Faith and the Ethics of Climate Change

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We can only be ethical in relation to something we can see, feel, understand, love, or otherwise have faith in. $-Aldo \ Leopold^1$

The reach of environmental problems today urges us to consider more carefully how interdependent we are with one another and with the entirety of ecological processes across the globe. Environmental degradation has reached a scale that the otherwise forward-thinking conservationist Aldo Leopold had not yet imagined in 1949, making his call for a land ethic even more urgent to heed. However, we can only see, feel, understand, love, or otherwise have faith in those things that our experiences, culture, and values have taught us are real—or at least that help stimulate our minds to imagine.

History shows that human communities often fail to think in global terms because it brings unwanted complexity, uncertainty, and responsibility. In religious communities, such attitudes end up compromising religion's universal and cosmological reach because believers forego the needed expansion of their imagined sphere of responsibility. Climate change tests our culture's capacity to imagine the remote and often unseen threads of inter-connectivity that knit all human communities together and that make social and environmental concerns inseparable. This requirement, of course, means we need deep environmental awareness stimulated by direct experience as well as by a truly planetary imagination that acknowledges realities that lie beyond our lives. Moreover, climate change requires faith in our unique human capacity to live morally in the context of uncertainty that a newly expanded sense of community has created. What is needed, then, to cultivate an ethics adequate to the problems we face is a restored sense of what it means to be a human being in the broadest of biological contexts and concomitant reinvigorated faith to consider the well-being of the entire human family and of the planet itself.

Learning to See the Unseen

As a complex phenomenon that implicates all human communities and that has begun to drive the climate globally, anthropogenic climate change is unprecedented in human history and unprecedented in the demand it makes of us to be answerable to unseen, complex, and global processes of degradation.² Although all religions attempt to imagine and explain the correlation between human behavior and climate conditions, earlier assumptions about the environmental manifestations of this relationship were often understood as local, not global. Moreover, climate changes that resulted from human behavior were traditionally directly attributed to God, not humankind.

And culturally speaking, human populations were not aware until relatively recently in human history of the reach of the planet and its diversity of cultures and geographies. Even today in the age of satellites, aeronautical travel, and world geography, the human mind's capacity to assimilate the diversity of the world's peoples and climates remains a major obstacle to global ethics. For example, it is not uncommon for people to gauge their reaction to climate change politics merely on the basis of their own local experience, even though this is scientifically absurd. Consider, for example, that the Intermountain West in 2010 experienced an unseasonably cool summer in the midst of the most scorching summer recorded globally since records have been kept.³ While the bumper sticker adage adjures us to "Think globally. Act locally," our capacity to imagine the global often derives from and rarely extends beyond the conditions of local experience.

Thus, it is not surprising that climate change has been relatively easy to deny or ignore altogether as a problem. Even the kind of heightened environmental awareness of one's home and region that Leopold hoped would stimulate a land ethic might not provide sufficient evidence or impetus to respond to the problems that climate change is causing. Modern life over the last 150 years has provided the means for a fortunate fraction of the world's population to enjoy an unprecedented level of comfort, with increased mobility, larger shelters of controlled climates, and an extraordinary diversity of foodstuffs available at the modern grocery store. These circumstances have had no small influence on the way its beneficiaries have come to see their lives compartmentally, as a distinct reality, sheltered from the ravages of nature and separated from the deprivations of the world's poor. The modern citizen of the developed world, in Leopold's terms, is able to see, feel, and touch the humanmade world that is his or her home, but perhaps less likely to have interest or faith in social, geographical, or ecological realities that lie beyond the reassuring appearance of the comforts that modernity provides, especially when those realities challenge the perception that all is well.

The irony, of course, is that we are arguably more connected as a human family—affecting and being affected by communities across the globe—than at any point in human history, because the home economy has been globalized by industrialization, international trade, massification of production, and increased reliance on technology. Quality of life for any one individual, group, or nation has become inseparable from questions concerning the whole of the planet and the entirety of humanity. Moreover, because the modern way of life has compromised the atmosphere itself and thus destabilized the climate across the planet, it requires faith to believe in this complex web of interdependency that often seems invisible, intangible, or at least unreliably measurable.

Despite these narrowing tendencies in our ethics, globalization and climate change present a unique opportunity to resist the spiritually deadening effects of modernity and restore our values and faith to their original potency. If we are more capable of affecting large-scale damage to the planet, we are also called upon more than ever before to act collectively and on principle on behalf of the human family. Perhaps no Christian religion today offers a more direct scriptural account of the mandate to imagine our place in a world of unknown diversity. We read a direct condemnation of geographical chauvinism in the Book of Mormon when Christ chastises his Old World disciples for their "iniquity" in failing to understand that the "other sheep" not only included the Gentiles of the Old World but the millions of inhabitants of the New World who were at the time entirely unknown to the Old World (3 Ne. 15:15–24). If it seems unfair to describe a people's capacity to imagine the unknown as a form of "iniquity," consider what it means in our Information Age to fail to concern ourselves with the millions of the earth's poor who live in close proximity to vulnerable coastlines, in drought zones, and in other areas already dramatically affected by climate change. To imagine, even insist, on ideological grounds that our consumption of natural resources cannot possibly be relevant to the well-being of others on the planet ignores the very foundation of the law of consecration.⁴ What kind of imagination is required to conceptualize problems of unseen complexity and to act responsibly in the face of the challenge they present? To answer this trenchant question, we must examine the roots of climate change skepticism.

Political Ideology as Obstacle to Faith

First, it is important to distinguish between principled and honest questioning and ideological and dogmatic denial. While the former is vital to the ongoing process of scientific discovery and of moral judgment and leads to dialogue, the latter is an enemy to learning and leads to self-confident mockery. Moreover, the latter position is motivated more by ideological and lifestyle preference than by deeply considered religious principles. Consider, for example, the profoundly irreligious confidence many have cultivated in progress and technology, which in turns inspires apathy or denial about the relationship between excess luxury and the plight of the poor or between wasteful living and the often remote or delayed environmental consequences of our way of life. Inspired by philosopher Hannah Arendt, ethicist Michael Northcott has argued that environmental apathy is at its root caused by the fact that we "defer [our] capacities for moral and political deliberation to the autonomous procedures of the market"⁵ and to the promise of the next advance in technology. To the degree that we have ignored our responsibility to the world as a whole or have shrunk from the challenges that such responsibility poses to our modern values and way of life, we have not only lost touch with the earth but also with religious principles; we have, in other words, preferred ideology to theology and the arm of flesh to the arm of God.

In a way, this attitude is understandable. The material benefits of industrialization are patently and tangibly obvious, while its environmental costs are often delayed or remote enough to deny or ignore, at least for those who enjoy its benefits. Indeed, the denial of the connection between the burning of fossil fuels and the warming of the planet has arguably been most adamant in the world's most developed nation and greatest producer of carbon in the atmosphere-the United States. Several authors have documented a devastating and long history in this country of obfuscating scientific fact in the interest of maintaining the economic status quo.⁶ Addiction to the idea of unlimited growth without restraint, an idea that took firm grasp of the American mind following the devastations of the Great Depression and World War II, is nurtured today by think tanks devoted to fabricating reasonable doubt about climate change and other evidence of the consequences of growth. This doubt, however, has not taken root in the developing world where the consequences of climate change are patently obvious to populations whose sustainability is vulnerable to local shifts in climate patterns.

Just to sketch the vulnerability I'm talking about, consider that 60 percent of the world's population lives within 100 kilometers of the ocean. In Bangladesh alone, the population is 140 million, 120 million of whom live near or on waterways vulnerable to floods. The Intergovernmental Panel on Climate Change (IPCC) predicts that a mere 40 centimeter rise-a likely occurrence in the next century due to global warming-will see an increase in the number of people worldwide whose lands will be annually flooded from 13 to 94 million, almost 60 million in South Asia alone. Further, 1.3 billion people live in areas affected by glacial retreat; they are likely to experience increased flooding at first and then increased water shortages. About 50 million people will be subject to starvation with a 2.5 centigrade increase in temperature, which is a reasonable expectation by century's end if we do not make significant changes in our dependence on fossil fuels. An estimated 150,000 people are already dying every year due to climate change, not to mention the thousands who have been displaced by increased weather extremes.⁷ The fact that the developed world is primarily responsible for the increase in carbon emissions, resulting in disproportionate suffering for the world's

poor, has led many theologians and religious leaders to conclude that improving access to renewable and clean energy sources and reducing our carbon footprint have moral urgency.⁸

Of course, the claim to moral urgency falls apart if we can convince ourselves that climate change perhaps doesn't exist, that it is immeasurably slow and therefore harmless, that it would be too expensive to do anything about it, or at least that there is no definitively proven link between fossil fuels and climate change. Or does it?⁹ If climate change suggests the need for more modest and conservative consumption of natural resources and if it suggests the need for more creative and innovative use of all of the world's energy sources, then why the resistance to mitigation efforts?

If our addiction to fossil fuels is directly linked to what Thomas Friedman aptly calls "petrodictators"¹⁰ across the world and to increased political instability, why is it not a form of patriotism to embrace the opportunity to make the world safer, cleaner, and more sustainable? A recent case in Kansas shows that people don't need a belief in climate change to be motivated to act in a way consistent with reducing the human carbon footprint. Instead, community leaders focused on "thrift, patriotism, spiritual conviction and economic prosperity" and thus motivated changes in behavior known to reduce contributions to greenhouse gases without saying a word about climate change.¹¹ In other words, much of what can be done to fight climate change is consistent with traditional Christian values of good stewardship and modest living. To the degree that we prefer to debate, yet again and ad nauseam, the comparative values of conservative and liberal approaches to governing instead of doing the hard work of living up to our environmental stewardship, we allow ideology to trump religious principle.¹²

Since the Kansas case reminds us that politically conservative values are not inconsistent with the theological principles of environmental stewardship, we might wonder what kind of theology we are using when we convince ourselves that the very possibility of something like anthropogenic climate change is absurd or of no concern. I can think of three main objections. First, some might say: "Worrying about human-caused climate change is absurd because we can always have confidence in unlimited growth and in the further development of technology as an answer to all of our environmental problems. Stop moralizing about the market or trying to move it in any particular direction." As indicated earlier, according to Michael Northcott, this is a symptom of a misplaced faith in the superstructures of liberal democracies, which have "[given] up on deliberation over ends, or on what kinds of taking up with the world make for a good society. Technological modernization sustains the illusion that it is possible to create procedures and policies that ensure that such good ends as justice or prudence can be achieved without the people being good."¹³

This argument, in essence, claims that it is more important to advocate and live in unfettered freedom than to articulate and live up to responsibility. Not only do such attitudes ignore the many ways in which markets are already subject to incentives intended to maintain the status quo, but they also give carte blanche to its consequences. It is hard to reconcile such confidence in an invisible mechanism of the economy with the consistent moral critique of the human economy offered by Old Testament prophets who repeatedly decry civilizations that ignore the created world or abandon the vulnerable and the poor. Indeed, if we allow the market to be free of moral restraint, we abdicate responsibilities to deliberate about how or why the economy grows and what its impact on the poor and on the earth might be. We pretend that economics isn't about human choices and human consequences. In other words, we have imagined our fate and well-being as radically separate from the well-being of others, as if no conditions of interconnectivity brought us together as part of the same community.

A second, equally theologically specious, kind of reasoning justifies inaction with a very different attitude. This reaction insists: "This is a problem of such complexity I can only throw up my hands and exonerate myself of any responsibility to do anything about it. God doesn't expect me to be worrying about global problems and will forgive me for ignoring something I couldn't have done much about anyway. It is not fair that driving my son to his soccer practices is somehow connected to the suffering of the world. Besides, to worry too much about it shows a lack of faith in God's plan. Who am I to doubt His purposes?" Indeed, I have heard some ask: "If the earth is going to die anyway, why should I bother taking care of it?" This apathy and insistence on inaction is akin to urging "eat, drink, and be merry for tomorrow we resurrect." It is utter nihilism offered in the name of religion.¹⁴ Large, complex events have the feeling of inevitability about them, but they do not obligate us to accept them, especially if it is apparent that they harm the vulnerable. Jesus warned: "It must needs be that offences come; but woe to that man by whom the offence cometh!" (Matt. 18:7).

It takes faith to act on principle, even-and especially whenthere is no tangible or immediate evidence that we are making a difference, which is to say that if we were collectively committed and proactively working to alleviate poverty and to care for the creation, our differing views of the proper role of government, or of the United Nations, Al Gore, and the Intergovernmental Panel on Climate Change would not have the power to stop principled and faith-based action. Faith is relevant here because, if climate change proves to be false or vastly overstated as many skeptics hope, and if the current unanimous view of every major scientific organization in the world on anthropogenic climate change proves to be based on massive and widespread error, we will have at least acted on good principle. That's a wager that seems far more religiously principled and far less reckless than the leap of faith it takes to actively dismiss every corroborating fact across the globe and across the wide spectrum of the sciences to retain dogmatic confidence that the theory of human-caused climate change is a colossal mistake.

I have also heard some say: "Why would God allow something like that to happen?" This is a bad application of a good theological question. Spontaneous abortions, sudden infant death, and birth defects happen, to name just three examples, and are much more challenging to consider theologically, so it hardly seems rational to dismiss a human-caused problem on theological grounds. Some Mormons might wonder why the very technologies that allow the prophet to travel across the world or missionary work to go forward must now be considered harmful. The horse and buggy made progress possible in their own day, but now we have also seen the wisdom of no longer putting manure in our streets. The fact that fossil fuels still exist is not a theological mandate to continue to make use of them. While the abundance of cheap fossil fuels has made modern life possible, are there not also abundant supplies of geothermal energy, sunshine, and wind? Why are they also not considered God-given for our use?

What we should not be ashamed to admit—and what religion certainly can stand behind—is the idea that we need to repent of our excess consumption and our luxury uses of fossil fuels. Again, a comparison between the ideological and materialistic values that justify doing nothing and the Christian faith to live according to values of modest living, concern for the poor, and respect and care for the created world shows clearly that there is little room or need for dogmatic denial.

I have occasionally heard fellow LDS members wonder why, if climate change is such a big problem, we haven't heard more from Church leaders on the question. While the silence of the LDS Church on this question is perplexing, it would be looking beyond the mark to conclude that this means climate change is not a serious issue that should concern members. The Church made no formal announcement that we should worry about what was happening in Darfur, for example, but that was not an excuse to remain ignorant or indifferent. No statement was read over the pulpit when the Church acted on behalf of flood victims in Pakistan. What should be our inspiration is the fact that doctrines throughout the restored gospel point us to careful stewardship over natural resources and that the Church has taken revolutionary steps recently to green its architecture, putting it in the very vanguard of religious institutional action on behalf of climate change.¹⁵ As modern revelation reminds us, "It is not meet that I [the Lord] should command in all things" (D&C 58:26).

I do not mean to suggest that it is our religious duty to believe that climate change is real and human-caused, but it is our duty to inform ourselves as honestly and as carefully as we can and to respect those who act out of deep concern for the issue. One of the first clues that religious-minded skeptics are allowing ideology and not religious principle to be their guide is how often they employ nouns such as "alarmist" and "extremist" to describe—and hence to dismiss—as if by definition, anyone crazy enough to believe that climate change is human caused. If we insist that anthropogenic climate change can't be real simply because in our minds it can't be possible, we will never be in a position to assess data rationally. Moreover, if we can't make a reasonable distinction between an alarmist and a concerned citizen, then the charge of alarmism is meaningless.

It seems rational and within the realm of theologically defined responsibility to disagree about policy matters or about which end of the spectrum of possible outcomes is worth our greatest attention, but to dismiss the science outright because it conflicts with or presents complications for a worldview that has largely been shaped by economic, partisan, or ideological values is neither religious nor ethical.

The Dialectic of Faith

Perhaps part of the problem in mustering faith sufficient to respond to global climate change is a fundamental misunderstanding of the nature of faith itself. Faith acquires meaning in a dialectic relationship to uncertainty. If we stipulate that climate change calls for a capacity to imagine the known world as part of a much broader whole that is not yet visible or accessible by direct experience but one that we are answerable to, then we might describe faith as a poetic capacity, one that allows us to see our place in the world humbly, as contingent upon a greater and as yet still unknown whole of interdependent relationships. Moral action similarly acquires meaning in a dialectic relationship to uncertainty and in the context of interdependence.

Moral action is, by definition, courageous because it is a genuinely free choice to take the risk of faith; it shows a willingness to act, even and especially when we don't have guarantees about the outcomes of our action, because we feel answerable to a broader, though not perfectly comprehended, set of relationships. As Leopold noted, "All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts."¹⁶ This is one reason why religious faith is not only compatible with dealing with a problem like climate change, but indispensable in doing so, since it is in the business of cultivating this kind of morality. Religious faith is no guarantee that we cannot be wrong about the world, as evidenced by Christ's chastisement of his Old World disciples, but this risk is not sufficient reason to dismiss religion's relevance or to categorize religion as the opiate of the deluded. It is not less religion that we need, but deeper and more careful consideration of our contingent understandings of the world which faith asks us to learn to live with.

To have faith is to inhabit that space between what we know and what we might know at some future point; it is not an expression of human certitude but an expression of trust in God's knowledge. It is to accept, as King Benjamin puts it simply, that "man doth not comprehend all the things which the Lord can comprehend" (Mosiah 4:9), which may be one reason why continual revelation is necessary. Similarly, novelist and essayist Marilynne Robinson posits that religious faith cannot be reduced to a system of assertions about ultimate realities; instead it is a trust in an ultimacy that remains beyond our full cognitive grasp but that nevertheless generates a rigorous rethinking, rereading, and reconsideration of our most basic impulses and assumptions. In an interview, she described faith as "trying to understand at a level that almost absents you from what you were trying to understand."¹⁷ She further argues that, in its addiction to a secular and materialist confidence in progress, our civilization has lost such faith. Because of the seductions of modernity, civilization fails to value distrust, self-chastening, or confessions of ignorance, all of which are fundamental to religion. The result has been increasing levels of epistemological certainty about the nature of the world and of our humanity, what Stanley Fish calls "a naive and untenable positivism."¹⁸ Religious faith can offer in the stead of radical certitude such principles and values as modesty, humility, mercy, justice, and stewardship that can guide us meaningfully through a complex and sometimes uncertain universe.

Jeremiads of moral certitude are, of course, not uncommon for environmental writers who see stakes so high that only a browbeating from a loin-clothed prophet will do. However, if environmentalism does not also have room for the kind of profound self-questioning that religion motivates, it closes the door on its own moral argument. Such problems as global warming or species extinction are moral issues precisely because there is a margin of uncertainty in what the science presents; they require the *risk* of judgment to determine and assess the comparative effects of our choices, which means that they also require us to rely on religious principles and values. If the picture is so clear that no judgment is required, then environmentalism is reduced to mere rhetorical battles about information and regulations and nothing more. We then encourage a perpetual circulation of the same wholly redundant information and diminish the chances for genuine learning.

When environmentalism is offered as a form of radical certainty about the world, it becomes just another form of "technology" that provides solutions to human problems through mechanized means, obviating the need for honest deliberation. This means that climate change can be rhetorically debunked with even the slightest hint of inconsistency or contradiction in the science. Such debunkings belie the fact that science is by nature a process of investigation; its findings are myriad and complex and must always be placed in contingent context. If we demand that science provide radical certainty, there will never be enough evidence to motivate any change and we fall back on ideological preference.¹⁹ As a society, we are no longer in the habit of learning about and responding to new empirical realities, since information is increasingly mediated and disseminated by partisan factions. And if we have abdicated the responsibility to honestly investigate and deliberate about an issue by surrendering our thinking to packaged ideologies, we will be tempted to believe that we are already in possession of a complete picture, on the one hand, or that we can never have enough information before we act, on the other. The inevitable result is a morass of uninformed inaction and angry certitude that compromises the health of democracy.

It is imperative to understand that ecosystems are not machines and human actions are not the equivalent of coins dropped in their slot to get our bag of chips. An inherently harmonious and knowable structure in nature was initially what ecology seemed to offer. Donald Worster has suggested that, whereas ecology was "basically a study of equilibrium, harmony, and order" in its beginnings, now "it has become a study of disturbance, disharmony, and chaos." Initially, the notion of ecosystems suggested the idea of a "superorganism" and the promise of meaning and manageability if we could but learn to live in balance and cooperation with natural laws. But as we observe the operations of complexly interconnected systems, he continues, we are learning that "change is without any determinable direction and goes on forever, never reaching a point of stability." The world appears to be asking us to act in faith, without foreknowledge or the assurance of predictability. As Worster remarks, "If there is order in the universe—and there will no longer be any science if all faith in order vanishes—it is going to be much more difficult to locate and describe than we thought."²⁰

Environmentalism and religious faith alike must avoid unwarranted certainty about an inevitable trajectory of increasing degradation for humanity. Because our knowledge is always evolving, we may never be absolutely certain which actions restore the world and which actions ruin it. This caution does not mean that we should abandon the hard work of identifying the best course of action. Quite the contrary: It implies that working for a particularly desired end is, ultimately, an act of faith. Catholic ecotheologian John Haught has argued, for example, that understanding nature as "unfinished" and creation as ongoing and moving toward a promised future fulfillment and perfection with God makes us answerable to its telos. "The cosmos itself," he writes, "is an installment of the future, and for that reason deserves neither neglect nor worship, but simply the kind of care proportionate to the treasuring of a promise."²¹ Eschatology can be a form of trust in the lawful way of the world without becoming a justification for asserting that we are in full possession of such knowledge or in full control of the process. Excessive and ideologically driven confidence in destiny often inspires indifference in the face of the world's suffering. It does not require judgment or the hard work of moral risk-taking; it appeals only to the panglossian mind that has grown tired of its own freedom and inspires acquiescence to the status quo.

Instead of offering faith as a dialectic that calls us to self-questioning and self-distrust and thus makes judgment a necessary risk, religion has sometimes seemed to offer the allure of radical certitude, even though this attitude negates life's requirement for moral judgment. As I suggested earlier, the existence of a moral universe requires that choices matter despite outcome, and that judgment must be exercised even (or especially) if we are not in possession of complete information. The notions of salvation and of condemnation can help to motivate an ethic that pertains to here and now; but too often religion, particularly the more superficial conceptions of Christianity, can offer eschatological visions of the end of times that leave believers uninterested in the hard work of assuming responsibility for the direction of civilization.

In this way, religion has proven at times to be a major obstacle to good environmental behavior, but more hopefully, it has recently begun to provide powerful impetus for change. The sociological research on the role of religion in shaping environmental behavior remains mixed, however. Some studies suggest that there is a strong correlation between religious belief and anti-environmental sentiment. The Pew Forum on Religion and Public Life, for example, reports that 47 percent of all Americans believe global warming is real and human-caused. Fifty-eight percent of Americans who are unaffiliated with any religion, however, hold this belief. White mainline Protestants are on a par with the national average, but black Protestants and white Evangelicals show a precipitous decline-a mere 39 percent and 34 percent respectively. Despite these trends, we have seen a significant shift in rhetoric, tone, and attitude toward environmentalism within religious communities in recent years, with most religious communities showing some effort to improve institutional practice, religious leaders declaring the moral principles of sustainable living, and important and numerous publications, conferences, and forums in ecotheology.²² While the record is still unclear about how much this official concern affects believers' practices and politics, signs seem to indicate an improvement. It is no longer the case, if it ever was, that environmentalists and believers represent two distinct groups.

It behooves us then to identify the kinds of stories, beliefs, and theologies in religious culture that can attend to the contingencies and chaos that lie at the heart of our current environmental crisis. As science has begun to describe our human impact on those workings in empirical language, we have also come to expect that science can provide an equally empirical map of where to go from here. We have what Daniel Sarewitz has called an "excess of objectivity" where we have grown accustomed to eschewing policies or philosophies that "favor adaptation and resilience over control and rigidity."²³ And as Michael Northcott adds, the supreme value placed on certainty only "obviate[s] the need for reasoned debate about probabilities and particular cases in moral deliberation."²⁴

If secularization means that we forsake the need to act in uncertainty, to act with a suspension of disbelief, or what in religion is simply called faith, we will not have the means to act meaningfully and ethically in response to global climate change. Strict materialist atheism and religious fundamentalism are both attitudes of superstition, not forms of knowledge, since they presume to hold fast to a form of knowledge that is without the stains of an evolving, contingent, and incomplete human history.

What is now necessary is what Michel Serres calls a "diligent religion of the world," an epistemology that refuses the specialization and balkanization of knowledge that secularism has created. The word "religion," he reminds us, means to "assemble, gather, lift up, traverse or reread," implying that if religion will prove helpful to our current environmental crisis, it must be a principle-oriented gathering of knowledge from any relevant epistemologies in the ethical interest of renewing the world.²⁵ Religion has to rethink its role and resist the balkanization that has become its refuge, which is one reason why a religious mind ought also to be a scientific one. Science, politics and current events, international affairs, human suffering, and environmental degradation raise an enormously wide range of questions that can bring out the very best in religious belief and practice if we are willing to treat them as religious questions.

While it might be assumed that making religion more relevant to the world requires relaxing the orthodox and universalist claims of religion to obtain a more open and secular outlook, faith is still necessary because it seeks to do the hopeful and hard work of binding together all knowledge. Faith, however, is irrelevant if it only wants the triumph of epistemological certainty or if it means that we can satisfy the demands of truth simply by assuming that, when doctrine and empirical reality seem to conflict, it can only mean that our interpretation of empirical reality is wrong. The same scrutiny should be brought to bear on our interpretation of doctrine, as Galileo's case famously showed. Religiosity means taking all available information seriously, as potentially of moral import and therefore deserving of reverent and careful rereading, as the word "religion" implies. It means allowing religious principle to guide our catholic and interdisciplinary learning.

The real religious heresy is when believers become so lazy that they feel confident they can dismiss secular knowledge categorically and in knee-jerk fashion as mere falsehoods. While secularism has had a heyday criticizing religious fanatics as flat-earthers, for example, believers must make the religious case that such dogmatic attitudes are inherently irreverent, uncharitable, and irreligious. By failing to make a religious case for openness to learning, religion becomes a scaffold to uphold our desire to be right instead of a ladder to motivate our aspiration to become good; and it seems unlikely that it will ever have the power to motivate social, political, and environmental transformation. So this is a problem within religion that needs to be fixed because, as I have been insisting, the crisis of global climate change is not only a crisis of the environment but also a crisis of culture that the ambitious and cosmic claims of a religion robustly interested in learning are well suited to redress. The complexity of the problem requires that the solutions we offer must meet the depth and range of the problems; they must be global, they must reach into the very marrow of how we define ourselves as human beings, into what we believe to be our place on this planet, and what, ultimately, is the meaning and nature of death, of dying, and of our biology. This is certainly too much to ask of capitalism, politics, science, and technology, but it certainly shouldn't be too much to ask of religion.

To the degree that religion remains resistant to the claims of science and other secular epistemologies, it calcifies in its claims of absolute knowledge and simultaneously turns its attention away from this world and toward another one beyond it. And to the degree that secular knowledge ignores religion or insists on a categorical differentiation between the sacred and the secular, it calcifies in its claims to absolute reliability but cannot explain why we should want to make one choice as opposed to any other or choose one end as opposed to any other. In this scenario, both religion and scientific knowledge are rendered ineffective in addressing the problems that confront us. What is needed, then, is a reading of religion that is informed by the questions that scientific findings raise about the workings of the world. In what follows, I hope to model such a reading.

The Dialectic of Human Significance in LDS Belief

In the greening of various academic and religious fields that pertain to contemporary culture that has occurred over the last four decades-including philosophy, literary criticism, history, psychology, anthropology, and theology-what has emerged is a sustained and sobering discussion of the human place in the physical world. Much of this thought has focused on the first part of Leopold's formula-seeking ways to increase human awareness of the physical and tangible presence and even the subjectivity of the more-than-human realm. The environmental argument of the past several decades has been that cultures which imagine human experience in the world as an *intersubjective* phenomenon are more likely to treat nature as a presence, not as an unfeeling object.²⁶ This approach has raised doubts about whether we can afford any longer to believe in the exceptionalism of humanity-that is, to see the world anthropocentrically or human-centered. Consequently, the push has been for worldviews that would teach our connection to and equality with all of creation-in a word, for a biocentric cosmology.

But in the rush to find antidotes to human hubris, our suspicion that we are unique and special within the created world has never entirely left us, since even the most hardened critic of humanity's environmental failings has to acknowledge that we are at least unique in our capacity for destruction and, most importantly, in our capacity to deliberate about the morality of this fact. Since I suppose it isn't a serious proposition of most environmentalists to convert the world to a doctrine of animism, it behooves the monotheistic traditions in the world to find sufficient reasons to trust in the living presence of the vast creation to temper our anthropocentric tendencies and thereby act responsibly. To the extent that some environmentalists reject human exceptionalism, environmentalism has become increasingly incapable of articulating the moral reasons for responsible stewardship, a fact that has sometimes alienated believers. In their attempt to reconcile the environmental aims of a biocentric philosophy with the most ancient and vital claims of religion about human exceptionalism, environmentally minded religious thinkers have begun to articulate a dialectic of human significance that I wish to argue, by way of conclusion, is consistent with the LDS account of the creation. Indeed, it would seem that few, if any, religious traditions offer such a satisfactory dialectic between the experience of human nothingness that nature provides and the faith in human significance and responsibility that emerges from such experience.

The Mormon account offered in the Book of Moses and echoed in the temple makes it simultaneously clear that human beings are special, even unique, in the Creation and yet are also part of a vast and endless universe of planets and almost inconceivable biodiversity that should temper any hubris that the divine origins and destiny of humanity might inspire. The LDS account of the creation, then, seems to resist the polemics of choosing between a strictly anthropocentric or strictly biocentric account of humankind; it instead points us to a theocentric universe in which humanity plays a vital role in a web of biological complexity that teaches both the reasons for our profound humility and for our special moral responsibilities. LDS theology does not privilege spirit over body, heaven over earth, eternity over this moment in time, individuality over collectivity, transcendence over immanence but rather produces an ambiguous commingling of these categories-spirit and body, heaven on earth, eternity in an hour, the individual within the collective, and so on. We cannot designate concern for the well-being of the earth, of the body, and of animals, plants, and watersheds as irrelevant to our pursuit of salvation.

The idea of an embodied God stresses the centrality of earthly physical life. While Genesis teaches that we are created in the image of God, the Book of Moses states more explicitly that we are created in the image of the Savior. In Moses 1:6, the Lord tells Moses, "Thou art in the similitude of mine Only Begotten" and amplifies Genesis 1:27 with: " . . . in the image of mine only Begotten created I them" (Moses 2:27). We are created, in other words, in the image of a son of God who would take upon Him flesh to become the incarnate God. This distinction, though subtle, is important, since it points to the central idea that the human condition is a combination of the body and spirit, of the divine and the earthly, and that this combination is, indeed, the very nature and sphere of the Creator Himself, a being of flesh and bone, familiar with the intricacies of the Creation as well as with the sufferings of the earthly condition. Of course, Mormon doctrine stipulates a Father of flesh and bone in any case, but these verses seem to clarify that our model is the same God who created the earth, assumed a body here, and suffered and sanctified the life of the body, perhaps culminating in that remarkable moment when Jesus eats fish and honeycomb with his disciples in a resurrected body (Luke 24:42).

Of course, it has often been assumed that this doctrine is incompatible with the story of evolution. Without getting into this important debate, suffice it to say that to exist in the body and to be in the image of God is not, in these verses, incompatible with the concept of being kin with the rest of creation. Because Mormon doctrine consistently asserts the holiness of the physical realm and the centrality of the body and of the earth to the divine destiny of humanity, it doesn't seem necessary to dismiss the evolutionary account out of hand, especially since it teaches the inherent complexity, diversity, and kinship of all living things. That the human mandate to reproduce is later echoed in God's commands to the rest of the earth's life forms suggests that the specialness of humanity is contextualized by biology's reminder of our belonging with all creation and the inherent value of all life forms. Moses 2:22, which echoes Genesis, reads: "And I, God, bless [every living creature that moveth]: Be fruitful and multiply, and fill the waters in the sea; and let fowl multiply in the earth." This divine command implies that biodiversity is its own good end. That the temple additionally suggests all living things' inherent right to joy in posterity advances an ethic of protecting biodiversity.

The diversity and immensity of creation, which by implication goes beyond even what Moses sees, is a cause for the most profound humility. Almost in the same moment that Moses learns of his divine parentage, he learns that God's creations are "without end" and that "no man can behold all my works, except he behold all my glory; and no man can behold all my glory, and afterwards remain in the flesh on the earth" (Moses 1:4, 5). In other words, as long as we are in the body and on the earth, even with the aid of the revelations that God grants to his prophet here, we can never comprehend the whole of God's creations. Our understanding of the specialness of our role must be couched within this broader, imagined cosmos, an imagination which is the fruit of faith. God allows Moses to witness "the world and the ends thereof," an experience of a global consciousness about which "he greatly marveled and wondered" (Moses 1:8).

The account further provides the clearest doctrinal basis for a kind of intersubjectivity we can experience in the physical world that neither denigrates the specialness of humanity nor the strangeness and diversity of the world. The cause of Moses's wonder appears to be the extent and diversity of the created world but is also the deep intersection between the body and the spirit that runs through all creation. As Moses learns, "I, the Lord God, created all things, of which I have spoken, spiritually, before they were naturally upon the face of the earth" (Moses 3:5). Spiritual creation means that all living things-human beings, animals, and plants-are all "living souls." This designation implies a kind of spiritual continuum or kinship that undergirds all life forms. Granted, it does not compromise the specialness of the human condition (created in the image of God), but it does suggest that the specialness of humanity is not categorical or all pervasive. It is an ambiguous specialness, and that ambiguity seems important to ethics. Precisely because we do not know exactly on what grounds we are equal to animal and plant life and on what grounds we are distinct, it seems we are placed in a constant state of wonder, a kind of uncanny spirituality, as if by looking into the mirror of nature, now we see ourselves, now we don't.

We learn that the created world is designed, in part, for our aesthetic response and that appreciation for the strangeness and beauty of the created world should form the basis of human culture and should temper any tendencies toward unrighteous dominion. Before the fall, God commanded that all animals should come to Adam "to see what he would call them, and they were also living souls" (Moses 3:19). His dominion, in other words, begins with a creative act of naming and continues as a responsibility to ensure the healthy reproduction of all life.²⁷ We learn some of this responsibility from the temple, which clearly teaches the right of all living things to fulfill the measure of their creation and to have joy in their posterity. Curiously, Adam is commanded to "dress" and "keep" the garden and to avoid the tree of the knowledge of good and evil.

The implications of the spiritual continuum in creation are enormous, especially with regard to the ethical treatment of animals; and while this aspect has been given some attention in Mormon scholarship, the significance of trees, for example, also as living souls has not been fully understood or explored. We are told that "out of the ground made I, the Lord God, to grow every tree, naturally, that is pleasant to the sight of man; and man could behold it" (Moses 3:9). The aesthetic value of contemplating trees and the allure of their always idiosyncratic and unique forms and colors are here placed in highest priority, as is the joy of gaining a relationship with creation, even before the value of use. It is only later that "man saw that it was good for food" (Moses 3:9). The implication is that language itself (and all of culture by implication) derives from this wonderful encounter with the strangeness of biological forms. Nature, in other words, is always central to our spiritual and cultural self-understanding, since it instructs us first about our own nothingness, a discovery that then tempers our acceptance of our significance. To the degree that we lose that sense of wonder or diminish our capacity for aesthetic pleasure, or degrade nature's beauty beyond repair, we are compromising these vital spiritual recompenses of physical life.

There is no more profound expression of the inseparability of physical life and spiritual happiness than in the marvelous cosmic chiasmas Moses describes at the very heart of our human journey: "Ye were born into the world by water, and blood, and the spirit, which I have made, and so became of dust a living soul, even so ye must be born again into the kingdom of heaven, of water, and of the Spirit, and be cleansed by blood, even the blood of mine Only Begotten" (Moses 6:59). Born of the Spirit before coming to earth, we are born in the womb of blood and water. Spiritual birth is a sanctification of the biological conditions of life, an echo in reverse of the voyage from heaven through the birth canal, capped by the reception of the gift of the Holy Ghost. It is only fitting, then, that God would be of flesh and bone and that the earth itself, the very site of our sufferings, our biological evolution, our toil, and our separation from God, would become the place of return and restoration of our unity with God. So, too, it is fitting that the conditions of the Fall (working for food and survival, being subject to sexual desire, experiencing sexual union, and suffering through childbirth and parenting), through the sanctification of the Spirit, are not the conditions of our alienation and separation from God as some forms of Christianity have it but part of what redeems us.

Indeed, if the Fall is a curse and a negative, lamentable event, Christianity would seem to see no hope embedded in physical life. Such a view is precisely why so many critics in environmentalism have taken aim at the Judeo-Christian tradition. To believe that this earth, this body, and this mortal existence are conditions merely to be suffered through in the hope of a better place and a better state is to argue implicitly against the need to concern ourselves with sustainable living. But Mormonism here presents a different view: that working for the health of this mortal existence is the means of truly becoming living souls. The evolutionary story of our emergence from the cell matter of the earth that once seemed so directly opposed to the story of the Creation now seems consistent with the idea that biological process and spiritual creation are not competing but cooperative processes. Indeed, it seems fitting that our bodies that evolved from dust, and blood, and the hard-scrabble struggle for survival over millennia-as evolutionary science seems to suggest-would ultimately be an image of a sanctified and perfect being, the very Son of God. There is something spiritually immanent about all biological accident and all biological process implied here.

I offer this thought as suggestive provocation, as an incentive to consider the need for us to be inherently interested in the workings of physical life, in the diversity of life forms, and in the ways in which physical life is not transcended by the spiritual but is rather informed by and informing of the ultimate verities of the spirit. Ultimately, to be human is not merely a biological story; we are not reduced to our origin and destiny as dust, but we are also given a temporary probation, like a tree, as a "living soul."

After seeing the ends of the earth and the diversity of the creation, the exhausted Moses slowly recovers and avers in awe: "Now, for this cause I know that man is nothing, which thing I never had supposed" (Moses 1:10). If we are to recover an awareness of this kind of nothingness, we must learn to imagine a wholeness far beyond our experience, and to do this as I have been suggesting is an act of faith. We can be reassured that this experience of nothingness is a gift of a loving Father, the Creator of the universe, and not merely an empirical experience. Indeed, Moses's recovery of awareness of his own nothingness might sound like what some environmentalists have called for: a thorough debunking of the specialness of humanity. And yet Moses's discovery of his nothingness appears to be his unique human privilege, thus proving the dichotomy as false. Moses, along with all of God's children, is uniquely situated among God's creations to discover his own nothingness in relation to the complexity and beauty of the whole. Awe and wonder are his and our human privilege, not certain knowledge or possession. My reading is intended to show that the principles that should inform our environmental attitudes and that are our moral duty to act upon are deferential reverence and care for the processes that sustain that complexity.

Of course, the story also reminds us that Satan is intensely interested in distorting this sacred relationship to the Creation that is so central to our spiritual health and growth. Moses successfully resists Satan's temptation to worship him precisely because he understands his own value in proper spiritual and biological context. He asks Satan, "Where is thy glory, that I should worship thee? . . . I could not look upon God, except his glory should come upon me, and I were transfigured before him. But I can look upon thee in the natural man" (Moses 1:13-14). In other words, Moses here understands that the unique privilege of awe that comes from understanding our small but vital human place in the vast physical universe is not a merely biological fact, nor a fact that requires merely intellectual or natural understanding. It requires a spiritual transformation of our powers of perception to see with the eyes of faith, a kind of seeing that is a unique combination of the spiritual and the physical, a vivification of the human eye through spirit and blood. Only such a transformation allows him to strike the necessary and delicate balance.

Furthermore, Moses's power to resist Satan's attempt to pervert his relationship to this vast creation comes from a determination to learn more about the mysteries of the earth and our human place on it. In other words, Moses's resistance comes from two understandings. First, he does not deny his unique human station: "Behold, I am a son of God," he says (Moses 1:13). Second, he recognizes his need for greater understanding: "I will not cease to call upon God, I have other things to inquire of him" (Moses 1:18). Consequently, Moses's recognition of his nothingness is a powerful tool of resistance to Satan's temptation to artificially elevate human significance and power. Satan's interest here suggests why a problem as serious and as global as climate change demands our heightened moral attention, lest we succumb to false ideas about our place in and responsibility to the world.

In conclusion, the LDS account of the Creation teaches that we can identify spiritually valuable and ethical uses of natural resources because they are facilitated by and enhance our sense of wonder of our spiritual kinship with the whole of the earth, stimulate a desire for deeper knowledge, and respect biodiversity; only these kinds of acts (ecological restoration comes to mind) are spiritually holy and redemptive; they enact the conditions of a Fortunate Fall. Acts that decrease wonder teach us that nature is mere dead matter, stop our growth of understanding, or insist that there is no way to act in our human self-interest and in the interest of the web of life are profane, tragic, and therefore enact the unfortunate conditions of humankind's profound alienation from God.

We deny the earth's holiness when we assume that we have the promise that there is enough and to spare regardless of how we use earth's resources or when we assume that, if the earth appears to be dying or suffering, we are supposed to let it happen. These attitudes are almost fanatical in their devotion to the instrumentality of nature; they see science merely as technology-as a certain means to use the world, not as the work of naming and building relationships to other living souls, or at least trying to imagine the earth on its own terms. They are also views that are bent on avoiding self-questioning and circumspection because they are uncomfortable with circumstances that demand judgment and action despite incomplete knowledge and high stakes. In their adherence to false certainties, these attitudes reject the need to engage our own moral agency. When religious beliefs are motivated by fear rather than love, they shield us from confronting the limitations and uncertainties that science sometimes inspires; when this happens, faith becomes unnecessary, ideology takes over, and religion does not live up to its claims of universality or morality.

As I have suggested, religion can either help or hurt in rising to the moral challenges of living on the earth, challenges that have perhaps existed from time immemorial but which global climate change has only recently spelled out that we can no longer avoid with impunity. The solution is not to declare that one knows the meaning of all things, but to remember that religion is a call to faithful and moral action on behalf of what we love, which is usually more important and far-reaching than what we can claim we know. It is our choice.

Notes

1. Aldo Leopold, A Sand Country Almanac (New York: Oxford University Press, 2001), 214.

2. In *The End of Nature* (New York: Random House, 2006), Bill McKibben argues that climate change has transformed the very meaning of nature as something we once imagined to be outside of human history but which is now within it. For further reading about the causes, range, and impact of climate change, see Timothy Flannery, *The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth* (New York: Grove Press, 2001).

3. According to the National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center, 2010 tied for the hottest year on record. See http://www.noaanews.noaa.gov/stories2011/ 20110112_globalstats.html (accessed February 15, 2011) and http:// www.grist.org/article/2010-08-17-summer-2010-is-breaking-heat-recordsvideo/ (accessed October 15, 2010).

4. Of course, Doctrine and Covenants 104 makes it clear that this is indeed a form of iniquity. There is "enough and to spare," the Lord tells us, but He qualifies this promise: "It is expedient that I, the Lord, should make every man accountable, as a steward over earthly blessings, . . . [but] it must needs be done in mine own way. . . . Therefore, if any man shall take of the abundance which I have made, and impart not his portion, according to the law of my gospel, unto the poor and the needy, he shall, with the wicked, lift up his eyes in hell, being in torment" (vv. 17, 13, 16, 18).

5. Michael S. Northcott, *A Moral Climate: The Ethics of Climate Change* (Maryknoll, N.Y.: Orbis Books, 2007), 6.

6. See, for example, Naomi Oreskes and Erik Conway, Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming (New York: Bloomsbury Press, 2010) and James Hoggan and Richard Littlemore, *Climate Cover-Up: The Crusade to Deny Global Warming* (Vancouver, B.C.: Greystone Books, 2009).

7. Northcott, A Moral Climate, 18, 31, 158, 84. For an LDS perspective on the impact of environmental degradation on the world's poor, see Gary Bryner, "Theology and Ecology: Religious Belief and Environmental Stewardship," *BYU Studies* 49, no. 3 (2010): 21–45, and James Mayfield, "Poverty, Population, and Environmental Ruin," in *New Genesis: A Mormon Reader on Land and Community*, edited by Terry Tempest Williams, William B. Smart, and Gibbs M. Smith (Layton, Utah: Gibbs Smith, 1998), 55–65.

8. This is the argument, for example, of Northcott's book *A Moral Climate*; See also Lyndsay Mosely, ed., *Holy Ground: A Gathering of Voices on Caring for Creation* (San Francisco: Sierra Club Books, 2009); and Roger Gottlieb's indispensable edited collection, *This Sacred Earth: Religion, Nature, Environment* (New York: Routledge, 1995).

9. Of course, the claim that fighting climate change is too expensive and will hurt the poor may very well be a principled and honest reason for skepticism; but if the hesitancy to move to action is based on the categorical denial of a link between consumption and the well-being of the rest of the world, such a position contradicts the fundamentals of Christian stewardship, especially as they are outlined in Doctrine and Covenants 104 and 49. If the hesitation comes from a preference for small government, then genuine dialogue, not denial, about the best solutions should ensue. As Gary Bryner, "Theology and Ecology," 41, has recently written: "Working out the details of political action requires compromise, patience, and time; environmental policies also tend to conflict with other pressing priorities. But our obligations to each other and to those who come after us cannot be discharged by our mere acceptance of worthy goals and true principles. Those obligations require that we plunge into the world of politics and work with others who may disagree with us on many issues in order to find common ground and workable solutions to the problems we face together."

10. Thomas Friedman, *Hot, Flat, and Crowded: Why We Need a Green Revolution and How It Can Renew America* (New York: Farrar, Straus, and Giroux, 2008), 23.

11. Leslie Kaufman, "In Kansas, Climate Skeptics Embrace Cleaner Energy," October 18, 2010, http://www.nytimes.com/2010/10/19/science/earth/19fossil.html?ref=globalwarming (accessed February 8, 2011).

12. For an exploration into how directly political ideology is linked to attitudes about climate change, see Michael Hulme, *Why We Disagree about Climate Change: Understanding Controversy, Inaction, and Opportunity* (Cambridge, England: Cambridge University Press, 2009); A. Leiserowitz, E. Maibach, C. Roser-Renouf, and N. Smith, *Global Warming's Six Americas, June 2010*, Yale University and George Mason University. New Haven, Conn.: Yale Project on Climate Change. 2010, http://environ-ment.yale.edu/climate/files/SixAmericasJune2010.pdf (accessed October 15, 2011).

13. Northcott, A Moral Climate, 115; emphasis mine.

14. I have criticized the absurdity of this kind of logic before, as have others. See my "The Environmental Ethics of Mormon Belief," *BYU Studies* 40, no. 2 (Summer 2001): 187–211; and George Handley, Terry Ball, and Steven Peck, eds., *Stewardship and the Creation: LDS Perspectives on the Environment* (Provo, Utah: BYU Religious Studies Center, 2006).

15. Kristen Moulton, "LDS Church Shows Off Its New 'Green' Prototype," June 4, 2010, http://www.sltrib.com/sltrib/home/49478671-73/church-lds-meetinghouse-davies.html.csp (accessed June 6, 2010); An article that cites the LDS Church's advances in architecture in conjunction with the greening of Islamic architecture is Christina Koningisor's "The Ground Zero Mosque and the Greening of Faith," August 24, 2010, http://www.theatlantic.com/national/archive/2010/ 08/the-ground-zero-mosque-and-the-greening-of-faith/61967/ (accessed October 15, 2010).

16. Leopold, A Sand Country Almanac, 203.

17. George Handley and Lance Larsen, "The Radiant Astonishment of Existence: Two Interviews with Marilynne Robinson, March 20, 2004, and February 9, 2007," *Literature and Belief* 27, no. 2 (2007): 132.

18. In response to atheists who wrote in to his blog to criticize religion's intolerance for doubt and dissent, Fish wrote: "What religion are you talking about? The religions I know are about nothing but doubt and dissent, and the struggles of faith, the dark night of the soul, feelings of unworthiness, serial backsliding, the abyss of despair. Whether it is the book of Job, the Confessions of St. Augustine, Calvin's Institutes, Bunyan's 'Grace Abounding to the Chief of Sinners,' Kierkegaard's 'Fear and Trembling' and a thousand other texts, the religious life is depicted as one of aspiration within the conviction of frailty. The heart of that life . . . is not a set of propositions about the world (although there is some of that), but an orientation toward perfection by a being that is radically imperfect.... So to sum up, the epistemological critique of religion-it is an inferior way of knowing-is the flip side of a naive and untenable positivism. And the critique of religion's content-it's cotton-candy fluff-is the product of incredible ignorance." Stanley Fish, "God Talk, Part 2," May 17, 2009, Opinionator, New York Times, http://opinionator.blogs.nytimes. com/2009/05/17/god-talk-part-2/(accessed May 18, 2010).

19. This was painfully evident in my home state of Utah where, in

2010, the state legislature passed an anti-climate-change bill crafted to discredit the entire scientific community as corrupted by ideology, greed, and deception. After insisting on the unreliability of science and the "inconclusive" findings of climate science, the bill's sponsor, Kirk Gibson, nevertheless disingenuously suggested that we should "let the science develop" lest we make "rash" decisions. At no point did the legislature offer a standard of scientific conclusiveness that would suffice for taking action, which is not surprising, of course, since the science is already overwhelmingly conclusive and corroborated across a diverse range of fields and upheld by every major national and international scientific society. For audio files of the floor debate and for the text of the bill, see http://le.utah.gov/~2010/htmdoc/hbillhtm/HJR012.htm (accessed February 10, 2010). For an editorial response, see "Legislators, Open Minds to Science," http://www.deseretnews.com/article/ 700008926/Legislators-open-minds-to-science.html (accessed February 12, 2010). For more on the visit of climate change skeptic Christopher Monckton to Utah and his influence on Utah climate change politics, see Barry Bickmore's blog (http://bbickmore.wordpress.com, (accessed February 10, 2011). For a full report on the saga, see Bud Ward's "BYU Earth Scientists Express Concerns over State Legislature's Climate Efforts," http://www.yaleclimatemediaforum.org/2009/11/byu-earthscientists-express-concerns (accessed February 15, 2011). In response to the bill, several BYU scientists authored a letter to the legislature, not to argue for policy, but to criticize the legislature's willingness to craft policy on the basis of erroneous and misleading interpretations of what the science of climate change has found. See Barry Bickmore, Summer Rupper, Stephen Nelson, Jani Radebaugh, Eric Christiansen, Matthew Bekker, Bart Kowallis, Thomas Morris, Jack Sites, Byron Adams, and Michael Dorais, http://extras.mnginteractive.com/live/media/site297/ 2010/0204/20100204_024750_Legislature2.pdf (accessed February 15, 2011). Despite the letter and opposition from the public, the bill, which was largely symbolic, passed.

20. Donald Worster, "Nature and the Disorder of History," *Environmental History Review* 18 (Summer 1994): 3, 8, 15; emphasis mine.

21. John Haught, "Christianity and Ecology," in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger Gottlieb (New York: Routledge, 1995), 279.

22. Since the 1950s, the National Council of Churches (representing mainline Protestant and Orthodox churches in the United States) has issued 133 declarations urging action on pressing environmental issues. The World Council of Churches has urged since 1964 a "better developed theology of nature and man in relation to nature." Jewish synagogues

across the country have organized more than 150 educational programs related to environmental stewardship. The Ecumenical Patriarch Bartholomew, symbolic leader of more than 250 million members of the Christian Orthodox Church, has been traveling across the world to decry environmental degradation. The Catholic Church has recently added environmental degradation as a "new sin," the Dalai Lama has called for a deeper respect for nature, the Islamic Foundation for Ecology and Environmental Sciences provides resources for mosques and Islamic education centers. In 1993 Dalvin Dewitt, a professor of environmental studies at the University of Wisconsin, founded the Evangelical Environmental Network; and more than a hundred evangelical leaders signed a declaration calling for better "Care for Creation." They have worked to protect the Endangered Species Act and in 2006 signed a call for action on global climate change. The Environmental Protection Agency estimates that congregations serious about reducing energy consumption could save 25–30%. If half of all congregations in the United States did so, it would have the effect of removing a million cars from the road and would make available 13.5 billion kilowatt hours of electricity for other uses, without the construction of new power plants. All statistics are reported in Charles L. Harper, "Religion and Environmentalism," in "The Legacy of Lynn White Jr.: Religion and the Environment," The Journal of Religion and Society, Supplement 3 (2008): 5-26, http://moses.creighton.edu/JRS/2008/2008-11.html (accessed February 15, 2011).

23. Daniel Sarewitz, "Science and Environmental Policy," in *Earth Matters: The Earth Science, Philosophy, and the Claims of Community*, edited by Robert Frodeman (Upper Saddle River, N.J.: Prentice-Hall, 1999), 91, 93.

24. Northcott, A Moral Climate, 67.

25. Michel Serres, *The Natural Contract*, translated by Elizabeth Mac-Arthur and William Paulson (Ann Arbor: University of Michigan Press, 1995), 48, 47.

26. See, for example, David Abram, *The Spell of the Sensuous: Perception and Language in the More-Than-Human World* (New York: Vintage, 1997). Abram argues that non-Western cultures, by virtue of their polytheistic and animistic traditions, experience nature in this intersubjective way but that Western culture emerged in competition with these cultures and thereby denigrated, to its own detriment, animism's claims about inspirited nature. Similarly, Lynn White, "The Historical Roots of Our Ecological Crisis," 1967, in *This Sacred Earth: Religion, Nature, Environment*, edited by Roger Gottlieb (New York: Routledge, 1996), 190–201, argued that Christianity's rejection of paganism by the Middle Ages led to its claims of nature as dead matter, thus rendering moot the ques-

tion of ethics. Many Christian theologians have responded to these criticisms by arguing that Christianity does indeed posit the living and spiritual presence of the physical world. These ecotheological responses resonate powerfully with Mormon doctrine. Indeed, as I argue in "Environmental Ethics of Mormon Belief" and hope to further elaborate here, few systems of belief in Christianity offer a more comprehensive and unambiguous articulation of the spiritual substructure of all physical life than Mormonism.

27. This notion of dominion has received a lot of attention from critics of the Judeo-Christian tradition because it seems to give us license to do to nature whatever we want. No one has written more powerfully and persuasively in the Mormon tradition about why Adam's dominion is a "call to service, not a license to exterminate" than Hugh Nibley, "Subduing the Earth," in *On the Timely and the Timeless* (Provo, Utah: BYU Religious Studies Center, 1978), 110.