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Dear reader,

Thank you for your interest in, and support for my ongoing explorations of topics related to the survival of nature and humanity. I hope you take time this holiday season to enjoy our amazingly beautiful world, and to connect with people who matter to you.

Richard

Environmental-Political Collapse Accelerates

The stench of failure emanating from the recently completed COP29 international climate negotiations in gas-rich Azerbaijan is deepening the gloom already enveloping the western world's managerial class since the (re-)election of Donald Trump. Both developments underscore the inescapable conclusion that bureaucratic, top-down, green-growth global efforts to stop climate change are essentially [dead](#). Trump will likely withdraw the United States from international climate agreements and cancel virtually all federal climate change tracking and mitigation efforts, making future international agreements far more difficult to achieve. But, so far, those efforts and agreements have been inadequate anyway. Despite [decades of pledges](#) by nations to reduce global carbon emissions, those emissions have continued to increase. And COP29 demonstrated once again that rich nations are largely [uninterested](#) in paying poorer ones to stop burning coal, oil, and gas and to recover from weather catastrophes—a wealth transfer that's widely viewed as necessary, since most emissions growth and some of the worst climate impacts are occurring in industrializing nations. In sum, there is no realistic global policy mechanism in place to halt calamitous planetary warming.

According to [Berkeley Earth](#), 2023 was the first full year in which the planet's average surface temperature exceeded 1.5 degrees Celsius above its pre-industrial level (at the Paris-held COP21 in 2015, attending countries agreed to try to keep warming below 1.5°C in order to avert catastrophic Earth-system unraveling). This year's global temperature has remained above the 1.5 °C marker, and 2024 has been the hottest year on record. Even if next year's temperatures dip somewhat, they will almost certainly rebound even higher, since global greenhouse gas emissions are at record levels and still climbing. During recent years, the rate of warming has [accelerated](#). Further, recent research led by James Hansen concludes that warming already “in the pipeline” (that is, requiring no further human forcing) will eventually result in

global temperatures roughly 10 degrees above the pre-industrial average. Long before warming reaches that hellish endpoint, our planet will have shifted to a new climate regime in which humans and innumerable other species will find survival difficult or impossible.

The simultaneous collapse of environmental and political systems (the latter are failing both to prevent catastrophic climate change and also to halt a widespread drift of democratic governments toward authoritarianism) will be immensely consequential. In this article, we'll see why cascading disruptions of environmental and political systems are entangled and mutually reinforcing. We'll also try to identify the next stages of global collapse, and explore the options for individuals and communities seeking to survive and to prevent as much harm and suffering as possible.

Systemic Failure

The inability of national governments to forestall climate change could easily have been predicted decades ago. That's because stopping global warming is fundamentally at odds with the underlying growthist agenda of the modern world. And most political and business leaders care more about advancing that agenda in the short term than they do about ensuring human survival in the longer term.

The goal of the COP process was, in effect, to minimize the unintended environmental consequences of fossil-fueled industrialism while somehow maintaining industrial growth by other means. It turns out that those other means are slow, costly, and come with their own environmental harms. With rare exceptions, negotiators ignored the links between population and consumption, on one hand, and environmental damage on the other. Climate change was portrayed as a technical problem amenable to technical solutions—rather than as a symptom of ecological [overshoot](#). From a systems viewpoint, abundant energy from fossil fuels has enabled humanity to increase its numbers and per capita resource usage to levels that cannot be maintained in the face of environmental limits. Technology alone cannot solve overshoot; in addition to alternative energy and machinery, managed reductions in population and consumption are required—with the vast majority of greenhouse gas emissions cuts needing to come from wealthy nations, and the wealthiest households among them. Machines can, at best, help at the fringes by replacing egregiously polluting substances and processes with ones that are less damaging.

A basic understanding of overshoot reveals that our modern industrial way of life is unsustainable at anything like its current scale and intensity. Whether as a result of pollution or resource depletion, human population and per-capita consumption will peak and start to decline, most likely during the next decade or two. But it gets worse: during our brief binge of industrialism we humans have found strategies (including corporate globalization and the proliferation of credit and debt in a widening variety of forms) to maximize consumption in the short term; when these strategies inevitably falter, the result will likely be an even faster decline in population and consumption than might be expected on the basis of ecological factors alone.

As we reach the end of the period of industrial expansion, social and environmental systems are showing greater instability. In the social realm,

this instability shows up in national and global politics. Due to resource and pollution limits, the rising expectations of a still-growing (though not for long) populace can't be met as easily as was once the case. As a result, there is a tendency for elites to fragment: some hope to maintain the status quo by shoring up existing bureaucracies, while others decry those same bureaucracies and propose to raze them and start over. As environmental factors worsen, the numbers of refugees and immigrants moving mostly toward countries in the Global North are [increasing](#). And anti-immigrant sentiment is helping drive a rightward shift in US and EU politics. Many people do not trust that the managerial elites have a viable plan—and they're correct in that judgment. However, this doesn't mean that opportunistic counter-elites who promise to tear it all down will somehow deliver peace and prosperity—most likely it will be the opposite.

Political scientist David Stasavage argues in his book [*The Decline and Rise of Democracy: A Global History from Antiquity to Today*](#) that modern democracy represents an effort to transplant some of the egalitarian qualities of early small-scale human societies into the current context of far larger and more bureaucratic states. Due to the inherent tensions between freedom and bureaucracy, modern democracy is [fragile](#). That bit of context helps us understand why rising economic inequality is leading to an authoritarian political shift and a decline in trust in democratic institutions. Many people fear this shift and decline. But some welcome it.

Will Authoritarians Stop Collapse?

Politics in democracies is always messy, but it's getting messier for reasons outlined above. Some folks find this messiness stressful, and conclude that it would be better to let a strong, confident leader take charge and put the country "back on track," even if that means hobbling or doing away with the institutions that enable democracy to work. Perilous times, according to this increasingly popular line of thinking, demand quick, decisive, and unchallenged leadership.

But would authoritarian regimes be better than democratic ones at preventing collapse? As Stasavage details in an article titled "[Democracy, Autocracy, and Emergency Threats: Lessons for COVID-19 from the Last Thousand Years](#)," comparisons are complicated. If democracies are prone to squabbling and dithering, dictatorships more often succumb to secrecy and denial.

Take the case of China. Its hybrid of state-controlled and capitalist enterprise has yielded spectacular economic growth and rising living standards for hundreds of millions of people during the past four decades. And, during that time, its political regime has been relatively stable. But the nation now burns half the world's annual coal supply, and thus has become the world's top carbon emitter. Even with high rates of renewable energy installation, there is no way for the country to make a post-carbon transition without sacrificing economic growth. But ditching growth would imperil the Chinese regime's legitimacy, since popular support rests on its ability to continue delivering rising material prosperity. For leaders, the path of least resistance is to build lots of EVs and solar panels, hoping to dominate these industries, while also continuing to burn vast heaps of coal.

The United States, for decades the world's most prominent democracy, has

done little better. Openness to internal dialogue has allowed the flourishing of an ecosystem of non-governmental environmental organizations, which occasionally influence government climate policy (as long as their advocacy doesn't challenge the growth- and consumerism-based economic order). Economic growth has slowed and inequality has worsened since climate change became a policy issue, leading to greater political polarization. The incoming "Trump 2.0" regime promises a more authoritarian style of governance and a turn away from even acknowledging the climate dilemma, with a focus instead on further increasing fossil fuel extraction. Right-wing [accelerationists](#), [monarchists](#), and haters of the "deep state" prize loyalty to Trump and spurn expertise. The incoming administration, an uneasy alliance of often incompetent and mutually hostile players drunk on power, will face not only internal conflict, but also pushback from liberal elites who have been shut out. The results might be lively and even entertaining in the way that horror movies sometimes are, but don't expect solutions to overshoot. The "best" we're likely to see in this regard is an unplanned and highly unequal spate of degrowth in which unsound economic policies inadvertently capsize the economy, impoverishing millions while billionaires continue to pad their fortunes.

Where from Here?

For the US, the next few years will offer the new administration opportunities to consolidate power and punish enemies. Liberals are licking their wounds and, rather than mounting protests, are increasingly just disengaging. In a recent article, "[Don't Let Donald Trump Drive You Into Internal Exile](#)," Russia expert Miriam Elder draws on her recollections of Putin's rise to power to offer advice for anti-Trump Americans: "You may not be interested in politics, but politics is interested in you. A new approach is necessary if America is to avoid the fate that befell so many Russians." Authoritarian regimes often tend to become [more oppressive](#) as time goes on; so, simply putting your head down and busying yourself with daily tasks will do nothing to prevent the worst government excesses, which will eventually impact you no matter how apolitical you try to be. At the same time, the anti-status-quo bent of many of Trump's picks for key positions in his government could offer some opportunities for positive changes. For example, putting aside serious concerns about RFK Jr.'s positions on modern medicine, he has been an outspoken opponent to industrial agriculture and the damage of pesticides. There could be policy opportunities and potentially governmental resources to support efforts that build more small-scale, sustainable, and localized food systems.

Globally, the next shoes to drop will likely be economic recession and, possibly, expanded armed conflict. Recessions are hard to predict, but they always recur eventually. During the last three years, the world has been recovering from the profound economic impact of the COVID pandemic, and has achieved short-term debt-fueled stability, with recent high inflation rates now abating. But the foundations of the global economic system are eroding as resources deplete, waste sinks are filled, and [debt multiplies](#). The system merely awaits a strong enough gust of wind to knock it off its pilings. Some say that [US protectionism under Trump](#) could provide that gust.

As the industrial end game approaches, war over remaining resources grows more likely. Conflict is already fierce in eastern Europe, the Middle East, and

parts of Africa; meanwhile, China is awaiting a propitious moment to forcibly annex Taiwan. Historians used to debate the [question](#) of why democracies rarely go to war with one another; today, it is perhaps more pertinent to ask whether autocracies are more likely to fight each other or to form alliances. Trump, after all, seems never to have met a dictator he didn't like; perhaps he will seek to remove the US from NATO and partner instead with Orbán and Putin. One could argue that, among kleptocrats, hostilities can be avoided just by sharing spoils obtained from fleecing the domestic populace. But authoritarian regimes sometimes need external enemies in order to solidify internal support, and all countries need essential resources; so, historically, authoritarian regimes have indeed [come to blows](#) with one another. Today's drift toward authoritarian governance doesn't signal an end to war. Nevertheless, with Russia weary from its protracted attempt at a hostile takeover of Ukraine, perhaps Trump can make a deal, forcing Ukraine to give up territory and some of its right to self-defense in exchange for an uneasy (and likely temporary) peace. However, that would set a bad precedent, one which both Russia and China might soon seek to exploit.

Impacts from climate change will continue to worsen; Kim Stanley Robinson helpfully provided a science-fiction foretaste in his book [The Ministry for the Future](#). For reasons explained above, it's unlikely that governmental efforts will succeed in limiting either emissions or warming. So, whatever efforts actually can minimize impacts on people and nature are likely to be small-scale, local, and ground-up.

Some useful thinking along these lines is contained in Douglas Tallamy's book [Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard](#). Destruction of habitat—as a result not just of climate change, but industrial agriculture, deforestation, and urbanization as well—is driving native species to the brink. Simply planting trees, if they're non-native, may not help much and can even make the situation worse. In contrast, native trees and shrubs provide a food forest for birds and insects that would otherwise go hungry. It seems like a small gesture in the face of the cataclysmic trends converging on us, but at least it's a push in the right direction: it restores ecosystems and makes them more resilient. That way, when civilization goes, it might possibly leave something behind other than a wasteland.

The folks at [Bio4climate](#) have more ideas along these lines. And there's inspiration for biologically restorative living at [The Simpler Way](#), and via the [Transition Initiatives](#), the [Ecovillage Network](#), and many permaculture organizations now scattered worldwide. When in doubt, consult local Indigenous peoples: they got it right centuries ago via trial and error.

For the time being, local action is probably the best arena for political engagement as well. Barrett Cole, a former intelligence officer who worked in conflict zones, offers some helpful practical advice in his book [Resist: Surviving the Slide toward Autocracy](#). Know your neighbors and develop a reputation as someone who helps out and doesn't try to ram opinions down other people's throats. In addition to resistance, resilience and regeneration must be our watchwords. Resilience should include both the ecological kind (which can be aided through [planting native trees and shrubs](#)), and also personal and emotional resilience (see our [webinar recording](#)) and efforts that build mutual aid ([ditto](#)).

A metaphorical hurricane is coming. Cover the windows and make sure your family, friends, and neighbors are safe.