¹⁵

This is a serious question, that deserves a more thorough response than I can give this evening. For now I will not address how to balance conflicting

¹⁵B. Lomborg, *Cool It*, p. 47 (Alfred A. Knopf, 2007)

obligations to the future and to the present, but only ask whether we have *any* significant obligation to the distant future. Consider the role of uncertainty. As we imagine the effects of our actions on posterity, we become less and less confident with each succeeding generation what if any effect our actions today will have. We also become increasingly uncertain over what, apart from such basic necessities as life and health, future generations will value; so in addition to not knowing the consequences of today's actions we are also ignorant of the value of those consequences.

Values are further complicated by a large and growing body of empirical psychological literature that clearly demonstrates that under conditions of anticipation and uncertainty, our preferences dramatically violate consistency and rationality, so the notion that utility is something we can measure consistently or objectively is questionable.

Utilitarian analysis can nonetheless attempt to account for our obligation to the future, but as the incendiary controversy over Nicholas Stern's economic analysis of the effects of global warming over the next several centuries demonstrates, compounding opportunity costs represent an almost insuperable barrier to any call for significant action on behalf of posterity.¹⁶

For these reasons, utilitarian accounts of posterity tend to minimize our responsibility beyond a few generations. Some have attempted to rescue a subset of ethical obligation from a future that comprises both a fog of uncertainty and compounding opportunity costs by distinguishing those consequences that are qualitatively significant and irreversible from those that are merely quantitative or at least somewhat reversible. Peter Singer writes,

There are some things that, once lost, no amount of money can regain. Thus, to justify the loss of an ancient forest on the grounds that it will earn us substantial export income is unsound, even if we could invest that income and increase its value from year to year; for no matter how much we increased its value, it could never buy back the link with the past represented by the forest.¹⁷

However, economists will point out that we make irreversible decisions all the time (look up "sunk costs" in any economics textbook) and markets for options provide rich data from which to infer the value we place on certainty and choice, at least over the short run. Thus, the desire to take irreversible harm to nature

¹⁶N. Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007).

¹⁷P. Singer, *Practical Ethics*, 2nd Ed., 270 (Cambridge, 1993).

off the table appears arbitrary and subjective from a strictly utilitarian point of view and it becomes hard for utilitarianism to provide much guidance if we stubbornly persist in caring about the distant future.

Contractarianism

Perhaps the dominant deontological approach (meaning one that focuses on duties rather than consequences) to the problem of distant generations is rooted in the social contract. Edmund Burke famously wrote:

Society is indeed a contract. Subordinate contracts for objects of mere occasional interest may be dissolved at pleasure—but the state ought not to be considered as nothing better than a partnership agreement in a trade of pepper and coffee, calico, or tobacco, or some other such low concern, to be taken up for a little temporary interest, and to be dissolved by the fancy of the parties. . . . It is to be looked on with other reverence, because it is not a partnership in things subservient only to the gross animal existence of a temporary and perishable nature. It is a partnership in all science; a partnership in all art; a partnership in every virtue and in all perfection. 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.¹⁸

However, the notion of an intergenerational contract between the dead, the living, and the unborn raises many difficulties. A contract is an agreement negotiated amongst its parties and voluntarily subscribed. The social contract is a fiction that binds everyone at birth to the extent that entering into it is preferable to remaining in some hypothetical state of nature. It is a small, though not negligible, exercise of imagination to picture ourselves negotiating such a contract with the current generations of humanity.

It is a much greater task to imagine how such a negotiation would proceed between our generations and all those that will come during the next millennium. The notion of negotiating from a state of ignorance as to which millennium one will inhabit defeats Rawls's "original position" and reduces his concern for future generations to the few that immediately succeed the present,

¹⁸E. Burke, "Reflections on the Revolution in France" in I. Kramnick, ed., *The Portable Edmund Burke*, 457–58 (1999 [1790]).

with care for the distant future reduced to a principle of “just savings.” by which successive generations hold some share of resources in trust.

To the contractarian, we do not know what the future will desire, we cannot negotiate with the future, and the future can neither reciprocate our consideration nor retaliate against our neglect. Robert Heilbroner points out that a contractarian might ask, “What has posterity ever done for me?”¹⁹ Without the possibility of reciprocity and sanctions, the metaphor of a social contract falls apart and we must look elsewhere for guidance on our obligations toward the future.

Our colleagues at law will not hesitate to remind us that a contract is meaningless without a means of enforcing it. But next century, much less next millennium, cannot enforce a contract against us. We might cobble together a notion of reciprocity through the duty of remembrance as future generations’ payment for our faithful stewardship; but even then, neither we nor posterity has any real means of enforcing the deal, so speaking of this arrangement as a binding social contract stretched the metaphor

If our intuitive sympathies impose an obligation toward the future, contractarian thinking will not help clarify our thoughts and match actions to our ends.

Communitarianism

Avner de-Shalit and Avishai Margalit, present communitarian views of our relation to posterity. Both situate ethical obligation within a community. Margalit draws a careful distinction between ethics, which operates within a community and treats each member of that community as a valued and respected individual, and morals, which operate outside of the community and describe our obligations toward humanity in general. *Morals*, to Margalit, are more universal and impersonal, while *ethics* are personal and individual. Margalit identifies a crucial difference between two strains of thought that he labels “Jewish” and “Christian:” Scripture tells us to love our neighbor as ourself, but who is a neighbor? Jews maintain a clear boundary between the Jewish community (neighbors) and the rest of humanity and Christians seek to extend the neighborhood of the ethical to all humanity. The parable of the good Samaritan exemplifies this difference and the Christian perspective is beautifully set forth by Martin Luther King Jr., in a 1956 sermon:

¹⁹R. Heilbroner, “What Has Posterity Ever Done For Me?,” in E. Partridge (ed.), *Responsibilities to Future Generations: Environmental Ethics*, 191–194 (Prometheus, 1981).

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America, . . . I wonder whether your moral and spiritual progress has been commensurate with your scientific progress. It seems to me that your moral progress lags behind your scientific progress. Your poet Thoreau used to talk about “improved means to an unimproved end.” How often this is true. You have allowed the material means by which you live to outdistance the spiritual ends for which you live. You have allowed your mentality to outrun your morality. You have allowed your civilization to outdistance your culture. Through your scientific genius you have made of the world a neighborhood, but through your moral and spiritual genius you have failed to make of it a brotherhood.²⁰

Scripture commands that we love our neighbor as ourself. Margalit tells us that to the Jew, the neighbor is any other Jew, while Christ preached of Samaritans and Jews being neighbors.²¹

In what follows, I will use Margalit’s terminology, but it is important to stress that these labels are shorthand, and do not necessarily apply only to Christians or Jews, nor universally to all Christians and all Jews. Moreover, the attitudes so labeled do not necessarily entail religious belief, but may arise simply from membership in a community that shares those values.

de-Shalit seeks to overcome the problems whereby neither utilitarians nor contractarians can produce a compelling explanation of our obligations to generations who will be born more than a short time after our own deaths. To de-Shalit, the notion of a community that endures over time provides an ethical fabric that connects us to those we will not know, but who share enough of our values and who will be tied closely enough to us through a web of overlapping relationships that we can meaningfully care for them as we care for our neighbors.

However, as we look farther and farther into the future, we know less and less of our descendants’ values and are likely to have less and less in common with them. To de-Shalit, this dilutes our obligation, so that although we have clear duties to the generations that will come over the next several generations, the connection is diluted over time and it is almost inconceivable that we would share many values in common with those born millennia in the future:

We should therefore accept the principle that we should sacrifice

²⁰M.L. King, Jr., “Paul’s Letter to the American Christians,” Ebenezer Baptist Church 4 Nov. 1956.

²¹Margalit, *Ethics of Memory*, pp. 41–42.

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something (how much and what is a separate question) for the sake of remote future generations. At the same time, it is unreasonable to think in terms of sharing control over goods with people who will live two thousand years from now.²²

In describing the ebbing of responsibility while denying that we can ever completely stop caring for future generations, de-Shalit distinguishes *justice*, which we owe to people within our own community, from *humane consideration*, which we owe to all people throughout time.

It is arguable that we cannot and should not allow every needy person join our community. . . . All the same, we should not be indifferent to their plight.²³

This mirrors Margalit's distinction between ethics within a community and morals throughout humankind.

Exclusion from the community has a different role for the two: to de-Shalit, exclusion is a matter of survival. The community has only so much food to go around so if you start admitting every beggar to an equal share the whole community will go hungry. To Margalit, exclusion is a more spiritual matter. The community can only have a shared purpose if this purpose distinguishes it from other communities, so even in a world of plenty the community must have a boundary to define its purpose. To Margalit, this *intratemporal* boundary serves an important *intertemporal* purpose. If part of the religious life of the community is preserving the memories of those who have left the mortal coil, consider that everyone in the generation born 300 years from now will have roughly 1000 ancestors from our generation to keep track of. That is too many stories and names to remember. And the generation born 1000 years hence will have billions of names and stories to maintain. To Margalit, membership in a community with a definite purpose can keep our stories alive even as our individuality fades from memory in the multiplicity of generations. To the extent that we participated in the common project, we have an identity within the intergenerational community even as our personal thread fades into the larger tapestry.

²²A. de-Shalit, *Why Posterity Matters*, 65 (Routledge, 1995).

²³*Id.* at 63.

What Is to Be Done?

I propose that the Christian turn of making all humanity neighbors is compatible with a shared purpose in caring for creation. This need not necessarily mean literal acceptance of Christ, but uses Christian in Margalit's sense to label an attitude commonly associated with Christian values.

The problem with this endeavor is whether it is in any way practical to extend the realm of community to embrace not just people living today but the billions who will follow us through time. My thoughts on this are less developed and represent a somewhat literal leap of faith. Roberto Mangabeira Unger described communities, or "organic groups" as incomplete realizations of an ideal toward which we strive. "There are necessarily limits to our capacity to achieve in the world natural harmony, sympathy, and concrete universality."²⁴

When philosophy has gained the truth of which it is capable, it passes into politics and prayer, politics through which the world is changed, prayer through which men ask God to complete the change of the world by carrying them into His presence and giving them what, left to themselves, they would always lack.²⁵

This role of faith in completing the moral community resonates with the great meteorologist Sir John Houghton's account of environmental responsibility:

In facing environmental problems ... we are called to exercise stewardship in as thorough a manner as possible, looking to God for the ability to carry it out. For any situation there are bound to be limitations to our knowledge and our ability to control; what we are invited to do is to go into the situation in partnership with God, knowing that he can take care of those things which we cannot.²⁶

This faith may be literal religious faith in God's voice and God's hand in our lives, or it may take the form of a less direct spiritual experience, but as the gap between our generation and those of the fourth millennium and onward is too great for our moral reason to span, a non-rational spiritual element is necessary if we are to preserve more than a nominal moral obligation to the distant future.

Writing on mysticism in communities, the theologian Dorothee Sölle describes a young student's first experience with Quaker worship. At first, the

²⁴R.M. Unger, *Knowledge and Politics*, 24 (Free Press, 1975).

²⁵*Id.* at 294.

²⁶J. Houghton, *Global Warming: The Complete Briefing*, 1st Ed., 126 (Cambridge, 1994).

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student is confused by the lack of a minister or a sermon, by the silent worship. Some time later, the student writes,

After about half an hour, I came to be present to myself and at the same time entered into relation with the other members of the meeting. I felt myself to be in communion with them; in a deep sense, I felt a kind of love for them and being loved by them. What was peculiar about this experience was that I had never met some of the people present at the meeting. And yet, I had the feeling that I knew them profoundly and that they were profoundly aware of me. . . . This moment of my life was an experience I would call God, an especially sacred moment of my life.²⁷

Can we extend this mystical state of communion beyond the meeting house to the world at large, through place and time? Perhaps. In discussing mysticism and time, Sölle contrasts a focus on the passage of time—something that leads us to feel rushed or impatient, or which leads some Christians to see time simply as a road leading to the *eschaton*—against a focus on being in time: something she follows Buddhists in calling “attentiveness.” To illustrate, she quotes Zen master Nhat Hahn:

There are two ways to wash dishes: the first is to wash dishes in order to have clean dishes; the second is to wash dishes in order to wash dishes.²⁸

The second way is the way of attentiveness, Sölle explains. “To live with Zen means to breathe when breathing, to walk when walking, to drink tea when drinking tea.”²⁹

Attentiveness is a way of putting down roots in the here and now. . . . Attentiveness is what C.S. Lewis expressed in the phrase “I am what I do.”³⁰

“I am what I do.” Margalit offers us a hope of immortality on this earth, even to the distant generations, if we are part of a community whose identity entails a project that will continue and will be valued by distant posterity. Even as our

²⁷D. Sölle, *The Silent Cry: Mysticism and Resistance* 171 (Fortress, 2001).

²⁸*Id.* at 177.

²⁹*Id.* at 178.

³⁰*Id.* at 177.

names and our personal stories fade into the centuries, the project continues and if we truly are what we do, it bears us with it toward eternity.

Can attentiveness, faith, spirituality build a community with the distant future sufficient to reinforce in us an imminent moral sympathy? I cannot provide a definite answer, but I think the possibility is sufficient to be worth exploring energetically. Unger concluded his major work *Knowledge and Politics* with the somewhat despairing plea,

Desirous of faith, touched by hope, and moved by love, men look increasingly for God. Their search for Him continues even where thinking must stop and action fail. And in their vision of Him they find the beginning and the end of their knowledge of the world and of their sympathy for others. So is man's meditation on God a final union of thought and love—love which is thought disembodied from language and restored to its source.

But our days pass and still we do not know you fully. Why then do you remain silent? Speak, God.³¹

I reply with Houghton's notion that we find God—or more generally spiritual attentiveness—when we act in partnership with the sacred. If part of our spirituality is a spirituality of care for all creation, then how can our community that performs these acts of care be other than the community of humankind? A shared purpose to nurture the earth and the life that inhabits it does not know boundaries of nations, of continents, or of time. It stretches from the deep past to the distant future and follows the winds and the currents around the world wherever they carry our breath.

Care for creation and for posterity cannot be simply consequentialist because it would be hubris to assume we know the consequences of our actions so well. There may be a non-contractarian deontological foundation, but I have not seen one. Thus, I only see a plausible foundation in the practice of environmental virtues—stewardship, sufficiency, sustainability, and so forth.

Conclusion

To summarize, I have argued from the premise that we have nontrivial ethical obligations to future generations. In support of this assertion, I point to our shared concern for the survival of humanity and our hope that our own names

³¹*Knowledge and Politics*, 295.

and stories will be carried forward after our deaths. If we are to think clearly about obligations toward distant posterity consequentialist and deontological thought does not have much to offer us. Communitarian thought makes a start and offers a plausible case for at least a moral obligation toward the distant future, but runs into trouble with the question whether far posterity can ever share ethical community with us. There is no inconsistency in saying that it cannot, but I raise the possibility for a thicker connection to the future through quasi-Christian mysticism and communal tasks of stewardship over creation. These latter thoughts are incomplete, but I believe they are worth further study.

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