

COVID-19 & The Bankrupting of Nature

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Bankrupting Nature

Forewarned

“We are not fully prepared for the next global pandemic,” Microsoft co-founder and philanthropist Bill Gates said in 2018. “The threat of the unknown pathogen – highly-contagious, lethal, fast-moving – is real. It could be a mutated flu strain or something else entirely.”¹

And yet, when COVID-19 struck, we weren't prepared.



Daniel Ramos / Unsplash

Hubris

Why didn't Gates's prophetic warning (which he also featured in his 2015 TED talk²) take hold more broadly? One reason is hubris – in this case, the presumption that humans control nature and not the other way around. But, as COVID-19 has brought into stark relief, the global economy is, undoubtedly, a subsidiary of the environment.³ One tiny change, a wee mutation in a virus, and *boom!* The planetary economic system goes into shock.

¹ Yahoo Finance, *Bill Gates: 'My Biggest Fears About What's Coming Next for this World,'* [Sept 2018](#)

² Bill Gates: [“The Next Outbreak? We're Not Ready”](#)

³ This quote, often attributed to [Herman Daly](#), has also been attributed to [Gaylord Nelson](#)

Local Versus Global

This has always been true locally, to be sure. A hurricane sweeps in and devastates an island nation, batters a coastal mainland, or floods major cities, and life in that area is dramatically altered. But insurers pay out, and governments draw from disaster funds to stabilize the area, and things slowly return to normal.

Can this system hold when the disasters are prolonged and systemic, rather than brief and local? As we're discovering, the answer is no.



By NASA

Belated Awareness

A third of humanity lives along, works along, builds along, farms and fishes along the 372,000 miles (620,000 kilometers) of global coastline.⁴ Both insurers and governments are beginning to question the wisdom of coastal settlement in vulnerable areas, and are looking askance at continuous rebuilding efforts. The entire system is built around insurance mitigating the consequences of disasters, but now those insurers are starting to see the entire carbon-based system as risky.

⁴ NASA, [Living Ocean](#)



Theewaterskloof reservoir, Cape Town, S. Africa, at 11% capacity, March 2018. Photo by Zaian. Source: Wikipedia

Investors and reinsurers are withdrawing support from climate-change agents such as Big Carbon. Credit agencies have begun considering climate when evaluating big corporations and cities – for example, Moody’s downgraded Cape Town’s credit rating after their water emergency and did the same to Trinity Public Utilities District in California after the wildfires of 2019.⁵

Bankrupting the Environment

The current pandemic is putting the scaffolds we have built our society around – carbon, credit, insurance, globalization, unlimited air travel and, especially, free-and-lightly-regulated markets – into stark relief. Our current approaches have bankrupted the environment, in other words, to the point where it is clearly threatening the global economic system.

⁵ Inside Climate News, *Climate Change Becomes an Issue for Ratings Agencies*, [Aug 5, 2019](#)



Bat at the Prague Zoo. By Martin Krchnacek / Unsplash

There's some scientific sentiment that this bankruptcy – specifically, bringing animals in close contact with dense populations through habitat loss – creates the conditions for diseases crossing to humans.⁶ “When we erode biodiversity, we see a proliferation of the species most likely to transmit new diseases to us,” Bard College biologist Felicia Keesing told *Ensia*.⁷

Climate and Pathogens

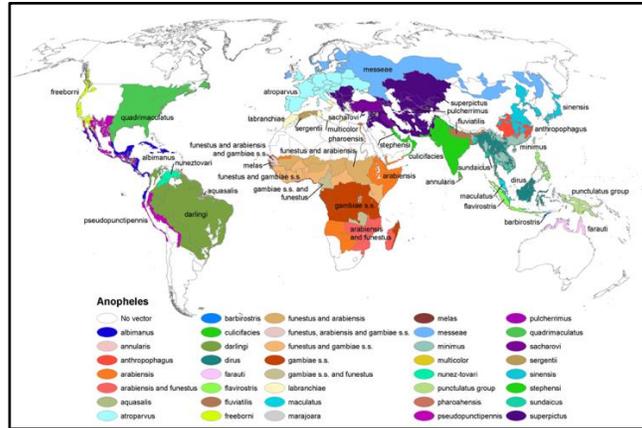
Another potential danger is that higher global temperatures may be selecting for disease agents that can survive in hotter conditions, neutralizing one of our bodies' most effective immune responses: fever.

“As pathogens are exposed to gradually warmer temperatures in the natural world, they become better equipped to survive the high temperature inside the human body,” noted *Time* in February.⁸ “The pathogens that survive – and reproduce – are better adapted to higher temperatures, including those in our bodies.”

⁶ The Guardian, *Tip of the Iceberg: Is Our Destruction of Nature Responsible for COVID-19?* [March 18, 2020](#)

⁷ *Ensia*, *Destroyed Habitat Creates the Perfect Conditions for Coronavirus to Emerge*, [March 18, 2020](#)

⁸ *Time*, *The Wuhan Coronavirus, Climate Change, and Future Epidemics*, [Feb 6, 2020](#)



Anopheles Mosquito (malaria vector) range map.
 Source: U.S. Center for Disease Control (CDC)

Another potential impact of warming is that diseases usually confined to the tropics – malaria, dengue, Lyme, etc. – may become more widespread in temperate zones.⁹

In other words, a bankrupt nature doesn't affect us through high water levels and more frequent devastating weather events alone. It can also unleash new pathogens and broaden the range and duration of both current and novel diseases.

Beyond the Immediate

Successful responses to COVID-19 are strongly making the case for community and global cooperation, with decisive action and public support helping contain the virus faster. It is a relief to see that we as a species are indeed capable of making a hard turn and changing course.

While we never wanted this, the course changes do show what is possible. In New York City, carbon monoxide was reduced by half, while NO₂ and CO₂ levels also fell dramatically.¹⁰ China's atmospheric carbon dropped "by around 200 million tons in February...roughly half as much CO₂ as Britain releases in a year."¹¹ A bottleneck

⁹ Scientific American, *What Could Warming Mean for Pathogens Like Coronavirus?* [March 9, 2020](#)

¹⁰ BBC News, *Coronavirus: Air Pollution and CO2 Fall Rapidly as Virus Spreads*, [March 19, 2020](#)

¹¹ Autoblog.com, *China's NO2 Emissions Rising as Country Recovers from Coronavirus Lockdown*, [March 20, 2020](#)

dolphin or two have been reported off Cagliari, and the Venetian canals are running clear and hosting swans, all rare sightings in the past.¹²

While these changes are beneficial, the pandemic that caused them is not. We need to find a way to recapture the declines in pollution and emissions that doesn't depend on disease and suffering.

Not So Remote

As others have noted, our response to COVID-19 makes clear that the world can work remotely more than we currently do. "In a recent webinar snap poll, 91% of attending HR leaders (all in Asia/Pacific) indicated that they have implemented 'work from home' arrangements since the outbreak," notes *Gartner*,¹³ predicting that by "2030, the demand for remote work will increase by 30%." The virus will probably drive that number up permanently and, if so, there will likely be a significant carbon savings globally.

That said, there are three things in particular we must remember.

First, as of now, this is a temporary stay rather than a pardon. For example, there is already evidence that China's air pollution levels are ramping back up.¹⁴

Second, we've paid a steep price for what we've done to make diseases like COVID-19 more likely, for our lack of adequate preparation for them, and for the illusion we could separate our economy and our ecology. We'd all be guilty of dereliction of duty if we don't learn from the mistakes we paid so dearly to discover.

¹² Esquire Middle East, *Covid-19 Upside? Dolphins Return to Italy and Clear Venice Canals as Humans Self-isolate*, [March 18, 2020](#)

¹³ Gartner, *With Coronavirus in Mind, is Your Organization Ready for Remote Work?* [March 3, 2020](#)

¹⁴ Bloomberg Green, *Satellite Pollution Data Shows China is Getting Back to Work*, [March 2020](#)

Third, humans are social creatures, and our biology does not – cannot – evolve at the same rate as our technology.¹⁵ As a result, when the crisis has passed there will be some changes but we will mostly go back to the way we socialized before – in person. That means we need to continue rapidly decarbonizing travel, work, and the economy.

When It's for All the Marbles

The response to this crisis makes it clear that countries, sufficiently motivated, can make powerful decisions, mobilize their forces, and unleash the full range of human knowledge and expertise to solve problems. It also shows how hollow are the bleatings of those who claim the cost of sustainability is too high. To fight this emergency, trillions of dollars are on the table – in the United States alone – for business, social, and medical assistance.

The trick that has – so far – eluded us is convincing lawmakers and citizens that the climate emergency rivals that of this pandemic. Unfortunately, they both have this in common: “if you wait until you can see the impact, it is too late to stop it.”¹⁶

The Highest Stakes

The COVID-19 virus has shown how high the stakes are and how we must respond. Our economies, and our ultimate welfare, are wholly owned subsidiaries of our environment. We must nurse it out of bankruptcy, for all our sakes.

¹⁵ In fact, while we need *physical* distancing to contain COVID-19, *social* closeness is important to our health, happiness, and productivity, as we discuss in a separate article

¹⁶ Yale Environment360, *Coronavirus Holds Key Lessons on How to Fight Climate Change*, [March 23, 2020](#)