Taylor, Bron, "A Green Future for Religion?" *Futures* 36: 991-1008, 2004.

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FUTURES

Futures 36 (2004) 991-1008

www.elsevier.com/locate/futures

A green future for religion? Bron Taylor*

Department of Religion, University of Florida, 107 Anderson Hall, Gainesville, FL 32611 7410, USA

Abstract

In recent decades, debates have erupted and intensified about the relationships between religions, cultures, and the earth's living systems. Some scholars have argued that ritual and religion can play a salutary role in helping humans regulate natural systems in ecologically sustainable ways. Others have blamed one or more religions, or religion in general, for promoting worldviews and cultures that precipitate environmental damage. Religious production in recent years suggests not only that many religions are becoming more environmentally friendly but also that a kind of civic planetary earth religion may be evolving. Examples of such novel, nature-related religious production allow us to ponder whether, and if so in what ways, the future of religion may be green.

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1. Introduction

Descriptive and normative ferment has erupted over the relationships between religions, cultures, and the earth's living systems, especially since the 1960s. Ethnographers Roy Rappaport, Marvin Harris, and Gerrardo Reichel-Dolmatoff, for example, focused on the role ritual and religion can play in regulating ecosystems in a way that supports traditional livelihoods and prevents environmental deterioration [29,30,51,56,57]. Better known are scholars who blamed one or more of the world's religions for fostering environmentally destructive attitudes and behaviors [38,42,62,63,77,82], often proffering views about what other religions do or, if reformed, could do to promote environmentally beneficent behaviors [6,8,9,12,17,61]. Much of this discussion was written upon a Darwinian landscape where, for some, secularization and the extinction of religion seemed a real possibility. The present

^{*} Tel.: +1-352-392-1625.

E-mail address: bron@religionandnature.com (B. Taylor).

¹ For a good overview of the main streams of the secularization thesis see Wilson [84]. What surprises me is how little explicit mention of Darwin's understandings there is in the secularization literature, including in Wilson's otherwise excellent overview.

analysis also assumes: (1) environmental degradation is becoming increasingly obvious and (2) the diversity of life came to exist through biological evolution. Such evolutionary and ecological perceptions provide a critical background to ponder: Will the future of religion be green?

The answer depends on a number of things, including the definitions of religion (in general) and "green religion" (in particular). For reasons that will become clearer as the discussion proceeds, I will here follow David Chidester [11: p. 4] in defining religion as "that dimension of human experience engaged with sacred norms". Among the many ways "green" religion can be constructed I will ruminate on three.

2. Green religions are environmentally concerned world religions

During the last few decades a field known most often as "religion and ecology" emerged focusing first on identifying the obstacles that the worlds' mainstream religions may pose to environmental sustainability, and secondly the resources such religions may have available for promoting environmentally beneficent behaviors. A third, normative agenda often accompanied these two more descriptive ones, to promulgate the religious beliefs and practices that produce environmentally responsible behaviors, reappraising and reconfiguring the traditions as needed so they can provide the needed conceptual, spiritual, and practical resources for environmentally beneficent behavior.

The bulk of the energy of the new field went into "mining" this or that religious tradition as a "resource" for environmentally sustainable livelihoods and activism. These were usually written either by devotees of the traditions they were exploring, or by scholars devoted to the study of specific traditions who, generally speaking, usually had some personal affinity with them, as well as a desire to help them "turn green".

Many examples of such religious production are reviewed in *The Encyclopedia of Religion and Nature* (2005); here I will focus on two scholarly examples. In 1990, a group of scholars successfully proposed to the American Academy of Religion the formation of a Religion and Ecology Group to study and help transmogrify religions along greener lines. Its first series of sessions was held in 1991 and it continues today. Many of its most active members later became involved in the most impressive scholarly project to date in the emerging "Religion and Ecology" field—a series of conferences that ran between 1996 and 1998 entitled "Religions of the World and Ecology". This was followed by a similarly named Harvard University Press book series (published between 1997 and 2004). The conferences were hosted by The Center for the Study of World Religions at Harvard University, with support from a variety of environmental and animal welfare groups, and organized by two Bucknell University Religious Studies Professors, Mary Evelyn Tucker and

² See Taylor [71: pp. 175-177] for further discussion of definitional conundrums related to religion and nature.

John Grim, who also edited the book series (and had been active in the Religion and Ecology group mentioned earlier).

Tucker and Grim began the series forward in an apocalyptic tone:

Ours is a period when the human community is in search of new and sustaining relationships to the earth amidst an environmental crisis that threatens the very existence of all life-forms on the planet. ... As Daniel Maguire has succinctly observed, 'If current trends continue, we will not' (Tucker and Grim in Tucker and Williams [78: p. vi]).

They clearly believed that the roots of the environmental crisis reside in defective religious perception, "We no longer know who we are as earthlings; we no longer see the earth as sacred" [78: p. xvii]. This, of course, implies that earlier humans had a different and superior religious sensibility toward nature.

The clearly stated aim of the series was to establish a common ground among diverse religious cultures for environmentally sustainable societies. Scholars could contribute significantly to this effort by identifying and evaluating

the distinctive ecological attitudes, values, and practices of diverse religious traditions ... highlight[ing] the specific religious resources that comprise such fertile ecological ground: within scripture, ritual, myth, symbol, cosmology, sacrament, and so on (Tucker and Grim in Tucker and Williams [78: p. xxiii].

Between 1997 and 2004, 10 volumes appeared in the series, exploring what the series editors decided were the world's major religious traditions: Buddhism, Christianity, Confucianism, Daoism, Hinduism, Indigenous Traditions, Jainism, Judaism, Islam, and Shinto. Most of the scholars who wrote for the volumes seemed to share the objective of the series editors, hoping to find and revitalize the green dimensions of all these religions. In 2003, Tucker published her own, optimistically titled book, *Worldly Wonder: Religions Enter Their Ecological Phase* [79], reflecting on such efforts to turn the world's religions green.

Other scholars (I will discuss two philosopher examples) have also sought to uncover the green potential in specific or diverse religious traditions, even though they did not personally find the overarching worldviews of such traditions compelling.

Max Oelschlaeger [44], for example, promoted the greening of Christianity in Caring for Creation: An Ecumenical Approach to the Environmental Crisis. This was a striking publishing turn, in that three years earlier he published The Idea of Wilderness [43], waxing lyrically about what he surmised was the ecologically salutary, mythic, consciousness—and concomitant ecologically beneficent lifeways—of "Paleolithic" peoples.

In Oelschlaeger's view [43: p. 12], these foraging peoples viewed nature as feminine, alive and sacred, sharing what contemporary scholars might call animistic and/or pantheistic/gaia-like worldviews. They also felt strong kinship obligations toward non-human life. With kindred spirits such as Paul Shepard and various deep ecology proponents, Oelschlaeger asserted that the eco-fall was coterminous

with the advent of Neolithic agricultures, which brought social and religious hierarchies (paralleling the emergence of monotheism), warfare, and a new attitude toward nature as enemy, triggering ecological decline [43: especially pp. 28–30,63]. Although recognizing the difficulties, Oelschlaeger [43: p. 8] expressed hope for a Paleolithic "counterrevolution" that would reinvent a new-old mode of consciousness and inaugurate a "posthistoric primitivism" [43: p. 7], reharmonizing life on earth. Caring for Creation [44] could be seen as a kind of interim ethic for Oelschlaeger, a short-term way to turn "Judeo-Christianity" green, until the advent of the deeper, paleo-revolution.³

Baird Callicott also approached religion instrumentally, but even more ambitiously. When he turned to world religions, he sought to contribute to the greening of the whole lot. In a series of works, culminating in Earth's Insights: a Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback [6], he sought to identify the religious obstacles to and resources for green behavior in a wide variety of cultures around the world. He nevertheless insisted that to be ecological and compelling, they must be updated in such a way so as to cohere with evolutionary science ([6], cf. especially chapter 9). Commenting a decade later on the "greening" of the world's major religions and his admittedly modest role in promoting this trend, he revealed that his more personal interest is to develop "Natural History as Religion" along the lines evocatively, if subtly, hinted at by the great 20th-century ecologist Aldo Leopold. As Callicott put it, writing in 2002 (in an encyclopedia published in 2005):

It would be nice to think that the current greening of these and many other religions were a spontaneous and wonderfully coincidental process. But the greening-of-religions phenomenon is, in my opinion, a response to and an implicit affirmation of the more scientific evolutionary and ecological worldview so elegantly and attractively expressed by Aldo Leopold. If it weren't for ecology we would not be aware that we have an 'ecologic crisis'. If it weren't for the theory of evolution we would be both blind and indifferent to the reduction in global biodiversity. The world's newly green religions thus tacitly orbit around the evolutionary-ecological worldview. I myself consider most religions—especially the Abrahamic family of religions—to be grounded in primitive superstition and ignorance. (In "Monument to the Pigeon", Leopold says that such

³ In a cautious reflection entitled "Paleolithic Religions and the Future", the reader can surmise that Oelschlaeger still hopes for a paleo-counterrevolution, though he is not predicting one. He concluded, "If the pervasive ecological dysfunctions of the modern age are rooted in narratized religious traditions that separate the spiritual and material, then paleoreligion, surely a system of belief more attuned to the connections between humankind and nature, has relevance to the future. Can contemporary people, steeped in textual religiosity now several thousand years old, somehow recover religious sensibilities that connected rather than separated them from the web of life? Only time will tell" [45]. By narratized religious traditions that sever the spiritual and material worlds I surmise he means text-based, monotheistic religions.

⁴ For criticisms of *Earth's Insights* see Hester et al. [32] (Callicott's reply pp. 291-310) and *Worldviews* 1:2 1997, a special issue devoted to Earth's Insights that I edited, which includes a rejoinder.

ideas as God creating man in His own image "arose from the simple necessity of whistling in the dark".) I am, however, immensely grateful for the greening-of-religions phenomenon and have modestly contributed to its development. The religious potential of natural history that Leopold so beautifully tapped but only scarcely explored is perhaps centuries away from its full actualization. But while a true—that is, an epistemically sound and scientifically compatible—religion gestates, people now have to be reached where they are with some kind of environmental ethic. And for most people, their religion seems to be among the most compelling of motives. If the popular traditional religions can be marshaled to achieve a better fit between global human civilization and the natural environment in which it is embedded, I shall not worry their green apologists, expositors, and theologians with logical and philosophical quibbles [7].

This remarkable passage reveals that his efforts to plumb the worlds religions for their potential in shaping environmentally beneficent behavior is instrumental, for Callicott is not really a religious believer in the conventional sense, namely, one who believes in divinities that somehow transcend this world. Callicott is like Oelschlaeger in his instrumental effort to "turn green" religion(s) that he does not believe in—but he is unlike Oelschlaeger in that he would, presumably, find superstitious the kind of Paleolithic spirituality Oelschlaeger seeks to apprehend and revitalize.

Oelschlaeger and Callicott, participants though they may be in the effort to turn mainstream religions green, in their own constructive efforts, express two more perspectives I will next consider. Oelschlaeger provides an example of the many efforts to rekindle (if not invent) spiritualities that consider nature directly sacred in some way. Meanwhile, Callicott's reflection—in which he also likened Leopold's A Sand County Almanac [38] to "a book of scripture for a new religion of natural history", while describing how in various ways it resembles a sacred text—suggests not only the possibility of a revitalization of spiritualities that explicitly treat nature-assacred in some way. It hints at the possibility of entirely new forms of nature religion that move beyond supernaturalism and are based on scientific understandings and narratives.

3. Green religions are "nature-as-sacred religions"

There are blurry lines between the three understandings of green religion I am focusing on here. For example, whatever social scientific curiosities may animate scholars involved in the AAR's Religion and Ecology Group and the Harvard World Religions and Ecology conferences and book series, and whether or not they feel loyalty and affinity toward the traditions they focus upon, most of them seem to share a belief that nature is sacred (in some way); and this conviction appears to be tethered to ethical concern about the environmental decline.

Such sentiments are also central to the identities of a number of groups whose participants self-consciously consider themselves engaged in "nature religion" and

confess that nature is sacred. These nature religions include paganism, many if not most indigenous religions, and certain New Age and New Religious Movements. Various environmental thinkers and groups also qualify [69].

In this *Futures Journal*, Christopher McIntosh has provided a thoughtful analysis of prospects and obstacles to the "Rebirth of Paganism" in the western religious future. To his astute analysis I would note also the explosion of scholarly and popular books devoted to such spirituality (for the best scholarly ones, see Harvey [31]; Hutton [33]; Pike [46]; Salomonsen [60]; and York [87]). Paganism's and Wicca's increasing popularity on American Television may be one signal of its growing vitality.⁵

Pagans generally express affinity with what they perceive to be the nature-beneficient spiritualities and lifeways of indigenous peoples, viewing these as kindred to their own religious outlooks. Some try to draw on such spiritualities in their own religious lives (as do many New Age practitioners). However, controversial this may be [47,58,64,70,88] it is clear that apart from the predominantly Caucasian populations involved in contemporary, Euro-American Paganism, there has also been a stunning revival of indigenous cultures and spiritualities purporting to consider nature sacred and promoting ethics of kinship toward all creatures.

Here again, the literature is proliferating. The trope of the ecological Indian, at least if religiously and culturally traditional, has broken out widely in western culture. Evidence ranges from the hard work of indigenous peoples trying to prevent the extinction of their languages, upon which ceremonies and connections with the natural and spirit worlds depend [28], to the scholarly analyses of "traditional ecological knowledge" and its value to the management of ecosystems [3,18,37,48,49,83], to political lobbying combined with legal and environmental activism seeking to protect places considered sacred and essential to native lifeways cf. [19,25,81], to internal ethnographic and archeological work reconstructing traditions imperiled by generations of oppression and neglect. Even if sometimes simplistic and romantic, western popular culture has increasingly responded with positive affirmations of the perceived "nature-as-sacred" spiritualities of indigenous peoples.⁶

⁵ As the fantasy novels by Tolkien about a "middle earth" populated by enchanted and devilish earthly and celestial beings, governed by magic and the struggle over who controls it, has become a resource for many contemporary pagans, it does not seem a stretch to wonder about the long-term religious impact of the Harry Potter Phenomenon. For the diverse tributaries in contemporary nature spirituality, see Taylor [73].

⁶ For a good representative overview of such a view see Suzuki and Knudtson [66]. Two scholars have controversially challenged the "ecological Indian" stereotype. Sam Gill argued that the notion of "Mother Earth" in Native American cosmology is a relatively recent invention created largely by Westerners and creative Indians responding to them, rather than a long-term aspect of Native American cultures [22,24: p. 141]. Nevertheless, Gill [21,23] elsewhere has argued that such cultures often have dimensions that are environmentally friendly. William Denevan [13] and Shepard Krech [36] have challenged the stereotype of the ecological Indian who leaves the land untouched and has always lived in perfect harmony with it.

The Disney movie *Pocahontas* (1995), which celebrated such spirituality, provides our first example. The film's directors Mike Gabriel and Eric Goldberg reported afterward that in the film they "tried to tap into [Pocahontas'] spirituality and the spirituality of the Native Americans, especially in the way they relate to nature". The animistic nature spirituality and environmental kinship ethic of the movie was reincarnated at Disney World's Animal Kingdom in Florida, which opened in 1998. There a performance entitled "Pocahontas and Her Forest Friends", replays the story and its quest for kinship and harmony among all creatures, explicitly asking audiences, "Will you be a protector of the forest?" 8

The opening ceremonies of the 2002 Winter Olympics in Salt Lake City Utah provides a second example, when a putatively environmental reverence for mother earth was celebrated on ice. Native Americans from five of the region's indigenous nations offered in their own languages (translated into the official Olympic ones) both welcoming messages and spiritual blessings. Including tunes from indigenous flute music, skaters performed an Indian-inspired dance, all in synch through native drumming with the "drumbeat of mother earth" herself. The narrator underscored the environmental "mother earth spirituality" that is commonly believed to be central to the continent's indigenous peoples. Many of the Native American participants were thrilled to be able to present their cultures in a positive way to a television audience estimated at three billion.

Many New Age and New Religious Movements, environmentalism itself, and mainstream religions as well, have attempted to learn, borrow, appropriate, or steal (depending on one's ethical evaluation of such phenomena or the specific example of it at hand) from indigenous religions. While New Age religion has a reputation for otherworldliness and inattention to politics, viewing consciousness change as the prerequisite to positive social change and reharmonizing life on earth, some of its proponents view environmental protection and restoration as important to the process, for healthy ecosystems contribute critically important energies to the envisioned and needed consciousness transformations. James Redfield's series of books on the "Celestine Prophecy" provide one example (see [53–55]; cf. [74]). These books and ethnographic fieldwork show that under the "cultic milieu" of oppositional religious subcultures there is substantial crossfertilization [35]. This helps to explain the greening of the New Age movement as well as aspects of New Age worldviews and practices permeating contemporary environmental movements [72,73], cf. [87].

When considering together the "greening of religions" phenomena and the growth and revitalization of "nature-as-sacred" religions—recognizing this involves

⁷ See www.movieweb.com/movie/pocahontas/pocprod1.txt. This from an anonymously written movie review accessed May 2003.

⁸ This quote is from park literature describing the show.

⁹ See, e.g., the article by Kenny Frost of the Southern Ute Drum, published by *Canku Ota* (Many Paths), 9 March 2002, issue #56, an "online newsletter celebrating Native America" found at www.turtletrack.org. [The article conveys the pride many native Americans felt at the performance, and was accessed June 2003 at www.turtletrack.org/Issues02/Co03092002/CO_03092002_Olympics.htm.]

great diversity of religionists, activists and scholars, all of whom believe the earth is in peril by human behavior yet worthy of reverent care—it is unsurprising that initiatives are underway to bridge the gap between what is (ecological decline) and what ought to be (environmentally sustainable lifeways). Many examples could be provided, but presently I will mention one that could prove globally significant, the "Earth Charter".

First proposed by Maurice Strong, a Canadian who served as General Secretary for the 1992 "World Summit on Environment and Development" sponsored by the United Nations and held in Rio de Janerio, the Earth Charter went through an extensive drafting process in the late 1990s, designed to gain maximum support from the international community. A draft presented a decade later to the United Nations during the "World Summit on Sustainable Development", a follow-up to the Rio conference in Johannesburg South Africa, spoke of "respect and care for the community of life in all of its diversity" and claimed that protecting and restoring the ecological integrity of the earth is a "sacred trust", inseparable from the quest for justice and peace, while concluding "let ours be a time remembered for the awakening of a new reverence for life". 10

The initiative mimics the strategy that guided the United Nations Declaration on Human Rights: it seeks United Nations ratification hoping this can be leveraged to facilitate better environmental behavior among individuals, institutions, and nation states.

Maurice Strong's own speeches are laced with Gaia-theory inspired earthen spirituality, and the Charter's most famous early proponent was Mikhail Gorbechev, who has confessed his own pantheistic form of earthen spirituality: "I believe in the cosmos... nature is my god. To me, nature is sacred. Trees are my temples and forests are my cathedrals" [27: p. 15].

Many would be surprised to hear the former leader of the Soviet Union expressing his religious fidelity to the earth, or to learn that he is now the President of Green Cross International, devoting his life to turning international institutions green. It may be equally surprising to hear scientists, some of whom have no belief in supernatural divinities, relying on metaphors of the sacred to express their awe at the wonders of the universe and reverence for life. A statement issued in the early 1990s by a group of prominent scientists that included Stephen Jay Gould, Hans Bethe, Stephen Schneider, and Carl Sagan, captures such sentiment:

As Scientists, many of us have had profound personal experiences of awe and reverence before the universe. We understand that what is regarded as sacred is more likely to be treated with care and respect. Our planetary home should be so regarded. Efforts to safeguard and cherish the environment should be infused with a vision of the sacred [66: p. 227], cf. p. 167.

The preceding examples suggest the possible emergence of a civic earth religion in which people around the world, despite diverse and sometimes mutually exclus-

¹⁰ See www.earthcharter.org for the entire text, from which these quotes are drawn.

ive religious worldviews and national interests, nevertheless express religious fidelity to the biosphere. Just as the above-quoted natural scientists assert that we should resacralize our perception of the universe, so do many others, whether in print or interviews. In his interview-based book on biologists who have devoted their lives to the conservation of biological diversity, David Takacs concluded, for example, "Some biologists have found their own brand of religion, and it is based on biodiversity. [They] attach the label *spiritual* to deep, driving feelings they can't understand, but that give their lives meaning, impel their professional activities, and make them ardent conservationists" ([68: p. 270], cf. especially pp. 254–270).

Some of these figures have been influenced significantly by the former Passionate Priest Thomas Berry, whose works (see especially [5]; and [67])¹² have led to a great deal of religious production that consecrates scientific cosmological and evolutionary narratives. Indeed, Berry's works both captured and catapulted forward an emerging trend whereby scientific narratives are sacralized and the diversity of life is accorded reverence, inspiring environmental protection efforts. Other figures involved include Mary Evelyn Tucker and John Grim, the driving forces behind much of the religion and ecology ferment in the 1990s discussed previously, and a close associate, the biologist Ursulla Goodenough. Tucker and Grim were inspired by the work of Tielhard de Chardine (who had earlier influenced significantly both Thomas Berry and Brian Swimme, his collaborator in consecrating "The Universe Story"), and they served for years as Vice President and President of the American Tielhard Society. Goodenough's book Sacred Depths of Nature [26] also illustrates how science can lead to religious reverence for life.

So does the work of the better-known natural scientist Wilson, especially his Biophilia [85] and Consilience [86]. Science writer Connie Barlow, whose Green Space, Green Time: The Way of Nature [2] draws on diverse scientific narratives, puts forward this kind of spirituality with unusual forthrightness. In Wild Earth [1], a wildlands conservation journal founded by radical environmentalists including a number of prominent biologists such as Michael Soulé and Reed Noss, Barlow asserts that environmentalists should not be embarrassed about grounding their rationale for protecting biodiversity in their own ecological religion: "Can we find the courage to proclaim that? I think we can and must. This essay is an exploration of how we secular enthusiasts of environmental values may not be (and certainly need not be) so secular after all" [1: p. 5].

Here, Barlow also asserted that Wilson hopes for an evolution in religions whereby spiritual feelings could increasingly be focused on "The Evolutionary Epic". Barlow should know, for after a November 1997 conference in Chicago attended by 450 that was co-sponsored by the American Association for the Advancement of Science (AAAS) and the Field Museum of Natural History, she

¹¹ Suzuki's and Knudtson's book, for example, includes many statements by scientists that they think cohere with indigenous religious worldviews, which they believe view the land and its creatures as sacred.

¹² Berry and many others discussed here (including Mary Evelyn Tucker and John Grim mentioned previously) are deeply indebted intellectually to Tielhard de Chardine.

and a number of others founded "The Epic of Evolution Society", recruiting Wilson to serve on the board of advisors, along with other prominent scholars including Goodenough, and Baird Callicott. The organization's mission was, essentially, to consecrate the story of the universe and biological evolution, and thus to "make sacred" life itself.¹³

One interesting aspect of this Epic of Evolution spirituality is that it can stand alone as something of a new religious movement or it can be grafted onto liberal forms of already-existing religions. Both approaches are well underway in the United States. As one example, Barlow and her husband Michael Dowd (who in 1991, published a book promoting Christian environmentalism) are pioneering an effort to bring the Epic into Churches and Synagogues. Their efforts and writings are featured at www.thegreatstory.org, where many of their essays can be found, including Dowd's "The gospel of evolution". In it, he quotes Thomas Berry and assures the reader that the universe can be trusted because we all belong to it—both suggestions bear little resemblance to orthodox Christianity. Also influenced by Berry and consecrating the universe story in ritual and lifestyle are the catholic sisters at Genesis Farm in New Jersey, who are themselves becoming increasingly and widely influential [75,76].

Some social scientists also argue that we should resacralize our perceptions of the earth or otherwise draw on metaphors of the sacred to express our valuing of the biosphere [4,63]. Meanwhile, the political theorist Dan Deudney, who demurs from considering himself religious, ¹⁴ nevertheless argues that the evolution of what he calls "Terripolitan Earth Religion" could displace provincialism and nationalism with loyalty to the biosphere, grounded in a sense of reverence toward it [14–16]. Environmental sustainability requires the construction of new international institutions and legal frameworks, Deudney believes, and given its scientific credibility, "Gaian Earth religiosity" is particularly "well suited to serve as the civic religion for a [desperately needed] federal-republican Earth constitution" [16: p. 318].

It is, of course, a matter of perception and definition whether some of these nature-oriented spiritualities count as religion. I see no reason to insist, however, that without supernatural beings there is no religion, ¹⁵ for there are many examples around the world where people feel and speak of a "spiritual connection" to nature, or of "belonging to" the earth (mother earth, or even mother ocean), or speaking of the earth as "sacred", without any concomitant confession of supernatural beliefs ([71,72]; for further example see [10]).

¹³ See Rue [59] for an excellent introduction to the Epic of Evolution, and search the internet with this phrase to see the burgeoning of such religio-science construction.

¹⁴ Personal conversation, 1 February 2003, Philadelphia, Pennsylvania.

¹⁵ Here, I am taking exception to the "Anthropology of Religion" entry in the *The Dictionary of Religion*, which claims that "an adequate definition" understands religion as "a system of beliefs and practices that are relative to superhuman beings" [65: p. 893]. See Taylor [71: p. 277] for further analysis.

4. Green religions as post-supernaturalistic "spiritualities of connection" to nature

Because there are blurry lines between the three types of green religion I have been analyzing, we have already provided some examples where individuals involved in green religious production use rhetoric of the sacred to express awe and reverence toward the "miracle" of life or wider universe, while disavowing supernaturalism of any kind. In this concluding section, I wonder whether the emergence of such religion presages the religious future.

One entry point into such puzzlement is to ask: Are the social and environmental conditions that have given rise to the three types of green religion here discussed likely to increase and intensify or wane? I think there are two critical factors catapulting forward these developments—in a complex mix with many other variables—but nevertheless in ways that are decisive: environmental degradation and evolutionary science.

Environmental degradation has become increasingly obvious and alarming, and this is increasingly grafted into existing religions (green religion type 1), and mixed in with revitalized and new forms of nature-as-sacred religions (green religion type 2). This represents a significant innovation in the history of religions, where apocalyptic expectation arises not from the fear of angry divinities or incomprehensible natural disasters but from environmental science. This environmental science is, of course, built upon a Darwinian foundation which, on the one hand, provides a way to understand the loss that comes with anthropogenic extinctions, while on the other hand, this science erodes the supernaturalistic beliefs that are the ground of most religions (including green religion type 1), and most nature-assacred religions (green religion type 2), which often retain some supernaturalism.

The point of all this that is most relevant to speculations about the future of religion (in general) and green religion (in particular) is that evolutionary science is the central driver producing green religion type 1 and 2 (to the extent that this type retains some sort of supernaturalism)—BUT—this science makes less plausible the metaphysical foundations of the first two types. It is a story as old as Galileo and as new as the Hubble Telescope: as human optics improve, the further out into the Universe we look, the more difficult it becomes to believe in divinities residing beyond the knowable world. Science provides a cosmogony that, while leaving many mysteries unexplained, can stand independent of divine creativity. Evolutionary science, ironically, challenges and tends to make incredible supernatural religions even as they have begun to turn green through an appreciation of what are, at their roots, evolutionary insights.

Returning to the question as to whether ecological degradation and evolutionary science are likely to increase or decrease in their cultural influence, it seems irrefutable that they will increase. The reason is simple: they are easier to apprehend than the divinities upon which supernatural worldviews depend.

Indeed, within hardly more than a century, it appears that evolutionary understandings have gained a solid foothold if not widespread acceptance among the world's intelligentsia (evolution is increasingly taught in secondary schools and

Colleges, although a successful cultural resistance has kept it out in regions also). Evolution may also be on the way toward acceptance among less well-educated sectors. Unfortunately, in both cases, the evidence is scanty and largely anecdotal: a recent literature search turned up no empirical data on the relative proportion of individuals who believe in evolution. This is an important question ripe for study.

Within only the past several decades, billions of people recognized that environmental degradation is real and threatening; probably because this is more easily observed by ordinary individuals, this perception appears to have grown faster than belief in evolutionary processes. Sometimes this degradation is viewed in moral, aesthetic, or spiritual terms, viewed with dismay as eroding the beautiful if not "miraculous" and "awe inspiring" diversity of life on earth.

Given the comfort that supernaturalism offers to humans facing an apparent mortality—it would be a fools errand to suggest its total eclipse. It seems a reasonable hypothesis, however, in the light of recent decades of intellectual, cultural, and religious developments, to expect supernatural religions in general, including those forms that fit our green religion types 1 and 2, to gradually decline. It may be that the third type, now only nascent and growing within small enclaves of devotees around the world, will inherit much of the religious future; a religion in which people feel awe and reverence toward to the earth's living systems and even feel themselves as connected and belonging to these systems. Such an affectively grounded spirituality of connection might not retain anything we would recognize in today's more common supernaturalistic metaphysics, but it might nevertheless require religious terminology to verbally capture the feelings. It might also require ritual forms to physically venerate the living systems that the word "sacred" is deployed to value fully.

A recent book published by William Jordan III reflects thoughtfully on a fascinating variety of cultural developments, much of which fits under my "spiritualities of connection"—green religion type 3 rubric. It simultaneously provides an example of a nascent green religion that is likely to increase in cultural importance in the coming decades. Written by an educator with a background in biology who has been a close observer and leader of the restoration movement for the past quarter of a century *The Sunflower Forest: Ecological Restoration and the New Communion with Nature* [34] argues that such work is a way in which we can confront the shame we feel for what we do to nature as we live and take from it.

Jordan proffers a utopian future in which all over the earth, ecological protection and restoration practices will become intertwined with performative ritual that will confront the problematic aspects of our relationship with nature, and through which community, beauty, the sacred, and other higher values can evolve. As these trends unfold, Jordan believes, people will come to understand the places they live in and depend on as sacred and with such perceptions will come corresponding ethical obligations.

While Jordan read widely in anthropology, religious studies, and other disciplines as he thought about his own experience and constructed a vision of a religious future shaped by ecological restoration, there are hundreds of groups across the United States and around the world who are finding their own ways to

such practices. One such group, the "Wild Ones", which is rapidly spreading across the United States, is on a mission to reestablish prairie ecosystems in pastures, farms, school grounds, and other places where they existed before Euro-American settlement. Meanwhile, the Kenya Greenbelt Movement, which is now spreading its tree planting model widely in Africa, provides a well-known international example [39,40].

Perhaps even more significantly is how nature-related spirituality is spreading into institutions with global reach. I have briefly mentioned the Olympics, from which I can provide but one example. But the World Summit on Sustainable Development hints even more at the possible evolution of a global, civic earth religion.

The most obvious place to look for evidence at this venue would be in the Summit's reception of the Earth Charter, which did receive significant positive attention. It was, for example, mentioned positively by several heads of state including South African President Thabo Mbeki when he opened the Summit. It also drew positive mention in a draft of the conference's concluding "political declaration", before explicit mention of it was stricken at the last minute from it. Some of the Charter's language, was incorporated into the Summit's political declaration, however.

But the evidence goes further and is tantalizing. The opening ceremony was framed by an evolutionary cosmogony, wherein during the official welcoming comments Africa was called the "Cradle of Humanity" after a nearby archeological site known locally as Sterkfontein, where the now extinct pre-human Australopithecus, dating back four million years, had been found in long-forgotten caves. Designated a World Heritage Site by the United Nations two years previously, the site's "Cradle of Humanity" name was woven into many of the Summit's speeches and ceremonies. It was generally used to express a kinship ethic, deduced from the consensus scientific view that all humanity had emerged from Africa. Even more significantly, perhaps, was the pageant-like performance that followed the opening speeches, which expressed a non-sectarian reverence for the "mother earth" and all of her creatures. In this musical theatre, a child was found wondering what happened to the forests and to the animals. In response, in prose and song, a cosmogony compatible both with evolution and Gaia spirituality was articulated. The earth was conceived of as a beneficent person while at the same time, the emergence of complex life on earth was depicted in a way suggesting an evolutionary unfolding. The story also provided an explanation for moral and environmental decline. In the words of one character:

Life began with the earth, then came the plants, then the animals, and finally the human beings. We are all children of Mother Earth, which is why we have to take care of her and be her custodians. She is the hand that feeds us and the heart that heals us. But I'm sad to say, we are failing. Greed and foolishness have even dipped into the fabric of humankind. We are failing to love and care for mother earth.

After this, dystopian and apocalyptic music and imagery followed, depicting a bleak future. Then a child asked plaintively, "Is there anything we can do?" This question was answered hopefully and positively, citing as evidence the United Nations Summit itself: "The nations are gathering, and the life and health of Mother Earth depends on their decisions". The mood shifted from dystopian to utopian during the finale of an opening ceremony extravaganza as a gigantic, iconic earth descended into the assemblage of earth's creatures below her. The dancing denizens of the then earth celebrated (and symbolized) a utopian hope for a planet in ecological and social harmony, with human beings uniting to repay Mother Earth for her many gifts.

Not only was the Cradle of Humanity mentioned in this ceremony and in various speeches at the Summit, but pilgrimages were made there. In one such pilgrimage (1 September 2002) the famous primatologist Jane Goodall accompanied the United Nations General Secretary Kofi Annan and South Africa's President Thabo Mbeki. After viewing the Australopithecus fossils, in his speech there Mbeki stressed how this and other such sites connect us to our evolutionary history and thus to each other. As he put it then, "When we say that this is your home, it is not merely that we want you to relax and enjoy our hospitality, but it is because in reality, this is in many ways a homecoming—a return to our common ancestors". He continued explaining that the site "traces the evolution of the significant part of our Earth as well as the interdependence of peoples, plants and animals, thus, in many ways [it is] teaching all of us how we can co-exist and ensure enduring prosperity for all species". Here he affirmed again, as the opening ceremony had earlier, an evolutionary worldview, while articulating an ethic of evolutionary kinship similar to that found in most contemporary green religion.

Political leaders like Mbeki and Annan, as representatives of the diversely religious people of the earth, have to be especially careful not to offend people of diverse faiths. This means they must scrupulously avoid sectarian religiosity. Through their support of the establishment of this World Heritage site, their pilgrimage to it, and their expression of the scientific narrative associated with it, however, they may well be quietly promoting new forms of civic earth religion, and establishing sacred places through ritual pilgrimage. It may be that such a religion, in which the evolutionary story, embedded in the broader Universe Story, fosters a reverence for life and diverse practices to protect and restore its diverse forms, will play a major role in the religious future of humanity.

¹⁶ Mbeki quotations are drawn from his 1 September 2002 speech, which was available in June 2003 at www.dfa.gov.za/docs/wssd029g.htm.

¹⁷ For a general discussion of how tourist pilgrimages can contribute to civil religion see Sears [89]. Engel's analyses [20], of World Heritage Sites and Biosphere Reserves as new humanly constructed sacred places fit in well with my speculations about the emergence of civic earth religion. So does the title of a book entitled *Man Belongs to the Earth*, published by UNESCO ([80: p. 10, 12]), which begins by quoting a speech attributed falsely we now know, (see [41]) to Chief Seattle (or Sealth, of the Squamish Indians), "The Earth does not belong to Man; man belongs to the Earth", as an example of the kind of worldview that could contribute to sustainability efforts.

Roy Rappaport [52: p. 28] once wrote, "Religious rituals [are] neither more or less than part of the behavioral repertoire employed by an aggregate of organisms in adjusting to its environment". It certainly seems plausible, in the light of evolutionary theory, to expect that over very long time frames cultural systems that do not prove adaptive to their producing organisms will not survive. If these two propositions are true, then it may be not only that the future of religion will be green; it may be that this is the only possible future for religion.

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