

Evidential Medicine for Our Collective Soul

What's Inevitable? What's Redemptive?

By [Michael Dowd](#)

Religions are evolving. Nowhere is this more evident than in how spiritual leaders across the spectrum are expanding their views of revelation to include all forms of evidence. We are witnessing the birth of what I have been calling the *Evidential Reformation*,¹ a time when all forms of evidence (scientific, historic, cross-cultural, experiential) are valued religiously. Crucially, *ecology*—the interdisciplinary study of God's nature—becomes integral to *theology*.

Pope Francis, Patriarch Bartholomew, the Dalai Lama, and the signers of the Islamic Declaration on Global Climate Change are spearheading this evidence-honoring *greening of religion*. The movement has been passionate and inspired for decades. But the noble sentiments that spawned *care* for Creation are no match for the crises now spinning out of control.

It is time for a prophetic turbo-charging of our religious traditions. Foremost is the need to expand beyond the self-focus of individual salvation or enlightenment to also include vital community concerns—notably, survival. The community now, of course, is the entire human family *and* the more-than-human Earth community.²

A renewed call to action cannot be expected to offer pat solutions. Sadly, what were *problems* in the recent past have now exploded into *predicaments*. A predicament (by definition) is a kind of problem for which there are no solutions. It can neither be solved nor overcome; yet it is too impactful to ignore. A predicament must be dealt with conscientiously and continuously. Our responses can offer only more or less helpful interventions. The predicament itself will persist.³

Once a problem metastasizes into a predicament, forecasts of challenges that *may* arise solidify into disquieting lists of inevitabilities. Such an evidentially derived list is what I offer, in annotated format, in the first part of this essay: “What's Inevitable?”

The second part, “What's Redemptive?” posits that the only way humanity can be ‘redeemed’ is to shift from human-centered to life-centered measures of progress and success. Mythically speaking, this would be *God's prime directive*—expanded into a list of ten *Reality's Rules*. Underlying these stark (and still very tentative) declarations is a broadening of how we understand “the word of God” today.

What's Inevitable?

To begin, *What has God/Reality⁴ revealed through evidence about what we can expect in the decades and centuries ahead?* The outlook is surprisingly (and disturbingly) clear. We can expect...

Climate chaos⁵ – Evidence from a wide range of scientific disciplines now points to escalating climate chaos (global *weirding*) as inevitable. Even if every nation goes *beyond* its 2015 COP-21 commitments, there is still trouble ahead, notably, intensified storms, droughts, and wildfires, shifts in agricultural zones and habitability, and the breakdown of ‘environmental services’ crucial for maintaining human wellbeing and civility.

Sea level rise⁶ – The last time that the concentration of atmospheric carbon dioxide (CO₂) was 400ppm, sea level was 50 feet higher than today. This was just prior to the Pleistocene glaciations (when CO₂ hovered around 200ppm). With sea level having risen mere inches in our lifetimes, though CO₂ is now 405ppm, simplistic logic might tempt us to ignore the past when anticipating our future. This is where the sciences of thermodynamics and glaciology become essential, as they teach us to expect a substantial lag time between cause and consequence. John Englander, former CEO of the Jacques Cousteau Society and author of *High Tide on Main Street: Rising Sea Level and the Coming Coastal Crisis*, sums up our predicament: “What the latest models show is that sea level will continue to rise for at least 500 years, even if we stopped CO₂ emissions immediately.”⁷ The loss of our coastal cities was even depicted in the opening ceremony of the 2016 Rio Olympics.⁸

End of the fossil fuel era⁹ – Geologists and ecological economists are tracking the depletion of world oil reserves. Exploration and technological advances do not make up for the losses, and the capital and energy costs of finding and producing an additional barrel of oil now exceed what economies can afford to pay. Soon it will be game over for high-cost extraction of tar sands, shale fracking, and risky investment in deep-water and polar locales. The end of the fossil fuel era is thus inevitable, even without governmental intervention to address climate chaos and sea level rise. Whether “peak oil” has already occurred or is still a few years out is irrelevant. The era of abundant, concentrated energy is behind us; the evidence is compelling. Transitioning to renewables will be expensive, and wrenching¹⁰—and incapable of powering industries and commerce at today’s levels.

Political unrest¹¹ – Climate chaos, sea level rise, and the decline of cheap, concentrated, easily transportable energy will interact to undermine the wellbeing of ordinary citizens. Even nations with strong economies, high ground, vast agricultural acreage, and social cohesion will be vulnerable. Political unrest and turmoil will be unavoidable. The evidence of history points toward severe disruptions that will force economies, governance, and cultures to re-localize—that is, to contract in scope and scale. There will be suffering and loss—but also opportunities for finding meaningful work and forging cooperative relationships in real communities. Economic contraction will unburden youth who have been victims of, what environmental sociologist William R. Catton, Jr. calls, the Age of Exuberance.¹² Once again, *real* work will be available for young adults. Apprenticeships will increasingly replace classroom education. Earlier entry into adult activities that build self-esteem will diminish the lure of addictive substances and errant activities that now challenge youth who, necessarily, choose to isolate or socialize mostly with same-age peers.

Toxic legacy¹³ – Historians and ecologists have documented the harmful impacts that virtually all civilizations have had on the health and recycling services of the ecosystems on which they depend. The reverberating effects on public health, economies, and safety become disastrous. In the inimitable words of Robert Louis Stevenson, “*Sooner or later we all sit down to a banquet of consequences.*”¹⁴ Additional burdens bequeathed to descendants this time around include nuclear waste, heavy metals, and toxic chemicals that will endure in the biosphere for centuries, even millennia. Climate-driven sea level rise will exacerbate the problem. The landward ingress of corrosive saltwater will penetrate metal containments. Ground flows and ocean currents will then disperse the poisonous contents. Equally, a superabundance of CO₂ becomes a toxin in its own right by acidifying seawater, threatening species whose shells depend on ocean alkalinity. Biologists report that severe marine degradation is already underway.

Biodiversity catastrophe¹⁵ – Since the late 1970s, when biologists warned that human impacts had triggered the “Sixth Mass Extinction,” local species recovery and habitat improvements have been overwhelmed by escalating losses at the global scale. Now conservation biologists are facing a future in which even common species (especially plants) will require our help in moving poleward at a pace that far exceeds their own capacities. That looming need for “assisted migration”¹⁶ will, however, coincide with reluctance in stressed societies for channeling funds toward any activities beyond immediate human needs. Thus, threatened species in even the wealthiest nations face an uphill battle.

Cultural loss¹⁷ – In times of stress, the complexities that weave communities into civilizations falter. When individuals and societies struggle to secure basic needs, the arts and sciences that both create *and* depend on high culture suffer. In such times, there will be those who voluntarily sacrifice their own comfort and security in service of safeguarding cultural treasures through a dark age. “Love something, learn something, let something go, and pass something forward”¹⁸ is how I regularly encourage audiences to embark on a legacy project.

Worldviews unravel¹⁹ – If any of the above inevitabilities were news to you, you likely experienced a twinge of one or more of *the five stages of grief*. These are denial, anger, bargaining, depression, and acceptance—acceptance leading not merely to acquiescence but to, what Joanna Macy calls, “active hope.” When worldviews unravel, there is loss, and the grieving process is instinctive and healthy. A traditional and vital function for religions in the future will thus be to shepherd individuals through the emotional and faith challenges that accompany periods of societal stress, when expectations erode and meanings unravel. As more and more people discover that their expectation of never-ending progress is an illusion, and as disruptions spread, religions will be called upon to do what they’ve always done: help people live meaningful lives, foster healthy relationships, die peacefully, and leave a sweet legacy.

To stay relevant for the times, religions will need to foster not only *personal wholeness* and *social coherence*. The exemplary wisdom of indigenous peoples is also crucial. *Ecological integrity*—right relationship to primary reality, the literal ground of our being—must be central.²⁰ Sacrificing for the common good and standing for the future must be honored as sacred.

What’s Redemptive?

Redemption for humanity does not imply that we can undo or compensate for the ecological devastation we have already wrought. We can, however, set out on a new course. We, the prodigal species, can come home to reality, come home to God.

Whether framed in secular or religious language, the implications are clear. If we treat primary reality as anything other than primary, there will be consequences—if not immediately, then compounded in the future. Voiced religiously, the health and wellbeing of God’s nature comes first. Anything else is human-centered, and thus a form of idolatry.

Anthropocentrism and the myth of human omnipotence over primary reality—God’s nature—have brought forth a global economic system that rewards the few at the expense of the many, measures progress by how fast it can turn the biosphere into pollution, and forces billions to betray posterity

in pursuit of the so-called “good life.” Whether we call such an anti-future economy unsustainable, insane, or demonic really doesn’t matter. It has no future. What is not aligned with God’s nature is self-terminating. There can be no human progress when the soils, waters, air, and life are degraded.

Ecologically, the success of any species begins with learning to thrive within the limits of *carrying capacity*. Humanity’s drawdown of natural resources and polluting of natural systems are not exempt from this law of life. How many fishes can be harvested without depriving our descendants of sustenance in the future? How much petroleum can be burned without triggering runaway climate catastrophe?

It is time to integrate carrying capacity into our theologies. Toward this end, I now speak of “grace limits.” The bounds that delimit safe levels of human use of other creatures and their habitats are there by natural grace. By staying within those bounds, we experience the grace of God’s nature. To venture beyond—which we have done, excessively—we suffer “God’s wrath” via storms, drought, floods, wildfires, rising and acidifying oceans, and in a great dying.

The call to action for religious adherents is this: to first learn about, then reflect upon, and finally evolve our worldviews. Henceforth, *the unbending grace limits of God’s nature*, combined with carrying capacity deficits inflicted by a century of human overpopulation and extravagant consumption (i.e., “overshoot”)²¹ will constrain even our noblest aims and thus the bounds of our efforts.²²

Idealism will be tempered whenever human *problems* morph into the far more dangerous and intractable contours of *predicaments*. The onset of multiple crises, such as those we witness today, signals that we have arrived at just such a turn.

I personally have spent much of the past three years revising and mourning the loss of a techno-optimist worldview that inspired my bright-eyed “evolutionary evangelism” for nearly two decades.²³ Along the way, I’ve been blessed not only with active hope, but also with a revised action plan that nourishes my soul. It feeds my soul because it arises from a realistic assessment of my own gifts and limitations at this pivotal time.

Among the tangible outcomes of my new focus is an uncompromising to-do list for humanity, which I offer below. This list derives from the collective intelligence of hundreds of scientific and religious colleagues whose ideas I have wrestled with and who have wrestled with mine.²⁴

For a religiously progressive audience, this set of declarative statements may be controversial not so much for *what* it says but *how*. Because “the *evidential* word of God” includes the knowledge and wisdom born of science, history, and cross-cultural experience²⁵, I have no difficulty writing *as if* the commanding, no-nonsense biblical God were speaking today. Crucially, in offering these “Ten Commandments” I am *not* channeling an otherworldly entity, nor am I accessing esoteric wisdom. Rather, I am aggregating scholarship in science, history, and cross-cultural studies to give voice to global collective intelligence in a way that maps our way home.

However you may respond to the style and tone of what follows, know that my proposal is a poor cousin to the power and art of what Conservation International and a dozen Hollywood stars have

already achieved. Please take a few minutes to watch one or more of the “Nature Is Speaking” videos freely available online, some of which have gone viral.²⁶ These short (1-2 minute) videos are unsurpassed for conveying the prophetic power of *personification*—giving human characteristics to what is more-than-human.²⁷

Reality’s Rules: Ten Commandments to Avoid Extinction and Redeem Humanity

The original Ten Commandments, as well as this version, delineate *the limitations on our behavior essential for human communities to persist over the long term*. Just as the Hebrew commandments were guidelines for a troubled people in a challenging time, the set below articulates the *constraints* that our species must now impose on itself while navigating crises of our own creation.

The first five commandments strive to inoculate us against the all-too-common virus of idolatry—that is, an unreal notion of God, a divinity not *synonymous* with reality. The second five offer a clear and compelling way back into right relationship to primary reality. Each is intended to be heard in the first-person, as God speaking.²⁸ In traditional religious language,

“Thus sayeth the Lord”...

1. Stop thinking of me as anything less than the voice of undeniable and inescapable reality.
2. Stop thinking of ‘revelation’ or ‘divine instruction’ without including evidence.
3. Stop thinking of Genesis, or your creation story, apart from the history of the universe.
4. Stop thinking of theology apart from ecology: the interdisciplinary study of my nature.
5. Stop defining and measuring ‘progress’ in short-term, human-centered ways.
6. Stop allowing the free or subsidized polluting of the commons.
7. Stop using renewable resources faster than they can be replenished.
8. Stop using non-renewable resources in ways that harm or rob future generations.
9. Stop exploring for coal, oil, and natural gas—keep most of it in the ground.
10. Stop prioritizing the wants of the wealthy over the needs of the poor.

* * *

Coda: The challenges ahead threaten to overwhelm. Yet I am moved to tears of joy as often as tears of sorrow. What a time to be alive and awake! What an honor to be engaged in the *Great Work*²⁹ of fostering a mutually enhancing human–Earth relationship! Supporting one another through the stages of grief and inevitable challenges along the way is surely medicine for our collective soul.

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The Rev. Michael Dowd, M.Div., is a former pastor, sustainable communities organizer, and bestselling eco-theologian and climate hawk whose work has been featured in *The New York Times*, *Los Angeles Times*, *Wall Street Journal*, *Washington Post*, *Newsweek*, *Discover*, and on television nationally. His 2009 book, *Thank God for Evolution: How the Marriage of Science and Religion Will Transform Your Life and Our World*, was endorsed by six Nobel Prize-winning scientists, noted skeptics, and by religious leaders across the spectrum. Michael and his science writer, evolutionary educator, and climate activist wife, Connie Barlow, have addressed 2,000+ groups throughout the U.S. and Canada since 2002. He has also delivered two TEDx talks, a program at the United Nations, and conducted two acclaimed online conversation series: “The Advent of Evolutionary Christianity” and “The Future Is Calling Us to Greatness.” Learn more about Rev. Dowd’s pro-science prophetic ministry here: StandingfortheFuture.org, TheGreatStory.org, MichaelDowd.org.

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² [Thomas Berry: Emerging Earth Community](#); David Abram, *The Spell of the Sensuous: Perception and Language in a More Than Human World* (Pantheon Books, 1996)

³ John Michael Greer, “[Problems and Predicaments](#)” (2006)

⁴ Michael Dowd, “[God in Big History](#)” (2015); “[God: Personification ≠ Person](#)” (2013); and “[God is Reality Personified, Not a Person](#)” (2011)

⁵ David Roberts, “[Climate Change Is Simple](#) Remix” 2012 TEDx talk; James Hansen, *Storms of my Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity* (Bloomsbury USA, 2009); Joseph Romm, *Climate Change: What Everyone Needs to Know* (Oxford University Press, 2015); [Skeptical Science: Getting Skeptical About Global Warming Skepticism](#)

⁶ John Englander, *High Tide On Main Street: Rising Sea Level and the Coming Coastal Crisis: Revised* (The Science Bookshelf, 2013)

⁷ <http://johnenglander.net/sea-level-rise-blog/why-sea-level-will-rise-centuries-ultimately-100-feet>

⁸ [2016 Rio Olympics Opening Ceremony](#) (video on climate change)

⁹ Richard Heinberg: *Afterburn: Society Beyond Fossil Fuels* (New Society Publishers, 2015); [The Association for the Study of Peak Oil \(ASPO\)](#)

¹⁰ Richard Heinberg and David Fridley, *Our Renewable Future: Laying the Path for One Hundred Percent Clean Energy* (Island Press, 2016)

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¹² William R. Catton, Jr., *Overshoot: The Ecological Basis of Revolutionary Change* (University of Illinois Press, 1980)

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- ¹⁴ <https://www.goodreads.com/quotes/6583723-sooner-or-later-we-all-sit-down-to-a-banquet>
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- ¹⁶ [“Assisted Migration”](#); [“Assisted Colonization”](#)
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- ¹⁸ <http://StandingfortheFuture.org> (“[Love something, learn something, let go of something, pass something forward](#)”)
- ¹⁹ National Geographic Explorer (2015): [“Bill Nye’s Global Meltdown: The Five Stages of Climate Change Grief”](#) John Michael Greer, *Not the Future We Ordered: Peak Oil, Psychology, and the Myth of Progress* (Karnac Books, 2013) pp. 101-120; Joanna Macy and Chris Johnstone, *Active Hope: How to Face the Mess We’re in Without Going Crazy* (New World Library, 2012)
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- ²¹ William R. Catton, Jr., *Overshoot: The Ecological Basis of Revolutionary Change* (University of Illinois Press, 1980); [Wikipedia entry, I = PAT](#)
- ²² [“Grace Limits & Systemic Piety”](#) audios and texts
- ²³ [“America’s Evolutionary Evangelist”](#)
- ²⁴ The content of these commandments/rules/guidelines derives from humanity’s current best scholarship in religion and science, especially the field of ecology. The wording has been influenced by dozens of friends and colleagues who work at the intersection of science, inspiration, and sustainability. Further suggestions for improvement are most welcome. Email [Michael\(DOT\)Dowd@ThankGodforEvolution.com](mailto:Michael(DOT)Dowd@ThankGodforEvolution.com)
- ²⁵ Michael Dowd, *Thank God for Evolution: How the Marriage of Science and Religion Will Transform Your Life and Our World* (New York: Penguin Group, 2009), Part II: “Reality Is Speaking”, pp. 65-137
- ²⁶ [“Nature Is Speaking” videos](#)
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- ²⁸ For a longer, annotated version and two distinct video versions, see [Standing for the Future](#) or [Ten Commandments for Today](#).
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