



The Ambitions of Wizards and the Warnings of Prophets: Religious Guidance on Climate Change?

Willem B. Drees, Emeritus Professor of Philosophy of Religion and Ethics, Leiden University, Leiden, the Netherlands, wb@drees.nl

Secular wizardry and secular prophecy are two responses to climate change. Secular wizardry involves implementing technological solutions. Prophecy involves demanding conversion to a different way of life, warning against the hubris of “playing God.” Prophets do not predict the future but speak truth to power. Wizards are not playing God but striving for morally responsible action. What to do about climate change? Can religions provide guidance? Traditions are reformed when used to address current concerns, as scholars may see in the greening of religions. Replacing religions with a science-based cosmic epic has its own weaknesses, as do experiential green religions. Philosophical justification for addressing climate change is limited too, unless there is another underlying commitment, whether articulated in religious, humanist, or political terms. Humanity needs smart technology, but also appropriate pluralistic politics. The alternative is not prophecy but lament for the conditions that our grandchildren and their offspring will face.



This article is not about climate change but about humans. Why are humans concerned about the climate? Where can we find guidance? Can we draw on our religious traditions? What may we expect of technological wizardry, scientific knowledge, and philosophical arguments? Or, in a pluralistic society, is a political process unavoidable?

Some local conditions on Earth, such as farmland and cities, have been created intentionally by humans. Other conditions have been created unintentionally. Some of these are global in kind. Our actions have changed the biosphere. Thereby, humans have changed the conditions for all living beings, future generations included. Temperatures on Earth have risen, ice sheets and glaciers are melting, and droughts and floods have become more devastating. Other authors in this thematic section may address the underlying science, substantially and methodologically, and discuss what might happen if our societies continue on their current path. They may argue about technologies and policies that might slow this process or help us adapt. Here, I focus on religious and philosophical thought. How can the two key terms used here, prophecy and wizardry, be understood in the context of climate change? Can religions be helpful resources in arguing the need to address climate change? If so, is it by being normative or by being formative and expressive? Does humanity need a green religion or the greening of all religions? What about secular, scientific, and philosophical arguments to address climate change? In humanity's pluralistic context, can we have a constructive political process for the climate?

The Ambitions of Wizards and the Warnings of Prophets

Wizardry and Prophecy

“Wizardry” and “prophecy” are two words people associate with magic and religion. Let us first consider these terms as the vocabulary of magic, drawing on fiction. When speaking of wizards, readers may think of Albus Dumbledore of Harry Potter fame and Gandalf the Grey of Tolkien's Middle-earth. Remarkable figures, apparently wise and in the possession of awesome powers. Prophecies also appear in the Harry Potter books. A central one is about a baby who will defeat Voldemort, the dark power. Seen thus, prophecies are predictions, insights into the future.

However, that is not how I have come to understand these terms from a religious studies perspective. In the Hebrew Bible, the Old Testament, prophets are not in the business of predicting the future but of speaking truth to power. They offer judgment. They challenge the king or the people on behalf of God, on behalf of that which is of ultimate value. One of the heresies criticized in early Christianity was docetism, the idea that Jesus was human in appearance only. Believers may be tempted to elevate him to the level of a wizard if not higher, someone in possession of extraordinary powers. But historians see

him as a human to be understood in the context of Palestinian Judaism in the Roman Empire. A figure about whom scholars rely on testimony from his fans given decades after his death.

When I use the term “prophet” here for those who express contemporary concerns about the climate, two forms may be distinguished. There are radical prophets, warning us, calling upon us to repent our industrial and capitalist ways and convert to a new religion or worldview and purer, simpler lives. And there are pragmatic prophets, who draw on science to analyze possible scenarios. This style of prophecy is exemplified by the Intergovernmental Panel on Climate Change (IPCC), which seeks insight into what is going on, what the consequences might be, and the options for mitigation and adaptation. The reports of the IPCC are the work of humans. The synthesis, the judgment, is negotiated between scientists and governments (Petersen 2006, 7.2 and Appendix; Broome 2020). Nonetheless, these reports speak truth to power: to governments, corporations, and all of us. When I speak of “wizardry,” of technological interventions, this refers to a range of actions, from the more pragmatic to the radical, from promoting electric cars to carbon capture and beyond towards more drastic forms of geo-engineering, or even building a new home elsewhere in outer space.

The terminology of prophecy and wizardry evokes the sphere of magic and religion, but those terms also refer to our understanding and powers. Prophets may be critical of some wizards, as their actions are not necessarily for the best. In this vein is also the story of Frankenstein, who could not control the technology he released. Which brings me to a particular concern about wizardry. Is it not hubris, “playing God”?

Playing God?

A concern might be that we humans go too far in our wizardry; that we are “playing God.” This expression may be used in two ways. The more traditional is when a human acts in a way judged to be immoral, such as killing someone. But it also may arise when new technologies undermine a distinction vital to ethics: the distinction between that which has been given and that which is a matter of choice and responsibility (Dworkin 2000, 442–46; Drees 2002). What is given is the stable background of human actions. Traditionally, this has been referred to as fate, nature, or creation: domains of the gods or God. We assume a clear demarcation between who we are and what we do in the situation we find ourselves in.

When new technologies shift the boundary between what is given and what is open to human actions, we become insecure and concerned. The reference to “God” in the expression signals that something that used to be beyond our powers is now on our side of the boundary. The fear of hubris, of “playing God,” may be the fear of losing grip on responsibility as the boundary dissolves.

Dworkin argues that such fear is not necessary; humans have always played with fire, and we ought to do so too. The alternative is an irresponsible cowardice towards the unknown, a weak surrender to fate.

The idea that humans should not be “playing God” can be challenged morally, as cowardice, but also theologically. If God is associated exclusively with that which has been given, our technological activity is seen as pushing God to the margins. In conversations on religion and science, the critical expression “God of the gaps” refers to the view that gaps in our knowledge are the places where God’s action may have taken place. This is a risky belief, wherein whenever humans become blessed with greater understanding, the role of such a God will be diminished. With technology, humans may be tempted to fall back on a God of the gaps, though with respect to actions not knowledge. We often use the fruits of science and technology—such as antibiotics, electrical light, sewage systems, computers, contraceptives, and much more—without paying much attention or gratitude. Praying to God, especially when technology fails, like when the plane goes down or the doctors cannot restore our health, is an instrumental type of religiosity: God is supposed to help us when we need help but keep out of our way as long as we are doing well. It seems preferable to appreciate the efforts of professionals, not only commercially but also religiously. It is appropriate that we look to engineers for our salvation. This is not an anti-religious move. Their knowledge and skills may be appreciated as gifts from God, as means by which they serve their neighbors “with all [their] heart, and with all [their] soul, and with all [their] strength, and with all [their] mind,” to quote the gospel of Luke (10:27).

Unintended Consequences?

Concerns about “playing God” regard not merely right and wrong. There may also be a fear of unintended consequences. Humans do not always anticipate correctly what the consequences of our actions, and hence of our technologies, may be. In his book *Earth in Human Hands*, the planetary scientist David Grinspoon discusses as an example the hole in the ozone layer caused by the use of chlorofluorocarbons (CFCs) in refrigerators and aerosol cans. In the 1970s, it was discovered that on the planet Venus traces of chlorine prevent the formation of ozone in the upper atmosphere. The decline of the Earth’s ozone layer was discovered in the 1980s. CFCs turned out to be the cause; their use had unintended consequences. “We did not intend to destroy the ozone layer, any more than the cyanobacteria intended to create it in the first place. Unlike them, however, we had the ability to see what we had begun, and to choose not to finish it” (Grinspoon 2016, 137).

Treaties were made in Vienna in 1988 and in Montreal in 1989 phasing out the use of CFCs. “So while the ozone story began as an example of . . . inadvertent catastrophe, it became an example of something else: an intentional planetary

change” (Grinspoon 2016, 138). This sets an example for dealing with climate change. Humans should intentionally counter changes we do not wish to see. Grinspoon makes this central to his definition of “true intelligence”: “There is a kind of cognitive activity that results in rampant, unchecked, unplanned global change of the kind we’re seeing today, and there is another level, what we might call true intelligence, or planetary intelligence, of more globally coordinated cognitive activity, that can result in more stabilizing behavior” (Grinspoon 2016, 138). Such intelligence would be essential for long-lasting intelligent civilizations in the universe, but Grinspoon’s definition “leaves it undetermined whether intelligent life has arrived on Earth” (Grinspoon 2016, 142).

In the context of discussions on religion and climate change, prophecy may be understood, in both its radical and analytical forms, as speaking truth to power. Wizardry may refer to human actions such as developing and applying new technologies that move the boundary between fate and responsibility. What are our resources to know which judgments to make and which technologies to develop? Can religious traditions provide normative guidance? Or is their contribution of a different kind?

Religion: Normative or Formative and Expressive?

Some believers envisage as the source of ultimate authority an eternal God who is almighty, omniscient, and benevolent. They see humans as creatures, limited beings, and sinners who do not live according to God’s commands. As sinners, humans bear responsibility for what they have done and still are doing. But as creatures, humans are not responsible for the moral law—as these norms come from God—just as humans are not responsible for the laws of nature. This is heteronomy: the law (*nomos*) is set by God, not by humans.

Readers may be more familiar with the opposite term, autonomy: individuals decide the goals they will pursue and the norms they accept as valid. Secularization can be understood as a cultural shift away from heteronomy, that is, away from the authority of the church, the state, and persons privileged by class, gender, or age. In 1784, the German philosopher Immanuel Kant made this the main message of his essay “An Answer to the Question: What is Enlightenment?” He used a Latin phrase to encourage people to have the audacity to be wise: “*Sapere aude!* Have courage to make use of your *own* understanding!” (Kant 1996, 17). Since all authorities are human, each may be challenged, as they all are provisional and fallible.

Such a view of authorities need not do away with religious beliefs and practices, but it does require a more modest view of the authority of religions. One such understanding of religions—as formative and expressive rather than normative—is conveyed by a definition from the anthropologist Clifford Geertz (1966, 3): “A religion is (1) a system of symbols [and rituals] which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations

in men by (3) formulating conceptions of a general order of existence, and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic.” Seen thus, religions are similar to languages and other forms of cultural repertoire, shaping how humans understand and experience our world, helping us express how we experience the world (moods), and motivating us to act in ways we consider right.

People who value autonomy and accept historical and empirical knowledge may still disagree on its consequences for our worldview and ethos. Should humans discard any idea of God and become naturalists? Or are there meaningful ways of using religious symbols and rituals that are not at odds with autonomy? This question about the use of ideas and words is central to many conversations on “religion in an age of science” (Drees 2021a). Another question focuses on practices: how may religious and non-religious views inspire us towards right action, in this case on climate care? Let me, as a roughly sketched map, distinguish a few different strategies: the use of existing religious legacies, or their replacement by a shared cosmic narrative or experiences with nature.

Reform: The Greening of Faiths

A particular tradition, Christianity, is central to Lynn White’s article “The Historical Roots of Our Ecological Crisis.” White, a historian of medieval culture and technology, finds that innovations in agriculture, in particular the plough, facilitated an exploitative attitude that had been encouraged by Western Christianity. Guilt brings him to an argument for the contemporary relevance of religions: “Since the roots of our trouble are so largely religious, the remedy must also be essentially religious, whether we call it that or not” (White 1967, 1207). Within the Christian tradition, White highlights Saint Francis, who substituted the idea of humanity’s rule over creation with the equality of all creatures. Thus, White proposes “Francis as a patron saint for ecologists” (White 1967, 1207). Pointing out resources within one’s own tradition is not exclusive to Christianity. Consider the ten books that emerged from a series of conferences at Harvard on Religions of the World and Ecology, initiated by religious studies scholars Mary Evelyn Tucker and John Grimm. Each volume considers the religious resources for a particular religious tradition that may be drawn upon to promote an eco-friendly orientation (e.g., Tucker and Williams 1997).

Saint Francis can be considered the opposite of Benedict of Nursia, the founder of monastic orders that combine prayer and work, *ora et labora*. In the European Middle Ages, Benedictine monasteries transformed swamps into farmland, while Francis is associated with wilderness. It is fine to choose Francis of Assisi as a role model of nature-friendly attitudes, as White advocates. But if there are multiple potential exemplary figures, “the tradition” does not function as a normative moral resource but as a repository of exemplars. The moral message is not justified by the tradition but rather the tradition is selectively appropriated, interpreted, and revised in light of our concerns. Such a strategy

may speak to persons who have affinity with a particular moral message and are at home in that tradition. Texts are read in selective and creative ways. Questions arise such as: Who has been invited to contribute at the Religions of the World and Ecology conferences? Who speaks for Islam? Who for Christianity? Will Francis or Benedict be held up as an example? In a formative and expressive understanding of religion, engagement with traditions is appropriation and transformation in service of interests at a later time.

There is pluralism within each tradition. In new circumstances, religious traditions are used to provide images and symbols that express that which is deemed valuable at that later time. A religious repertoire may allow us to express our worldview and ethos, and may be drawn upon to motivate us. Religion is formative, even when it is presented as normative. It serves as a language that allows for the expression and nourishment of an ethos. Reading religions in eco-friendly ways is not uncovering relevant elements that have been there since the beginning of time. It is reformist and creative, a greening of faith (Carroll, Brockelman, and Westfall 1997), offering new imaginations and a different arrangement of beliefs and practices.

Furthermore, what once was embedded in a particular local context now is used in service of a global message. On this global stage, humanity faces another form of pluralism: the plurality of cultural and religious practices around the world. Given the plurality of religions, how to address issues that are genuinely global and thus may be in need of a collective response?

Replacement: A Cosmic Epic?

As ecological challenges are global, it may seem desirable to develop a shared framework to address them, to aim for consensus on a worldview that will provide guidance for all. For this purpose, the natural sciences might be a better resource than particular religious or cultural traditions, as the aspiration for the natural sciences is to develop insight that is valid everywhere, at all times. There is a rise of naturalistic visions, such as “the evolutionary epic,” that combine an evolutionary perspective (biology) with a desire for stories that may provide orientation (Wilson 1978, 201; Hefner 2009, 3; Goodenough 1998, 272). An example is *Journey of the Universe*, a film and multimedia project overseen by Mary Evelyn Tucker and Brian Swimme, an evolutionary cosmologist. They present scientific information in the form of a grand evolutionary narrative, weaving together scientific knowledge and humanistic concerns, thereby seeking to evoke wonder and a sense of connectedness and responsibility. They thus present a science-based creation story for our time (e.g., Tucker 2019).

Is it possible to build a morally motivating message on scientific insights? The idea that a science-based, morally motivating creation story would be adequate to justify a particular moral stance has been challenged by Lisa Sideris in her book *Consecrating Science: Wonder, Knowledge and the Natural World* (2017). Philosophers have argued that there is a fundamental difference between

descriptive and prescriptive language, between the effort to describe what “is” and the message as to what “ought” to be. Grand narratives that draw on scientific knowledge put scientists in a priestly role, which expects more of them than their disciplinary expertise justifies. One may challenge the way the humanities are used in such narratives. Tucker, herself a scholar in the humanities, treats religions as repositories of myths and metaphors. In contrast, Sideris positions the humanities as critical discourse, as posing questions, as probing beyond the general “humanity” to the plurality of humans, showing conflicting interests, views, and values. In religious terms, Sideris gives priority to prophetic voices rather than priestly ones.

Sideris also holds that humans should be far more modest in envisaging our place in the cosmos. Tucker calls her own view not anthropocentric but anthropocosmic, envisaging the human as the being who completes the cosmos. Sideris finds this too grandiose a perspective on humans: “Anthropocosmism, then, is no garden variety anthropocentrism. It is anthropocentrism on steroids” (2019, 446).

In such grand narratives, science is used to offer moral orientation and motivation. To speak of a journey or an epic gives the presentation coherence and focus, a sense of a destiny. But this passes by the marginal position of humans and the contingent nature of evolutionary development. By anchoring its message in a naturalistic understanding of reality, such a religious vision is asking more of the scientific image than it can provide. Though aspiring to transcend the particularity of various religious traditions, such a creative proposal becomes in practice one more religious option. This is a fairly typical development; religions aspiring to be universal again and again become new particular ones alongside others.

Science-based cosmic religiosity may be politically problematic as well, as it treats disagreements as if they regard our understanding of the way the world is, thereby passing by underlying differences in values and interests. It treats this challenge as a theoretical one to be resolved by a better view of reality rather than as a practical one about our actions and the values and preferences that guide them in a messy world.

An alternative strategy, also avoiding reliance on historic traditions, focuses on experiences, such as those discussed by Bron Taylor in his book *Dark Green Religion: Nature Spirituality and the Planetary Future*. Taylor defines dark green religion as “religion that considers nature to be sacred, imbued with intrinsic value, and worthy of reverent care” (2010, ix). Experiences with nature “may even inspire the emergence of a global, civic, earth religion” (Taylor 2010, x). He refers to environmental saints such as Henry David Thoreau, John Muir, Aldo Leopold, and Rachel Carson. Regarding radical environmentalism, Taylor considers “the sport of surfing a new, global manifestation of it”, “motion pictures, documentaries, and theme parks an influential expression of it . . . and the United Nations its global champion” (Taylor 2010, xi). This “dark

green religion” makes human experience and perception its prime resource, in contrast to the previously discussed approach, which leans more on science. Dark green religion may tend to see nature itself as sacred and has elements of animism, seeing “the world as full of spiritual intelligences with whom one can be in relationship” (Taylor 2020, 4) and pantheism, perceiving the earth to be alive or even divine.

Experience seems to me less a global resource than science. Some phenomena of environmental concern become known, at least at first, via careful scientific observations and modelling rather than appearing first in common sense experience. Experiential religious approaches also still pass by the difference between descriptive and normative language.

In the ecological arena, many people of good will seek to draw on religious traditions or advocate new, eco-friendly forms of religion. Their contributions may be of great value to those who feel at home within those traditions, whether old or new. But scholarly and politically, these contributions fall short as reasonable bases for a well-founded and shared global stance on ecological challenges such as climate change. So, which religion should one draw upon? And within each religious tradition, which interpretation does one endorse? How to select from the many voices within a particular religious tradition?

What does a religion contribute to addressing environmental concerns? Let me quote once more Clifford Geertz (1966, 3) to make clear some of the dynamics: “Sacred symbols function to synthesize a people’s ethos—the tone, character, and quality of their life, its moral and aesthetic style and mood—and their world view—the picture of the way things in their sheer actuality are, their most comprehensive ideas of order.” In the context of ecological concerns, this ethos seems to justify a particular interpretation of a religion. Religious imagery and convictions are not the sources of ecological engagement but rather expressions of it. So far, my reflections have focused on the role of religions in addressing ecological concerns. The next section focuses on whether there are scientific or philosophical arguments that justify why humans should address climate change.

Why Should We, Humans, Address Climate Change?

By itself, science does not seem to provide a basis for caring about the climate. A geologist might say that in the 4.5-billion-year history of the Earth variation in the climate is natural. So why care about the climate as it currently is? Does that not show a particular bias in favor of conditions for human life? What is special about humans? Aren’t we organisms, just like other organisms? Other organisms might flourish when the climate changes. Concern about climate change regards the suitability of conditions for future humans, beyond those currently alive. But should there be future generations of humans? Can a commitment to the continued existence of humans be justified on the basis of science and philosophical ethics, or does such a justification need something

else, something more like a religious motivation? In relation to our need to address climate change, I think it may be helpful to consider such questions about human nature and the future we might care about.

Humans: Just Organisms among Others?

Humans are biological organisms, part of the web of nature. Can such a view be a sufficient perspective on humans when talking about human responsibilities? I hold that there is something exceptional about humans that justifies prioritizing conditions humans need over other potential climates. The same feature also grounds the idea that humans have responsibility for their actions and determines the character of the humanities as human self-reflection (Drees 2021b).

Humans are natural beings but happen to be endowed with categorically significant qualities that may not be present in other natural beings on Earth, at least not to the same extent. Because we are natural beings, our constitution and the causal consequences of our existence can be objects of study in geology, biology, medicine, and other disciplines. We are also subjects. That is, we are beings who study the world, who analyze those causal processes as if we can be observers of them, that is, consider them from outside. As subjects, we also are beings who act within the world upon the world.

The German philosopher Helmuth Plessner introduced in his book *Levels of Organic Life and the Human: An Introduction to Philosophical Anthropology* ([1928] 2019) a conceptual language to speak of the particular richness of human experience, understanding, and agency. As a first step, one might say that each living organism is characterized by a metabolism, taking food in and pushing waste out, and with that comes a permeable boundary between inside and outside. Thus, with life there arises an inner world, while each organism is within its environment. Positionality becomes a characteristic of life.

Positionality works differently for different kinds of organisms. Schematically, Plessner distinguishes plants, animals, and humans. Plants have no center that coordinates actions and hence no relationship to their own positionality. Animals are aware of their environment and their own position in it; they have a centric positionality. Human positionality goes a step further with the emergence of awareness of the possibility that one could have been at a different place or time. Humans not only have experiences, but they also experience that they have experiences. Plessner speaks of persons as having an ex-centric positionality, given their ability to engage in self-reflection, to consider their own actions as if from an external perspective. In this self-reflective process as ex-centric beings, humans also encounter others and hence come to participate in a shared historical, cultural, and social world. We are products of this shared world, but we are also creators of its future.

Plessner's imagery and language is just one conceptual vocabulary for philosophical anthropology; others have expressed it differently. The point is that natural and reflective forms of existence can be distinguished. Whatever

the vocabulary used, when we as humans reflect upon our knowledge of the world and ourselves in that world and upon our ability to transform the world intentionally—and hence upon the choices we have to make—we cannot avoid envisaging humans as a special kind of animal. We are organisms within the web of nature, but we are also reflective, as if humans might step outside of it, consider it, and act upon it.

To link this insight about human nature to climate change: it would be nonsensical to suggest that earlier organisms deserve credit or blame for introducing photosynthesis and thereby transforming the atmosphere. They did not exhibit the kind of insight and intentional action that we humans assume when assigning credit and blame. But current developments cannot be ignored as if such transformations just happen. We humans deserve blame, and we need to study the climate and act intentionally upon it.

A further distinction may be made between the human ability to understand reality and our ability to act upon the world. This implies two types of reason: theoretical reason and practical reason, the one exemplified by science, the other by ethics. This distinction is central to two major works of the late eighteenth century by the philosopher Immanuel Kant. His 1781 *Critique of Pure Reason* (1997) considers the conditions for the development of knowledge of reality. In that context, determinism is assumed. When explaining phenomena, scientists and scholars assume natural laws to be valid. A few years later, Kant published his *Critique of Practical Reason*. “Practical reason” means that this branch of philosophy reflects on practices, on humans as actors, and in particular on morality, the ideas that should guide our actions. In this context, a basic assumption is human freedom; we are free to act in ways guided by reason, by moral convictions, rather than as puppets.

The distinction between theoretical reason, which treats humans as elements of the natural world, and practical reason, which considers humans as actors in the world, is fundamental to philosophical anthropology. In the context of science—theoretical reason—we are naturalists, but when we are moral actors, we must consider ourselves to be persons driven by reason.

At the end of his 1788 *Critique of Practical Reason*, Immanuel Kant writes of two awe-inspiring themes: our knowledge of nature and our awareness of moral obligations. Those lines have been inscribed on his grave in Königsberg, now Kaliningrad: “Two things fill the mind with ever new and increasing admiration and reverence, the more often and more steadily one reflects on them: *the starry heavens above me and the moral law within me*” (Kant 1996, 269). The starry heavens do not depend upon our existence. The starry heavens would remain as natural and as awesome if the Earth were to become uninhabitable to humans. But then, the human study of those starry heavens, and of reality on Earth, would be lost. The two forms of human reason, involved in analysis and understanding on the one hand and in intentional action on the other, would be lost. This is a loss worth countering, if we can.

Should There Be Future Generations?

The existence of future generations is, abstractly speaking, not anybody's moral obligation. There are moral obligations to existing persons, but not to persons who do not exist. A young couple that voluntarily decides not to have children is not failing morally. This results in a tension in arguments for climate care: the existence of future persons is not a moral obligation for anyone, but the case for sustainability needs future persons.

One argument for the existence of future generations is pragmatic, naturalist in kind. Given human biology and psychology, future generations will come into being as long as is possible. And if they will exist, those alive now are responsible for the conditions within which they will live.

Is there also a more positive argument, aside from the messy tendencies of human procreation? An argument that future generations are desirable? One such argument may be the one I just presented: humans are the beings who may engage in theoretical and practical reasoning, as we have created a rich understanding of the world, and may be guided by "the moral law within" (Kant 1996, 269). Hence, if one values those features in general, one values conditions that would allow for the continued existence of humans over conditions under which beings with substantial ability to engage in theoretical and practical reason would not survive.

Another argument is more personal, tied to issues of identity and "reasons of love" that are neither selfish nor universally moral (Wolf 2010, 4). Just as I care about my children and grandchildren, about nieces and nephews, I also care about the continuity of human history across generations. This seems to be a particular love and not a conclusion that fits general theories in philosophical ethics. Moral reflection requires more than moral theory; it needs human commitment to a human future, whether articulated in religious, humanistic, or political terms.

Earlier in this article, I suggested that it is hard to make a convincing case that religions can justify moral responsibility in the context of climate change. Here, I conclude that such a justification needs something like a religious commitment. Humanity needs to intertwine its knowledge *of* nature and its ideals *for* nature with concern for the lives of future humans and future generations of species with which we share this planet, beyond the interests of those currently alive.

I have cautioned not to expect too much from science as a resource for a collectively shared normative vision. A theoretical interest is widespread in "religion and science" (Drees 2010), but perhaps scholars should not succumb to the theoretical temptation when considering issues that are primarily about action, or inaction, rather than knowledge. Though agreement in the sciences is more widespread than in almost any other domain of human activity, this is less the case when it comes to interpretations of science or the articulation of worldviews that aspire to be science-based, or at least consistent with the best available knowledge. A similar problem, of the underdetermination of moral and metaphysical convictions by science and worldviews, whether religious

or secular, also regards religious views. Pluralism within traditions and across traditions is a given, and one that is to be appreciated.

Rather than seeking agreement on ideas (theoretical philosophy), the best option might be to live with disagreements, pragmatically solving problems one by one. In this process, sustainability may be called for, given the urgency of issues and their potential impact, even though we as humans cannot have a theoretical justification for this concern. Not everything humans may find important needs to be philosophically justified.

Pluralism and Politics

In this pluralistic social world, it seems to me that alongside knowledge and technology, politics cannot be avoided. I do not mean politics in the disappointingly dysfunctional way currently seen in some countries. The call for politics should take as its point of departure a more ideal version: a deliberative process that involves all, respects the concerns and values of minorities, and is intertwined with a judicial system that arbitrates conflict in an accessible, impartial, and predictable way.

One author who has argued for such an approach in the context of discussions on climate change is Mike Hulme, the British author of *Why We Disagree on Climate Change* (2009) and the *Zygon: Journal of Religion and Science* article “(Still) Disagreeing about Climate Change: Which Way Forward?” (2015). As he argues, the most appropriate venue for addressing climate change seems to be a deliberative, democratic, political process that draws on science to develop scenarios and in relation to which humanity can articulate and develop its moral intuitions while seeking conclusions on appropriate actions, even though underlying views, interests, and preferences may differ.

By way of summary, humanity needs:

1. prophecy, both as careful analysis, such as provided by the IPCC, and as speeches and images that motivate us to address climate issues and change our behavior
2. wizardry (technologies) to counter climate change and adapt to changes, for ourselves and for others
3. politics, ways of living with disagreements and setting goals in a deliberative process, thereby solving problems one by one.

I hope there will be smart technological options to address climate change, but also that we may develop an intelligent democratic global order. To speak in religious terms, the alternative is disappointment, lament—not for a temple that has been destroyed, but for the conditions that our grandchildren and others will have to face.

Acknowledgments

This article derives from a presentation given at the sixty-eighth annual summer conference of the Institute on Religion in an Age of Science entitled “The Wizards of Climate Change: How Can Technology Serve Hope and Justice?” at Star Island, New Hampshire, from June 25 to July 2, 2023. A similar argument has been made in Drees (2023).

References

- Broome, John. 2020. “Philosophy in the IPCC.” In *A Guide to Field Philosophy: Case Studies and Practical Strategies*, edited by Evelyn Brister and Robert Frodeman, 95–110. New York: Routledge. DOI: <https://doi.org/10.4324/9781351169080-7>
- Carroll, John E., Paul Brockelman, and Mary Westfall, eds. 1997. *The Greening of Faith: God, the Environment, and the Good Life*. Hanover, NH: University of New Hampshire.
- Drees, Willem B. 2002. “Playing God? Yes! Religion in the Light of Technology.” *Zygon: Journal of Religion and Science* 37 (3): 643–54. DOI: <https://doi.org/10.1111/1467-9744.00442>
- . 2010. *Religion and Science in Context: A Guide to the Debates*. London: Routledge. DOI: <https://doi.org/10.4324/9780203869604>
- . 2021a. “Naturalism and Religion: Hunting Two Snarks?” *Zygon: Journal of Religion and Science* 56 (4): 950–59. DOI: <https://doi.org/10.1111/zygo.12745>
- . 2021b. *What Are the Humanities For?* Cambridge, UK: Cambridge University Press.
- . 2023. “Justifying Sustainability: Scientific Necessity, Sacred Duty, or Political Process?” In *Issues in Science and Theology: Global Sustainability: Science and Religion in Dialogue*, edited by Michael Fuller, Mark Harris, Joanna Leidenhag, and Anne Runehov, 17–24. Cham, CH: Springer Nature.
- Dworkin, Ronald. 2000. *Sovereign Virtue: The Theory and Practice of Inequality*. Cambridge, MA: Harvard University Press.
- Geertz, Clifford. 1966. “Religion as a Cultural System.” In *Anthropological Approaches to the Study of Religion*, edited by Michael Banton, 1–46. London: Tavistock.
- Goodenough, Ursula. 1998. *The Sacred Depths of Nature*. New York: Oxford University Press. DOI: <https://doi.org/10.1093/oso/9780195126136.001.0001>
- Grinspoon, David. 2016. *Earth in Human Hands: Shaping Our Planet’s Future*. New York: Grand Central.
- Hefner, Philip. 2009. “The Evolutionary Epic.” *Zygon: Journal of Religion and Science* 44 (1): 3–7. DOI: <https://doi.org/10.1111/j.1467-9744.2009.00980.x>
- Hulme, Mike. 2009. *Why We Disagree about Climate Change: Understanding Controversy, Inaction, and Opportunity*. Cambridge, UK: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9780511841200>
- . 2015. “(Still) Disagreeing about Climate Change: Which Way Forward?” *Zygon: Journal of Religion and Science* 50 (4): 893–905. DOI: <https://doi.org/10.1111/zygo.12212>
- Kant, Immanuel. 1996. *Practical Philosophy*. Cambridge, UK: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9780511813306>
- . 1997. *Critique of Pure Reason*. Cambridge, UK: Cambridge University Press.
- Petersen, Arthur C. 2006. *Simulating Nature: A Philosophical Study of Computer-Simulation Uncertainties and Their Role in Climate Science and Policy Advice*. Apeldoorn, NL: Spinhuis.
- Plessner, Helmuth. (1928) 2019. *Levels of Organic Life and the Human: An Introduction to Philosophical Anthropology*. New York: Fordham University Press. DOI: <https://doi.org/10.5422/fordham/9780823283996.001.0001>
- Sideris, Lisa H. 2017. *Consecrating Science: Wonder, Knowledge, and the Natural World*. Oakland, CA: University of California Press. DOI: <https://doi.org/10.1525/9780520967908>
- . 2019. “Wonder Sustained: A Reply to Critics.” *Zygon: Journal of Religion and Science* 54 (2): 426–53. DOI: <https://doi.org/10.1111/zygo.12517>

- Taylor, Bron. 2010. *Dark Green Religion: Nature Spirituality and the Planetary Future*. Berkeley, CA: University of California Press. DOI: <https://doi.org/10.1525/9780520944459>
- Tucker, Mary Evelyn. 2019. "Journey of the Universe: Weaving Science with the Humanities." *Zygon: Journal of Religion and Science* 54: 409–25. DOI: <https://doi.org/10.1111/zygo.12516>
- Tucker, Mary Evelyn, and Duncan Ryūken Williams, eds. 1997. *Buddhism and Ecology: The Interconnection of Dharma and Deeds*. Cambridge, MA: Harvard University Press.
- White, Lynn. 1967. "The Historical Roots of Our Ecological Crisis." *Science* 155 (3767): 1203–7. DOI: <https://doi.org/10.1126/science.155.3767.1203>
- Wilson, Edward O. 1978. *On Human Nature*. Cambridge, MA: Harvard University Press.
- Wolf, Susan. 2010. *Meaning in Life and Why It Matters*. Princeton, NJ: Princeton University Press.

