The HOPEFUL REALIST Newsletter:
Looking at the World Today as if Facts Matter

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*Here we explore the latest facts, actions, and perspectives on the New
Great Transformation of the Earth System, as it unfolds before our eyes. We
apply the Hopeful Realism we all need to work through the greatest
predicament in human history.*

Latest News from the Hopeful Realist

Infrastructure, social instability, and Domestic Terrorism

When the sabotage of power substations in Ohio and South Carolina happened last week, I had not been aware that 104 similar attacks on U.S. domestic infrastructure installations had already occurred this year. The number of such 'incidents' has steadily increased in the last few years, especially since the enabling of violence by the Fake President drew national attention during both his campaign and presidency.

I had been thinking about the vulnerability of our society's large centralized systems for a number of years. I was not alone in that. Military and national security experts have warned about critical systems vulnerability to not only cyber-attacks, but also physical ones for quite a while.

The vulnerability of large complex systems has interested me ever since reading Jay Forrester's pioneering work in systems dynamics in the late 1960s and early 1970s. The one core principle that Forrester explained that stuck in my mind was the fact that the larger and more complex a system is, the more vulnerable to breakdown it becomes, including both internal disturbances and external incursions by any disruptive or damaging factor. The extreme white nationalists have been talking on their social media for some time about attacking infrastructure to foment chaos in hopes of starting a 'race war.' Yes, it sounds crazy, but crazy is as crazy does.

In the case of the U.S.A., as a very large complex social-economic-political system, the vulnerabilities are many. All sorts of news events are indicators of underlying vulnerabilities of our key component systems. The power grid is a glaring example of failure to secure a critical complex sub-system from breakdown due to any of several potential causes. Oddly, even though I knew that the nation's power grid is so vulnerable and so few security steps have been taken, the recent attacks were shocking although not surprising, for several reasons.

First, consider the numerous indicators of societal instability in the population, the politics, and the economy. A twenty-year veteran EMT with the New York City Fire Department reports in his new book, *Riding the Lightning*, and in a *New York Times* article, "I'm an N.Y.C. Paramedic. I've never Witnessed a Mental Health Crisis Like This One." that the lot of the paramedic has never been worse. In a TV

interview segment, the interviewer also quoted high frequencies of EMT calls for emergency mental health services. Mr. Almojera also reported that the intense efforts he and his colleagues perform are more or less futile, leading to increased rates of suicide among his peers. He blames the COVID pandemic in part, but it runs deeper than that. Societal instability causes personal problems and political ones as well, and mental health resources remain vastly inadequate. I am not writing off political violence as a 'mental health problem.' But various forms of instability tend to arise under ambiguous political conditions. If some people can't even trust audited elections, and some of them attempt insurrection, then we can expect other forms of societal chaos and violence as well.

Second, the January 6, 2021, insurrection that attempted to overthrow the election of Joe Biden to the presidency, reveals the extreme end of a deep and growing political instability in the U.S. When an ostensibly democratic nation experiences an autocratic attempt—that is, an attempt to overthrow democratic institutions and place in power a wannabe autocrat, an aspirational authoritarian leader—such an action reflects a "democracy scare." Despite the pseudo-populist rhetoric, the elites and their political demagogues who incite seditious insurrection are expressing their fear that the people may have a say in government—that might end excessive tax reductions for the rich.

The political-economic elites like their domination over society and the profits it brings. So they try to turn the people's frustration toward the usual suspects, the scapegoats—Blacks, immigrants, Mexicans, et al, and the mysterious 'deep state,' which is actually the elites themselves. The vulnerable scapegoated groups are always misunderstood, feared, blamed, and resented by those who have lost status and/or economic power (in this case, older white mostly male worker victims of automation and overseas outsourcing of their manufacturing jobs).

The infrastructure of 'modern civilization' is quite vulnerable to damage from catastrophic events. The electrical grid is an outstanding case of physical vulnerability to natural disasters or sabotage. Many institutions—banking, military, healthcare, even education and voting systems are vulnerable to cyber-attacks. The power grid is particularly susceptible to direct physical attack. As demonstrated in the last couple of weeks, all a domestic terrorist needs is a little technical information downloaded from the internet and a high-powered rifle, to take out an unsecured local electrical power substation. Suddenly, thousands of people are without power.

One of the beliefs of extreme right-wing white nationalist fanatics is that an all-out domestic race war is inevitable to secure the dominance of the "white race," and that they should help it along by causing severe disruption of society's infrastructure. The number of such incidents of sabotage is rapidly increasing. The white power movement wants to start a fascist revolution.

Security is one of several reasons why electrical power generation and transmission should take the form of a network of self-sufficient local and regional grids. That is eminently doable by converting to local solar and wind generation instead of giant wind-farms and solar farms that allow the giant utility corporations to keep control. Like democracy itself, the most reliable and secure form of power generation is distributed, not centralized.

The Biodiversity Slide

Meanwhile, the COP15—the United Nations Biodiversity Conference COP15 / CP-MOP10 / NP-MOP4—not to be confused with the climate COPs, is happening in Montreal, Canada, 7-19 December 2022.

Strange as it seems to me, biodiversity appears to be a matter treated separately from the climate emergency, yet ecological collapse is directly related to climate disturbances as well as human encroachment into diverse ecosystems and even intentional destruction, such as in the case of the destruction of the Amazon rain forest. The danger of biodiversity loss has gotten little international attention so far, as COP15 struggles toward the adoption of a post-2020 global biodiversity framework.

A startling fact is that of the 198 nations in the world, only **two** are **not** a party to the convention on biological diversity: the Vatican and the **United States of America**! What's up with that, Pres. Joe? This is only one of the several major international treaty that the US has refused to ratify. However, most of those failures preceded the tenure of President Biden. That has been a habit of the U.S. in its relations with the other nations. As George Monbiot points out in a recent article in the _Guardian_, the U.S. has acted as a '_rogue state_' by its refusal to be a party to such fundamental international agreements. (Thanks to Erin Remblance on her LinkedIn feed for bringing to our attention George Monbiot's article. BTW, the Guardian may be the best international newspaper around.) The hypocrisy of the nation that claims to 'bring democracy to the world' is nothing short of astounding. As Monbiot put it, "Through its undemocratic dominance of global governance, the US makes the rules, to a greater extent than any other state. It also does more than any other to prevent both their implementation and their enforcement."

My eBook **HOPEFUL REALISM: A Climate Manifesto** is still available for free download from Kindle Unlimited. The price will soon go to normal. Give it a review on GoodReads.com. Or, review and rate _Hopeful Realism_ on Amazon. On Amazon, do so by clicking the button on the lower left of the book's Amazon page below "Customer Reviews," and say a few words about what you think about the issues and how I

Note: Past issues of The HOPEFUL REALIST Newsletter are available, archived on my web site:

https://thehopefulrealist.com/hopeful-realist-newsletter/

LOOK UP! A Bi-weekly Featured Commentary

Ever since reading Christian Parenti's 2011 book, _Tropic of Chaos: Climate Change and the New Geography of Violence_, I have been thinking of the growing predicament of the catastrophic convergence of multiple crises of biosphere, economics, politics, and chaotic culture of violence around the planet. Parenti's work was on-the-ground-empirical and prescient too. As we members of 'industrial civilization' go about our consuming lives, all manner of systems, both planetary and human, seem to be coming apart at the seams, as he predicted over a decade ago.

Most of us think in linear terms, as we were taught in school; we see something odd or disturbing and we look for 'the cause.' On a small scale, that can often work out fine. However, the world is much more complicated than that. We live in a world of complex adaptive living systems, all of which interconnect with each other in diverse ways. When disturbances to these complex systems occur, simple linear thinking is not sufficient to understand the complex interactions that resulted in the disturbance we may see as a singular event or process.

So, if we contemplate the COP15 conference on biodiversity in isolation from the COP27 conference on climate change, we miss a key factor. The changes in climate that increasingly disrupt so much of human life today (extreme weather events such as floods, heat waves, droughts, changes in seasonal rainfall damaging crop production, etc.) are interconnected in very complex ways. We need to understand those complexities to shape the most effective responses to the chaos unfolding before our eyes.

It is interesting and important to note that the growing societal protests against the failures of both governmental and corporate institutions to respond to the crises that confront us suffer from a similar failure to grasp the complexity of our predicament. The demands for severe reductions in carbon emissions, to reverse deforestation, to eliminate governmental subsidies for oil and gas development, etc., etc., are based on a great deal of scientific evidence supporting them. Yet, how to go about actually achieving such monumental changes in our relations to energy is a far more complex process than the *idea* of simply reducing the extraction and use of petroleum products. Yes, we must do these things, but the societal ramifications of doing so are many and complex. That is why they will require transforming or replacing our most important institutions.

Let me mention just two key dilemmas that constitute obstacles to replacing the globalized fossil-fueled industrial-consumer economy.

First, given the institutional intransigence that pervades governments and corporations worldwide, how can 'we the people' move such mega-institutions to 'do the right thing'? We must somehow mobilize enough people to *force* institutional action. (That alone is complex enough to require a book-length analysis just to work out the methodology.)

Second, given the fact that most institutions, organizations, and other human groups today operate by using large amounts of fossil-fuel energy, how can our social structures operate using much less energy? Well, they cannot, for the most part, without re-organizing themselves to operate in very different ways. Hardly any 'expert' I read has much of anything to say about that.

The world's societies cannot simply replace fossil-fueled operations with renewable energy sources within the current economic framework or with the current intensity of energy use and waste. We have already overshot the planet's capacity to supply all the materials and energy needed. We cannot produce the renewable energy-generating facilities to continue the profligate consumption levels of the Global North, no less enable the rest of the world to live the high-consumption lifestyle' of the industrial nations.

Unfortunately, much of the current renewable energy facilities are adding to instead of replacing existing fossil-fueled operations. The political system continues to provide incentives for that to happen, including massive subsidies to the fossil-fuel industries. None of it reflects any systems level thinking. So much of it reflects the corruption of transactional politics. We desperately need a cultural-political overhaul.
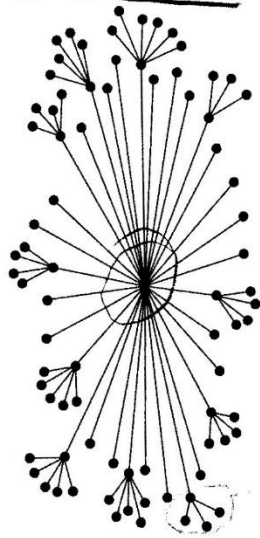
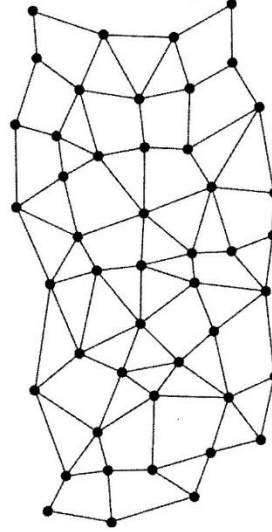For more discussions of this and related matters, go to:

https://thehopefulrealist.com/the-hopeful-realist-blog/

Today's Featured Image:

The Two Major Kinds of Social Networks:
Hierarchic and Distributed

Fireworks Display (weak ties)　　**Fishing Net (strong ties)**

(Images adapted from Baran [1962])

From Damon Centola, *Change* (2021)
Hierarchical Networks have weak links and centralized control. Distributed networks have strong ties and democratic control.

Throughout history, hierarchical and distributed networks have struggled for control of societies. But they have not only distinctively different structures, but also different cultural characteristics. Centralized hierarchies, which Centola likens visually to 'fireworks display,' have weak ties among members, while control emanates from the center (elites or autocrats), where power is concentrated. Distributed networks, which appear as similar to a fishnet, have strong ties among members and power is expressed democratically, so that authority is distributed.

In distributed networks with strong ties, achievement of goals is more effective, according to experiments in social network science. We live in societies that are primarily hierarchically organized, like the diagram above on the left. That is partly why decisive action is so hard to come by in corporate and government institutions. Nevertheless, decisive global action is needed now.

Will we make the decisions and take the climate action that we must? The answer to that will depend on whether and to what extent **the people** of this world will **mobilize** in sufficient numbers in strong networks to **force** our stagnant hierarchical institutions to take the actions they must. The alternative? Collapse of climate, of ecosystems, and of society itself. The choice is between realistic hope and fatalistic futility.

Books and other Sources on the New Great Transformation

For decades, the science of social networks was constrained by the fact that computers did not yet have the power to analyze the complexities, volume, and types of interactions among the members of a social network. In the last decade or two, that all changed. New experiments have shown that dissimilar network configurations can have different outcomes, especially in the performance of group tasks. Damon Centola, a sociologist at the University of Pennsylvania, has done some of that work; he reports the state of the science in his book:

Damon Centola. 2021. ***Change: How to Make Big Things Happen.*** New York: Little, Brown Spark.

My interest in the field goes all the way back to the late 1960s, when the field was in its infancy. Today, a lot of interesting work is going on. Centola gives a great summary of the state of the field. What I found most important, at least in terms of potential is the suggestion that social networks with strong internal ties, when linked with other strong networks by strong ties, can become a rapidly growing force for social change.

Quotable Quote

> *Before mass leaders seize the power to fit reality to their lies, their propaganda is marked by its extreme contempt for facts as such, for in their opinion fact depends entirely on the power of the man who can fabricate it.*

> *~ Hannah Arendt*

Hannah Arendt was a consummate scholar of totalitarianism and how its leaders take control of society. Autocrats seek to form rigid hierarchies of social control. In the present situation of growing ecological, climate, economic, and political chaos, Arendt's work is more important than ever. With the 'enabling' efforts of the former president, and the multiple sources of instability in our political economy, the rise of "alternative facts," conspiracy theories, the big lie and insurrection, and the claim that we live in a 'post-fact' world, are themselves gambits of the demagogues. At the same time, if we look at the actual verified scientific facts, we have every right to be scared.

Yet, reality is the only basis for hope. As Greta Thunberg says, hope is an action. At the same time, growing groups of very alienated persons, filled with racism and hatred, attack the nation's electrical grid, not because our profligate consumption of energy is destroying the planet, but because they hope to foment a 'race war.' While that seems not a likely outcome, the hit-and-run tactics of such groups can play havoc on society, breeding more fear and inaction. In asymmetric warfare, insurgent insurrectionists have a distinct advantage of hit-and-run tactics and an unlimited supply of targets. The best counter to all that is to build an equitable ecologically sane society that counters alienation with inclusion, equity, and justice.

See you in two weeks. Meanwhile, stay safe and read HOPEFUL REALISM: A Climate Manifesto.