

## Thinking About the Unthinkable by David Orr

We have long lived in the faith that “nature does not set booby traps for unwary species,” as Robert Sinsheimer once noted. Whether or not nature does, we humans do, and we have nearly trapped ourselves by exploiting large pools of carbon found in soils, forests, coal, oil, and gas. The result is a rapid change in the chemistry of the atmosphere, leading to rising temperatures, destabilization of virtually every part of the biosphere, and the looming prospect of global catastrophe. The effect of climatic disruption now gathering momentum is a tsunami of change that will roll across every corner of the Earth, affect every sector of every society, and worsen problems of insecurity, hunger, poverty, and societal instability. We live now in the defining moment of our species that will determine whether we are smart enough, competent enough, and wise enough to escape from a global trap entirely of our own making.

Global warming, in the words of John Holdren, President Obama’s science adviser, “is already well beyond dangerous and is careening toward completely unmanageable.”[1] Furthermore, the destabilization of climate is now believed to be more or less permanent in human timescales. Geophysicist David Archer puts it this way: the climate impacts of releasing fossil fuel CO<sub>2</sub> into the atmosphere will last longer than Stonehenge. Longer than time capsules, longer than nuclear waste, far longer than the age of human civilization so far. The CO<sub>2</sub> coming from a quarter of that ton will still be affecting the climate one thousand years from now, at the start of the next millennium.[2]

In other words, the climatic destabilization we have incurred is not a solvable problem but a steadily worsening condition with which humans will have to contend for a long time to come. Early and effective action to end our use of coal, oil, and natural gas and switch to renewable energy can only contain the eventual scale, scope, and duration of climatic destabilization; it will not remedy the situation in any way that could reasonably be called a solution. That’s the science.

But the gap between science and the public discourse about climate destabilization seems as wide and seemingly as unbridgeable as the Grand Canyon itself. We are, to say the least, quite unaccustomed to thinking about matters so total and so permanent. We rely on analogies and metaphors to understand things otherwise inexplicable. But what analogies, metaphors, or manner of thinking clarify the issues posed by climatic destabilization?

We will first turn to the familiar beginning with the standard metaphor of our age, based on the image of the machine—devices of our own making that are accordingly understandable, purposeful, and repairable. Machine thinking leads some to regard climate destabilization as a solvable problem and, of course, as an opportunity to build a better world. In one recent view “solving climatic change” is described as a new pathway to prosperity; we can have it all—growth in the economy, a thriving business environment, and a solution to the climate crisis. Would that it were so.

Machine thinking is rooted in the Enlightenment era's faith in progress: machines beget better machines that beget still better ones. And better machines and more cleverness, it is assumed, will restore climate stability without disrupting our manner of living. But the Earth and its enveloping atmosphere are not simply machines and accordingly are not repairable. Nor is their "malfunction" a solvable problem as we understand those words.

Reliance on capitalism, rooted in the metaphor of "invisible hands," doesn't clarify our plight much either. Humans are not the rational calculators assumed in economic models. And the common use of discounting marginalizes the prospect of future disasters such that a new shopping mall is privileged over investments that reduce the scale of catastrophe, say, fifty years hence. Neither are the "preanalytic assumptions" about human mastery of nature, infinite substitutability of technology for scarce natural resources, and the beneficence of economic growth useful for adapting economic activity to the limits of the Earth.

What about biblical narratives? There is a similarity of sorts between the story of Adam and Eve's eviction from Paradise and that which we are now writing about our own self-eviction from the ten-thousand-year paradise that geologists call the Holocene into a hotter world that some call the Anthropocene. Perhaps a better story is to be found in narratives about End Times. Theologian Jack Miles, for instance, wonders what we will resolve to do once we discover that achieving sustainability is beyond our capacities and that we are living in the End Times, although not as told by rabid End-Timers like pastor Tim LaHaye, coauthor of the *Left Behind* books. Would our demise turn out to be our finest hour or simply a nasty and brutish final scene?

Perhaps climate destabilization bears a resemblance to the issue of abortion writ large. Whereas the public debate about abortion has been focused on an individual fetus, climate destabilization carries with it the possibility of aborting many species forever and many generations of humans that would otherwise have lived. But as Jonathan Schell wrote in his discussion of nuclear politics, "How are we to comprehend the life or death of the infinite number of possible people who do not yet exist at all? . . . To kill a human being is murder, but what crime is it to cancel the numberless multitude of unconceived people? In what court is such a crime to be judged? Against who is it committed? . . . What standing should they have among us?"[3]

This is a case of what Hannah Arendt once called "radical evil," which Schell interprets as evil that "goes beyond destroying individual victims and, in addition, destroys the *world* that can in some way respond to—and thus in some measure redeem—the deaths suffered." [4] Climate destabilization, like nuclear war, has the potential to destroy all human life on Earth and in effect "murder the future." [5] But having never lived, those not born will not suffer, will know no deprivation, and can make no claims against those who aborted the opportunity they might otherwise have had to live. Willfully caused extinction is a crime that as yet has no name. There would be no judge, no jury, no sentence . . . simply a void and a great silence that would once again descend on Earth.

There are other metaphors and analogies that we could summon to help us begin to comprehend the full gravity of our situation, but all will be found wanting in one way or another. We are now in the era that biologist E. O. Wilson has called “the bottleneck,” for which we have no precedent and no very useful example. I have faith that humankind will emerge someday chastened but improved.

But deliverance will require more than astute science and a great deal more than smarter technology—both necessary but insufficient. Science can describe our situation down to parts per trillion and help to create better technologies, but it can give us no clear reason why we should want to survive, why we deserve to be sustained on Earth, or why we should worry about the lives or well-being of generations whose existence now hangs in the balance. That is rather the function of deeper senses that we catalog with words like “morality,” “ethics,” and “spirituality.” But what kind of morality or ethics is remotely adequate when measured against the time spans necessary to restabilize Earth’s systems? I do not know. But with each turn of the screw it will be tempting to avoid asking such questions and give in to trade-offs that privilege the living and damn those who reside only in the abstraction we call the future. And, for sure, there is no easy or perhaps good case to be made for current destitution except a bit more of it for the wealthy.

While I do not presume to know what the content of that morality might be, I doubt that it will be born in “deep thinking” characteristic of the academy or from philosophers debating esoteric points of obscure doctrines. I think the birth will be harder than that—messy and painful, which is to say a philosophy born of necessity and of stories of real people caught in the acts of struggle, generosity, and failure. Perhaps it won’t be philosophy at all but rather a kind of practical worldview that emerges from the recognition of realities we’ve created and with which humankind must now contend for centuries to come. Let me suggest three illustrations of such a process.

The first is taken from a friend who recently spent several months as a patient in a cancer ward. During hours of treatment he witnessed the growth of community among his fellow cancer patients. Once reticent to say much about themselves, under the new reality of a life-threatening disease they gradually became more talkative and open to thinking about their lives and listening to the experiences of other patients. Living in the shadow of death, they were more open to ideas and people, including some that they formerly regarded as threatening or incomprehensible. They were less prone to arrogance and more sympathetic to the suffering of others. They were less sure of once strongly held convictions, and more open to contrary opinions. No longer masters of their lives, their schedules, or even their bodies, many achieved a higher level of mastery by letting go of illusions of invulnerability, and in the letting go, they reached a more solid ground for hope and the kind of humble but stubborn resilience necessary for beating the odds or at least for living their final days with grace.

Another possible narrative can be drawn from the experience of people overcoming addiction. Alcoholics Anonymous, for example, offers a twelve-step process to overcome addiction that begins with self-awareness and leads to a public confession of the problem, a reshaping of

intention, the stabilizing influence of a support group, and a reclaiming of self-mastery to higher ends. The power of this narrative line is in the similarity between substance addiction and its collateral damages and our societal addictions to consumption, entertainment, and energy and their destructive effects on our places, selves, and children.

A third narrative comes from the haunting story of the Native American Plenty Coups, chief of the Crow people, told by philosopher Jonathan Lear. [6] Under the onslaught of white civilization, the world of the Plains tribes collapsed and their accomplishments disappeared, along with much of their culture, sense of purpose, and meaning. At the end of his life, Plenty Coups told his story to a trapper, Frank Linderman, saying: “But when the buffalo went away the hearts of my people fell to the ground, and they could not lift them up again. After this nothing happened.” [7] Of course many things happened, but without the traditional bearings by which they understood reality or themselves, nothing happened that the Crow people could interpret within a familiar framework. Lear describes Chief Plenty Coups’ courageous efforts to respond to the collapse of his civilization with “radical hope” but without the illusion that they could ever re-create the world they had once known.

There were others, like Sitting Bull, who pined for vengeance and a return to a past before the juggernaut of American civilization swept across the Plains. Likewise, Ghost Dancers hoped fervently to restore what had been, but Plenty Coups knew that the Crow culture organized around the hunt and warfare would have to become something inconceivably different. The courage to fight had to be transformed into the courage to face and respond creatively and steadfastly to a new reality with “a *traditional* way of going forward.” [8] What makes his hope radical, Lear says, “is that it is directed toward a future goodness that transcends the current ability to understand what it is. Radical hope anticipates a good for which those who have the hope as yet lack the appropriate concepts with which to understand it.” [9]

It is clear by now that we have quite underestimated the magnitude and speed of the human destruction of nature. But the rapid destabilization of climate and the destruction of the web of life are just symptoms of larger issues, the understanding of which runs hard against our national psyche and the Western worldview generally. It is easier, I think, to understand the reality of dilemmas in places that have historical ruins and are overlaid with memories of tragedies and misfortunes that testify to human fallibility, ignorance, arrogance, pride, overreach, and sometimes evil. Amid shopping malls, bustling freeways, and all of the accoutrements, paraphernalia, enticements, and gadgetry of a booming fantasy industry, it is harder to believe that sometimes things don’t work out because they simply cannot or that limits to desire and ambition might really exist. When we hit roadblocks, we have a national tendency to blame the victim or bad luck but seldom the nature of the situation or our beliefs about it. What Spanish philosopher Miguel de Unamuno called “the tragic sense of life” has little traction just yet in the United States because it runs against the national character, and we don’t read much philosophy anyway. [10]

A tragic view of life is decidedly not long-faced and resigned, but neither is it giddy about our possibilities. It is merely a sober view of things, freed from the delusion that humans should be

about “the effecting of all things possible” or that science should put nature on the rack, as Francis Bacon advised, and torture secrets out of her. It is a philosophy that does not assume that the world or people are merely machines or that minds and bodies are separate things, as we learned from Descartes. It is not rooted in the assumption that what can’t be counted does not count, as Galileo believed. The tragic sense of life does not assume that we are separate atoms, bundles of individual desires, unrelated hence, without obligation to others or what went before or those yet to be born. Neither does it assume that the purpose of life is to become as rich as possible for doing as little as possible, or that being happy is synonymous with having fun. The tragic view of life, on the contrary, recognizes connections, honors mystery, acknowledges our ignorance, has a clear-eyed view of the depths and heights of human nature, knows that life is riddled with irony and paradox, and takes our plight seriously enough to laugh at it.

Whether aware of it or not, all of us are imprinted with the stamp of Bacon and the others who shaped the modern worldview. However, the problem is not that they were wrong, but rather that we believed them too much for too long. Taken too far and applied beyond their legitimate domain, their ideas are beginning to crumble under the weight of history and the burden of a reality far more complex and wonder-filled than they knew and could have known.

Anthropogenic climate destabilization is a symptom of something more akin to a cultural pathology. Dig deep enough, and the “problem” of climate is not reducible to the standard categories of technology and economics. It is not merely a problem awaiting solution by one technological fix or another. It is, rather, embedded in a larger matrix, a symptom of something deeper. Even if we were to “solve” the “problem” of climate change, our manner of thinking and being in the world would bring down other curses and nightmares now waiting in the wings. Perhaps it would be a nuclear holocaust, or terrorism, or a super-plague, or, as Sun Microsystems founder Bill Joy warns, an invasion of self-replicating devices like nanotechnologies, genetically engineered organisms, or machines grown smarter than us that will find us exceedingly inconvenient. There is no shortage of such plausible nightmares, and each is yet another symptom of a fault line so deep that we hesitate to call it by its right name.

The tragic sense of life accepts our mortality, acknowledges that we cannot have it all, and is neither surprised nor dismayed by human evil. The Greeks who first developed the dramatic art of tragedy knew that we are ennobled not by our triumphs or successes but by rising above failure and tragedy. Sophocles, for example, portrays Oedipus Rex as a master of the world—powerful, honored, and quite full of himself, but also honest enough to search out the truth relentlessly. In his searching, Oedipus falls from the heights, and that is both his undoing and his making. Humbled, blind, old, and outcast, Oedipus is a far nobler man than he had been at the height of his kingly power. Tragedy, the Greeks thought, was necessary to temper our pride, to rein in the tug of hubris, and to open our eyes to hidden connections, obligations, and possibilities.

We are now engaged in a global debate about what it means to become “sustainable.” But no one knows how we might secure our increasingly tenuous presence on the Earth or what that

will require of us. We have good reason to suspect, however, that the word “sustainable” must imply something deeper than merely the application of more technology and smarter economics. It is possible and perhaps even likely that more of the same “solutions” would only compound our tribulations. The effort to secure a decent human future, I think, must be built on the awareness of the connections that bind us to each other, to all life, and to all life to come. And in time, that awareness will transform our politics, laws, economics, philosophies, manner of living, worldviews, and politics.

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[1] John Holdren, “One Last Chance to Lead,” *Scientific American Earth* 3.018, no. 4 (November 2008), 20–21.

[2] David Archer, *The Long Thaw* (Princeton, NJ: Princeton University Press, 2009), 1.

[3] Jonathan Schell, *The Fate of the Earth* (Palo Alto, CA: Stanford University Press, 2000), 116.

[4] Schell, *Fate of the Earth*, 145.

[5] Schell, *Fate of the Earth*, 168.

[6] Jonathan Lear, *Radical Hope* (Cambridge, MA: Harvard University Press, 2006), 2.

[7] Lear, *Radical Hope*, 2.

[8] Lear, *Radical Hope*, 154.

[9] Lear, *Radical Hope*, 104.

[10] Miguel de Unamuno, *The Tragic Sense of Life in Men and Nations* (Princeton, NJ: Princeton University Press, 1977).