

THIS ISSUE; POLYCRISIS; THE COLLAPSE OF COMPLEX SOCIETIES

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This issue is the first of a three-part series on where we humans are in human and planetary history. This issue is on collapse (endings), the following issue will be on cosmogenesis (beginnings), and the final issue will be on ecozoic practices (actions we can take to bring about a viable future for humans and the larger community of life systems).

The future is unpredictable. As the saying on the cover of this issue says, things are getting better and better for humans—in some ways (new technologies, growing economies, declining poverty, medical breakthroughs)—and they are getting worse and worse for humans and other species (loss of biodiversity, ecological degradation, ever-more-lethal weapons, aging infrastructure, authoritarianism, social divisions), all faster and faster. The nearly 300-year-old industrial age is a blip in the 300,000-year history of *Homo sapiens*, and a miniscule amount of the four-billion-year history of our planet. The “Great Acceleration” following World War II of human population growth, consumption, and communication is shorter still.

Ancient humans knew nature through their senses, stories, and customs; modern humans have largely lost these ways of knowing, at least at the conscious level, but have increasingly come to know nature through science—physics, chemistry, biology, ecology, Earth systems science. After centuries of seeking and in many ways achieving mastery of nature, humans are re-experiencing the limits of their ability to control. There is a growing fear that there are limits to growth and indeed we may already have passed them. Industrial civilization may be a house of cards.

Each of the authors in this issue feels that this may be the case—that our civilization is breaking down and hard times lie ahead. What is important is not, however, whether the way they are foreseeing collapse occurs in that way, but rather what are the implications of understanding the future this way.

The authors would argue it is ecologically, socially, and psychologically beneficial because it involves facing reality and leads to right action. This view is supported in a book that has influenced several of the authors of this issue, *Overshoot: The Ecological Basis of Revolutionary Change*, by William Catton,¹ which lays out, as he says, “the ecological facts of life.” Here are some of those facts:

Human society is inextricably part of the global biotic community, and in that community human dominance has had and is having destructive consequences.²

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¹ William Catton, *Overshoot: The Ecological Basis of Revolutionary Change* (Urbana, IL, The University of Illinois Press, 1982).

² *Ibid.*, 10.

All creatures human or otherwise impose a load upon their environment's ability to supply what they need and to absorb and transform what they excrete or discard. . . If the load increases until it exceeds the carrying capacity, overuse of environment *reduces* its carrying capacity [and] in time, reduce the load to match the shrinkage of carrying capacity.³

The past four centuries of magnificent progress were made possible by two non-repeatable achievements: (a) discovery of a second hemisphere [that is, colonialism], and (b) development of ways to exploit the planet's energy savings deposits, the fossil fuels.⁴

Catton describes our age as the "Age of Exuberance," an exuberance that is not warranted. Industrialism made us reliant on nonrenewable resources and we are exploiting them at increasing rates as they become less available, while still oddly believing that, with enough human ingenuity and technology, sources of energy and materials can limitlessly support growth. To the contrary, he argues, we are in a condition of de-civilization. The abundance we achieved and believed would increase gave us an illusory hope of a prosperous, harmonious human family, a hope that may have made democracy possible. The foreclosing of the conditions of the industrial age will cause not only physical strain but also social strain.

Catton advises us that

[hu]mankind must gamble on an uncertain future, for phenomenally high stakes. . . . *Ironically the less optimistic assumptions we let ourselves make about the human prospect, the greater our chances of minimizing future hardships for our species.* To keep from dehumanizing ourselves (and even gravitating toward genocide), we must stop demanding perpetual progress.⁵

In this spirit, in this issue

- Jean Arnold offers her art and words on sanity in a time of ecological breakdown and collapse.
- Alice Loyd expects industrialism's exploitation of the natural world to be its downfall, and explores how human success in this period of contraction will depend on the degree to which we can adapt to nature's limits.

³ Ibid., 4.

⁴ Ibid., 5-6.

⁵ Ibid., 9 (italics added).

- Michael Dowd tells the story of the influence Catton's *Overshoot* had on him, his recognition that the breakdown we are experiencing is not a set of problems to be solved for the biosphere has already crossed critical thresholds, and how living beyond denial of this breakdown, while sharing in the suffering of loss, offers the possibility of *post-doom* new life.
- Michael Powell then takes readers into the experiential reality of loss in his review of and reflection on Dahr Jamail's, *The End of Ice: Bearing Witness and Finding Meaning in the Path of Climate Disruption* (2019): Breakdown is not an analytical awareness, it is an inner experience that opens one to profound questioning and ecological conversion.
- Alice Loyd ends this issue by highlighting three human capacities to strengthen in order to become more collapse-ABLE.

Polycrisis

Polycrisis is a word you will read several times in this issue. It is an emerging term in the field of social-ecological inquiry. Just as we were completing this issue of the *Reader*, we came across Richard Heinberg's "MuseLetter #363: Polycrisis, Unraveling, Simplification, or Collapse."⁶

This led us to two important downloadable documents:

1. From the Post Carbon Institute: "Welcome to the Great Unraveling: Navigating the Polycrisis of Environmental and Social Breakdown"⁷; and
2. From the Cascade Institute: "Global Polycrisis: The causal mechanisms of crisis and entanglement."⁸

"Polycrisis," while coined decades ago,⁹ is thought to be a helpful neologism for understanding how we are not facing many separate crises each one of which can be addressed independently, but rather we are facing multiple interconnected and inter-causal crises no one of which can be addressed within the bounds of that crisis alone. Obvious examples of this are that the migration crisis is connected with the climate

⁶ Richard Heinberg, "Museletter #363: Polycrisis, Unraveling, Simplification, or Collapse," June 2023, <https://richardheinberg.com/museletter-363-polycrisis-unraveling-simplification-or-collapse>.

⁷ Asher Miller and Richard Heinberg, "Welcome to the Great Unraveling: Navigating the Polycrisis of Environmental and Social Breakdown, post carbon institute, June 15, 2023, <https://www.postcarbon.org/publications/welcome-to-the-great-unraveling/>.

⁸ Michael Lawrence, et al, Global Polycrisis: The causal mechanisms of crisis and entanglement," Cascade Institute, Version 1.0, Pre-print, June 2023, <https://cascadeinstitute.org/wp-content/uploads/2023/06/The-Causal-Mechanisms-of-Global-Polycrisis-v1.0-19June2023.pdf>.

⁹ For a collection of articles on Polycrisis, see "The Global Polycrisis: Cascading Crises, <https://omega.ngo/learn-more/the-global-polycrisis/> and <https://omega.ngo/category/polycrisis/>.

crisis, populism and authoritarianism are connected with inequality and cultural crises . . . which are connected with migration and climate change, and so on.

We highly commend to our readers Richard Heinberg's MuseLetter and the Post Carbon Institute's report on "The Great Unraveling." The latter updates Catton's work and explains why addressing climate change and other crises, such as inequality, racism, populism, and authoritarianism is so complex. The good news is that while no crisis can be solved alone, efforts in any crisis can have beneficial effects on other crises.

The Collapse of Complex Societies

To our knowledge no book is cited more in studies of societal or civilizational collapse, sometimes called "collapsology," than Joseph Tainter's *The Collapse of Complex Societies*.¹⁰ Tainter notes that much attention has been given to the history of the buildup of complex societies, but little to their collapse, which he says is a "recurring feature of human societies."¹¹ The objective of his work is to develop a general theory of societal collapse. Here follows a brief overview of certain elements of his thought.

Complex societies, dating back only about 6,000 years, are a relatively recent phenomenon in human history and yet they dominate our experience such that we think of them as normal. In earlier hunter-gatherer societies there were few distinct social roles. In our societies today there are tens of thousands of distinct roles. Complexity refers to

The size of a society, the number and distinctiveness of its parts, the variety of specialized social roles that it incorporates, the number of distinct social personalities present, and the variety of mechanisms for organizing these into a coherent, functioning whole. . . .

Two concepts important to understanding the nature of complexity are inequality and heterogeneity.¹²

As complexity increases, the amount of information that needs to be processed to coordinate the parts increases and laws to maintain the complex structures and order increase. In simpler societies, social units were small, autonomous, and largely self-sufficient and individuals in such societies were also largely self-reliant. In modern societies, states form the basic social unit.

In states, a ruling authority monopolizes sovereignty and delegates all power. The ruling class tends to be professional, and is largely divorced from the bonds of

¹⁰ Joseph Tainter, *The Collapse of Complex Societies* (Cambridge, UK: Cambridge University Press, 1988).

¹¹ Tainter, 5.

¹² *Ibid.*, 23.

kinship. This ruling class supplies the personnel for government, which is a specialized decision-making organization with a monopoly of force, and with the power to draft for war or work, levy and collect taxes, and decree and enforce laws. The government is legitimately constituted, which is to say that a common society-wide ideology exists that serves in part to validate the political organization of society. And states, of course, are in general larger and more populous than tribal societies, so that social categorization, stratification, and specialization are both possible and necessary.¹³

Notwithstanding this shared ideology and monopoly of force, states have a need to constantly reinforce their legitimacy and they are greatly concerned with maintaining their territorial integrity. Legitimacy is the belief by the populace that things are as they should be. When this declines states can replace legitimacy with coercion but this is a costly exercise. “Establishing moral validity is a much less costly and effective approach.”¹⁴ States have a center, the symbolic framework of society. “The center partakes of the sacred. And, in this sense, every state has an official religion.”¹⁵

Because individuals in complex societies are not autonomous and self-sufficient, the legitimacy of a state must also have a material basis. In other words states must satisfy the demands of their citizens for material well-being. “Output expectations are continuous, and impose on leadership a never-ending need to mobilize resources to maintain support.”¹⁶

Earlier states had a more sacred basis and order could be maintained by invoking supernatural sanctions. Modern states are increasingly secular and more dependent on the maintenance of a material base and on coercion through enforcement of both just and unjust laws.

Tainter defines collapse as a political process: “*A society has collapsed when it displays a rapid, significant loss of an established level of sociopolitical complexity.*”¹⁷ Collapse is evidenced in art, literature, and philosophy and also, among other things, in the loss of central control, investment in complexity, disintegration of regulation and integration, less flow of legitimate information, less coordination, loss of territorial control, and less sharing and trading and redistribution of resources. Cogently, Tainter observes that “Human societies, like all living systems, are maintained by a continuous flow of energy.”¹⁸ The energy needs of simple societies are far less than in complex societies and with increasing complexity energy demands grow. When marginal returns on increased complexity decline, a key to continued socioeconomic growth is to obtain a

¹³ Ibid., 26.

¹⁴ Ibid., 27

¹⁵ Ibid.

¹⁶ Ibid., 28.

¹⁷ Ibid., 4 (italics in the original).

¹⁸ Ibid., 91.

new energy subsidy, which in the industrial age occurred through the discovery and use of fossil fuels and atomic energy. Alternative energy, a return to sourcing energy largely from sun, wind, and water is proposed by many as the new energy subsidy. As explained by Asher and Heinberg, in “Welcome to the Great Unraveling,” however, this is unlikely to be the case.

This may be the biggest question of all for human societies, will there be enough energy to maintain and increase complexity? Still, in keeping with the wisdom of the concept of polycrisis, much more is involved to maintain the structures and legitimacies of societies and maintain and regenerate the ecological bases of societies.

We would not be alone, therefore, if we were experiencing societal collapse. As Tainter observes, it is a recurring feature of history. Yet, the stakes for societies and nature have never been as great as now. Humans have never faced collapse of societies and nature on a global scale.

Neither we of CES, nor the authors in this issue can persuade the public that we are in a condition of global collapse that will occur over the relatively short historical time period of a few decades. We can only point to symptoms and how they match up with overshoot on the one hand and the collapse of complex societies on the other. And we can share our wisdom on what is involved in becoming collapse-ABLE.