The year 2012 has been at the center of many millennial theories, commonly referred to under the umbrella term the "2012 phenomenon". These theories, which predicted important changes for humanity usually related to some kind of environmental apocalypse, are generally described as relating to the end of the Mayan calendar, to the common-era calendar date, 21 December 2012 (21.12.2012), and to "New Age interpretations".1

Since 2001 I have conducted fieldwork in Italy, Spain, and Portugal, focusing on Neopagan movements and, more generally, on contemporary spirituality, and I have come across very different narratives about 2012—so different that it seemed almost impossible to find two persons who agreed on the same interpretation. When mentioning the Mayan prophecy and the winter solstice, my interlocutors often added that other prophecies also indicated that 2012 was a meaningful year but that 21.12.2012 should not be taken as indicating a precise event so much as marking a period of change that would unfold slowly, over time.

Classical sociological theories have described religion as an antidote to the uncertainty of human existence, and prophecies have often been seen by social scientists as specific religious tools offering adherents answers about a future that, to nonbelievers, looked uncertain. However, I will show that, at least among my Southern European interlocutors, uncertainty was intrinsic to their expectations of what might unfold in 2012. We will also see that apocalyptic beliefs were not a central element of their worldview. Their focus was on ritual practice, not on prophetic theories; they were worried about the well-being of the planet and focused on what they could do to make a different world possible rather than on the specific contents of various theories. Referring to Gordon Melton's (1985) analysis of what happens when prophecy fails as well as to his concept of "spiritualization", I will argue that with respect to the 2012 phenomenon such spiritualization had already taken place before the prophecy "failed". In fact, we will see that in a certain sense this was a prophecy that could not fail.

Millennial religious groups are often convinced that they have access to a cosmic history or universal truth. They believe they play a key role in the history of humanity because they possess information that is hidden from most humans at a time when important changes are about to
take place. Typically, such groups share an apocalyptic worldview and expect that the world will progressively be transformed or even destroyed, with only a few elect and spiritually advanced persons surviving (see, e.g., Melton 1985; Smith 1988; Faubion 2001).

Although the 2012 prophecy fits well into this analytical scheme there are elements that distinguish it from previous apocalyptic phenomena. One important differentiating element is that the 2012 phenomenon was not intrinsic to one or more specific religious groups. Usually, religious apocalyptic groups represent a clearly identifiable minority that has to defend its beliefs from society’s prevailing critique and ridicule. The 2012 prophecy, on the contrary, gradually gained worldwide popularity from the 1980s onward, influencing not only those immersed in the milieu of contemporary spirituality but also the wider public in Europe, Australia, and the Americas, as well as China and Russia. Theories associated with 2012 were featured in bestsellers such as *The Celestine Prophecy* (1997) or *The Da Vinci Code* (2003) and in blockbuster films such as *Avatar* (2009).

In Mexico, Guatemala, and Belize the Mayan prophecy also acquired a distinctly political dimension and generated millennial expectations (Sitler 2012). In Andean countries such as Peru, Ecuador, Bolivia, Chile, and Argentina, different versions of an “Andean prophecy” about the “return of the Inca” developed, its plausibility reinforced by reference to millennial changes that related to the Mayan prophecy (De la Peña 2002; Galinier and Molinié 2006). Exactly how indigenous groups in Latin America appropriated versions of the 2012 prophecy is beyond the scope of this article; however, in Latin America at least, it seems as if this prophecy was used as the basis for political utopias and liberation movements that share compelling similarities with African prophetic movements (Comaroff and Comaroff 2001; Richards 2002; Sarró and Melice 2012; Llera Blanes forthcoming).

Before I continue my analysis let me briefly explain that “contemporary spirituality” is the umbrella term I am using to describe spiritual practitioners and movements that refuse to identify with a specific religious group. Often declaring that they are “spiritual but not religious,” such practitioners consider established religions to be conservative, misogynist, and controlling, and emphasize the importance of spiritual freedom and the human capacity to establish personal contact with divine forces. For the purpose of analysis, I also group under this umbrella contemporary Pagan movements such as neoshamanism and Goddess spirituality—groups that claim roots in pre-Christian pagan religions practiced by their European or American ancestors as well as by contemporary indigenous groups. Some or all of these groups have been and are still often described as “New Age”. I will not go into all the problems here related to the term “New Age” (see, among others: Sutcliffe and Bowman 2000; Wood 2007, 2010; Fedele and Knibbe 2013), but I will say that I avoid the term because it is perceived as derogatory by most of the social actors I have encountered (Fedele 2013: 14–15). Moreover, as we will see, beliefs about the arrival of a new era are evidently not as central as has been thought.

However diversified and flexible they were, my interlocutors’ apocalyptic theories did share two elements: they referred to the imminent risk of an “environmental crisis” and to “indigenous prophecies” regarding important changes that would transpire in 2012. By “indigenous prophecies” I am referring to theories related to the end of what is generally described as the long-term Mayan calendar (Sitler 2006: 25) but also to other theories that invoke Amerindian indigenous prophecies about 2012, for instance, the Inca prophecy (Galinier and Molinié 2006). While the so-called Mayan prophecy is the best known with respect to 2012, there are many versions and interpretations of this prophecy. Robert Sitler (2006, 2012) has argued that “investigations of the principal trends in the 2012 phenomenon reveal merely tangential connections to the realities of the Mayan world” (2006: 25). I will not analyze these indigenous prophecies in detail here, but I will summarize their main elements as follows:
since 1987 the planet has been undergoing important “vibrational changes” that will reach their maximum on 21.12.2012,
these major changes are coinciding with radical environmental changes and an important transformation of human consciousness,
there has been a gradual awakening of feminine energy, which will lead to a new kind of society that respects and venerates Mother Earth and which will grant equal rights to men and women, and
indigenous cultures worldwide (but especially in the Americas) have played an important role as guardians of Mother Earth.

What I describe here as “environmental spirituality” (see Sponsel 2010) is a corpus of theories that has many elements in common with Bron Taylor’s (2010) “dark green religion". Taylor (2010: IX), who adopts an “operative definition of religion” that “does not presume a belief in nonmaterial spiritual beings”, has described radical environmentalism and other forms of environmentalism as forming part of a religion “that considers nature to be sacred, imbued with intrinsic value, and worthy of reverent care.”

An influential theory in this context relates to the ecofeminist movement and to authors such as Riane Eisler or Mary Daly who see the domination of women as directly linked to the exploitation and domination of planet Earth. Under ecofeminism, monotheistic religions are accused of having described man as superior to woman and to nature, and to be among the main forces responsible for the current environmental crisis. These theories were particularly important for my interlocutors in Italy, Spain, and Portugal. For them, the Judeo-Christian oppositions between body and soul (Fedele and Llera Blanes 2011), heaven and earth, male and female, and the subsequent demonization of the body and the feminine fostered a negative conceptualization of the material world and women as being inherently sinful, related to a dangerous and satanic darkness.

The importance of recovering the connection with the “feminine” so obscured by the “Church” was explained to me by Gianmichele, a spiritual teacher in his fifties and a former leading member of Legambiente (Italy’s main environmental movement):

I was a national leader for Legambiente and was part of the national scientific sector for water and waste. I worked a lot. I came to see these things were as if working on the final links of a chain whose first links were never touched. It was like running after things whose real origin was somewhere else…. To give an example ... after campaigning for years to teach people how to sort rubbish [for recycling], or to conserve resources, I realized that, in reality, it was impossible to obtain permanent changes, even in the younger generations. Because, in fact, what was probably at the base of this behavior was a bad relationship with the universe, with the cosmos. It made no sense. If you ignore the relationship you have with Mother Earth, then any effort to raise awareness is useless, because the basic cause cannot be understood.

Although Taylor (2010: 84) argues that “apocalypticism is rooted in radical environmentalism,” the assumption that Earth is approaching a point of collapse is common to all the environmental groups he describes. Environmental apocalypticism also informs contemporary spirituality and has found its way into mainstream culture under the widespread assumptions that the planet Earth is overpopulated, that humanity produces too much toxic waste, and that we are rapidly consuming all available natural resources. Similar to Taylor’s environmentalists, my interlocutors considered the planet as a living being, usually identified as “Mother Earth”.

To summarize, the expected changes related to 2012 can be broadly divided into two categories:
1) Theories focusing mainly on the beginning of a new era for humanity and the planet:

According to this optimistic approach, the end of 2012 would be the beginning of a long period of peace and well-being for all inhabitants of the Earth. Owing to the ongoing efforts of a worldwide community of spiritual teachers, an increasing number of persons would have reached a high degree of spiritual elevation and a “critical mass” would be achieved. Humans would come to recognize their deep connection with Mother Earth and with all living beings, and a society based on gender equality and sustainable development would slowly emerge.

Those advocating these theories interpret the prophetic changes as manifesting apocalypse in its original sense, from the Greek ἀπό and καλύπτω, for “uncovering”; in other words, advocates anticipate the discovery of a knowledge that has long been hidden. Consequently, in criticizing monotheistic religions, which describe the end of the world as dramatic and painful, these optimists argue that there is no need for suffering to bring about change. Sofia, a Portuguese woman in her early thirties, explained this to me in 2009: “We had enough of God the Father and his judgment over humanity.” Criticizing Christian theories about the apocalypse and their focus on redemption through suffering and sacrifice, she added: “We have finally discovered that we are divine beings and that the planet we live upon is divine as well.”

2) Theories focusing on the urgent necessity to protect the environment:

The theories I would group in this category also describe the beginning of a new era but are inherently less optimistic. Humanity, these theories suggest, has gone too far in exploiting the planet and as a consequence there will be catastrophic events that usher in major changes. These catastrophes are usually thought to be natural events; even so, since 2008 there has been an increased tendency to relate capitalism as well to the exploitation of planetary resources and to consider the worldwide financial crisis as symptomatic of the collapse of the world “as we know it.”

Although my interlocutors rarely referred to it, there was also an implicit assumption that only those who have prepared themselves through spiritual practices and who have recognized and honored their deep connection to Mother Earth would in fact survive. Several spiritual teachers even traveled around the world, Southern Europe included, giving workshops, helping people to prepare for the “vibrational changes” related to 2012 (see Farahmand 2013). Although these leaders rarely mentioned what would happen to those who did not prepare, there was an implicit assumption that spiritual practitioners would be better equipped for survival.

Also characteristic of these theories is the suggestion of an imminent “revenge of Mother Earth” in which the planet will eventually re-establish her own supremacy over mankind. Natural disasters such as earthquakes, tornadoes, or tsunamis (such as the devastating one in 2004) would allow the Earth to reduce the number of humans considerably, but extreme versions of this revenge theory foresaw the end of humanity if humans did not quickly change their attitude towards the planet.

As Taylor (2010: 85) points out, such apocalyptic expectations are ambiguous, because “the decline of ecosystems and the collapse of human societies may pave the way back to an earthly paradise.” According to what amounts to an environmentalist inversion of the Christian apocalypse, the vengeful transcendent God/Father judging humanity on doomsday would be replaced by an immanent Earth/Mother who spares only those who have learned to live in accordance with Her rules. In this context Mother Earth figures as an ambiguous entity, both divine but mortal, in need of our protection but equally capable of revenge and destruction (Taylor 2010:40).

Referring also to Melton (1985) and Van Fossen (1988), Lorne Dawson (1999: 73) suggests that prophecies should not be seen as simple predictions of a future event but as “part of a denser
continuum of cosmologically significant beliefs and activities that can embrace and contain contradictions." This seems to be particularly true with respect to the 2012 phenomenon: even if a specific date was sometimes mentioned, it was rarely thought to coincide with a major event that could change everything; rather, it was described as the culmination of a long process of changes that would bring further, more significant changes. Most of my interlocutors shared the opinion that these changes would not simply arrive while humanity stood around observing. Humanity had played a crucial role in causing the current environmental crisis—active participation was now needed to reverse the destructive arc and make possible a different world.

A case in point is a remark made at a 2009 women-only workshop held in Lisbon. The workshop, which was hosted by a neoshaman from Chile, was designed to help women to reconnect with Mother Earth and their own feminine essence. When one participant referred to the Mayan prophecy, the leader responded by offering her theory about what to expect, highlighting the importance of practice over belief. “The most important thing is not what 2012 will bring to you,” she said, “but what you can do to make the prophesied changes come true.” She then went on talking about the importance of humanity’s connection with Mother Earth.

Generally, my interlocutors rarely used the term “apocalypse”, which they associated with violence—thereby making it a word to be avoided (see Arthur 2008). Yet they did espouse apocalyptic beliefs, often in an implicit way that made it sometimes difficult to discuss such issues with them. Like Shawn Arthur’s (2008: 201) American Wiccans, my interlocutors “approached their apocalyptic millenarian beliefs as obvious assumptions, and they interacted with others as if there was no question about everyone holding, or at least being aware of, these beliefs.”

Spiritual practitioners also organized common rituals to enhance the raising of consciousness that would in turn foster the predicted changes; they learned practices to prepare their own physical and spiritual bodies for the boosted energy level expected for the winter solstice, or they gathered in discussion groups with friends to exchange their feelings and expectations. I attended several workshops that were not explicitly centered upon the 2012 prophecy but during which leaders shared their insights about 2012 and led rituals to foster cosmic change.

When I then asked the participants to elucidate certain aspects of the theories that had been explained during a workshop, I often found that, having taken notes, I was the one who best remembered what had been said. Other participants were more eager to describe their spiritual experiences during the rituals rather than discuss prophetic theories. Whenever I tried to challenge the leader’s explanations, I expected to be criticized or pressed into conceding that the leader was right; instead, I found that many of my interlocutors easily reinterpreted the leader’s explanations and added to it sometimes-contradictory information they had gleaned from workshops or books.

In February 2005, at a women-only initiation ceremony near Zaragoza (Spain), I was discussing issues related to the Mayan prophecy with a small group of participants who specialized in Mayan astrology. After answering some of my questions about the Mayan prophecy, one of the women told me: “You are too much in your head. The kind of information that we are receiving has to be considered on a symbolic level, you should not take things so literally.” She then went on to explain that the Maya had a way of thinking and conceptualizing the world that was very different from ours today and that their prophecies could fully be understood only if you opened up to receive information through the flow of “energy”.

Social scientists have argued that a focus on practice and ritual rather than belief and dogma is an important characteristic of contemporary spirituality (Sutcliffe and Bowman 2000; Bender 2010; Fedele and Knibbe 2013). I would add to that the observation that the spiritual practitioners I encountered felt free to create their own bricolage of theories about what to expect in 2012. Their focus, it must be said, was not prophetic wisdom but the rituals they could celebrate to foster transformation and to prepare themselves for 2012.
Melton (1985) has argued that, contrary to the assumptions in the now classic *When Prophecy Fails* (Festinger et al. 1956), what usually happens when a prophetic date does not usher in the expected changes is not so much an increase in proselytization to reduce dissonance, but rather a “spiritualization” and a subsequent “reaffirmation” of the prophecy’s message. Melton (1985: 21) observes: “The belief that prophecy is the organizing or determining principle for millennial groups is common among media representatives, nonmillennial religious rivals and scholars. In their eagerness to isolate what they see as a decisive or interesting fact, they ignore or pay only passing attention to the larger belief structure of the group and the role that structure plays in the life of believers.” Referring to what commonly transpires after prophecy fails, he then continues: “the ultimate and more permanent reconceptualization is most frequently accomplished through a process of ‘spiritualization.’ The prophesied event is reinterpreted in such a way that what was supposed to have been a visible, verifiable occurrence is seen to have been in reality an invisible, spiritual occurrence. The event occurred as predicted, only on a spiritual level” (1985: 21).

Following Melton, I argue that in the case of contemporary spirituality, belief in the dawn of a New Age has been granted too much significance, to the point that this belief is considered a determining principle of the entire movement—despite the fact that spiritual practitioners began to resist the label “New Agers” in the 1990s. Moreover, I suggest that in the case of the 2012 prophecy, the spiritualization process Melton describes transpired even before 21.12.2012—with the prophesied changes reinterpreted as having already taken place on a spiritual, “energetic” level, visible and perceptible only to those who were attuned to such subtle change.

A good example of this process was the walk to “kilometer zero” of Iberia in Madrid on 21–22 December 2012. “Iberia” refers here to the Iberian Peninsula but also to the Goddess Iberia, the manifestation of the peninsula’s Mother Earth. The following text describes the event, marked by a vigil on December 21 and a silent ceremonial walk on December 22:

**Vigil of light and creation and silent walk for the next generations to the kilometer zero of Iberia**

:: THE FUTURE HAS ALREADY BEGUN :: TIME IS ART ::
:: ANOTHER WORLD IS POSSIBLE ::

On December 21, the winter solstice of 2012 and portal of the birth of the new Sun; the date on which many traditions announced the end of a great cycle and the beginning of a millennium of peace … we go to Madrid to celebrate there the changing of the cycle. … Because we feel the call to re-unite there on this much signaled date … we call all those who love, protect and bring forth the messages of life so that you can join our common effort … all those persons who take care of the Earth, cultivate her, protect her and honor her as the source of life. … [W]e call the families, movements and tribes that are messengers of the Earth, messengers of peace, consciousness and art … we invite them to participate in this feast of collective creation. We will celebrate that the future has already begun … that we ARE the people we have been waiting for … that united we will start the collective construction of a world where there is a place for many worlds.

The text recapitulates several elements of the 2012 phenomenon that we have explored so far: it does not explicitly refer to the Mayan prophecy but to a date noted by “many traditions”; environmental activism and the need to venerate Mother Earth appear as important elements; as well, there is a focus on the ritual celebration of the winter solstice and on what can be done
to foster change and make a different world possible. The infallibility of the prophecy is also affirmed—participants celebrate a future that “has already begun” as well as the fact that they themselves “are” the people whom adherents have been waiting for.

The day after the ceremony, as well as in emails written in early 2013, participants expressed their enthusiasm, regardless of the fact that no major political or environmental change had transpired. On 27 December 2012 and then on 9 January 2013 the leader of one of the most important female groups linked to goddess spirituality in Spain sent emails expressing her satisfaction and excitement about the ceremony in Madrid, and her comments were echoed by other participants.

This early spiritualization of the prophetic theories related to the 2012 phenomenon can be ascribed to the characteristic effort of contemporary spirituality to distinguish itself overtly from “religion”—notably, a religion that is seen as condoning hierarchy, the domination of women and the environment, and the condemnation of the body and human sexuality in general. In this context, apocalyptic theories (especially Christian ones) are seen negatively, as relating to a transcendent male divinity, to unnecessary suffering in order to attain salvation, and to the condemnation of darkness and materiality.

While spiritual practitioners are constructing their own spirituality, as opposed to religion (especially Christianity), in the process they often reproduce some of the very tenets of the system they reject (Fedele 2013, forthcoming; Fedele and Knibbe 2013). In the case of 2012, the result has been a spiritualized prophecy that opposes Christian apocalyptic theories while reproducing some of the exact same characteristics of the latter.

As we have seen, the prophetic theories related to 2012 possessed distinctive traits that set the date apart from previous apocalyptic scenarios. Not only did the theories not belong to specific religious groups, they had actually been assimilated into mainstream Western culture. At least among my interlocutors in Southern Europe, these theories varied greatly; their primary focus was on what could be done ritually to enhance and celebrate the foreseen changes, rather than on precise beliefs. Finally, the main entity venerated in the context of the prophecy, Mother Earth, was described as sacred and powerful yet also vulnerable and ultimately mortal.

Even if they did have elements in common with apocalyptic millennial movements, most of my interlocutors expressed doubt about the notion of a specific, crucial event taking place on 21.12.2012. Notably, rather than providing a remedy for an uncertain future, the apocalyptic theories I encountered left considerable room for uncertainty, and thus, interpretation (see Fedele 2014).

I have argued that, in the case of 2012, the process of spiritualization that Melton considered a result of failed prophecy seems to have occurred even before the end of that fateful year. Using Melton’s (1985: 21) terms we can say that my interlocutors did not expect so much a “visible, verifiable occurrence” but rather an “invisible, spiritual occurrence” that would take place “on a spiritual level.” According to their worldview, things would have to take place first on a spiritual level before they could then manifest on a material level. For this reason, rather than focusing on political activism—something which, according to their worldview (see Gianmichele’s comments above), only dealt with the surface of social problems—practitioners celebrated rituals to effect change on a spiritual level and to help people recognize their deep connection with the environment and the sacrality of the material world. I would add that the spiritualization of this prophecy can be seen as a further manifestation of the tendency within contemporary spirituality to criticize and oppose established religions, especially Christianity.
I am writing this article in May 2013, when it is perhaps too early to evaluate whether the end of 2012 was or will one day be perceived as a failed prophecy, or to foresee whether contemporary spirituality will undergo relevant changes specific to those that were anticipated in relation to 2012. What I can say is that, so far, the reactions of spiritual practitioners indicate that they have stayed the course—no major readjustments have been necessary to assure the ongoing vitality of contemporary spiritual movements, or to explain why the winter solstice did not mark any major social or environmental changes. That said, if there has been a shift, it is in the reinforced conviction that humanity in general and spiritual practitioners in particular should take advantage of the powerful energies available post-2012 to foster significant changes, especially in defense of the environment.

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**NOTES**

2. Other indigenous prophecies I encountered were mostly related to indigenous groups in the Americas. See for instance, the recounting of a Hopi prophecy: http://www.december212012.com/articles/Hopi_Indians/A_Hopi_Prophecy.htm; and a Mapuche prophecy: http://reportero-mistiko.bligoo.cl/profeccia-mapuche (accessed May 2013).
3. This comment appears also in Fedele (2013: 138). In the same book Gianmichele’s experience within Legambiente and his life narrative are described in more detail. All the translations of comments and texts in Italian, Portuguese, and Spanish used in this article are mine.
5. Elsewhere I have shown that within contemporary spirituality there is a tendency to turn Christian rituals, symbols, and theories upside down, with the intention of transforming their meaning. Ironically, this procedure sometimes reproduces some of the very androcentric schemes and concepts it is supposed to overcome (Fedele 2013: 123–191, forthcoming). See also Fedele and Knibbe (2013).

**REFERENCES**


The Revelation of Climate Change

Peter Rudiak-Gould

“Festering sores broke out on the people. … Every living thing in the sea died. … The sun was allowed to scorch people with fire. They were seared by the intense heat … but they refused to repent. … There came flashes of lightning, rumblings, peals of thunder. … The cities of the nations collapsed. … Every island fled away.”

Revelation 16: 2–20

“Heavy cloudbursts … converting once fertile fields into gullied badlands. … Almost everything which normally lives in and on the sea floor had suddenly disappeared. … Coastal cities [turned] into wave-battered ghost towns. … It would look as if the sea was boiling. … Islands of nature … snuffed out by the changing climate. … [A] methane fireball racing towards a city. … Buildings are flattened, people are incinerated where they stand. … Our continued blinkered behaviour makes it more likely every day. … The Sun’s rays burning into our skin … triggering outbreaks of cancer. … The corpses of people, livestock and wildlife piling up in every continent. … We cannot say we were not warned.”

Mark Lynas, Six Degrees: Our Future on a Hotter Planet (2007: 200–256)

Has John’s seven bowls of God’s wrath become Lynas’s six degrees of global warming? The echo is unmistakable, but any serious comparison between the prediction of climate change and the prophecy of end times is surely preposterous. To the rationalist, that juxtaposition lowers a battle-hardened scientific theory to the level of a mad person’s ravings. To the evangelical Christian it is equally provocative: God’s infallible word likened to a contingent secular prophecy. Besides, as anthropologist Megan Jennaway (2008) has pointed out, climate change has little in common with the Bible’s final chapter. If only it did! Revelation, at least, tells us that good will ultimately prevail. No such happy ending in the Intergovernmental Panel on Climate Change’s (IPCC) Assessment Reports, which outline the state-of-the-art in climate science.

And what if the comparison is meant only as an attention-grabbing rhetorical device? That excuses nothing. Apocalyptic rhetoric saddles environmentalism with all the tunnel-visioned megalomania of a fundamentalist religious movement (Lal 1995). By bullying audiences into total agreement and compliance, it enforces a single vision of the future, turning dissenters into “deniers” (Swyngedouw 2010). Attitudes toward climate science take on a weirdly Christianized register: “Do you believe in climate change?” we now ask—as if the greenhouse effect were an article of faith. The perverse result of this language is that objecting to any part of the “doctrine”—say, the proposed solution of taxing carbon—requires one to reject the whole belief-package, denying even that the earth is warming (Brugger 2010). And scaremongering is a sure way to turn people off: “apocalypse fatigue” (Nordhaus and Shellenberger 2009) and ideological defensiveness (Feinberg and Willer 2011) quickly set in when the problem is presented as “a mega-problem awaiting … a mega-solution” (Hulme 2009: 333). Even Mark Lynas has confessed, at a 2010 talk at Oxford, that his fire-and-brimstone rhetoric—in Six Degrees he makes
un-ironic allusions to Dante's Inferno—hindered public concern more than it helped. Even more worrisome is the fact that some dispensationalist Christians actually take the analogy literally. To them, climate change is a welcome sign of coming end times; if possible we should even hasten it (Leduc 2011: 143–169). This 'environmental cataclysm as Good News' has won the minds of several influential US Republicans, threatening to bring 'the most dangerous and destructive self-fulfilling prophecy of all time' (Scherer 2004).

Who then could welcome this ill-considered rhetorical gambit? Both environmentalists and their detractors should agree that we must cease and desist with this glib, misleading, manipulative, loaded, provocative, counterproductive metaphor.

But the language of climatic sin, repentance, and apocalypse has not gone away. And I doubt it will any time soon. There are good reasons for this. Much of Jennaway's argument is a straw man: no one ever suggested that millenarian climatology meant a single charismatic seer portending a literal thousand-year reign and a deus ex machina salvation. What people have suggested is that climatic worst-case scenarios function very much like religious prophecies: extravagant cautionary tales, as dead-serious to some as they are risible to others. The parallels are noticed not only in the ivory tower. In the Marshall Islands, a perilously low-lying, mostly Protestant island nation where I do fieldwork, people have been experimenting with climate exegesis for some years now. Little wonder—when one is told by foreign scientific soothsayers that one's country is headed for a watery grave, the threat does not seem "environmental" so much as existential, and one reaches for the Holy Book more quickly than the Nature article.

Some locals dismiss the scientific prophecy on the basis of God’s promise to Noah: "never again will there be a flood to destroy the earth" (Genesis 9: 11). Other locals compare those skeptics to Noah's doubters: this time, it is people who are flooding the earth, not God, and while Revelation does not foresee a Genesis-like flood, it does tell of a scorching sun. Some US Christians have read the Noahic covenant in the same fashion: in 2010, Republican Congressman John Shimkus argued that we needn't worry about climate change because of God's promise to Noah: "As long as the earth endures, seed time and harvest, cold and heat, summer and winter, day and night, will never cease" (Genesis 8: 22) (Mail Foreign Service 2010).

Thus two of the great texts of our time are put into dialogue. They are well suited to the task: climate science, much like the Bible, is ambiguous enough to be interpreted freely, and enormous enough to be cherry-picked opportunistically (Hulme 2009: xxvii). In their interpretation of Revelation, theologians have for centuries been split into futurists, historicists, preterists, and idealists, based on whether they view that book as predicting events that have yet to pass, broadly describing human history, recounting events that have already occurred, or serving as an allegory. Something similar has been occurring in our "exegesis" of global warming. President Bush's "wait and see" approach to climate change was a sort of futurism, while James Hansen's approach could be called historicist: in 2012 he wrote that "Global warming isn't a prediction. It is happening," but that "game over for the climate" lies ahead and can still be averted (Hansen 2012). Climate change preterists similarly insist that "[w]e are already well into a new geological era, the Anthropocene” (Lynas 2007: 223). And this is no longer the fringe view of a few diehard believers who can find signs of climate change in the environment as easily as some Catholics can find the Virgin Mary in a potato chip. Hurricane Sandy and 2011's multisited droughts have convinced laypeople, and recently climatologists too, that climate change is here and now (Rudiak-Gould 2013). Many indigenous groups have thought so for years, and Bill McKibben ([1989] 2006) famously argued as early as 1989 that human tampering with the climate had already ended nature itself.

Then there are the climate change idealists, for whom the predictions serve primarily as a "narrative to dream differently" (Beck 2010: 262, emphasis in the original). For these thinkers,
climate change may be no truer than Revelation, but that matters not. In a quote beloved by climate skeptics, Canadian Minister of the Environment Christine Stewart is reported to have said, “No matter if the science is all phony, there are collateral environmental benefits” to tackling it (Menzies 1998). A cartoon declares, “But what if climate change turns out to be a hoax, and we make the world better for nothing?”—a sort of Pascal’s wager. In this view, everything we ought to do about climate change should have been done anyway. We do not need ice cores and general circulation models to know that our industrial Babel is disaster-bound. Climate change, real or not, should teach us the enduring evils of global inequality, unrestrained capitalism, technological hubris: the apocalypse that climate change portends is not only an Earth-rendering cataclysm, but the possibility of a long-overdue “apocalyptic change in consciousness” (Leduc 2011: 180) for the good. It is not an apocalypse so much as an apocalypsis (ancient Greek: “uncovering, revelation”) proving, if we still had doubt, that the industrial capitalist status quo is facing its end times (Žižek 2010). These idealists are on to something. Our recent preoccupation with global climatic doomsday may speak less to the consolidation of a scientific consensus than to a moral and religious transformation: the dawning of global solidarity in the wake of the Soviet Union’s collapse, growing distrust of “progress”, nature’s usurpation of God as the great check against human pride (Douglas and Wildavsky 1982), or perhaps just a timeless “human anxiety about the future … which is merely attaching itself at the current time to the portended climates of the future” (Hulme 2008: 13).

Seven bowls and six degrees are alike also in the fact that people are able to believe at all in these extravagant, belief-beggaring prophecies. Seven-headed dragons and lion-toothed locusts with human faces make easy targets of ridicule for the likes of Richard Dawkins. But climate change can seem nearly as far-fetched: a kettle switched on in London makes a palm tree fall in Tuvalu, entire nations will sink, a billion people will be displaced. But “believe” we do. In a 2002 poll, 59 percent of Americans said they believed John’s prognostications would come true (Gibbs 2002). A 2013 poll reported that 57 percent of Americans believe humans can change the global climate, and 58 percent worry about this a great deal or a fair amount (Saad 2013). In fact—despite all the hand-wringing among environmentalists about the persistent influence of climate change deniers—what really ought to catch our attention is the fact that these dissenters seem to be but a small minority in almost every country in the world (Boykoff and Roberts 2007). The fact that most people do believe in the preposterous and true theory of anthropogenic climate change is interesting, actually quite astonishing, and no less surprising than the fact that some Christians subscribe to a literal interpretation of Revelation. “But climate change is actually true!” is the obvious retort, but it is no answer at all: as Bruno Latour (1993: 91–92) has pointed out, true beliefs are just as much in need of explanation as false ones, and that explanation cannot simply be that people believe it because it’s true. There is so much more to credence than that. Jennaway (2008: 71) claims that climate change cannot be compared to Biblical millenarianism because climatologists’ data, unlike the visions of religious prophets, “are in the public domain and eminently testable by anyone.” That view is naïve. Imagine a Marshall Islander, or for that matter a New Yorker, told by a visiting climatologist that her homeland will go underwater. She has no realistic chance of measuring trends in global sea levels and atmospheric carbon dioxide concentrations, let alone determining the link between the two. Scientists’ belief may hinge on evidence, but laypeople’s belief is a matter of trust and a priori plausibility.

The trust is there, because (despite sustained attacks from both the left and the right) science still commands enormous symbolic capital. The plausibility, too, is there, for the simple reason that we are narrative animals first, rational animals second. The positivist’s nightmare is a reality: belief is the default. Much like a journalist, if we hear a good story from a couple of sources,
we are happy to pass it on to others as received wisdom. What exactly constitutes a good story will vary by culture, but our credulity when faced with such a story seems to me quite widely cross-cultural. Doubly so, I think, if the story is as "secretly thrilling" (Ereaut and Segnit 2006: 7) as climate change, a jeremiad made all the more juicy by its truth. "Climate porn," it has been called (Ereaut and Segnit 2006: 7). There is a Facebook group titled "The hardest part of a zombie apocalypse will be pretending I’m not excited." Indeed, that recently resurgent genre is as much a fantasy of liberation—looting a mall (Dawn of the Dead, 1978), crashing a celebrity’s mansion (Zombieland, 2009)—as it is a nightmare of communism or creeping conformity. Audiences lap up stories of a great tribulation: the “Left Behind” book series, the film 2012 (2009), and the film The Day After Tomorrow (2004), which is simultaneously a fictional disaster blockbuster and an environmental call to arms. Apocalypse itself is rather unpleasant, to say the least. But narrating it, imagining it, even suspecting that it is nigh is exhilarating.

The 2012 doomsday prophecies provide a revealing example. To be fair, this apocalyptic meme hardly commanded widespread acceptance. But 4 to 20 percent of respondents in various countries said they believed it to be true (Ipsos 2012); a few Brazilian cities made concrete preparations for the catastrophe; and some mystics made quasi-pilgrimages to Rtanj in Serbia, Şirince in Turkey, and Bugarach in France, places considered magically invulnerable to the coming disaster. Amateur enthusiasts who had up until then had little interest in Mayan civilization, and no particular reason to think its folk astronomy might be able to predict world destruction millennia in advance, were suddenly terribly interested in the esoteric details of the Mesoamerican Long Count calendar. Even when the Western media gently pooh-poohed the idea, they often did so in a way that preserved, even strengthened, the millenarian narrative: they said that people ought not to worry because the Mayans had foreseen not doomsday but the dawning of a new era. A tad absurdly, the issue at hand had become what exactly the Mayan calendar predicts, rather than whether the Mayan calendar has any claim whatsoever to be able to accurately predict such an event. Similarly, “Y2K”—a “millennial” prophecy in a somewhat different sense—prompted worries as extreme as accidental nuclear launches, even though the true result was nothing much worse than a 105-year-old woman in Sweden receiving an invitation to attend kindergarten. In the famous War of the Worlds affair of 1938, hundreds of thousands, perhaps millions, of Americans thought that the fictional radio play of an extraterrestrial invasion was actually occurring, or was a misreported German attack. A similar hoax fooled Ecuadorians in 1949, to even more widespread credulity and chaos: the police were called in, and when the ruse was up, an angry mob burned the radio station to the ground.

So the battle for public acceptance of climate change was, from the beginning, the environmentalists’ battle to lose. Psychologists tell us that humans have an “optimistic bias”, and there is probably some truth in that: we’d rather believe that bad things only happen to other people. But other biases cut the other way: we are given not only to optimism but also to suggestive storytelling and ideological proselytizing. For critics of modernity, the “bad news” of climate change is actually “viewed with relief,” and if tomorrow it were somehow to be disproven, “some elements of the environmental movement would be heartbroken” (Easterbrook 1996: xviii). People have, in fact, been trying to tell the story of anthropogenic climate change since long before the evidence was there to be found: “global cooling” in the 1970s; nuclear winter in the 1980s; droughts, floods, and storms as divine punishment for sin—a story told not only by Christians but also by Tibetans, Tikopians, Totonacs, and many others besides. Centuries before the IPCC, Marshall Islanders feared a cataclysmic flood as moral retribution. One might then say that global warming is like God: to paraphrase Voltaire, if it did not exist, it would be necessary to invent it. Empirical reality gave us a strange gift: now, thanks to the physical properties of carbon dioxide, a story we have always wanted to tell may actually be true.
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REFERENCES


Facing the Apocalypse
Environmental Crisis and Religion

Terry Leahy

It is hard to establish that the most likely outcome of our present course of action is a crisis of “biblical” proportions. It is as though religion has preempted the space in which to make such a claim. Surely such a thing cannot be real; it must be filched from the book of Revelations. There is no doubt that environmentalists invite such comments. James Hansen from NASA is one of many cogent scientific writers on the topic. In Storms of My Grandchildren (2009) he forecasts an apocalypse in no uncertain terms. Without drastic action, the most likely scenario is something similar to that which took place 55 million years ago. A warming of several degrees tipped off a release of methane from deposits of frozen organic matter on the ocean shelves and in the permafrost, raising temperatures by nine degrees, acidifying oceans, and killing off half of all marine species. Sea levels were driven to 70 meters above present levels and the polar regions were tropical, the rest of the world a desert. That seems bad enough to be called biblical. He goes on to argue that, since then, the earth has accumulated much greater deposits of frozen organic matter. Today we risk a warming that could evaporate all water and send it into space. While this is seriously alarming, even the Intergovernmental Panel on Climate Change is predicting up to a third of species extinct by the end of the century and a large part of the world’s best agricultural sites destroyed by climate change (2007). Dyer (2008) concentrates on the likely human impacts—for example a nuclear war between India and Pakistan, fought over water rights.

So one might wonder what the ordinary citizens of affluent democracies make of such claims. In 2003, John Gow and I interviewed a random sample of 300 residents of Newcastle, Australia. We were interested in finding out why there was such minimal support for the kind of environmental politics represented by the Green Party. In the course of these broader interviews on environmental matters, we asked whether respondents thought some kind of apocalypse was likely and suggested eight options—ranging from nuclear war and environmental catastrophe to massive poverty and unemployment. Ninety-two percent picked at least one such scenario as likely: the modal response was that four scenarios were likely (Gow and Leahy 2005). More recent research on students in the Hunter region confirms that fears of environmental catastrophe are still strong. One student said, “Yeah, the whole world is going to self-destruct I just hope that we are not part of it when it happens [laughter]” (Threadgold 2012: 23), and another postulated, “I think what they are gonna try and do is give huge sums of money at the very last minute to try to save the Earth. But I think that it is going to be too late” (Threadgold 2009: 251). These findings fit with Norgaard’s (2011) research in Norway. A widespread understanding of the risks of climate change goes with a failure to integrate this knowledge in daily life, what we have come to think of as “two-track” thinking (Norgaard 2011; Leahy, Bowden, and Threadgold 2010).

It seems there are four discourses through which people relate environmental issues and fears of the apocalypse to religion. These discourses appear in the in-depth interviews that we have
been conducting. As we did not ask all interviewees to comment on religious matters, it is hard to compare the strength of these discourses in the community. The best we can say is that these four discourses exhaust the field of discursive options that are commonly taken.

Fundamentalist Christians make the most use of the parallel between the biblical apocalypse and an environmental one. They welcome apocalypse as fulfilling biblical prophecy. In my first research on attitudes toward the environment I was interviewing a fellow worker at the primary school cafeteria. She was apathetic about political issues and said that she hid from the news. She thought it was quite possible that there could be an environmental apocalypse but she was not worried:

If the world was to go on as it is, yes I do think that there’d be disaster around the corner but this is where it gets hard to explain. I think because everything in the world was created. So I believe what the Bible says, that there’s going to be a sorting out period and then we’ll have the great tribulation and then Armageddon, then the thousand years of peace and I think that God himself will fix everything up. I believe that he created it so any mess that’s made, if he so chooses, he’ll fix. If he doesn’t choose to fix the hole in the ozone layer, I’ve no doubt that in the thousand years it won’t harm you.

She had gained these views speaking to Jehovah’s Witnesses. There is a powerlessness and fatalism running through her interview, engendered by a lifetime of having little say in anything of importance. Not long after the interview, her husband was laid off his job. Such depressing experiences are alleviated by the fantasy of a divine father coming to the rescue. While evangelical Christianity is on the wane in the United States, and perhaps in other countries (Putnam and Campbell 2010), this viewpoint persists, as seem in a more recent interview in the Hunter region: “I don’t think that another Ice Age is ever gonna happen because that’s when Jesus will come. I don’t think that it ever will completely destroy the Earth” (Threadgold 2009: 253). As Ruether (1994: 81) remarks, contemporary society with its global risks of apocalypse is “ripe for magical shortcuts … which claim to assure the victory of total good over total evil.”

In diametric opposition is yet another kind of primordialism. While science may warn us of environmental disasters, the proper response is not more science and new technology but an opposition to modernism. This is couched as the return of the repressed. We have destroyed indigenous societies and their harmonious relationship to nature. To save ourselves we must embrace this ancient wisdom again: “ ‘Traditional Native knowledge about the natural world tends to view all—or at least vast regions—of nature … as inherently holy rather than profane, savage, wild, or wasteland’ (Knudtson and Suzuki 1992: 13; see also Seed et al. 1988; Jensen 2006; Williams, Roberts, and McIntosh 2012). It is not just an environmentalist middle class that finds hope in such perspectives. In my interviews, a young worker on a government work for the dole project explained a television program: “We’re all going downhill. We’re just fucking up. So we’ve gotta try and save this planet. Live like the Ituri forest people. We’d have the land of milk and honey. African forest pygmies. They’re hunters and gatherers in a real good area. They dance and sing to the gods, smoke hemp through their pipes and walk on stilts, play games with bows and arrows. They’re really peaceful people. I’m sure they’re more in tune with nature and stuff. They’ve probably got slight telepathic powers and things” (Leahy 2000).

There have been a multitude of popular apocalyptic films with related themes. Sometimes they are depressing visions of an apocalyptic end to current society, like the 2009 version of The Road by John Hillcoat, inspired by Cormac MacCarthys’s book with the same title. Other films promote the connection of indigenous people to the natural world. In James Cameron’s Avatar (2009), the blue natives stave off an invasion that would destroy their ecology and religion. They
are aided by a giant tree that stores the spiritual memory of their planet. Even the animals come to the rescue in waves of kamikaze assault on the alien imperial soldiers. Kevin Costner’s 1990 *Dances with Wolves* counterposes the natural harmony of the Native Americans and the thoughtless rapacity of the white conquerors. *Apocalypto*, the 2006 film directed by Mel Gibson, references the collapse of the Mayan civilization. The egalitarian tribes people of the forest resist the Mayan empire, which is destroying its own ecological base. In these films, established religion is absent and a nature-embracing pantheism is favored. A recent statement from a high school student in the Hunter expresses this version of apocalyptic thinking: “Sometime into the future it is all gonna fall apart and we are going to turn into slum lords and gangs in cities. Because human nature is like a big cylinder. It goes Caveman, then we go Medieval, Renaissance, Enlightenment, Industrial, Modern and then we will go back to Caveman” (Threadgold 2009: 252). Both the fundamentalist and the indigenist perspectives acknowledge the apocalyptic reality of the environmental crisis. Either God comes down from the sky to help the human race or we make a clean break with modern civilization and rediscover an original harmony with the natural world. In either case, we cannot expect established elites to deal with the problems.

A third perspective on these matters comes from the growing inclusion of environmental issues within established religions. While mainstream churches are losing followers quite quickly (Putnam and Campbell 2010), authors in each denomination reinterpret the Bible and find injunctions to care for the planet. Genesis is interpreted to oblige humans to look after, rather than simply dominate, the natural world. Humans are “ultimately accountable for [nature’s] welfare to the true source of life, God” (Ruether 1994: 227), or they should respond to nature as “the incarnation of God’s very being and presence” (Collins 1995: 145; see also Jenkins 2008). While interviews in the Hunter region did not find adherents of this perspective, it has been discerned in discussions of genetically modified organisms (GMOs). Focus groups in the UK rejected GMOs through an implicit theology: “I don’t think we should mess with nature. Nature was designed for specific reasons. We mess with it. We have no right” (Deane-Drummond 2008: 118).

A fourth approach to environmental matters links religion and environmentalism in order to reject both. A focus group of students included two men who attacked the view of the other students that nature is “really sacred” and that we have an obligation to care for the natural world, as for a mother: “Economics and politics is defined by human nature, which is to procreate, dominate and expand … humans as dinosaurs are doomed. The planet’ll be alive a lot longer than we are” (Leahy 2003: 110). These two interviewees were not worried by environmental issues because they would be dead before “the shit hits the fan.” This is science and rationality used to attack environmentalism as unrealistic moralizing. A sociobiological view of human nature shows modern society’s inevitable trajectory. Humans are self-interested, calculative, and rational—a counterdiscourse to Christian messages of love. While in this case, the speaker is quite happy to acknowledge the reality of environmental risk, a similar discursive position, where religion and morality are concerned, is also taken by many who are global warming skeptics.

Vanessa Bowden (2009) conducted interviews with business leaders on climate change policy. Quite often both environmentalists and the scientists who inform them are accused of having a “religious” view of climate change policy and not being “realistic” about the material self-interest of ordinary people. They are “religious” in supporting supposedly scientific viewpoints for moral and emotional reasons. One business leader said: “There seems to be this religious fervor—about climate change. … So long as they’re reporting the facts and not just using emotional arguments as, as their canvas” (Bowden 2009: 47). Another responded: “One of the things that shocked me … is the brutal-ness of scientists for their own mantra, that this is the only way. … I find the fundamentalism of the scientists to be actually breathtaking” (Bowden 2009: 54). In this context, the term “religious” covers the intrusion of moral values (emotions) into suppos-
edly factual analysis. In their attacks on environmentalists and environmental scientists, these business leaders argue that the call to cut the use of fossil fuels is quixotic. The logic of capitalism is inexorable—environmental considerations will never block it: “I think the international energy demand is growing at such a rate that coal will still be required for decades to come … low cost abundant energy is what you’re looking for, so there’s no doubt that coal will remain an important part of the global energy mix” (Bowden 2009: 34). Another said, “Those mines up there represent just way too much economically for our region for anybody to do away with them. It won’t happen. It can’t” (Bowden 2009: 34). The expectation of these business leaders is that the public will back them in prioritizing material affluence: “I go to you and say—I will triple your electricity bill. What will you say? You will say, ‘no I don’t want that’” (Bowden 2009: 59). One businessman invoked the material desires of the Chinese, “Those people [in China] have a real—they want a lifestyle the same as what we have in Australia” (Bowden 2009: 61).

What is also often asserted is that climate change is a natural phenomenon. Consequently, a climate apocalypse will be something over which we humans have no control. At a recent barbecue I attended, a geologist working with the mining industry explained to me that the science on climate change was far from settled and that it seemed likely that climate change events were caused by alternations in the earth’s rotation around the sun, which happened every 120,000 years. I asked him whether he worried about the impact of climate change on his grandchildren. He said he was not worried because these changes are natural.

So this viewpoint is constituted as an opposition to religion. Humans are perceived as self-interested replicating machines. The fate of humans can be predicted by rational investigation. The sensible thing is to calculate one’s own interest. In relation to apocalypse, there are several options. In one, the capitalist machine is an expression of human nature and will not be stopped, with apocalyptic consequences. In another, the view taken by global-warming skeptics, the fuss about climate change is dreamed up by sentimental and “fundamentalist” environmentalists. In a third, climate change is real enough but we have not caused it and can do nothing about it. These three options are aspects of a similar worldview.

Is there any respect in which environmentalism is a “religious” point of view as charged? It cannot be viewed as religious on account of its prediction of apocalypse or its call for action to forestall this. These can be defended as rational science and self-interested precaution. What strikes the materialist as most religious about environmentalism is its moral injunctions. The antireligious reaction to environmentalism notes an analogy between the “de-ontological” ethics of religions and the moral injunctions of environmentalists. For example deep ecology specifies that all species have intrinsic value and we are obligated to care for them equally. We could wonder where these injunctions to care for other species come from. They seem to make the most sense if they are enjoined by God. Founders of deep ecology even specify a list of obligations, numbered just like the Ten Commandments (Devall and Sessions 1985).

These are the aspects of environmentalism that antireligious anti-environmentalism seizes upon. The fear that environmentalists are about to capture the ear of government and impose these moral rules upon the rest of us is a huge part of the resentment launched against the environmental movement. As one of my interviewees put it, “it is not fair” (Leahy 2003; see also Gow and Leahy 2005). The emotional background is people’s daily experience of domination in schools and at work, combined with moral injunctions to work hard. People seek to protect their freedom to consume as they please and to enjoy their leisure as they wish. The moral injunctions of environmentalists are termed “religious” to reflect the idea that they could make sense only if one believed in a God who could actually sanction improper conduct.

The fracture between religious and antireligious views of the climate crisis can be seen as yet one more example of a long-standing split between religion and materialism. Graeber (2011)
traces this to the “Axial Age” between 800 BCE and 600 CE. This is a period in which older imperial states are broken up and warring kingdoms take over. Coinage becomes central to economies as states go to war and pay soldiers in money. Precious metals stored by previous generations are plundered by conquering armies and reconstituted as coins. The subordinate classes are made to pay their taxes in coins and set up markets, selling goods to soldiers. Slavery is ubiquitous and comes from debt and military conquest. Slaves are set to work mining more precious metals to continue funding the military expansion. It is this context in which the great world religions established themselves. They are alike in defending the human community against calculative rationality. The effect has been to make religion the repository of a pure (and to a large extent inefffectual) opposition to the material world of the economy. Religion recommends generosity when the market dictates the opposite. Religion promotes the care of others while the marketplace throws debtors into slavery. Religion seeks to transcend material needs. Religion promotes peace while states wage ruthless war.

So in the great debate between religion and materialism, environmentalism is placed on the side of religion, as worthy ideals and moral injunctions which have to be put aside to conduct the business of the world. In fact, the expansionary, hierarchically ordered states in which this dualism was forged are in trouble. There is no way to massively cut back the material consumption of the ordinary citizens of rich countries without opening up the question of inequality. There is no way to secure the consent of poor countries to an end to fossil fuels without a transfer of wealth and technology from the rich countries. There is no way to end the drive for increased consumption without abolishing coercive labor. There is no way to prevent expansion for military purposes without resolving international conflicts. Attempts to “materialize” religion seek an alternative to Axial Age religion, celebrating our material nature while acknowledging our capacity for love, not just for other people but also for other species. One version finds our own way to the animism of stateless societies (Seed et al. 1988), another materializes our present religions (Spong 1998; Ruether 1994; Collins 1995), and a third replaces supernatural religion with humanist ethics (Grayling 2013). All of these options could provide an ethical vision for a society organized to look after the environment and supersede expansionary states. Indigenous societies are a model here, not because of their lack of technological power, but on account of their perceived egalitarianism, devotion to “leisure”, and respect for the natural world. We may indeed inhabit an “Anthropocene”, in which the impact of humans on the natural world is already too far gone to reverse, but how we handle that impact is surely a matter of social choice.

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**REFERENCES**


Challenging the Skeptics
False Prophecy and Climate Activism

Stefan Skrimshire

Introduction

What should we read into the patronizing caricature of environmental campaigners as latter-day “prophets” and “apocalyptic” doom-mongers? Unmasking their pejorative association reveals two important, and popular, misunderstandings. The first is the conflation of the genre of apocalypse with that of prophecy, or to be more precise, the casting of Christian apocalyptic as a subgenre (and development) of the Jewish prophetic tradition. And the second is the assumption that in both prophecy and apocalypse what is definitive (indeed what gives “apocalyptic discourse” rhetorical clout in the secular domain) is the practice of forecasting the future. Exposing and critiquing these assumptions is, I hope to show, more than an exercise in theological pedantry. It tells us something important about what is expected in contemporary society from the narration of future scenarios. The objection will no doubt come that these references—whether from skeptics or campaigners—are at best tongue-in-cheek, at worst provocative, secular uses of theological categories. I think they tell us more than that. They reveal important clues about how critical voices regarding environmental and social futures are received in popular and political cultures. If “prophetic” figures are today derided for their departure from secular, rational discourses, this tendency should make us curious about what this “premodern” function was perceived to have been in the first place, and what we assume it has been replaced by today.

I take as my starting point a perfect constellation of the misunderstandings I have just described. A report published in 2008 by the Institute of Economic Affairs (IEA) entitled Climate Change Policy: Challenging the Activists, features six conservative economists1 who reject, in their own ways, two phenomena: (a) what they perceive to be a mainstream acceptance of “alarmism” surrounding climate change, whose form has taken on the nature of “institutional religion”, and (b) the adoption of this rhetorical device to justify “centralized” illiberal policies (policies that would curtail “sovereign freedoms” of the individual), “immediate and drastic government action,” and forms of environmental direct action. Regardless of its ideological self-positioning,2 the authors of this report are only of interest to me because of their insistence upon the religious nature of the alarmism that they are attempting to undermine. Specifically, the authors claim that the rhetorical success of climate alarmists has depended upon four distinct aspects of climate change communication: (1) alleged scientific consensus over climate change is, under inspection, more akin to a “‘fundamentalist religion’ which is a matter of faith and … cannot be moved by argument or factual evidence” (Lewis 2008: 40); (2) climate change rhetoric is organized under the typologies of “sin” (climate change is solely the fault of humanity), “salvation” (by following the pronouncements of the IPCC, the International Panel on Climate
Change), and an “orthodoxy/heresy” divide (for deviating even slightly from its pronounce-
ments, the climate skeptic Bjørn Lomborg is cited as a modern martyr to the intolerance of
“received wisdom” to prove this point) (Peacock 2008: 117); (3) the IPCC behaves like a lat-
ter-day “prophet of old”, because it “unilaterally defines the relationship between human action
and its 'sinful' results” (Peacock 2008: 119); and (4) climate change predictions take the form of
religious “apocalyptic forecasts” whose appearances can be explained as “natural reaction(s) to
… anxiety and a demand for predictions” (Sir Nicholas Stern is presented as a “lower level" St.
John of Patmos to make explicit this connection (Robinson 2008: 44)). The adoption of theo-
logical categories may seem a little brazen here, but they represent something of a trend. In a
report from a parallel conservative think tank in Australia, the Institute of Public Aff airs (IPA)
(tasked similarly with “preserving and strengthening the foundations of economic and political
freedom”) lambasted the Australian government’s climate change commissioner, Tim Flannery,
for his “quasi-religious fervor,” describing him as a man whose “failed prophecies have all the
hallmarks of a religious cult-leader or wacko preacher predicting Armageddon” (Paterson 2013:
3). The Australian report itself came in reaction to the alleged report by Flannery of waking up
and feeling, in these times of climate crisis, like “one of the Old Testament prophets” (Paterson
2013: 1)

I want to focus first on the claim that climate alarmism displays hallmarks of biblical proph-
ecy.3 The claim shares a presumption found not only in right-wing publications but also in more
progressive social scientific studies,4 namely, that the secular use of prophecy is an attempt to
revitalize a discourse of catastrophism (in this sense “prophetic” according to the formula: if we
do not refrain from doing x, terrible events y are unavoidable) by retelling it within a premod-
ern, romantic imaginary.5 I want to show how this presumption does a disservice, first, to the
social and ethical function of both prophecy and apocalypse within Judaism and Christianity
(by reducing their function to that of “anxiety and a need for predictions”), And second, to the
potential ethical foundations of climate activist discourse (by reducing it to a form of moral
blackmail).

Uses and Abuses of Prophecy and Apocalypse

What are the features of this comparison with prophecy? I will attend to three. First, there is the
charisma of the prophet. Alan Peacock (2008: 119) believes that a prophet is one whose decla-
rations attract a passionate and unquestioning following amongst his “disciples” since they are
“recognised as the source of transmission of the content of the moral order.” This comparison
allows Peacock to pronounce against the IPCC’s authoritarian and “moralistic” carbon reduc-
tions pronouncements. Biographies of the Hebrew prophets show, of course, that this caricature
is mistaken. The fate of many prophets in ancient Israel was social isolation, ostracization,
and persecution (Sawyer 1987: 17). Second, there are the frightening consequences of failure to
enact social and personal change: the “if/then” mode of prophetic speech (Kool 2012: 2). This
allows comparison with the scenarios of varyingly frightening degrees of global warming. But
in fact many Old Testament scholars point out that a prophet was predominantly “an accredited
teacher of the moral law, one who hands on to succeeding generations inspired commentary
on the Torah” (Barton 1986: 14). The emphasis, in other words, is on their judgment of present
behavior based upon their knowledge about justice.

The third, and most problematic feature of prophecy, concerns the authority of prophetic
speech, which is, in the skeptic’s comparison, related directly to the historical experience of its
failures. This leads us back to the dilemma of environmental false prophets. A false prophet is
a foreteller of doom whose predictions, like those of Paul Ehrlich’s 1968 The Population Bomb, have failed to materialize. In Richard Kool’s view, for example, the dilemma associated with identifying false prophets is that in relation to negative prophecy—doomsday predictions—there is no way of verifying their truthfulness in the simplistic sense. A doomsday prediction failing to materialize may be the result of people heeding its warning, thereby providing retrospective and unverifiable proof of its legitimacy (Kool 2012: 4; see also Festinger et al. 2008). However, is the social function of prophecy thereby discredited by such a comparison? The most that an advocate of modern-day climate prophecy could say would be that if there are false prophets, there might also be “true” ones. The risk of not heeding their exhortations may turn out to be disastrous for humanity. And the power of their message relies solely on one’s faith in their future scenarios coming to pass. But what Old Testament scholarship teaches us is a far more nuanced relationship between eschatology (what is to come) and moral instruction (what is to be done). It is common, particularly in the field of Christian ethics, to collapse those two elements into one another. The Hebrew prophets told stories not of the future, but of the unfolding present and its moral demands upon people. When we heed them, according to this view, we effectively read the “signs of the times” and give space to that wilderness figure who rails against the iniquities of his contemporaries. Recent studies in Christian and Jewish environmental ethics support this caricature to a degree, submitting figures such as Noah and Joseph as paradigms of sagacious readings of the weather (see Northcott 2007: 75).

Rather than reaffirming the stereotype of doomsayers, we may thus read the rhetorical tactics of the prophets through the lens of familiar, Western ethical theories: categories of virtue, justice, utility, and obligation (Marlow 2009: 266), to name a few. But biblical scholars also encourage us to keep in mind the distinctiveness of eschatological emphases on the one hand, and moral readings on the other. To the Jewish tradition, the Hebrew prophet is one who exemplifies the moral code at a time of religious infidelity, doubt, and cultural relativism. Such a figure is embodied nowhere more vividly than in the person of Elijah: “Behold, I will send you Elijah the prophet before the great and terrible day of the Lord comes. And he will turn the hearts of the fathers, lest I come and smite the land with a curse” (Malachi 4: 5–6). The act of prophecy is originally performative, in other words: his righteousness inspires transformation in the people of God. Future predictions do of course play an important part in the tradition, and, for some, constitute its primary feature (Sawyer 1987: 16). But to the extent that prophecy is understood within a broader social function of stimulating moral transformation then it should already cast suspicion on the claims of the IEA report. Such claims stigmatize the use of “prophetic” alarmist rhetoric “as a rationale for curtailing freedom” (Peacock 2008: 121).

In relation to the prophetic texts, the different emphases in Jewish and Christian biblical canons give us a strong clue to the peculiarly Christian cultural obsession with predictive prophecy (Barton 1986: 14). It is this predictive legacy of the “fulfillment of (ancient) prophecies” that is very much dominant (though not exclusive) in the Western climate skeptic’s repertoire, in particular those aspects of tradition that made prophecy synonymous with future predictions, as evidence of their fulfillment (and end) in Christian history (Barton 1986: 186; Sawyer 1987: 131). New Testament and early Christian sources abound with “proofs” to the Jews that the events surrounding the life and death of Christ fulfill Old Testament prophecies. And yet even here something is missing in the modern appropriation of the concept of a prophetic discourse. Studies in the writings of St. Paul, for example, have not solely focused on Paul’s use of Old Testament prophecies as “proofs” of the church’s mission. Emphasis is also placed on the significance of the new (messianic) age in which they lived. Early Christians believed that they were living in such a changed, transformed time (after the resurrection of Jesus) that all ancient prophecies were no longer mysterious, coded, or inaccessible. The emphasis was, in other words, on unlock-
ing the “code” of the future: living in the “time of the end” in which prophetic words—including warnings and judgments—now made sense (Barton 1986: 189).

Why is this last distinction significant for us? The common association of ancient prophecy with modern doom-mongering typically refers to a strict correlationist model. That is, a prophet is retrospectively false if his predictions do not come to pass in the timescale that is given. A climate change activist can then be easily named as the secular continuation of that tradition of religious, literalist interpretations of prophecy. What I am highlighting about prophetic interpretation (even within Christian tradition, by some interpretations) is that prophecy may have more to do with contesting moral and political corruption in the present than this view credits. One listens to prophetic speech not out of fear that its prognoses might prove correct and therefore, by the terms of the precautionary principle, worth heeding (in other words, in the sense that Kool (2012: 5) puts it: “For the ancient Israelites as for us, it’s always about betting, in a sense, on the prophecy and the prophet”). Rather, one heeds prophecy because it contains wisdom about the conduct and fate of the present age that has gained a new, sudden moral urgency. But it is also supported by the argument that for the post-exilic Jewish community (where the prophetic tradition diminished) prophetic texts continued to have significance only by virtue of the fact that, as holy scripture, they continued to “amplify” the moral and theological teachings of the rest of scripture (Barton 1986: 171). The value of prophecy, in other words, was no longer bound to a literalist, predictive reading of history. Prophecy contributed to the sense of moral urgency with which the believer could engage with the present.

Kool exemplifies the popular assumption that Old Testament prophecy conforms to the predictive model by quoting a famous passage from Deuteronomy that appears to lay down a legal standard for prophetic text in general: “should the word of the prophet speak in the name of YHWH but the word not happen, not come about—(then) that is the word that YHWH did not speak!” (Deuteronomy 18: 21–22). A literalist interpretation of this text sets up the challenge of discerning true from false prophets. This is a dilemma that also characterizes popular assumptions about the climate science debate. Namely, how are we to discern the true science-prophet from the false one? However, Joseph Kelly (2012: 191) has argued that the injunction of Deuteronomy 18 need not be taken as the paradigmatic criterion for validating the authenticity of a prophet. Elsewhere in the Old Testament, prophets prophesy contradictory futures, such as those of Hananiah and Jeremiah (Jeremiah 28). In that story, only one prophet, Jeremiah, is vindicated. According to some interpretations of the Jewish tradition, prophecy may be conditional, in other words, and this reflects a wider theme in the Old Testament, of God changing his mind. Changing of prophecies is, in this view, thought to result from the act of repentance of the people, not simply that a given prophecy is “false” (Kelly 2012: 191). The “general sense” of Deuteronomy—that “a true prophet will speak the truth” (Alter quoted in Kelly 2012: 188) is thus, according to Kelly’s analysis, preserved in a way that reinforces the moral function of prophecy.

This argument leads us to the second claim of the IEA report: that the religious spirit of climate predictions is “apocalyptic”. Robinson (2008: 42) defines the apocalyptic genre as the communication of “dreadful events [that] are foreseen unless people repent from sin.” This is, once again, incorrect: apocalypses do not suggest that dreadful events are avoidable, and certainly not within the terms of human action. Importantly, the caricature misses a key feature of apocalyptic eschatology, with particular reference to the book of Revelation: namely, the irreducible evil of the present age. It is this recognition that generates the need for a cataclysmic (world-ending) intervention to restore righteousness. What should interest us nevertheless is Robinson’s (2008: 44) confident sociological diagnosis: that modern-day “apocalyptic forecasts” bear some parallel to religious text as arising “as a natural reaction to the pervading state of uncertainty
which creates both anxiety and a demand for predictions.” What is operating here is a classic (and misplaced) assumption that apocalypse is simply a more “developed” form of the Jewish prophetic tradition, of which much has been written and critiqued. Whereas prophecy could be said to concern the (hopeful) progress of a “historical” future, apocalypse is primarily about the revelation of divine secrets (Barton 1986: 200; Ladd 1957: 193). But these may or may not be secrets about the future of the world: some Jewish apocalypses focus on “cosmic” rather than “eschatological” revelations, as Christopher Rowland (1982) has pointed out.7

The Ethics of Climate Change: Beyond Soothsaying

What should climate change campaigners make of the caricatures described above? In some cases we see it turned around for their advantage. For instance, contemporary climate change scientists may liken themselves to the lone figure of the Old Testament prophet who is shunned by his own community: those who “have ears but do not hear” (Kelly 2012: 185). Such a title is bestowed, for example, upon the outspoken climate scientist, James Hansen, by both his supporters and detractors alike. The common rejoinder to such claims will be that the role of the scientist is not to preach to us or convince us to change our behavior. This much was made explicit in the IPA’s damning critique of Tim Flannery, whose “religion-like certainty … (is an) indicator of his status as a modern-day climate prophet, rather than expert scientific advisor” (Paterson 2013: 3). “Religion-like certainty” is an interesting phrase. It indicates, presumably, an unquestioning and unscientific conviction. But perhaps this is in fact something that a conservative, climate-skeptic position does share with that of a climate activist. To speak with the voice of a “latter-day prophet” today is, to the activist, a way of conceding the failures of rational, scientific discourse to break through to public understanding. If the scientific evidence does not convince us, the argument goes, perhaps a premodern, dualistic symbolism will. This is certainly not the approach taken by all climate activists, but it is representative of some. What both sides of the debate perhaps assume too readily, therefore, is that a discourse of scientific prediction (and in particular of earth modeling exercises) historically replaces the social function of religious prophecy and spiritual revelations. And this assumption suggests in turn a desire that scientific, statistical discourse would today “save us” from irreducibly ethical, interpersonal problems, problems that it was once the explicit remit of the prophet to preach about. The desire for apocalypse (in the caricature described above) today is not, as the skeptics claim, born of fear and insecurity, therefore, but of a deferral of ethical responsibility.

Our first point of critique should therefore be that climate change as a physical atmospheric phenomenon cannot be understood in isolation from cultural, social, and moral frames of knowledge (see Hulme 2009a). The demand that society has placed upon scientific and policy reports on levels of global warming that correspond to the adjectives “dangerous”, “catastrophic”, or “apocalyptic” only confirm that the communication of climate change is not ethically neutral (Dessai et al. 2004). The questions that we ask of earth systems analysis are ethically and politically driven. Furthermore, they precede questions of future prediction by clarifying our motivation for acting in the first place: what are the causes of global warming and who are its victims in the short and long terms? The obsession with “climate prophecy” as predictive capability that I have been critiquing appears to suppress this ethical connection. As Mike Hulme (2009b: 2) has stressed, and never more so than in the light of the public scandal that followed hacked emails from his own university, “too often, when we think we are arguing over scientific evidence for climate change, we are in fact disagreeing about our different political preferences, ethical principles and value systems … we expect too much certainty, and hence clarity, about what should
be done. Consequently, we fail to engage in honest and robust argument about our competing visions and ethical values.” By reducing the ethics of climate change to the scientific evidence for various “if/then” formulas of scenarios or predictions (and abusing the religious trope of prophecy in order to do so), we implicitly ignore issues such as the likelihood of moral corruption within climate narratives (Gardiner 2010: 94) and ideological foundations of responses to climate crisis. In the latter case what an obsession with prophecy as prediction so often masks is its inherent depoliticizing trend. That is, its assumption that only an economical, cost-driven rationalism can future-proof us from disaster. The calculable avoidance of carbon reduction targets becomes a kind of “post-political” (Swyngedouw 2013) sideline to other “unquestionable” issues such as economic progress.

Only a purely science-driven (evidence-based) interpretation of the prophetic-apocalyptic impulse, therefore, could treat climate change as an exercise in probabilistic gambling. Scientific predictions do not replace the social roles of prophecy or apocalypticism, because those roles had more to do with a transformation or renewal of political and moral orientation than the art of future-telling. These are roles that the sciences are unwarrantedly called upon today to fulfill in the void of any prophetic voices of radical political critique operating at the policy level today. That unrealistic demand is not only one that is waved about by the climate skeptic community, charged as it is with rooting out “hysterical”, “quasi-religious” prophecies. Climate change activism has also traditionally allied itself with “champions” of the scientific community, professing proudly as the activists did at the 2009 Camp for Climate Action at Heathrow that “we are armed only with peer-reviewed science.” The specifics of that armory, we can assume, have to do with its predictive capacity: an ability to faithfully warn us about the future that is of our own making. We should be seriously questioning whether such a boast is really desirable. Andrew Bowman (2010: 178) has argued that such a stance acts to conceal a “weak arsenal of political, economic and ethical arguments.” If this is true, then this is further reason to critique the association of climate narratives as apocalyptic in the predictive-prophetic sense. Many activist groups have used the sorts of scare tactics that Hulme and others have defined as apocalyptic in this sense (Plane Stupid, Greenpeace,8 and Stop Climate Chaos are valid examples, certainly of the visual side of such tactics). But the motivation for activists in general need not depend upon the truth or falsity of the frightening scenario of a globally warmed world. The climate activist does not need to know what the world will look like in 50 years’ time in order to justify calling for radical social and political changes to the present. Nor could she ever be expected to provide such a vision before deciding that radical change was necessary. The claims of the climate change movement do not (or need not) state anything “new” in their diagnoses of the future. Their demands for the present, furthermore, frequently draw upon well-rehearsed categories of social equity and global justice. That the pretext for enacting such changes takes place within a discourse of (often frightening) future scenarios does not equate to an “apocalyptic” narrative in the sense of manipulating visions of the future—with the threat of an “if/then” formula of prophetic vision—in the way that the skeptic fears.

### Conclusion

The pejorative connotation leveled at scientists, activists, and politicians, as latter-day prophets is, to conclude, not simply bastardized biblical theology. This would hardly be an interesting, or original, observation. Rather, its theological misappropriations provide clues to a far more concerning aspect of the climate change discussion, at least as it is interpreted by the likes of the IEA and IPA (who, in terms of their uncompromising defense of economic orthodoxy in this
debate, are not marginal voices). That is, a tacit attempt to strip the debate about future scenarios of its moral, political, and “religious” demands upon society. Confining to a discussion of probabilities, statistical uncertainties, and failed prophecies (with a “long history,” stretching back throughout our “naïve” religious predecessors), the figure of the shrill, doom-obsessed prophet is one that is too hard to resist conjuring. But that is a caricature of our own making, and thus contingent upon a selective theology and historicity. The derision of the “apocalyptic” quality of climate narratives easily equates the use of dramatic, visual metaphors for social and ecological collapse with a form of moral and ideological blackmail. If a defense of climate activism were to share any affinities with the kind of Jewish and Christian heritages I have just described, then it would revive a tradition of vision more as revelation (ironically more of the apocalyptic, therefore) than as scenario prediction. This much the scientist Donella Meadows (1999), one of the original authors of the Club of Rome’s Limits to Growth report, called for. Meadows expressed a need for a tradition of vision that is capable of articulating the moral and political “truths” of the contemporary crisis to the rest of society in a way that traditional secular discourses (at least as they are narrowly perceived by orthodox economists) cannot achieve on their own.

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NOTES

1. The IEA is a “research and educational charity … [whose] mission is to improve understanding of the fundamental institutions of a free society by analysing and expounding the role of markets in solving economic and social problems” (Robinson 2008: 160).
2. An overview of the contributors’ backgrounds provides important context: Colin Robinson is a “business economist, mainly in the oil industry” and a “fellow of the Institute of Energy”; Russell Lewis’s publications include the first biography of Margaret Thatcher (a “best seller”) and Global Warming: False Alarms (2007); and Julian Morris is author of Global Warming: Apocalypse or Hot Air? (1994).
3. For an extended discussion of climate change and apocalypse references, see Skrimshire (forthcoming).
4. Other recent scientific publications taking an interest in the rhetorical function of Old Testament prophecy include analyses of the predictive Limits to Growth report in 1972 (Kool 2012) as a latter-day prophetic interpretation of current immoral trends (in this case the long-term consequences of overpopulation). Elsewhere, historical studies (Levene, Johnson and Roberts 2012) and geography and geopolitics (Dittmer and Spears 2009) have also found fertile ground in these associations of
contemporary crisis rhetoric with premodern, visionary forms of discourse that amount to forms of moral, social, and cultural warning of one kind or another.

5. See, for example, Lilley et al. (2012).
6. Ehrlich predicted that at continued birth rates, “hundreds of millions of the world’s poor would die through starvation and disease in the 1970s and 1980s” (Kool 2012: 4).
7. I am also grateful to George Brooke for reminding me of this fact.
8. In 2009, Greenpeace staged a public protest at the UN Climate Change summit in Copenhagen by dressing four mounted horsemen as representatives of War, Famine, Death, and Pestilence, respectively.

REFERENCES


