

Imagining a Gaian Reality After the Virus
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A specter is haunting modern civilization—the specter of Gaia. All the powers of the global capitalist market have been entering into a holy alliance to exorcise this specter. The name “Gaia” is borrowed from the scientific hypothesis of James Lovelock, who himself borrowed it from author William Golding, who in turn borrowed it from Hesiod’s ancient Greek cosmogony. Do not imagine an anthropomorphized goddess, “Mother Nature,” when you hear this name. Imagine instead an immeasurable assemblage of coevolving lifeforms precariously poised along a far from equilibrium thermodynamic gradient of self-organizing geochemical feedback loops whose fragile entanglements are necessary for maintaining the habitability of this planet. For several hundred years, this living Earth has been treated as a mere background to human activity, a storehouse of raw materials to be violently extracted, a passive stage upon which our technological progress could unfold indefinitely. But Gaia could not be dispelled by the industrial might or monetary magic of global capitalism. Gaia has only been further provoked by it. “Matter Strikes Back,” as the process theologian Catherine Keller put it in [her recent Gaian dreamreading of the *Apocalypse of John*](#).

Despite the wishful thinking of capitalist economists, the market is not a [“perpetual motion machine”](#) insulated from the biophysical inevitabilities of entropy and extinction. Since the end of the last ice age 12,000 years ago, the human economy as we know it has only ever existed at the grace of the Earth’s ecology. Whether agricultural, industrial, or digital, our species has undertaken each new mode of production with tremendous Promethean creativity, but also with increasing ignorance of the geophysiological conditions making it all possible.

“Gaia’s intrusion,” as the philosopher Isabelle Stengers [has referred to it](#), has always been inevitable, but until very recently, it was for the most part only decipherable scientifically through complex data sets and computer simulations of global temperature rise, biodiversity loss, and many other abstract metrics detailing the fraying of its feedback loops. Timelines stretching to the end of this century warned of the dire consequences of failing to take bold action to curb greenhouse gas emissions and reverse other ecologically unsustainable practices. Insurance companies were beginning to feel uneasy about the increasing severity of droughts, wildfires, and hurricanes, but surely Gaia could wait for the market to adapt. With the rapid and virulent emergence of the COVID-19 pandemic ([likely a spillover effect of habitat loss*](#)), the situation is just as it was before, only massively accelerated. After a decades-long trial period, planetary transformation is now no longer optional: [“we do not have any choice, because \[Gaia\] will not wait.”](#)

What remained a specter before the pandemic—a barely perceptible threat safely hidden behind the noise and smog of business as usual—has now brought the entirety of modern human civilization to its knees. The continuing public health threat posed by the virus remains potentially catastrophic on its own. And with most of the world’s human population unable to consume or produce at the ever-increasing rates required of our capitalist system, the

economic fallout threatens to become even more severe.

Marxist philosopher Fredric Jameson once said that “it is easier to imagine the end of the world than to imagine the end of capitalism.” Jameson’s statement was borrowed from H. Bruce Franklin, who originally posed it as a question: “What could [our species] create if [we] were able to envision the end of capitalism as not the end, but the beginning, of a human world?” With the old world now on the brink as humanity is brought to its knees by Gaia,—the for too long taken for granted ground beneath our feet,—our species has a fateful decision to make. Will we continue to pray to the God of the Market by imposing another round of what Naomi Klein has called “disaster capitalism,” or might we invoke an older god?

To Marxist ears, the invocation of a god, especially one with the mythic residue of “Gaia,” resounds of ideology. Why leave our capitalist chains behind only to succumb to a new, or ancient, opiate of the masses? Worse, my narrative account of our current situation as the disruption of the human political economy due to the intrusion of a seemingly outside natural power appears to be a textbook case of the process [Roland Barthes warned about more than half a century ago](#), whereby “the bourgeoisie transforms the reality of the world into an image of the world, History into Nature”; this, according to Barthes, is “the very principle of myth: it transforms history into nature.”

But Gaia has not come in any form recognized by the terms of the modern constitution, signed by Marxists and capitalists alike, which placed a metaphysical chasm between human society and physical nature: the historical realization of freedom on one side, mere matter to be mastered by it on the other. “If man is shaped by the environment,” Marx wrote, “his environment must be made human.” Even Marx’s dialectical materialism remains insensitive to Gaia’s non-modern mode of composition. Gaia is not “the environment,” not “Nature” as modern people have conceived of it. Gaia does not passively suffer our historical projects. Nor has Gaia come in the ancient form imagined by our ancestors. Gaia is not natural and not mythical. Gaia is a geohistorical hybrid, to use Bruno Latour’s favored definition. Latour asks us to face Gaia not as a transcendent mythical or immanent natural unifier, but as a cosmic power demanding that we come “down to earth,” to concrete, earthbound existence. Gaia’s revenge is a reminder to moderns that we are not masters of “Nature,” but members of Whitehead’s “democracy of fellow creatures.” Gaia is just as much an historical agent as we are. Given our continued lack of political will to respond to her summons, perhaps more so.

Finding ways to get along with the bizarre biological neighbors modernity has for several centuries prided itself on ignoring will not be easy, as the still unfolding COVID-19 crisis exemplifies. Human survival in this new/old Gaian reality will require reimagining our [political](#), [religious](#), [scientific](#), and [artistic](#) forms. Our concept of “society” will need to be expanded to include non-humans. Time itself will need restorying: History has always been ending; myth endlessly beginning; and creation forever ongoing. We are not the rational animal capable of calculating profit and loss in advance of our exchanges. We are not lords of the land and owners of private property. We are creatures coevolving with a community of others, of a kind with the mycorrhiza fertilizing the soil, with the grass and trees that share our atmosphere,

with the bees that pollinate their flowers, with all the other plants and animals. Becoming Gaian is not so much a matter of reinventing ourselves as “merely” biological organisms as it is of shedding our god-like Promethean ambitions, of learning to settle down here on the earth beneath the sky instead of setting sail once more, this time beyond all finite horizons, as if Mars, too, could be colonized and commodified. Contrary to the dualisms of the modern world view, the capitalist economy cannot float above its material conditions like a perpetual motion machine. Contrary to Jeff Bezos and Elon Musk, our species is not destined for space capitalism. All that is solid has not melted into air. Even the “cloud” that hosts our digital economy depends upon massive super-cooled server farms and undersea cables to power its invisible networks.

Marx and Engels could not have foreseen the specific condition—a viral pandemic—that would finally initiate the dialectical self-overcoming of capitalism. But they did predict that capitalism, by expanding the market over the entire surface of the globe and establishing connections everywhere, would at last compel each of us to face with sober senses our real conditions of life, and our true relations to others of our kind. Our conditions of life, and our shared vulnerability, have never been more apparent than during this planetary quarantine. Millions have already perished, and billions more need an economic and, indeed, a psychospiritual lifeline. All humanity, despite our social distancing and our cultural diversity, must now unite against a common enemy. But who is this enemy? COVID-19? If we are no longer modern, we cannot so easily disentangle ourselves from this viral agent, as though “Nature” had raised a microscopic army against us. After all, maybe *we* are the virus. Maybe COVID-19 is a Gaian antibody. *Nonsense*: *we*, too, are Gaians. *We*, too, have a place on this planet, if only we would turn from hubris to humility.

What would it mean to be civilized in a humbler non-modern, or ecological way? [Alfred North Whitehead was willing to consider that even some squirrels may be capable of it.](#) For Whitehead, civilization implies conscious participation in the creative power of ideas—like freedom or love—to shape history. Whitehead is not an idealist, however. He is an organic realist. Ideas only have power when the material and historical conditions are ripe, when a particular social habitat is patient enough to shelter their ingression.

Many moderns, Marx included, have too anthropocentric an idea of ideas. Ideas were already active in evolutionary processes long before conscious human beings emerged on the scene. Ideas are not just conjured up in human heads or typed into computers by human hands. Whitehead’s philosophy of organism is an invitation to consider the possibility that the idea of the Good participates in generating the light and warmth of the Sun no less than the nuclear reactions and electromagnetic radiation known to physicists, that the idea of Beauty is at work in the evolution of peacocks, butterflies, and roses and not just in Beethoven’s 9th or the Mona Lisa. Ideas don’t just shape history, they shape geohistory and indeed cosmic history.

Whitehead: “The basis of democracy is the common fact of value-experience, as constituting the essential nature of each pulsation of actuality. Everything has some value for itself, for others, and for the whole.” Every bacterium enriching the soil, every bumble bee making honey

in the hive, every human building the future, every star spiraling in the galaxy has value for itself, for others, and for the whole. Nonhumans not only *have* value, they are themselves agents of value creation.

What is value? Debates continue to rage among economists about the differences between use and exchange value, or between objective and subjective value, but Adam Smith, David Ricardo, and Marx all agreed that, under capitalism, value is a social relation determined by the amount of labor time required to produce a commodity. The implication is that only humans create value by working on raw material or dead nature.

Is all value really produced by human labor alone? Is there nothing extra-human that supplies value? In Whitehead's cosmos—and the Gaian reality we moderns are stumbling into—there is no more mere matter or dead nature, no inert or raw material to be appropriated by someone called Man. [“We have no right,” Whitehead admonishes us, “to deface the value-experience which is the very essence of the universe.”](#) Value is typically linked to agency. Moderns, whether Locke, Marx, or Hayek, have limited agency and thus value creation to human beings (what's worse, within capitalist social relations, value creation is even further delimited almost exclusively to those lucky enough to be owners of capital).

Despite his recognition of a growing [“metabolic rift”](#) between humanity and nature under capitalism, Marx was fully modern in his commitment to what Latour calls the [“double task of emancipation and domination.”](#) The emancipatory task was political: to end exploitation of humans by humans. The task of domination was techno-scientific: to become masters of nature.

Gaia's intrusion in the form of a viral pandemic is turning our lives upside down and outside in. Perhaps now, from the perspective it has granted us, we will come to see that we are in a crucial sense surrounded by the Earth, enclosed within it, trapped, *earthbound*. We cannot escape to any beyond, Musk and Bezos' extra-terrestrial utopianism notwithstanding. We must re-think human freedom and human-earth relations as though Gaia mattered, as though matter mattered. Humans are not as free and teleological as moderns have imagined; nor is nature as dumb and deterministic. Marx said that the worst human architect is distinguished from the best honeybee by the fact that the former designs his building ideally before constructing it materially. Man has a plan. Bees, apparently, are simply automatons obeying blind instinct. But is this really how human or bee creativity works? Organic architect [Christopher Alexander](#) studied how medieval cathedrals were generated over generations in a purposeful but not centrally planned way. This is akin to the way insects build their nests, following a simple organizational patterning language out of which emerges enduring, functional forms of beauty. Buildings that are designed and built in the way Marx imagined tend to be dead structures meant for money-making rather than living. Consciousness of the power of ideas does not mean mastery over ideas. Ideas possess us, purpose us; we participate in their powers of proposal, co-workers and not free inventors.

Where to go from here? In place of the deterministic teleology of techno-utopianism, we need organic processes of relational creativity. In place of individual competition and class hierarchy, democracy and social solidarity. In place of a Big Plan from on high, playful kin-making with the community of nonhuman beings we breathe, eat, love, and otherwise share this planet with. Instead of providential history, we must settle for what anthropologist [James Clifford](#) calls “big enough” stories that remain “ontologically unfinished” and “situated in zones of contact, struggle, and dialogue.”

We who are no long modern need new practices of aestheticization, new stories, new rituals (or perhaps we need to respectfully recover “old” practices, stories, and rituals) to help sensitize us to the values of non-humans. Our survival depends on it.

Becoming sensitive to the values of non-humans doesn’t mean there is no hierarchy of values that recognizes the unique evolutionary accomplishments of cosmogenesis. As Whitehead says, [“life is robbery.”](#) But, he continues, “the robber needs justification.” What is the human, anyway? Are we one species among many? In an obvious sense, of course we are; and we ignore our dependence upon and embeddedness within wider ecological networks to our own peril. In another sense, we are not just another species. We have become, for better or worse, a planetary presence, a geological force. How are we to justify our presence on the Earth? What does ecological justice look like when the idea of justice is expanded beyond just human society? These are questions any civilization hoping to survive the next century is going to need to answer.

Human history is a geophysical event. Whether we date the history of this event to the emergence of symbolic consciousness 200,000 years ago, the Neolithic revolution 12,500 years ago, the capitalist revolution 500 years ago, the industrial revolution 250 years ago, the nuclear age 75 years ago, or the information age 30 years ago, it is clear that the Earth has by now at least entered a new phase of geohistorical development. Whether we call it the Anthropocene, the [Capitalocene](#), the [Plantationocene](#), the [Chthulucene](#), the [Entropocene](#), the emergence of the [Noosphere](#) or the [Ecozoic Era](#), diagnosing the metaphysical roots of the present ecological catastrophe is a necessary (though not sufficient) part of imagining and materializing a post-capitalist world.

[Marx, of course, was not unaware of our profound connection to the Earth:](#) “Nature is man’s *inorganic* body, that is to say, nature in so far as it is not the human body. Man *lives* from nature . . . and he must maintain a continuing dialogue with it if he is not to die. To say that man’s physical and mental life is linked to nature simply means that nature is linked to itself, for man is a part of nature.” In *Capital*, he writes of labor as a process “by which man, through his own actions, mediates, regulates, and controls the metabolism between himself and nature. He confronts the materials of nature as a force of nature.” I do not mean to downplay the extent to which Marx’s dialectical understanding of the human-earth relation goes a long way toward describing our new Gaian reality. But he still could not shake the all too modern tendency to treat Earth as dead and awaiting the value-creating power of human consciousness. So with Whitehead, I have argued that value is not just a human social construct or free creation of

human labor or desire, but a cosmological power upon which our human values and potentials depend.

* Whether the virus ends up being a lab leak or not, research underway at the virology lab in Wuhan was ongoing precisely because of the dangers of spillover. “Horseshoe bats are the natural reservoir for SARS-CoV-like virus and that civets are the amplification host highlight the importance of wildlife and biosecurity in farms and wet markets, which can serve as the source and amplification centers for emerging infections” ([from a meta-analysis of medical studies on coronaviruses](#)).

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