10 Converting the Environmental Movement into a Missionary Religious Force

Erik Assadourian

"New Earth" is perhaps too generous a way to describe the future planet that the remnants of human civilization will most likely live on. "Venus Junior" may be more accurate. With governments and corporations already working to mine tar sands and oil shale, to drill deep water oil deposits, including under the now-thawing Arctic, and even to capture natural gas from frozen methane hydrates (all while continuing to mine coal and drill current oil and gas reserves), a radically hotter world than civilization developed in seems highly likely. That's a world where average atmospheric temperatures are 4°C,[1] 5°C, even 6°C hotter,[2] where the North Pole is again nearly ice free, where the western Antarctic ice sheet has collapsed,[3] and much of the coastal land where many people now live has been submerged. Yes, that nightmarish reality might take a few centuries to manifest, but it seems clear that this is the future we're choosing for ourselves and that the environmental movement tacitly accepts.

Preventing that future—if that's even possible at this late stage in the game—will require a radical reformation of the environmental movement, as either a bolder political force as Peter Jacques discusses in chapter 9, or even as a religious missionary force (or ideally both). The movement has taken neither form thus far—at least in any significant way—and might not be able to fill either niche, but in its current "soundly compromised" form where it prioritizes incremental reform, the catastrophic future we're heading for is all but certain (see chapter 9). Yes, the movement is helping to modestly slow down the ecological transition (or "collapse" from a human's perspective), but in the end, this will mean only that the collapse comes a few years or decades later. Until a radical redesign of the movement is orchestrated, we can expect little more than this.

In this chapter, I critique the current form of the environmental movement, which at its best is doing little more than slowing the spread of the global cancer that human civilization currently has become and at its worst

is legitimizing the unsustainable growth and consumer culture that the movement is embedded in. I then propose an alternative design of the movement—one that could reintegrate humanity as a functional and healthy part of a larger Earth system. Specifically, I apply the lessons from over 2,000 years of missionary religious organizing to the environmental movement to see how these lessons could lead to more enduring success for the movement. While the speed of this type of change may be too slow to prevent civilizational collapse, it may turn out to be exactly the strategy needed to get humanity through the ecological transition, which at this point appears unstoppable, and rebuild in a manner that prevents further human-triggered collapses in the future.

The Roots of the Environmental Movement

How far back does one go to describe the environmental movement? Can it be pinpointed to the tumultuous 1960s and 1970s when Rachel Carson warned that forever more, springs may be silent of birdsong? When the Club of Rome warned that human civilization had reached the limits to growth? When Paul Ehrlich warned that the future would be plagued by mass starvation unless we slowed population growth? Do we stick to when the United States passed monumental clean air and clean water legislation and the world united around a new understanding of Earth as a borderless entity—facilitated by the first images of the planet taken from space—and came together to celebrate Earth Day?

Or do we have go back further to the conservation movement of the late 1800s and early 1900s when groups like the Sierra Club got their start or earlier in the 1800s when authors like Henry David Thoreau and Ralph Waldo Emerson inspired a transcendental relationship with nature?

Or was it even before that when the thick black smog from industrialization started causing new illness and mortality in cities like London when the first signs of the industrial revolution's ravages became unmistakable?[4] These are battles that have never stopped and often now take the mantle of "environmental justice."

Or maybe we have to go much further back: when first societies created myths, rituals, and taboos to prevent poor stewardship of essential resources—whether sacralizing forests, banning certain foods during certain times of the year, or ritually redistributing wealth to prevent overconsumption, hoarding, and inequity?[5]

All of these could be argued as the starting point of the environmental movement perhaps. In fact, none of these really ever disappeared,

continuing to work in pa
times in symbiosis, someti
("not in my back yard") s
mental agenda. But if we
ment—one deeply associat
like ozone depletion, toxi
would argue that this mov
first nonprofit environme
chises or subsidiaries. This
nected but similar (in biolo
a global unifying presence
help set (or even trump) lo

Sometimes this has pr
resources to developing c
such as when environment
porations whose local ager
term environmental stewar

In certain cases, this glob
including international c
phasing out chlorofluoroc
and banning toxins like pe
tler benefits, like creating c
suppressed to help orche
destructive pursuit of prog
entering China (see chapte
helped create a core of envi
fund the movement, creati
port for those activists, and
increase their protection ag

The Corruption of Environm

Sometimes, however, inter
influence. In 2004, conser
conservation community's
ignored, marginalized, disen
munity as it worked to pro
the movement should hav
the marginalization of es
partners continues. Similar

continuing to work in parallel—sometimes in unconnected ways, sometimes in symbiosis, sometimes even in conflict—such as when one NIMBY ("not in my back yard") struggle conflicts with a broader global environmental agenda. But if we're talking about today's environmental movement—one deeply associated with charismatic megafauna and global issues like ozone depletion, toxic waste, and, most recently, climate change—I would argue that this movement has existed in its modern form since the first nonprofit environmental organizations created multinational franchises or subsidiaries. This took a series of disparate and relatively unconnected but similar (in biological terms, "convergent") struggles and created a global unifying presence that could direct resources around the world and help set (or even trump) local priorities.

Sometimes this has proved advantageous—shepherding rich country resources to developing country battlegrounds—and other times less so, such as when environmental organizations serve as collaborators with corporations whose local agendas are directly at odds with the goals of long-term environmental stewardship.

In certain cases, this global standardization process led to positive results, including international cooperation on key environmental issues, like phasing out chlorofluorocarbons, preventing cross-border water conflict, and banning toxins like persistent organic pollutants. It has also led to subtler benefits, like creating civil society power where it was relatively weak or suppressed to help orchestrate environmental action and redirect the destructive pursuit of progress. Western nongovernmental organizations entering China (see chapter 12) and post-Soviet states, for example, have helped create a core of environmental energy there and helped to build and fund the movement, creating political space for homegrown activists, support for those activists, and international recognition (which also helped to increase their protection against persecution).[6]

The Corruption of Environmentalism

Sometimes, however, international civil society has had a less beneficial influence. In 2004, conservationist Mac Chapin wrote a critique of the conservation community's work in Latin America and how it often ignored, marginalized, disempowered, even displaced the indigenous community as it worked to protect biodiversity hotspots.[7] And while in theory the movement should have learned that this is not a model for success, the marginalization of essential constituencies and powerful potential partners continues. Similar stories to Chapin's continue to be told about

initiatives like the REDD+ (Reducing Emissions from Deforestation and Forest Degradation) mechanism. While designed to slow deforestation and incentivize additional forestation, critics argue that REDD+ is leading to the conversion of forests into monocropped tree plantations, undermining indigenous peoples' conservation efforts, and even propping up extractive industries.[8]

These stories aren't limited to the distant forests of developing countries. Tom Goldtooth, executive director of the Indigenous Environmental Network, noted that even 350.org, often viewed as the new face of the United States (and even the global) climate movement, resisted engagement with indigenous people. "We had to challenge them to bring us to stand with them on the pipeline issue," noted Goldtooth in 2011.[9]

Perhaps as problematic is that many organizations accommodate the political realities of the consumer societies of which they're part—either consciously or unconsciously—and so at best they work to slow ecological decline, not fight to create an entirely new sustainable reality. Some, like Ted Nordhaus of the Breakthrough Institute, defend this position by explaining that development is inevitable: "The question isn't whether Brazil is going to develop the Amazon, it's how. You have to think about how you're going to work with that process as opposed to resist it."[10] When moderating development is the starting point of the struggle, the end point can at best be an "ecodeveloped" Amazon (read: condominiums, malls, factories, stadiums, and farms, built with green materials and running on renewable energy). But considering the global ecological importance of the Amazon to a stable climate and preserving biodiversity, if development is inevitable, so is our eventual collapse.

Worse is that most multinational environmental organizations have fully embraced their part in the industrial-consumer paradigm, even if they self-identify as correctives to this system. From large salaries and posh office buildings, regular global travel junkets, and many of them actively partnering with corporations, to nearly all of them failing to question growth and having investments[11] in the very system that has to be radically changed to have any chance at preventing runaway climate change and other catastrophic disruptions of Earth's systems, these organizations are in no position to foment the scale of change needed to create a sustainable future for the 9.6 billion people the United Nations projects will be inhabiting Earth in 2050.[12]

But even worse is many organizations now suffer from undue influence from corporations—in the research, health advocacy, and

environmental communitie
dollars in donations and h
has not only weakened th
provided a vehicle for som
themselves. Accepting fund
dollars available to invest in
nizations from the true cha
groups to soften their crit
cases has even led to quest
or their products.[13]

As journalist Christine Ma
tions listed in the Political E
the worst corporate air poll
tributors to conservation org
much influence these contri
ine that these relationships
former vice president in cha
vancy, after leaving the org
that his pioneering effort t
mistake in my life." "Thes
explained, "you bring them

How does this corporate
willingness to advocate for
nomic degrowth and the cu
industries? And with most g
and foundations, both of wh
the wealthy to continue th
alienating their funders and
the planet needs?

What True Sustainability Wil

The mainstream environme
mental change agent at best-
ging or habitat to be drilled,
being built, and accelerating
battle is not shifting to less u
curbing energy and material
style impossible. After all, re

environmental communities. With many organizations taking millions of dollars in donations and having corporate leaders on their boards, this has not only weakened the independence of these organizations but provided a vehicle for some of the dirtiest corporations to "greenwash" themselves. Accepting funding from corporations, which have millions of dollars available to invest in public relations efforts, has misdirected organizations from the true challenges facing them. Moreover, it has led some groups to soften their criticism of supportive companies and in some cases has even led to questionable endorsements of polluting companies or their products.[13]

As journalist Christine MacDonald writes in *Green, Inc.*, of those corporations listed in the Political Economy Research Institute's Toxic 100 (a list of the worst corporate air polluters in America), twenty-nine are major contributors to conservation organizations.[14] While it isn't easy to identify how much influence these contributions provide companies, it is hard to imagine that these relationships provide no influence at all. David Morine, a former vice president in charge of land acquisition at the Nature Conservancy, after leaving the organization, discussed with the *Washington Post* that his pioneering effort to bring in corporate funders "was the biggest mistake in my life." "These corporate executives are carnivorous," he explained, "you bring them in, and they just take over."[15]

How does this corporate influence affect organizational priorities and willingness to advocate for the difficult changes necessary—such as economic degrowth and the curtailing or even dismantling of unsustainable industries? And with most groups receiving funding from affluent donors and foundations, both of which depend on a growing economy that allows the wealthy to continue their philanthropy, will these groups really risk alienating their funders and members advocating for the tough remedies the planet needs?

What True Sustainability Will Require

The mainstream environmental movement has made itself into an incremental change agent at best—saving a percentage of forests slotted for logging or habitat to be drilled, stopping a percentage of the new power plants being built, and accelerating the growth of renewables even when the real battle is not shifting to less unsustainable technologies like renewables but curbing energy and material use to a point that makes the consumer lifestyle impossible. After all, renewables also take massive amounts of upfront

energy to build and additional energy to maintain.[16] Ultimately the only way we get to a sustainable future is by reining human civilization back within planetary boundaries, and that will require dramatic degrowth of energy and material usage, consumption, and the total population of both humans and its dependent species, including livestock and pets, none of which will be very popular positions to take.[17]

There's a lack of honesty in the movement when we talk about what sustainability is going to require on the New Earth. For any chance at a sustainable future, we are going to have to radically reduce consumption, especially if justice continues to be a priority and we want to provide additional resources to the most impoverished among us to increase their chances of having a decent quality of life. In that context and in the context of a growing population,[18] the only thing that can give is how many of us live the lifestyles of consumers.

The ecological footprint, while not a perfect indicator (for one, it is far too conservative), does offer a rough benchmark of how many people the Earth can sustain. At current consumption levels, for example, humanity is using 1.5 planets worth of biocapacity.[19] In other words, we're undermining planetary stability as we burn through Earth's ecological capital. At our current global average consumption level, the Earth could sustain just 4.4 billion people without undermining the well-being of the Earth's systems. And if everyone consumed like Americans, the Earth could support only a quarter of today's population. On the flip side, if we lived very humbly (at a $3,000 per capita annual income rate, as in low-income countries), the Earth could support nearly double our current population.[20] Naturally, few people would choose such an "impoverished" lifestyle and no mainstream environmental organization would dream of advocating for this. Worse, with global marketers and policymakers pushing growth and increased consumption worldwide—and projections estimating that another 1 billion people will join the ranks of consumers by 2025[21]—this extreme reining in of human consumption probably won't happen unless major ecological changes force us to live like that.

But what about attempting to converge around a one-planet footprint? William E. Rees and Jennifer Moore calculated a one-planet footprint and found that it is dramatically smaller than what high-income consumers take for granted (see table 10.1).[22] Calorie consumption is a third less, meat consumption 80 percent less, living space just a quarter, and air travel just 4 percent of what it is in a high-income country.[23] Most striking is the number of cars per person: while there is one car per 2 people in a high-consumption society, in a one-planet society there is just one

Table 10.1
Comparing Fair Earth-Share, W

Consumption Measures (per Capita)
Daily calorie supply
Meat consumption (kg/year)
Living space (m2)
People per household
Home energy use (GJ/year)
Home energy use (kWh/year)
Motor vehicle ownership
Motor vehicle travel (km/year)
Air travel (km/year)
Carbon dioxide emissions (tons
Life expectancy (years)

Source: From Moore and Rees, "

car per 250 people.[24] In a ci
about 620,000, that means a
ity to emergency vehicles, p
ing, and rentals), that m
something Americans will
their meat intake by 80 perc
cant health benefits to shifti
ing far fewer people overwe
and walking more. After Cu
to a lack of oil access after t
ened environmental consci
plunging from 14 percent i
While it has since risen to 1
cent obesity rate in the Unit

Moore and Rees's one-pla
however. Add another 2.4 bill
2050—and these standards w
mainstream environmental
consumers, foundations, corp
ited off these consumer trends
Are organizations blind to th
that has caused the enviro

Table 10.1
Comparing Fair Earth-Share, World Average, and High-Consumption Countries

Consumption Measures (per Capita)	Fair Earthshare: 1 Planet	World Average: 1.5 Planets	High Consumption: 3 Planets
Daily calorie supply	2,424	2,809	3,383
Meat consumption (kg/year)	20	40	100
Living space (m2)	8	10	34
People per household	5	4	3
Home energy use (GJ/year)	8.4	12.6	33.5
Home energy use (kWh/year)	2,300	3,500	9,300
Motor vehicle ownership	0.004	0.1	0.5
Motor vehicle travel (km/year)	582	2,600	6,600
Air travel (km/year)	125	564	2,943
Carbon dioxide emissions (tons/year)	2	4	14
Life expectancy (years)	66	67	79

Source: From Moore and Rees, "Getting to One-Planet Living"

car per 250 people.[24] In a city like Washington, DC, with a population of about 620,000, that means a vehicle fleet of just 2,500 cars. Giving priority to emergency vehicles, public transit, and shared cars (taxis, car sharing, and rentals), that means essentially no private car ownership, something Americans will be even more reluctant to do than cutting their meat intake by 80 percent.[25] Of course, there would be some significant health benefits to shifting over to a one-planet lifestyle, such as having far fewer people overweight or obese because they'd be eating less and walking more. After Cuba's transition to a one-planet lifestyle—due to a lack of oil access after the collapse of the Soviet Union, not enlightened environmental consciousness—the country's obesity rate halved, plunging from 14 percent in to 7 percent in just 5 years (1990–1995).[26] While it has since risen to 19 percent, it is still far lower than the 35 percent obesity rate in the United States.[27]

Moore and Rees's one-planet calculations assume today's population, however. Add another 2.4 billion—the UN's medium-growth projection for 2050—and these standards will have to drop even further.[28] So how can a mainstream environmental movement—dependent on donations from consumers, foundations, corporations, and rich individuals who have profited off these consumer trends—advocate for the radical changes necessary? Are organizations blind to the fact that it is the Western consumer culture that has caused the environmental crisis, or is it that organizations'

continuing financial stability depends on keeping their eyes willfully shut to that truth? Either way the environmental movement as currently designed is failing to "save the planet" or, more correctly, prevent radical ecological changes that will lead the Earth, in comedian George Carlin's words, to "shake us off like a bad case of fleas."[29]

So where do we go from here? Assuming we don't want to wait patiently for the collapse to wipe out humanity and the Earth to heal and repopulate its biological diversity millions of years from now after the sixth wave of extinction runs its course, how should the environmental movement reform itself? And by "reform itself," I mean in the sense that Martin Luther broke some minority of Christians away from the decadent Catholic church. The majority of environmental groups (i.e., the Catholic church) will continue to be part of the established order committed to minor incremental change (e.g., green growth) while living affluent lifestyles. While they will most likely remain as the dominant player, a new wave of energy and authenticity could come from the Lutheranesque upstarts and over the coming decades bring environmentalism in a radically new direction.

Considering the massive scale of change necessary, I see one strategy as superior to others: the creation of environmentalism as a missionary philosophical movement. While this certainly will be met with ambivalence at first glance, it should be considered a real alternative to the ineffectual strategies currently employed by the mainstream environmental movement. I hope my detailing of this will at least spark a deeper introspection within the movement's membership, leadership, and supporters and perhaps even trigger the hammering of some treatises upon a door or two.

Cultivating an Ecological Philosophical Missionary Movement

What have been the most successful and long-lasting movements in history? Democracy? Capitalism? Expansion of human rights in a variety of forms? Or should we go back far further to the spreading of entire ways of being—religious belief systems that provide codes of ethics, offer an understanding of how the world works, and promise guidance in how to achieve a better life now and in the future, even after death. Religions, over millennia, "changed the basic principles of world civilization," as Peter Jacques points out in chapter 9. This is what a true sustainability movement will need to do too. The fact that Christianity, Islam, Buddhism, and other religions have spread and remained dominant social and cultural forces for the past few thousand years, and across a wide variety of geographic and

cultural realities, reveals the p
term, around a deeper way of
cific short-term campaign goal

The environmental movem
stand that it needs to espouse
energy to spread that philosop
shift would mean renouncing
goals (today's missionary mov
ment), only that those immed
term missionary movement bu

By "comprehensive philos
cosmology, theodicy, rituals, e
affect people and change the w
at this already. Arne Naess, in
low" environmental movemen
included eight principles that
ecological philosophies.[30] One
that it's not easy to organize a m
one gets to make their own per

Vaclav Havel, the Czech wri
could change the direction of t
develop a new understanding o
Earth. Only by making such a
new models of behavior and a
a purpose of life should be the st
purpose? Why do we have cons
et's long-term development? W
different answers to this questio
that allows humanity to live wit
ecomissionary philosophy coul
helping the Earth to flourish an
that impedes Earth's ability to d
"The flourishing of human and
The value of nonhuman life-for
nonhuman world for human p
world thrives may be at the hear

This purpose would also help
system requires. The ethics of a
be fully grounded in Earth's

cultural realities, reveals the power in this type of organizing: for the long term, around a deeper way of being and acting, and not just around a specific short-term campaign goal.

The environmental movement must learn lessons from this—to understand that it needs to espouse a comprehensive philosophy and use its core energy to spread that philosophy first and foremost. That's not to say this shift would mean renouncing working to achieve shorter-term political goals (today's missionary movements are no stranger to political engagement), only that those immediate campaigns are subordinated to longer-term missionary movement building.

By "comprehensive philosophy," I mean the creation of an ethics, cosmology, theodicy, rituals, even stories of redemption that could deeply affect people and change the way they live. There have been some attempts at this already. Arne Naess, in 1973, criticized the anthropocentric "shallow" environmental movement and advocated for "deep ecology," which included eight principles that could be at the heart of people's personal ecological philosophies.[30] One problem with that approach, however, is that it's not easy to organize a missionary philosophical movement if everyone gets to make their own personal "ecosophy."

Vaclav Havel, the Czech writer and political leader, once asked, "What could change the direction of today's civilization?" He answered, "We must develop a new understanding of the true purpose of our existence on this Earth. Only by making such a fundamental shift will we be able to create new models of behavior and a new set of values for the planet."[31] Offering a purpose of life should be the starting point of any philosophy. What is our purpose? Why do we have consciousness and the power to shape the planet's long-term development? While both religion and science have offered different answers to this question, neither has been able to answer in a way that allows humanity to live within the bounds of a flourishing planet. An ecomissionary philosophy could offer a new purpose—one as simple as helping the Earth to flourish and at the very least not developing in a way that impedes Earth's ability to do so. As deep ecology's first principle notes, "The flourishing of human and nonhuman life on Earth has inherent value. The value of nonhuman life-forms is independent of the usefulness of the nonhuman world for human purposes."[32] Ensuring that the nonhuman world thrives may be at the heart of any ecomissionary's creed.

This purpose would also help shape the ethical code that a philosophical system requires. The ethics of an effective ecophilosophy would need to be fully grounded in Earth's ecological realities and should facilitate

humanity's Earth-nurturing purpose. As conservationist Aldo Leopold noted over sixty years ago, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[33] This simple rule could serve as a foundation for a broader ecological ethics. Of course, considering how far we've trespassed beyond Earth's limits, this will not be an easy ethical code to follow. Obeying an Earth ethic will mean tough sacrifices and giving up many modern luxuries—and some things taken today to be fundamental rights (such as the ability to be as "fruitful" as one would like). But better to make sacrifices than to accelerate Earth's decline, and if the movement was organized in a way that provides other life wisdom and communitarian benefits, these might outweigh the tough moral requirements. Look, for example, at the Shakers, who because of their economic success and strong community grew to a peak of 6,000 adherents, even though being a Shaker required celibacy—a far higher bar than having fewer children and giving up air-conditioning would be.[34]

Beyond ethics, this philosophy would need to provide an updated theodicy—or understanding of suffering. Ancient theodicies rely on ancient understandings of the world. God's punishment or testing of faith or karma often serves to explain away bad fortune. But humans are capable of more nuanced understandings of the world now, including why we suffer. Grasping that the Earth is a complex, self-organizing system means certain forms of suffering are natural: prey/predator relationships, for example, or the chaos caused by violent planetary change like volcanic eruptions or earthquakes. But some other forms of suffering stem from imbalance, such as when one population grows unchecked, whether that be populations of homo sapiens or cancer cells. Distinguishing between forms of suffering and minimizing preventable types, while finding mantras and rituals to accept that which isn't preventable, could serve people far better than many theodicies available today.

Having a robust theodicy will be especially important in getting through the next centuries, when, even in the best case, there will be massive life loss and suffering as sea levels rise from thermal expansion and a collapsing western Antarctic wipes cities and even entire countries off the map. God's (or Gaia's) wrath could serve to explain these losses, but a more nuanced understanding of system change may lead to a healthier coping with those changes (e.g., settling on higher land rather than having faith that God will protect us no matter where we settle).

Beyond codes and creeds, any effective philosophy will provide means to bond communities in celebration and mourning. As theologian and

environmentalist Martin Pa
fear, guilt and sin from religi
and redemption."[35] The pro
celebration, and sin without
motivate. Thus, creating ritu
cycles like the coming of a ne
dependence on the planet w
sionary philosophy. If done
logical force rather than an
the average funeral costing
massive amounts of resource
to inter loved ones, it would
celebrate death if we tried.[36]
movement is doing, could n
restoration, burying the body
that becomes a sacred forest
bon, providing community
biodiversity and ecosystem
the pesticide-laden monocro
tion to this, the accompanyi
mourning friends and loved
life cycle, that like the proverb
impending shore as we are a
loved one will become the fo
future generations. While thi
life, it's arguably better tha
oblivion.

Could this mix of a hard
understanding of suffering,
enough to pull in adherents?
a robust, holistic ecological
cultures to follow a new eco
on aliens or supernatural be
that a system based on a li
one that science demonstr
survival—should absolutely
misunderstood in promoting
spread without the hard wor
those mechanisms will be at
itself.

environmentalist Martin Palmer notes, "Environmentalists have stolen fear, guilt and sin from religion, but they have left behind celebration, hope and redemption."[35] The problem is that fear without hope, guilt without celebration, and sin without redemption is a model that fails to inspire or motivate. Thus, creating rituals to mark birth, marriage, death, and annual cycles like the coming of a new year that both celebrate human life and our dependence on the planet will play a key role in developing a strong missionary philosophy. If done well, these rituals can also be a restorative ecological force rather than an ecological drain as they often are today. With the average funeral costing over $10,000 in the United States and using massive amounts of resources (concrete, woods, steel, and toxic chemicals) to inter loved ones, it would be hard to design a more unsustainable way to celebrate death if we tried.[36] But redeveloping this ritual, as the green burial movement is doing, could make death into a driving force for ecological restoration, burying the body simply (in just a shroud) in a natural setting that becomes a sacred forest of the future, in the process sequestering carbon, providing community parkland and food, and providing a space for biodiversity and ecosystem services to rebuild themselves (as opposed to the pesticide-laden monocropped cemetery that's typical today). In addition to this, the accompanying funeral ritual could celebrate life, helping mourning friends and loved ones understand that they are part of a larger life cycle, that like the proverbial ocean wave, we should not be afraid of the impending shore as we are actually part of the larger ocean. The body of a loved one will become the food of the forest and eventually the bodies of future generations. While this may not be as satisfying an end as eternal life, it's arguably better than the successful end of the karmic cycle: oblivion.

Could this mix of a hard-edged ethics, new stories, a more nuanced understanding of suffering, and a set of restorative rituals be attractive enough to pull in adherents? Perhaps the whole package could add up to a robust, holistic ecological philosophy that could inspire people across cultures to follow a new ecocentric way of life. If religious systems based on aliens or supernatural beings can spread around the world, it seems that a system based on a living but nonsentient planetary organism—one that science demonstrates we depend completely on for our survival—should absolutely be able to. But the biggest point that Naess misunderstood in promoting his deep ecology is that no philosophies spread without the hard work of missionary organizing, and developing those mechanisms will be at least as important as creating the philosophy itself.

Spreading Philosophies through Social Service Provision

How have missionary religious philosophies been so successful in spreading across cultures, times, and geographies? (Religions, while they are understandably more than this to adherents, are essentially orienting philosophies.) Certainly forced adoption of these philosophies by populations was part of their success (whether driven by converted leaders or invading forces). But more than this was the effective mix of a powerful philosophy combined with a timeless vision, beautiful stories, committed adherents, and perhaps most important, the promise of immediate assistance—the offering of food, clothing, education, livelihoods, medical care, even a supportive community.

As the breakdown of the climate system and other ecosystem services progresses in this century, the need for assistance will only increase—in the most impoverished countries as well as in fully consumerized societies. In places like the United States, for example, few people have retained basic survival skills—whether life skills like food cultivation, carpentry, sewing or repair, or specialized skills like midwifery or basic first aid. As complex societies break down and fewer people can access the fruits of the consumer economy (or depend on it for a livelihood), fewer will have access to medical care, schooling, support during elderly years, or even basic access to food or shelter (something readily visible reading the news about the Great Recession, Spain and Greece's depressions, the breakdown of the Soviet Union, and even the Great Depression of the 1930s). Providing aid, community support, and the skills needed to survive will offer a means to help people in this transition and, as important, provide a means to convert people from the currently dominant ecologically destructive consumer ideology to a more ecocentric and humanistic one.

The Christian socialism movement of the 1800s offers a relevant case study for this transition.[37] Christians, witnessing the destructive effects of rapid urbanization and the poverty that came with it, created social programs, including job training, food pantries, and safe housing for people immigrating to the cities. The goal was not to simply aid those in need but to spread Christianity, capturing the hearts, minds, and labor of the recipients of their aid.[38] This was the time when the Salvation Army and the YMCA were created, which today continue to have a global reach, reaching out to tens of millions of people, and distributing billions of dollars of social services in over 110 countries.[39] Imagine what an environmental movement could do with the same missionary zeal that the Salvation Army exhibited.

Look for example at Kib
mal survey of this slum f
the 200,000 to 250,000 Ke
nature.[40] The charitable go
education to Kiberans, a s
enough of. But these schoo
to their philosophical com

At the same time, there
ecological philosophy. But
every turn reinforces the
utterly on Earth and its com
to consume more than you
on the exploitation of ecos
factories, mines, and dump
to changing this untenable
that improve the well-being
sophical community, and, a

This is a philosophy th
school—from what is taug
and permaculture along wi
the lunchroom and everyt
away just with knowledge,
dence on Earth and perhap
will grow in value in a poste
a deep commitment to this
sionaries of that ecological p
services that could improve
could compete with the sed

And this model could be
provide basic medicine but
people and the planet. Fo
might be asked to spend tim
ment for treatment, growin
fare that contributed to th
ments. The clinic could also
as engaging with the large
regain their health. In the
along with their waistlines
and processed food, both o
locally grown vegetables.[42]

Look for example at Kibera, one of the largest slums in Africa. An informal survey of this slum found that of the roughly 250 schools serving the 200,000 to 250,000 Kenyans living there, nearly half are religious in nature.[40] The charitable goal of these religious schools is to provide a basic education to Kiberans, a service the Kenyan government cannot provide enough of. But these schools are also there to save souls and add members to their philosophical communities.

At the same time, there appear to be no schools in Kibera teaching an ecological philosophy. But imagine if there were. Imagine a school that at every turn reinforces the idea that humanity depends completely and utterly on Earth and its complex systems for our well-being; that it is unjust to consume more than your fair share and to have a lifestyle that depends on the exploitation of ecosystems, workers, and communities polluted by factories, mines, and dumps; and that the best life to live is one committed to changing this untenable, inhumane, and unsustainable system in ways that improve the well-being of your local community, your broader philosophical community, and, above all, the planetary community.

This is a philosophy that could be reinforced in every aspect of the school—from what is taught in the classroom (ecology, ethics, activism, and permaculture along with basic math and literacy) to what is served in the lunchroom and everything in between. Some students would walk away just with knowledge, including a better understanding of our dependence on Earth and perhaps basic livelihood and trade skills—skills that will grow in value in a postconsumer future. Others would walk away with a deep commitment to this way of thinking, and perhaps even become missionaries of that ecological philosophy, starting new schools or other social services that could improve people's lives while spreading a way of life that could compete with the seductive consumerist philosophy.[41]

And this model could be applied to a variety of needs. Ecoclinics could provide basic medicine but also focus on prevention that will help both people and the planet. For example, people with adult-onset diabetes might be asked to spend time tending the ecoclinic garden in partial payment for treatment, growing healthy food to replace the toxic, processed fare that contributed to their diabetes and so many other modern ailments. The clinic could also provide cooking and lifestyle courses as well as engaging with the larger community to help patients eat well and regain their health. In the process, their ecological impact would shrink along with their waistlines as they reduced their consumption of meat and processed food, both of which have larger ecological impacts than locally grown vegetables.[42]

Of course, social service provision is expensive, suggesting this new movement may be as dependent on members and foundations as today's movement is. But some of the services provided could be profitable social enterprises that help fund other more costly social services. The Shakers were known for their excellent herbs and craftsmanship. High-quality food production could play a similar role, as could providing key medical services like midwifery. Medicalized birth is expensive, both ecologically and financially, and typically leads to worse outcomes for baby and mother than allowing nature to lead the process.[43] In many countries, including the United States, midwifery is a lost art, and the demand for these services exceeds their supply. Making an ecophilosophy synonymous with high-quality midwifery and doula services could gain adherents through successfully helping mothers to have a healthy pregnancy, birth, and postnatal recovery, including supporting women in the breastfeeding process rather than using less healthy and less sustainable formula. And in the process, they could generate revenue that supports both these practitioners and the broader movement.

Hence social enterprises—like the YMCA's successful gym model and the Salvation Army's secondhand clothing and furniture sales—could play a key role in building a positive feedback cycle to spread this new missionary philosophy. And as the number of lives that these eco-missionaries touch grows, so does the potential for social modeling and friendships to lead to further spreading of the philosophy. As adherents invite friends and neighbors to join a celebration, a wedding, a weekly service, additional people may find their way aligns closer to this worldview than more ancient ones, and thus the movement could grow.

Finally, as numbers grow, some of the energy could be used to bolster immediate political goals—helping mainstream environmentalists in their campaigns, and with their deeper commitment perhaps even playing an outsized role than their small numbers might suggest possible. The Quakers (the Religious Society of Friends) could be an instrumental model for eco-missionaries. This small Christian sect became a dominant economic and political force of Pennsylvania in the 1700s as well as a major force in the abolition movement.[44] Today the Quakers continue to be a powerful voice in international peace and governance processes—far larger than what their total membership of 340,000 would seem to warrant.[45] Eco-missionaries could do the same, engaging in political resistance efforts, and working both inside and outside the system toward the cultural, social, economic, and political change needed (all the while also trying to gather additional adherents to the cause).

The Long Decline and Event

The long decline is on its wa
think. Climate change alon
ing a path of more growth, n
a certainty that there will b
tions; a flood of failing sta
wars.[46] As ecosystems unrave
ernments go bankrupt or ad
is a good chance that basic s
significantly. Who will fill t
vices? Will it be fundament
down of ecosystems and soc
governments that offer sec
freedom?

Will either of these force
they bring us further away a
needed or, worse, do more da
with other imperial governm
and lands now available wit

Let's imagine a scenario
losophy come out on top.
Christians survived ancient
mutualistic support membe
Christian teachings).[47] More
pagans) ended up helping th
bers and, often, to convert t
or awe, some because their
not-so-fortunate pagans did
vival rates and high conversi
dominant religion, even fro

A strategic mix of essentia
ulture and essential preventi
tance, and missionary aid co
adherents to both survive the
spread their philosophy to n
received in surviving too.

This in turn could enable
humanity to a more ecocentr
thus more influential, propo

The Long Decline and Eventual Rebirth of Civilization

The long decline is on its way—and probably coming much sooner than we think. Climate change alone will prevent human civilization from following a path of more growth, more progress, more "development." It is almost a certainty that there will be major political, social, and economic disruptions; a flood of failing states; the dislocation of millions of people; and wars.[46] As ecosystems unravel, economies falter, and local and national governments go bankrupt or adopt austerity measures to appease lenders, there is a good chance that basic social services will be cut and poverty will grow significantly. Who will fill this vacuum of providing order and basic services? Will it be fundamentalist religious institutions that read the breakdown of ecosystems and society as signs of the end times, or authoritarian governments that offer security in exchange for the last remnants of freedom?

Will either of these forces bring us closer to a sustainable future, or will they bring us further away as they either ignore the ecological restoration needed or, worse, do more damage as they fight over diminishing resources with other imperial governments (fighting, for example, over new resources and lands now available within the Arctic Circle)?

Let's imagine a scenario where instead, adherents of an ecological philosophy come out on top. As sociologist Rodney Stark has found, early Christians survived ancient epidemics in larger numbers because of the mutualistic support members offered each other (made more normal by Christian teachings).[47] More so, their aiding of out-group members (e.g., pagans) ended up helping those fortunate pagans to survive in higher numbers and, often, to convert to Christianity (some, perhaps, out of gratitude or awe, some because their own networks were suddenly much smaller as not-so-fortunate pagans didn't survive the epidemic).[48] Both higher survival rates and high conversion rates helped the rise of Christianity into a dominant religion, even from its tiny starting base.[49]

A strategic mix of essential knowledge retention (particularly in permaculture and essential preventive and medical care), in-group mutual assistance, and missionary aid could play a key role in helping ecophilosophical adherents to both survive the turbulent times ahead in larger numbers and spread their philosophy to many new converts, grateful for the help they received in surviving too.

This in turn could enable these adherents to help redirect the future of humanity to a more ecocentric path as they become a relatively larger, and thus more influential, proportion of surviving humanity. After the dust

settles and new states stabilize, it is possible that this ecomissionary movement (whatever specific name it takes) will have grown large enough to become a major force in rebuilding civilization and could seed a new harmonious way of relating to the Earth as well as prevent a new growth-centric/imperial culture taking root.

I can even imagine a day where ecocracies (ecological theocracies) become the dominant form of state—just as Christian, Islamic, and Buddhist kingdoms guided the world throughout the Middle Ages. Surely these ecocracies will not be without their problems; no human institution is. There may even be wars about meaningless nuances of their philosophy or warring factions of eco-missionaries, as we have seen historically with other philosophical and religious movements. It is hard to imagine a future where human conflict is no longer, but if it is waged in a way that neither harms the planet nor diminishes the prospects of the long-term survival of civilization, perhaps that is a worthy enough outcome to pursue.

Taking the Difficult First Steps on This New Road

While starting a new ecophilosophical missionary movement is surely not a comfortable discussion topic for most in the environmental movement, this may offer more hope of saving humanity than the current populist form of light green environmentalism. While telling middle-class consumers that "you can save the planet in ten easy steps," (with number 10 being "donate to our organization") makes people feel better, it has shown its extreme limitations. Clearly that kind of semiuseful or even counterproductive organizing will continue, but perhaps a more enlightened minority will be enough to bring us a new, deeper environmentalism that can help us get through the collapse and build a truly sustainable future at the other end.[50]

The big question is, How do we take the first steps down this road? Does it require a gathering of committed individuals to hammer out a first draft of the philosophy to be shaped over the coming decades? Does it require entrepreneurs to start building social enterprises and social services, embedding philosophical elements within the goods and services provided? Does it require reformers within the environmental movement working to ratchet up the role of mainstream environmental movements? Yes, yes, and yes. All of these and far more is required to get us to a more useful and enduring environmentalism—one that I hope can push us toward a new ecocentric future that centuries from now will be built around a billion

or so people living simple, f
tained for millennia by a f
eighth, then ninth wave of
ecocidal growth cycle beyo

Notes

1. Potsdam Institute, *Turn Dow*
2. Lynas, *Six Degrees*.
3. Sumner, "West Antarctic Ice
4. Hanlon. "Pollution and Mo
5. Gardner, "Engaging Religio
Ecological Guardians."
6. Larson, "China's Emerging
Global Greengrants Fund an
efforts to help support and leg
7. Chapin, "A Challenge to C
8. Cabello, and Gilbertson, N
9. Sharife, "Climate Change,
10. Ted Nordhaus as quoted i
11. Klein, "Time for Big Gree
12. United Nations, "World P
13. MacDonald, *Green, Inc.*
14. Ibid., 25–28.
15. Ibid., 58–60; Ottaway and
16. Murphy, Jr., "Beyond Fos
17. Moore and Rees. "Gettin
18. Due to population mo
of family planning efforts st
current projections). See, for
Reduction Is Not a Quick Fix
19. WWF, *Living Planet Report*

or so people living simple, fulfilling lives—lives that will be able to be sustained for millennia by a flourishing Earth, rather than cause a seventh, eighth, then ninth wave of mass extinction, as humans keep repeating the ecocidal growth cycle beyond a scale Earth can sustain.

Notes

1. Potsdam Institute, *Turn Down the Heat.*

2. Lynas, *Six Degrees.*

3. Sumner, "West Antarctic Ice Sheet Is Collapsing."

4. Hanlon. "Pollution and Mortality in the 19th Century."

5. Gardner, "Engaging Religions to Shape Worldviews" and "Ritual and Taboo as Ecological Guardians."

6. Larson, "China's Emerging Environmental Movement." See also, for example, the Global Greengrants Fund and the Goldman Prize for two examples of Western efforts to help support and legitimize the global environmental movement.

7. Chapin, "A Challenge to Conservationists."

8. Cabello, and Gilbertson, *NO REDD: A Reader.*

9. Sharife, "Climate Change, the Big Corrupt Business?"

10. Ted Nordhaus as quoted in Rosner, "Is Conservation Extinct?"

11. Klein, "Time for Big Green to Go Fossil Free."

12. United Nations, "World Population Prospects."

13. MacDonald, *Green, Inc.*

14. Ibid., 25–28.

15. Ibid., 58–60; Ottaway and Stephens, "Nonprofit Land Bank Amasses Billions."

16. Murphy, Jr., "Beyond Fossil Fuels."

17. Moore and Rees. "Getting to One-Planet Living."

18. Due to population momentum, even scenarios with significant expansion of family planning efforts still result in a larger population (albeit not as large as current projections). See, for example. Bradshaw and Brook, "Human Population Reduction Is Not a Quick Fix for Environmental Problems."

19. WWF, *Living Planet Report 2014.*

20. Calculations by author, based on ibid.

21. McKinsey Global Institute, *Urban World*.

22. Moore and Rees, "Getting to One-Planet Living."

23. Ibid.

24. Ibid.

25. Ibid.

26. Murphy and Morgan, "Cuba," and Manuel Franco et al, "Population-Wide Weight Loss and Regain in Relation to Diabetes Burden and Cardiovascular Mortality in Cuba 1980–2010.

27. National Center for Health Statistics, *Health, United States, 2014*.

28. United Nations, "World Population Prospects."

29. *George Carlin: Jammin' in New York*, Cable Stuff Productions, HBO, April 24, 1992.

30. Naess, *The Ecology of Wisdom*.

31. Havel as quoted in Speth, Foreword.

32. Naess, *The Ecology of Wisdom*.

33. Leopold, *A Sand County Almanac*.

34. *Ken Burns' America: The Shakers*, Public Broadcasting System, 1985. This number may have grown far larger; however, the Shakers' economic model of producing high-quality goods was unable to compete with industrialization and the cheap products this brought.

35. Palmer quoted in Grady, "Using Religious Language to Fight Global Warming."

36. Harris, *Grave Matters*.

37. Stewart J. Brown taught an ecclesiastical history course at the University of Edinburgh, "The Social Gospel in Britain, Germany, and the United States, 1870–1920,"that explored this topic.

38. Hattersley, *Blood and Fire*.

39. *The YMCA Blue Book*; YMCA, "Mission," at www.ymca.int/who-we-are/mission; Salvation Army USA, *The Salvation Army 2012 Annual Report* (2012); The Salvation Army International, "About Us," at www.salvationarmy.org/ihq/about.

40. Population and area from Karanja, "Myth Shattered," and Maron, "Kibera's Census: Population, Politics, Precision." School calculation based on Map Kibera's

education database at www.mapl
Kibera Trust, e-mail to author, D

41. Erik Assadourian, "The Liv
Prepare for a Changing World,"

42. Assadourian, "The Living Ea
"The Weight of Nations."

43. Jan Blustein and Jianmeng
Delivery for Long Term Child He

44. Crothers, *Quakers Living in th*

45. Friends World Committee fo
see American Friends Service Com

46. Potsdam Institute, *Turn Down*

47. Stark, *The Rise of Christianity*.

48. Ibid.

49. Ibid.

50. Research by Erica Chenoweth
of the population is needed to su
in an engaged, active, and sus
adherent-activists were cultivated
nizing, the movement, even with
one based in a larger number of
Success of Nonviolent Civil Resist
Why Civil Resistance Works.

Bibliography

Assadourian, Erik. "The Living Ea
for a Changing World," *World Wa*

Assadourian, Erik. "The Living E
Life Rituals," *World Watch Magazi*

Bradshaw, Corey J. A., and Barry
a Quick Fix for Environmental
Sciences of the United States of
doi:.10.1073/pnas.1410465111

Cabello, J., and Gilbertson eds.
.makenoise.org.

education database at www.mapkibera.org, December 11, 2012, and on Maron, Map Kibera Trust, e-mail to author, December 11, 2012.

41. Erik Assadourian, "The Living Earth Ethical Principles: Life of Service and Prepare for a Changing World," *World Watch Magazine*, May/June 2009, pp. 34–35.

42. Assadourian, "The Living Earth Ethical Principles: Right Diet"; Walpole et al., "The Weight of Nations."

43. Jan Blustein and Jianmeng Liu, "Time to Consider the Risks of Caesarean Delivery for Long Term Child Health," *BMJ* 2015, 350:h2410.

44. Crothers, *Quakers Living in the Lion's Mouth*.

45. Friends World Committee for Consultation, *Finding Quakers Around the World*; see American Friends Service Committee, afsc.org/afsc-history.

46. Potsdam Institute, *Turn Down the Heat*; Welzer, *Climate Wars*.

47. Stark, *The Rise of Christianity*.

48. Ibid.

49. Ibid.

50. Research by Erica Chenoweth and Maria J. Stephan finds that only 3.5 percent of the population is needed to succeed in nonviolent civil resistance (albeit acting in an engaged, active, and sustained manner). If these more deeply engaged adherent-activists were cultivated through deeper, longer-term philosophical organizing, the movement, even with smaller numbers, may be far more effective than one based in a larger number of loosely engaged followers. See Chenoweth, "The Success of Nonviolent Civil Resistance"; and Erica Chenoweth and Maria J. Stephan, *Why Civil Resistance Works*.

Bibliography

Assadourian, Erik. "The Living Earth Ethical Principles: Life of Service and Prepare for a Changing World," *World Watch Magazine* (May/June 2009): 34–35.

Assadourian, Erik. "The Living Earth Ethical Principles: Right Diet and Renewing Life Rituals," *World Watch Magazine* (November/December 2008): 32–33.

Bradshaw, Corey J. A., and Barry W. Brook. "Human Population Reduction Is Not a Quick Fix for Environmental Problems." *Proceedings of the National Academy of Sciences of the United States of America* 111, November 18, 2014, 16610–15. doi:.10.1073/pnas.1410465111

Cabello, J., and Gilbertson eds. *NO REDD: A Reader*. December 2010. http://noredd.makenoise.org.

Chapin, Mac. "A Challenge to Conservationists." *World Watch Magazine* (November/December 2004): 17–31.

Chenoweth, Erica. "The Success of Nonviolent Civil Resistance." *TedX Boulder*, September 21, 2013.

Chenoweth, Erica, and Maria J. Stephan. *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. New York: Columbia University Press, 2012.

Crothers, A. Glenn. *Quakers Living in the Lion's Mouth*. Gainesville, FL: University Press of Florida, 2012.

Franco, Manuel. "Population-Wide Weight Loss and Regain in Relation to Diabetes Burden and Cardiovascular Mortality in Cuba 1980–2010: Repeated Cross Sectional Surveys and Ecological Comparison of Secular Trends." *BMJ*, April 9, 2013.

Friends World Committee for Consultation. *Finding Quakers around the World*. Philadelphia: Friends World Committee for Consultation, 2007.

Gardner, Gary. "Engaging Religions to Shape Worldviews." In *State of the World 2010*, edited by Linda Starke and Lisa Mastny. New York: Norton, 2010.

Gardner, Gary. "Ritual and Taboo as Ecological Guardians." In *State of the World 2010*, edited by Linda Starke and Lisa Mastny. New York: Norton, 2010.

Grady, Helen. "Using Religious Language to Fight Global Warming." *BBC Radio*, January 25, 2010. http://news.bbc.co.uk/2/hi/sci/tech/8468233.stm.

Hanlon, W. Walker. "*Pollution and Mortality in the 19th Century*." UCLA and NBER, 2015.

Harris, Mark. *Grave Matters: A Journey through the Modern Funeral Industry to a Natural Way of Burial*. New York: Scribner, 2007.

Hattersley, Roy. *Blood and Fire: William and Catherine Booth and Their Salvation Army*. New York: Doubleday, 2000.

Karanja, Muchiri. "Myth Shattered: Kibera Numbers Fail to Add Up." *Daily Nation*, September 3, 2010.

Klein, Naomi. "Time for Big Green to Go Fossil Free." *Nation* (May 2013): 20.

Larson, Christina. "China's Emerging Environmental Movement." *Yale Environment 360*, June 3, 2008.

Leopold, Aldo. *A Sand County Almanac*. New York: Oxford University Press, 1966.

Lynas, Mark. *Six Degrees: Our Future on a Hotter Planet*. Washington, DC: National Geographic, 2008.

MacDonald, Christine. *Green, Inc*. Guilford, CT: Lyons Press, 2008.

Maron, Mikel. "Kibera's Cens
September 5, 2010.

McKinsey Global Institute. *U*
McKinsey & Company, June 2

Moore, Jennie, and William
of the World 2013: Is Sustain
Washington, DC: Island Press,

Murphy, Pat, and Faith Morg
of the World 2013: Is Sustain
Washington, DC: Island Press,

Murphy, T. W., Jr. "Beyond
of the World 2013: Is Sustain
Washington, DC: Island Press,

Naess, Arne. *The Ecology of W*
point, 2010.

National Center for Health
Feature on Adults Aged 55–64,
2015.

Ottaway, David B., and Joe
Charity Builds Assets on Corp

Potsdam Institute for Climate
the Heat: Why a 4°C Warmer W
2012.

Rosner, Hillary. "Is Conservati

Salvation Army USA. *The Salva*

Sharife, Khadija. "Climate C
December 5, 2011.

Speth, James Gustave. Forewo
Human and Natural Communit
Fernandez. New Haven, CT:
2008.

Stark, Rodney. *The Rise of Chris*

Sumner, Thomas. "West Anta
2014).

Maron, Mikel. "Kibera's Census: Population, Politics, Precision," *Map Kibera* (blog), September 5, 2010.

McKinsey Global Institute. *Urban World: Cities and the Rise of the Consuming Class*. McKinsey & Company, June 2012.

Moore, Jennie, and William E. Rees. "Getting to One-Planet Living." Ed., In *State of the World 2013: Is Sustainability Still Possible?* edited by Linda Starke, 39–50. Washington, DC: Island Press, 2013,

Murphy, Pat, and Faith Morgan. "Cuba: Lessons from a Forced Decline." In *State of the World 2013: Is Sustainability Still Possible?* edited by Linda Starke, 332–42. Washington, DC: Island Press, 2013

Murphy, T. W., Jr. "Beyond Fossil Fuels: Assessing Energy Alternatives." In *State of the World 2013: Is Sustainability Still Possible?* edited by Linda Starke, 172–83. Washington, DC: Island Press, 2013.

Naess, Arne. *The Ecology of Wisdom: Writings by Arne Naess*. Berkeley, CA: Counterpoint, 2010.

National Center for Health Statistics. *Health, United States, 2014: With Special Feature on Adults Aged 55–64*, (Hyattsville, MD: National Center for Health Statistics, 2015.

Ottaway, David B., and Joe Stephens. "Nonprofit Land Bank Amasses Billions: Charity Builds Assets on Corporate Partnerships." *Washington Post*, May 4, 2003.

Potsdam Institute for Climate Impact Research and Climate Analytics. *Turn Down the Heat: Why a 4°C Warmer World Must Be Avoided*. Washington, DC: World Bank, 2012.

Rosner, Hillary. "Is Conservation Extinct?" *Ensia*, July 22, 2013.

Salvation Army USA. *The Salvation Army 2012 Annual Report*. 2012.

Sharife, Khadija. "Climate Change, the Big Corrupt Business?" *Africa Report*, December 5, 2011.

Speth, James Gustave. Foreword to *Toward a New Consciousness: Values to Sustain Human and Natural Communities*, edited by Anthony A. Leiserowitz and Lisa O. Fernandez. New Haven, CT: Yale School of Forestry and Environmental Studies, 2008.

Stark, Rodney. *The Rise of Christianity*. San Francisco: HarperSanFrancisco, 1997.

Sumner, Thomas. "West Antarctic Ice Sheet is Collapsing," *New Science* 12 (May 2014).

United Nations, Department of Economic and Social Affairs, Population Division. "World Population Prospects: The 2012 Revision, Key Findings and Advance Tables." Working Paper. ESA/P/WP.227, 2012.

Walpole, Sarah Catherine, , "The Weight of Nations: An Estimation of Adult Human Biomass," *BMC Public Health* 12 (2012), 439–445.

Welzer, Harald. *Climate Wars: What People Will Be Killed For in the 21st Century*. New York: Polity Press, 2012.

WWF. *Living Planet Report 2014: Species and Spaces, People and Places. McLellan, R.* Ed. L. Iyengar, B. Jeffries and N. Oerlemans. Gland, Switzerland: WWF, 2014.

The YMCA Blue Book. Geneva: World Alliance of YMCAs, 2012.

Section 6 New Earth

Joyeeta Gupta explains in
has historically been a fun
ful states. Both Gupta an
that geopolitics on the N
geopolitics can no longer
of material resources, but
together on an ecologic
explains how changes in
understood—are harming
examines these changes th
global quest for resources i

Gupta develops the con
tainable sharing of abiotic
resources like minerals and
components of ecospace: li
and fixed resources couple
various options for the equ
political implications, ultim
rizing and practice is limit
degradation on the New Ea
framework based on "gloc
social, ecological, and ec
inclusive drivers of develo
constitutionalism.

In chapter 12, Shapiro hi
power is having not only
participation and transparen
tics surrounding them. Prim
she argues that China's trad