The COVID-19 pandemic: a systemic analysis

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From a systemic perspective, the coronavirus must be seen as a biological response of Gaia, our living planet, to the ecological and social emergency humanity has brought upon itself. During the last decades of the twentieth century, humanity exceeded the Earth's carrying capacity, and the irrational obsession of our political and corporate leaders with perpetual economic and corporate growth has generated a multi-faceted existential crisis threatening humanity's very survival.

Scientists and environmental activists have warned of the dire consequences of our unsustainable social, economic, and political systems for decades, but until now our corporate and political leaders stubbornly resisted these warnings. Now, however, our political and financial elites are forced to pay attention, as COVID-19 brought the earlier warnings into real time.

The clear-cutting of large areas of tropical rainforest by multi-national food corporations, as well massive intrusions into other ecosystems around the world, have fragmented these systems and have fractured the web of life. One of the many consequences of these destructive actions was that viruses, which had lived in symbiosis with certain animal species, jumped from those species to humans, where they were highly toxic or deadly. The coronavirus jumped from a species of bats to humans in China, and from there it rapidly spread around the world.

Population density is the key variable in the spread of COVID-19, and population density is often a consequence of excessive profit maximizing—whether on giant cruise ships and in other forms of mass tourism, in giant supermarkets and department stores, or in crowded living situations caused by social and economic inequality. In previous times, these vulnerable social and cultural conditions were

usually concealed. But now the coronavirus, which does not know any social or cultural boundaries, has laid them open.

When the pandemic spread around the world in March 2020, one country after another went into lockdown with only essential businesses remaining open and most people confined to their homes. As a consequence, transportation of people and goods was radically reduced, supply chains were disrupted, businesses closed, the stock market collapsed, and unemployment soared. The exponentially growing pandemic has gone hand in hand with an exponentially growing world-wide economic crisis.

Both of these crises have led to widespread tragic consequences for individuals and communities around the world. However, from a planetary ecological perspective there have also been many positive consequences. As automobile traffic and industrial activities decreased dramatically, the pollution of major cities around the world suddenly disappeared, and we are once again enjoying clear skies and clean air. As giant cruise ships no longer enter the Venetian lagoon and other tourists stay at home, the canals in Venice have become so clear that fish can be seen again. The coronavirus has already been more effective in reducing CO₂ emissions and slowing down climate breakdown than all the world's policy initiatives combined.

This does not mean that we want to continue in the current situation. But the world's COVID-19 response has shown us what is possible when people realize that their lives are at stake—individually during the pandemic and for civilization as a whole in the climate emergency. We know now that the world is able to respond with urgency and coherence once the political will has been aroused.

With COVID-19, Gaia has presented us with valuable, life-saving lessons. The question is: will humanity heed these lessons? Will we shift from undifferentiated, extractive economic growth to regenerative, qualitative growth? Will we replace fossil fuels with renewable forms of energy for all our energy needs? Will we replace our centralized, energy-intensive system of industrial agriculture with organic, community-oriented and regenerative farming? We have

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the knowledge and the technologies to embark on all these initiatives. Will we have the political will?

What we are seeing already is that corresponding social policies, which were unthinkable just a couple of months ago, are now being discussed seriously in various countries. For example, Denmark plans to pay 75% of the salaries lost by employees in private companies to help them through the crisis. The UK, similarly, plans to cover 80% of salaries. Spain is nationalizing its private hospitals. California is leasing hotels to shelter homeless people during the pandemic.

If we can catalyze global leadership to continue such social policies, and if we can add to them policies that respect and cooperate with nature's inherent ability to sustain life, we may not only overcome the COVID-19 pandemic but also succeed in restoring the Earth's ecosystems and stabilizing the climate. Looking back on 2020, future

historians may conclude that, even though COVID-19 had widespread tragic consequences for countless individuals and communities, in the long run it may have saved humanity and large parts of the planetary community of life from extinction.

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