

COLLAPSE, POLYCRISIS, DECLINE, CONTRACTION

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Do I think today's economic, political, and social structures will collapse? Of course they will; all past civilizations have failed in time, and ours has reasons to break down that have never before existed. Our era, the Industrial Age, began and has succeeded by extracting and exploiting elements of Earth's functioning. As Earth's functioning is thus weakened and impaired, so eventually is our way of life weakened. The source of its strength will be an instrument of its downfall.

Four decades ago English environmental writer and thinker Edward Goldsmith explained succinctly the ingredients of industrial progress. "Economic growth . . . is biological and social contraction and deterioration. *They are just different sides of the same coin.* It is the biosphere, in fact—the real world—that is being industrialised."¹

As a result of its exploitative success, the present global economy is nearing the point when the resources it requires for growth are gone or financially unprofitable, and that means one by one the industries dependent on a scarce asset will fail. A full ending will take years to accomplish, however, and I think the right question at this point is not "is there hope we can avert collapse?" but rather "how will we manage the contraction that has already begun?"

In other words, what we can predict with certainty is contraction, and in the natural world we are surrounded by its signals.

- Global levels of human-made "forever chemicals" have made rainwater unsafe to drink worldwide—even in the most remote areas.²
- Almost all of the global population (99%) breathe air that exceeds WHO guideline limits and contains high levels of pollutants, with low- and middle-income countries suffering from the highest exposures.³

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¹ Edward Goldsmith, "Deindustrializing Society," *The Ecologist* Vol. 7. No. 4, May 1977, downloadable at <https://www.resurgence.org/magazine/ecologist/issues1970-1979.html>.

² Karen Graham, "Global levels of 'forever chemicals' in rainwater make it unsafe to drink worldwide," Digital Journal, August 7, 2022, <https://www.digitaljournal.com/tech-science/global-levels-of-forever-chemicals-in-rainwater-make-it-unsafe-to-drink-worldwide/article>.

³ World Health Organization, "Air pollution," https://www.who.int/health-topics/air-pollution#tab=tab_1.

- Heat impacts are increasing fast in the developing world and may soon hit hard limits of human survivability.⁴
- Fertility rates are dropping, and on present trends the worldwide fertility rate would reach zero by 2045.⁵
- An Edinburgh-based research team says plankton, the tiny organisms that sustain life in the seas, has all but been wiped out in the equatorial Atlantic.⁶
- From April 1, 2022, to April 1, 2023, US beekeepers lost 48.2% of their managed hives to threats including the varroa mite and adverse weather.⁷
- Over the last 160 years more than 57 billion tons of soil have eroded in the US Midwest.⁸
- New research shows total ecosystem collapse is inevitable if the losses are not reversed.⁹

The myth of progress is the underlying worldview leading to these consequences.

The worldview that Goldsmith analyzes as the reason for wholesale acceptance of industrialism is one most *New Ecozoic Reader* subscribers have begun to question—at least in theory.

Let us begin by considering the main features of this world-view. Implicit to it is the notion that the world we live in is *imperfect*. . . . By means of science, technology, and industry, we have persuaded ourselves, it can be transformed into a veritable paradise.

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⁴ Ben German and Andrew Freeman, “1 big thing: Heat waves taking humanitarian toll,” Axios Generate, October 11, 2022, <https://www.axios.com/newsletters/axios-generate-6050b879-81f7-4cb6-8a68-2e06951ce415.html>.

⁵ Kurt Cobb, “Are we missing something about the coming population decline?”, Resource Insights, June 11, 2023, <http://resourceinsights.blogspot.com/2023/06/are-we-missing-something-about-coming.html>.

⁶ “Equatorial Atlantic ‘pretty much dead’ says scientist as plankton wiped out,” Marine Industry News, July 18, 2022, <https://marineindustrynews.co.uk/atlantic-ocean-pretty-much-dead>.

⁷ Olivia Rosane, “‘Very Troubling’: US Honeybees Just Suffered Second Deadliest Year on Record,” Common Dreams, <https://www.commondreams.org/news/2022-2023-was-the-second-deadliest-year-on-record-for-us-honeybees>.

⁸ Rachel Crowell, “More than 57 billion tons of soil have eroded in the U.S. Midwest,” ScienceNews, April 12, 2022, <https://www.sciencenews.org/article/soil-erosion-rate-us-midwest-unsustainable-usda>.

⁹ Damian Carrington, “Ecosystem collapse ‘inevitable’ unless wildlife losses reversed,” *The Guardian*, February 23, 2023, <https://www.theguardian.com/environment/2023/feb/24/ecosystem-collapse-wildlife-losses-permian-triassic-mass-extinction-study>.

This transformation is referred to misleadingly as development and the direction it is leading us in is referred to as progress.¹⁰

Thomas Berry also recognizes an underlying dissatisfaction with the kind of life Earth offers: “There seems to be in the western psyche a deep hidden rage against the human condition, an unwillingness to accept life under the conditions that life is granted us, a feeling of oppression by the normal human condition, a feeling that the pains of life and ultimately death are something that should not be, something that must be defeated.”¹¹ Berry, again: “We have been entranced with the progress myth . . . progress that would lead beyond the human condition to something infinitely better, to wonderland.”¹²

In the effort to escape from the real world, writes Goldsmith, “a new organisation of matter is building up: the technosphere or world of material goods and technological devices: or the *surrogate world*.”¹³ Since Goldsmith’s day, this buildup has reached enormous proportions. In 2020, the amount of anthropogenic mass created since 1900 exceeded the weight of all living global biomass. An impressive graphic illustrating this statistic depicts the scale of comparison, material by material, beginning with concrete, the largest.¹⁴

Because Goldsmith was writing to people who identified themselves as part of the world of automobiles and airplanes rather than the world of fishes and trees, he considered it necessary to explain:

Unfortunately, we are part of the real world not the surrogate one.¹⁵

I think the more privileged classes of the Global North do identify more with industrial life than with nature, and the threatened loss of modern conveniences may be of more concern than signs of contraction in the natural world. To lose services we’ve been buying with our participation in the economic system is a cause for worry, since most of us don’t know how to manage without them. Daily we access technologies we understand only well enough to press the right buttons or the proper pedals. We eat food we know little about, even if we can afford the label “organic.” We depend on life-extending medications we could not replicate if the pharmacies were to close. We turn

¹⁰ Goldsmith, “Deindustrializing Society,” 129.

¹¹ Thomas Berry, “Ethics and Ecology,” a paper delivered to the Harvard Seminar on Environmental Values, Harvard University, April 9, 1996, <https://intuerifarm.files.wordpress.com/2014/09/ethics-and-ecology2.pdf>.

¹² Berry, *The Dream of the Earth* (San Francisco: Sierra Club Books, 1988), 57.

¹³ Goldsmith, “Deindustrializing Society,” 129.

¹⁴ Bruno Venditti, author, and Zack Aboulazm, graphics/design, “Visualizing the Accumulation of Human-Made Mass on Earth,” *Elements Newsletter*, November 28, 2021, <https://elements.visualcapitalist.com/visualizing-the-accumulation-of-human-made-mass-on-earth/>.

¹⁵ Goldsmith, “Deindustrializing Society,” 131

on faucets from which water appears as if by magic. We board a plane and in four hours are in the arms of a loved one we would never see again if access depended on animal-powered transportation.

Because of the seriousness of our dependencies and the scarcity of alternatives—much less high-level planning and preparation for a succession economy—it would be callous of me to approach the topic of industrial-age breakdown with any attitude except sober anxiety. For almost all humans, privileged or not, the experience of contraction will be very hard.

I can't mourn the passing of a harmful way of life.

I face this decline with any degree of composure for several reasons. First, I recognize the harm this civilization is causing to the natural world. For the industrial economy to prosper, biological life must wane. My wellbeing is tied to the welfare of fishes and trees.

Second, I understand that the industrial way of life began and has succeeded by also exploiting human potential—spirit, mind, and body. We have been shaped to want comforts that consume the very things we cannot do without. To remedy that shaping I find it helpful to look at what I need rather than what I want. The more I acknowledge my essential biological needs, the more I release attachment to the benefits the industrial economy has given me. In other words, the more clearly I recognize the damage all natural beings have suffered, including myself, through the processes of industrial civilization, the less I value its advantages. To injure the vibrant bio-layer of Earth as it has done is more deadly to all life forms than any of us can comprehend, but the more we focus on our essential needs—clean water, air, and livable temperatures—the more easily we can release our hold on the system that must destroy all of these in order to prosper. The ease we have obtained through progress has been gained at a price too high. It has cost us the elements we need in order to thrive.

The third reason I face this passing somewhat calmly is my age and history. In childhood I experienced a less industrialized, less consumer-oriented, less financially affluent existence and saw the good of it. In my heart is the blueprint for a more handmade, localized way of life, and I've turned many of these memories into practice in adult years. Even though I've had one foot in the modern world, I never came to see a more Earth-friendly existence as unappealing. The worldview that Goldsmith analyzed as the reason for wholesale acceptance of industrialism is one I never fully shared.

Overriding the importance of these three factors, however, is another explanation: increasingly I take seriously my sense that all the world is sacred. I want to be caring in my relationship to each member of the Earth family. I want my appropriation of a being or feature to be necessary, and I want to convey my need and appreciation in a conscious way. When I ask the vegetable, the animal, the rock, the tree, or the mountain

to contribute to my wellbeing, I want to be sure I come from a caring rather than a “use” relationship.

For me to live at all does require taking or altering the life of another. That is the Earth story. One receives because another gives. The source of livelihood for Earth creatures is Earth’s creatures and Earth’s features. Gratitude and generosity—receiving and giving mindfully—is the spirit of the exchange in the ideal situation. And because our present situation is far from ideal for living in such a spirit, I can’t face contraction or even collapse without awareness of this benefit.

Sustainability means no depletion and no waste.

On a planet where everything is sacred, industrialism—even “green” industrialism—is far from ideal. From the beginning of this century most environmentalists have proposed replacing the fossil-fuel industrial system with an industrial system run on renewable power generation. Unfortunately this green vision is yet another technosphere, still based on extraction and exploitation, and so does not meet nature’s standard of sustainability. My environmental-educator daughter is the source of the best succinct explanation of where we are now, compared with where we need to be. She says, “In nature there is no depletion of what we call resources, and no waste.”¹⁶ That’s the rule by which we can measure our conduct, and the directive we can set for public policy. Humans can only survive if we adjust to the planet’s survival requirements. This we will do eventually, since as they say, “nature bats last,” but so far we haven’t found a way to stop the destruction and the waste yet keep our technological benefits.

I don’t see a way to accomplish the one without abandoning the other. Industrial benefits cost destruction and waste. Richard Heinberg, Senior Fellow of the Post Carbon Institute, working with David Fridley of Lawrence Berkeley National Laboratory, came to the conclusion that even if we could focus on climate change alone, technology cannot resolve that problem. He writes:

Nuclear power is too expensive and risky; meanwhile, solar and wind power both suffer from intermittency, which (once these sources begin to provide a large percentage of total electrical power) will require a combination of three strategies on a grand scale: energy storage, redundant production capacity, and demand adaptation. At the same time, we in industrial nations will have to adapt most of our current energy usage (which occurs in industrial processes, building heating, and transportation) to electricity. Altogether, the energy transition promises to be an enormous undertaking, unprecedented in its requirements for investment and substitution. When David and I stepped back to assess the enormity of the task, we could see no way to maintain current quantities of global energy production

¹⁶ Laurie Cone, HBSG Zoom conversation, Center for Ecozoic Studies, June 14, 2022.

during the transition, much less to increase energy supplies so as to power ongoing economic growth. The biggest transitional hurdle is scale: the world uses an enormous amount of energy currently; only if that quantity can be reduced significantly, especially in industrial nations, could we imagine a credible pathway toward a post-carbon future.¹⁷

Reducing energy consumption significantly is what policymakers dare not ask, and what wealthy and powerful energy consumers do not plan to offer. And anyway, climate change cannot be addressed separately from all the other pressing factors in our dilemma. As the wise among us have said, *everything* must change. I don't expect powerful institutions built on biological and social exploitation to shift in proportion to the urgency, or to move in step with the pace of what is now being called a polycrisis. We will not have the benefit of enlightened public policy or visionary leadership.

I see reasonable reasons to expect some positive outcomes.

Nevertheless, smaller-scale transitions will increasingly occur, largely beyond the view of corporate media. The questioning of fossil-fuel-era norms will spread, but almost silently as families and neighborhoods begin to adapt. Openness to the principle of living within limits will grow. The paradigms that shaped industrial culture will lose credibility. More and more people will learn from Indigenous wisdom. The work of human hands will become more respected, whereas narrow intellectual knowledge will prove just that—narrow—and insufficient for a period of institutional decline. Low-energy ways to thrive will be explored by warm-hearted, accurately informed people who will prove to be humanity's true stars and leaders.

I don't want to minimize the difficulty of the shifts we can expect. People who are not well, not well-off financially, and not young enough or old enough to handle the no-doubt greater personal demands involved—these have reason to fear the downfall of institutions and services that have made their lives more comfortable. Pain and distress will increase according to a person's physical, spiritual, and social difficulties. The weak and sick will need the care of stronger companions to manage such a transition, and everyone needs a village of helping partners. But most readers who take the time to learn some new but very old skills can find satisfaction in creating a worthwhile life even amid environmental, economic, and social upheaval, however it may be labeled.

¹⁷ Richard Heinberg, "Museletter #303, "Climate Change Isn't Our Biggest Environmental Problem, and Why Technology Won't Save Us," <https://richardheinberg.com/museletter-303-climate-change-isnt-our-biggest-environmental-problem-and-why-technology-wont-save-us>.