

COVID-19 and Catastrophe Capitalism

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COVID-19 has accentuated as never before the interlinked ecological, epidemiological, and economic vulnerabilities imposed by capitalism. As the world enters the third decade of the twenty-first century, we are seeing the emergence of catastrophe capitalism as the structural crisis of the system takes on planetary dimensions.

Since the late twentieth century, capitalist globalization has increasingly adopted the form of interlinked commodity chains controlled by multinational corporations, connecting various production zones, primarily in the Global South, with the apex of world consumption, finance, and accumulation primarily in the Global North. These commodity chains make up the main material circuits of capital globally that constitute the phenomenon of late imperialism identified with the rise of generalized monopoly-finance capital.¹ In this system, exorbitant imperial rents from the control of global production are obtained not only from the *global labor arbitrage*, through which multinational corporations with their headquarters in the center of the system overexploit industrial labor in the periphery, but also increasingly through the *global land arbitrage*, in which agribusiness multinationals expropriate cheap land (and labor) in the Global South so as to produce export crops mainly for sale in the Global North.²

In addressing these complex circuits of capital in today's global economy, corporate managers refer both to supply chains and value chains, with supply chains representing the movement of the physical product, and value chains directed at the "value added" at each node of production, from raw materials to the final product.³ This dual emphasis on



Image credit: William B. Cassidy, "[Shippers seek stability ahead of patchwork COVID-19 recovery](#)," *Joc.com*, May 18, 2020.

supply chains and value chains resembles in some ways the more dialectical approach developed in Karl Marx's analysis of the *commodity chains* in production and exchange, encompassing both use values and exchange values. In the first volume of *Capital*, Marx highlighted the dual reality of natural-material use values (the "natural form") and exchange values (the "value form") present in each link of "the general chain of metamorphoses taking place in the world of commodities."⁴ Marx's approach was carried forward by Rudolf Hilferding in his *Finance Capital*, where he wrote of the "links in the chain of commodity exchanges."⁵

In the 1980s, world-system theorists Terence Hopkins and Immanuel Wallerstein reintroduced the commodity-chain concept based on these roots within Marxian theory.⁶ Nevertheless, what was generally lost in later Marxian (and world-system) analyses of commodity chains, which treated these as exclusively economic/value phenomena, was the material-ecological aspect of use values. Marx, who never lost sight of the natural-material limits in which the circuit of capital took place, had stressed "the negative, i.e. destructive side" of capitalist valorization with respect to the natural conditions of production and the metabolism of human beings and nature as a whole.⁷ The "irreparable rift in the interdependent process of social metabolism" (the metabolic rift) that constituted capitalism's destructive relation to the earth, whereby it "exhausted the soil" and "forced the manuring of English fields with guano," was equally evident in "periodical epidemics," resulting from the same organic contradictions of the system.⁸

Such a theoretical framework, focusing on the dual, contradictory forms of commodity chains, which incorporate both use values and exchange values, provides the basis for understanding the combined ecological, epidemiological, and economic crisis tendencies of late imperialism. It allows us to perceive how the circuit of capital under late imperialism is tied to the etiology of disease via agribusiness, and how this has generated the COVID-19 pandemic. This same perspective focusing on commodity chains, moreover, allows us to understand how the disruption of the flow of use values in the form of material goods and the resulting interruption of the flow of value have generated a severe and lasting economic crisis. The result is to push an already stagnant economy to the very edge, threatening the toppling of the financial superstructure of the system. Finally, beyond all of this lies the much greater planetary rift engendered by today's catastrophe capitalism, exhibited in climate change and the crossing of various planetary boundaries, of which the present epidemiological crisis is simply another dramatic manifestation.

Circuits of Capital and Ecological-Epidemiological Crises

Remarkably, during the last decade, a new more holistic One Health-One World approach to the etiology of disease arose, mainly in response to the appearance of recent zoonotic diseases (or zoonoses) such as SARS, MERS, and H1N1 transmitted to humans from nonhuman animals, wild or domesticated. The One Health model integrates epidemiological analysis on an ecological basis, bringing together ecological scientists, physicians, veterinarians, and public health analysts within an approach that has a global

scope. However, the original ecological framework that motivated One Health, representing a new, more comprehensive approach to zoonotic disease, has recently been appropriated and partially negated by such dominant organizations as the World Bank, the World Health Organization, and the Centers for Disease Control and Prevention in the United States. Hence, the multisector approach of One Health has been rapidly converted into a mode of bringing such varied interests as public health, private medicine, animal health, agribusiness, and big pharma together to strengthen the response to what are regarded as episodic epidemics, while signifying the rise of a broad corporatist strategy in which capital, specifically agribusiness, is the dominant element. The result is that the connections between epidemiological crises and the capitalist world economy are systematically downplayed in what purports to be a holistic model.⁹

There thus arose in response a new, revolutionary approach to the etiology of disease, known as Structural One Health, building critically on One Health, but rooted rather in the broad historical-materialist tradition. For proponents of Structural One Health the key is to ascertain how pandemics in the contemporary global economy are connected to the circuits of capital that are rapidly changing environmental conditions. A team of scientists, including Rodrick Wallace, Luis Fernando Chaves, Luke R. Bergmann, Constância Ayres, Lenny Hogerwerf, Richard Kock, and Robert G. Wallace, have together written a series of works such as *Clear-Cutting Disease Control: Capital-Led Deforestation, Public Health Austerity, and Vector-Borne Infection* and, more recently, "COVID-19 and Circuits of Capital" (by Rob Wallace, Alex Liebman, Luis Fernando Chaves, and Rodrick Wallace) in the May 2020 issue of *Monthly Review*. Structural One Health is defined as "a new field, [which] examines the impacts global circuits of capital and other fundamental contexts, including deep cultural histories, have upon regional agroecconomics and associated disease dynamics across species."¹⁰

The revolutionary historical-materialist approach represented by Structural One Health departs from the mainstream One Health approach in: (1) focusing on commodity chains as drivers of pandemics; (2) discounting the usual "absolute geographies" approach that concentrates on certain locales in which novel viruses emerge while failing to perceive the global economic conduits of transmission; (3) seeing the pandemics not as an episodic problem, or random "black swan" events, but rather as reflecting a general structural crisis of capital, in the sense explicated by István Mészáros in his *Beyond Capital*; (4) adopting the approach of dialectical biology, associated with Harvard biologists Richard Levins and Richard Lewontin in *The Dialectical Biologist*; and (5) insisting on the radical reconstruction of society at large in ways that would promote a sustainable "planetary metabolism."¹¹ In his *Big Farms Make Big Flu* and other writings, Robert G. (Rob) Wallace draws on Marx's notions of commodity chains and the metabolic rift, as well as the critique of austerity and privatization based in the notion of the Lauderdale Paradox (according to which private riches are enhanced by the destruction of public wealth). Thinkers in this critical tradition thus rely on a dialectical approach to ecological destruction and the etiology of disease.¹²

Naturally, the new historical-materialist epidemiology did not appear out of thin air, but was built on a long tradition of socialist struggles and critical analyses of epidemics, including such historic contributions as: (1) Frederick Engels's *Conditions of the Working Class in England*, which explored the class basis of infectious diseases; (2) Marx's own discussions of epidemics and general health conditions in *Capital*; (3) the British zoologist (Charles Darwin and Thomas Huxley's protégé and Marx's friend) E. Ray Lankester's treatment of the anthropogenic sources of disease and their basis in capitalist agriculture, markets, and finance in his *Kingdom of Man*; and (4) Levins's "Is Capitalism a Disease?"¹³

Especially important in the new historical-materialist epidemiology associated with Structural One Health is the explicit recognition of the role of global agribusiness and integration of this with detailed research into every aspect of the etiology of disease, focusing on the new zoonoses. Such diseases, as Rob Wallace stated in *Big Farms Make Big Flu*, were the "inadvertent biotic fallout of efforts aimed at steering animal ontogeny and ecology to multinational profitability," producing new deadly pathogens.¹⁴ Offshore farming consisting of monocultures of genetically similar domestic animals (eliminating immune firebreaks), including massive hog feedlots and vast poultry farms coupled with rapid deforestation and the chaotic mixing of wild birds and other wildlife with industrial animal production—not excluding wet markets—have created the conditions for the spread of new deadly pathogens such as SARS, MERS, Ebola, H1N1, H5N1, and now SARS-CoV-2. Over half a million people globally died of H1N1 while the deaths from SARS-CoV-2 will likely far exceed that.¹⁵

"Agribusinesses," Rob Wallace writes, "are moving their companies into the Global South to take advantage of cheap labor and cheap land," and "spreading their entire production line across the world."¹⁶ Avians, hogs, and humans all interact to produce new diseases. "Influenzas," Wallace tells us, "now emerge by way of a globalized network of corporate feedlot production and trade, wherever specific strains first evolve. With flocks and herds whisked from region to region—transforming spatial distance into just-in-time expediency—multiple strains of influenza are continually introduced into localities filled with populations of susceptible animals."¹⁷ Large-scale commercial poultry operations have been shown to have much higher odds of hosting these virulent zoonoses. Value-chain analysis has been used to trace the etiology of new influenzas such as H5N1 along the poultry production commodity chain.¹⁸ Influenza in southern China has been shown to emerge in the context of "a 'historical present' within which multiple virulent recombinants arise out of a mélange of agroecologies originating at different times by both path dependence and contingency: in this case, ancient (rice), early modern (semi-domesticated ducks), and present-day (poultry intensification)." This analysis has also been extended by radical geographers, such as Bergmann, working on "the convergence of biology and economy beyond a single commodity chain and up into the fabric of the global economy."¹⁹

The interconnected global commodity chains of agribusiness, which provide the bases for the appearance of novel zoonoses, ensure that these pathogens move rapidly from one place to another, exploiting the chains of human connection and globalization, with the human hosts moving in days, even hours, from one part of the globe to the other. Wallace and his colleagues write in "COVID-19 and Circuits of Capital": "Some pathogens emerge right out of centers of production.... But many like COVID-19 originate on the frontiers of capital production. Indeed, at least 60 percent of novel human pathogens emerge by spilling over from wild animals to local human communities (before the more successful ones spread to the rest of the world)." As they sum up the conditions of the transmission of these diseases,

the underlying operative premise is that the cause of COVID-19 and other such pathogens is not found just in the object of any one infectious agent or its clinical course, but also in the field of ecosystemic relations that capital and other structural causes have pinned back to their own advantage. The wide variety of pathogens, representing different taxa, source hosts, modes of transmission, clinical courses, and epidemiological outcomes, have all the earmarks that send us running wild-eyed to our search engines upon each outbreak, and mark different parts and pathways along the same kinds of circuits of land use and value accumulation.²⁰

The imperial restructuring of production in the late twentieth and early twenty-first centuries—which we know as globalization—was the result primarily of the global labor arbitrage and the overexploitation (and superexploitation) of workers in the Global South (including the purposeful contamination of the local environments) for the benefit primarily of the centers of world capital and finance. But it was also driven in part by a global land arbitrage that took place simultaneously through multinational agribusiness corporations. According to Eric Holt-Giménez in *A Foodie's Guide to Capitalism*, "the price of land" in much of the Global South "is so low in relation to its land rent (what it is worth for what it can produce) that the capture of the difference (arbitrage) between low price and high land rent will provide investors with a handsome profit. Any benefits from actually growing crops are secondary to the deal.... Land arbitrage opportunities come about by bringing new land—with an attractive land rent—into the global land market where rents can actually be capitalized."²¹ Much of this was fed by what is called the Livestock Revolution, which made livestock into a globalized commodity based on giant feedlots and genetic monocultures.²²

These conditions have been promoted by the various development banks in the context of what is euphemistically known as "territorial restructuring," which involves removing subsistence farmers and small producers from the land at the behest of multinational corporations, primarily agribusinesses, as well as rapid deforestation and ecosystem destruction. These are also known as twenty-first-century land grabs, accelerated by high prices for basic foods in 2008 and again in 2011, as well as private wealth funds seeking tangible assets in the face of uncertainty after the Great Financial Crisis of 2007–09. The result is the greatest mass migration in human history, with people being thrown off the

land in a global process of depeasantization, altering the agroecology of whole regions, replacing traditional agriculture with monocultures, and pushing populations into urban slums.²³

Rob Wallace and his colleagues observe that historian and critical-urban theorist Mike Davis and others “have identified how these newly urbanizing landscapes act as both local markets and regional hubs for global agricultural commodities passing through.... As a result, forest disease dynamics, the pathogens’ primeval sources, are no longer constrained to the hinterlands alone. Their associated epidemiologies have themselves turned relational, felt across time and space. A SARS can suddenly find itself spilling over into humans in the big city only a few days out of its bat cave.”²⁴

Commodity Chain Disruption and the Global Bullwhip Effect

The new pathogens generated unintentionally by agribusiness are not themselves natural-material use values, but rather are toxic residues of the capitalist production system, traceable to agribusiness commodity chains as part of a globalized food regime.²⁵ Yet, in a kind of metaphorical “revenge” of nature as first depicted by Engels and Lankester, the ripple effects of combined ecological and epidemiological disasters introduced by today’s global commodity chains and the actions of agribusiness, giving rise to the COVID-19 pandemic, have disrupted the entire system of global production.²⁶ The effect of lockdowns and social distancing, shutting down production in key sectors of the globe, has shaken supply/value chains internationally. This has generated a gigantic “bullwhip effect” rippling up from both the supply and demand ends of the global commodity chains.²⁷ Moreover, the COVID-19 pandemic has occurred in the context of a global regime of neoliberal monopoly-finance capital that has imposed worldwide austerity, including on public health. The universal adoption of just-in-time production and time-based competition in the regulation of global commodity chains has left corporations and facilities such as hospitals with few inventories, a problem compounded by urgent stockpiling of some goods on the part of the population.²⁸ The result is extraordinary dislocation of the entire global economy.

Today’s global commodity chains—or what we call *labor-value chains*—are organized primarily in order to exploit lower unit labor costs (taking into account both wage costs and productivity) in the poorer countries of the Global South where world industrial production is now predominantly located. Unit labor costs in India in 2014 were 37 percent of the U.S. level, while China’s and Mexico’s were 46 and 43 percent, respectively. Indonesia was higher with unit labor costs at 62 percent of the U.S. level.²⁹ Much of this is due to the extremely low wages in countries in the South, which are only a small fraction of the wage levels of those in the North. Meanwhile, arm’s length production carried out under multinational corporation specifications, along with advanced technology introduced into the new export platforms in the Global South, generates productivity on levels comparable in many areas to that of the Global North. The result is an integrated global system of exploitation in which the differences in wages between countries in the Global North and the Global South are greater than the difference in

productivities, leading to very low unit labor costs in countries in the South and generating enormous gross profit margins (or economic surplus) on the export price of goods from the poorer countries.

The enormous economic surpluses generated in the Global South are logged in gross domestic product accounting as *value added* in the North. However, they are better understood as *value captured* from the South. This whole new system of international exploitation associated with the globalization of production constitutes the deep structure of late imperialism in the twenty-first century. It is a system of world exploitation/expropriation formed around the global labor arbitrage, resulting in a vast drain of value generated from the poor to the rich countries.

All of this was facilitated by revolutions in transportation and communication. Shipping costs dived as standardized shipping containers proliferated. Communication technologies such as fiber-optic cables, mobile phones, the Internet, broadband, cloud computing, and video conferencing altered global connectivity. Air travel cheapened rapid travel, annually growing by an average of 6.5 percent between 2010 and 2019.³⁰ Around a third of U.S. exports are intermediate products for final goods produced elsewhere, such as cotton, steel, engines, and semiconductors.³¹ It is out of these rapidly changing conditions, generating an increasingly integrated, hierarchical international accumulation structure, that the present global commodity-chain structure arose. The result was the connecting of all parts of the globe within a world system of oppression, a connectivity that is now showing signs of destabilizing under the impacts of the U.S. trade war against China and the global economic effects of the COVID-19 pandemic.

The COVID-19 pandemic, with its lockdowns and social distancing, is “the first global supply-chain crisis.”³² This has led to losses in economic value, vast unemployment and underemployment, corporate collapse, increased exploitation, and widespread hunger and deprivation. Key to understanding both the complexity and chaos of the present crisis is the fact that no CEO of a multinational corporation anywhere has a complete map of the firm’s commodity chain.³³ Usually, the financial centers and procurement officers in corporations know their first-tier suppliers, but not their second-tier (that is, the suppliers of their suppliers), much less the third- or even fourth-tier suppliers. As Elisabeth Braw writes in *Foreign Policy*, “Michael Essig, a professor of supply management at the Bundeswehr University of Munich calculated that a multinational company such as Volkswagen has 5,000 suppliers (the so-called tier-one suppliers), each with an average of 250 tier-two suppliers. That means that the company actually has 1.25 million suppliers—the vast majority of whom it doesn’t know.” Moreover, this leaves out the third-tier suppliers. When the novel coronavirus outbreak occurred in Wuhan in China, it was discovered that fifty-one thousand companies globally had at least one direct supplier in Wuhan, while five million companies had at least one two-tier supplier there. On February 27, 2020, when the supply chain disruption was still largely centered on China, the World Economic Forum, citing a report by Dun & Bradstreet, declared that more than 90 percent of the Fortune 1000 multinational corporations had a tier-one or tier-two supplier affected by the virus.³⁴

The effects of SARS-CoV-2 have made it urgent for corporations to try to map their entire commodity chains. But this is enormously complex. When the Fukushima nuclear disaster occurred, it was discovered that the Fukushima area produced 60 percent of the world's critical auto parts, a large share of world lithium battery chemicals, and 22 percent of the world's three-hundred-millimeter silicon wafers, all crucial to industrial production. Attempts were made at that time by some monopoly-finance corporations to map their supply chains. According to the *Harvard Business Review*, "executives of a Japanese semiconductor manufacturer told us it took a team of a 100 people more than a year to map the company's supply networks deep into the sub-tiers following the earthquake and tsunami [and the Fukushima nuclear disaster] in 2011."³⁵

Faced with commodity chains in which many of the links in the chain are invisible, and where the chains are breaking in numerous places, corporations are faced with interruptions and uncertainties in what Marx called the "chain of metamorphoses" in the production, distribution, and consumption of material products, coupled with erratic changes in overall supply demand. The scale of the coronavirus pandemic and its consequences on world accumulation are unprecedented, with the global economic costs still increasing. At the end of March, some three billion people on the planet were in lockdown or social-distancing mode.³⁶ Most corporations have no emergency plan for dealing with the multiple breaks in their supply chains.³⁷ The scale of the problem has manifested itself in the early months of 2020 in tens of thousands of force majeure declarations, beginning first in China and then spreading elsewhere, where various suppliers indicate they are unable to fulfill contracts due to extraordinary external events. This is accompanied by numerous "blank sailings" standing for scheduled voyages of cargo ships that are canceled with the goods being held up due either to failure of supply or demand.³⁸ In early April, the U.S. National Retail Federation indicated that March 2020 saw a five-year low in the shipment of twenty-foot equivalents (of containers) in ship cargo, with shipments expected to plummet much more rapidly from that point.³⁹ Airline passenger flights all over the world have decreased by around 90 percent, leading the major U.S. airlines to leverage "the bellies and passenger cabins of their aircraft [in order to redirect them] for cargo flights, often removing seats and using the empty tracks to secure cargo."⁴⁰

According to the estimates in early April by the World Trade Organization, the economic fallout from the COVID-19 pandemic would lead to a drop in annual world trade in 2020 by 13 percent in the more optimistic scenario, and by 32 percent in the more pessimistic scenario. In the latter case, the collapse of world trade would equal in one year what happened in the Great Depression of the 1930s over a three-year period.⁴¹

The dire effects of the disruption of global supply chains during the pandemic have been particularly evident with respect to medical equipment. Premier, one of the chief general purchasing organizations for hospitals in the United States, indicated that it normally purchases up to twenty-four million N95 respirators (masks) per year for its member health care providers and organizations, while in January and February 2020 alone its members used fifty-six million respirators. In late March, Premier was ordering 110 to

150 million respirators, while its member organizations such as hospitals and nursing homes when surveyed indicated they had barely more than a week's supply. The demand for medical masks soared while the global supply froze up.⁴² COVID-19 test kits were also in chronically short supply globally until China revved up production in late March.⁴³

Many other goods are also now in short supply, while in the general chaos warehouses are overflowing with goods, such as fashion clothing, for which demand has plummeted. In the world of just-in-time production and time-based competition, inventories are generally reduced to a minimum to decrease costs. With no slack, auto and many retail supply chains in the United States are likely to see a chronic shortage in supplies by early May. As Peter Hasenkamp, who directed Tesla's supply chain strategy and now is in charge of purchasing for Lucid Motors, an electric car startup, has stated: "It takes 2,500 parts to build a car, but only one not to." COVID-19 test kits were in scarce supply in the United States partly because of a shortage of swabs.⁴⁴ By mid-April 2020, 81 percent of global manufacturing firms were experiencing supply shortages, evident in a 44 percent increase in force majeure declarations by March from the beginning of the year before the emergence of the novel coronavirus, and a 38 percent increase in production shutdowns. The result is not only material shortfalls but a crisis in cash flow and hence a huge "spike in financial risks."⁴⁵

For today's multinational corporations, which care little about the use values they sell provided they generate exchange value, the real economic impact of the disruption of supply chains is their effect on value chains—that is, on exchange value flows. Although the full value effects of the global supply-side disruption will not be known for some time, an indication of the crisis this generates for accumulation can be seen in the losses in value that corporations have experienced. Hundreds of companies, including firms such as Boeing, Nike, Hershey, Sun Microsystems, and Cisco, have encountered critical commodity chain disruptions in the last couple of decades. Studies based on some eight hundred cases have shown that the average effect for firms of such a supply chain disruption includes: a "107 percent drop in operating income; 114 percent drop in return on sales; 93 percent drop in return on assets; 7 percent lower sales growth; 11 percent growth in cost; and 14 percent growth in inventories," with the negative effects normally lasting for two years. The same research indicates that "companies suffering from supply chain disruptions experience between 33 to 40 percent lower stock returns relative to their industry benchmarks over a three-year time period that starts one year before and ends two years after the disruption announcement date. Also, share price volatility in the year after the disruption is 13.50 percent higher when compared to the volatility in the year before the disruption."⁴⁶

Although no one knows how all this will fall out in the present, even in the case of an individual firm, capital has every reason to fear the consequences for valorization and accumulation. Everywhere, production is dropping and unemployment/underemployment is soaring as firms shed workers who in the United States are left simply to fend for themselves. Corporations are now in a race to pull in

their commodity chains and provide some semblance of stability in what seems to be an all-encompassing crisis. Moreover, the disruption of the whole chain of metamorphoses involved in the global labor arbitrage threatens to engender a financial meltdown in a world economy still characterized by stagnation, debt, and financialization.

Not the least of the vulnerabilities exposed is what is known as *supply-chain finance*, which allows corporations to defer payments to suppliers, with the help of bank finance. According to the *Wall Street Journal*, some corporations have supply-chain financing obligations that dwarf their reported net debt. These debts owed to suppliers are sold by other financial interests in the form of short-term notes. Credit Suisse owns notes that are owed by large U.S. corporations such as Kellogg and General Mills. With a general disruption of commodity chains, this intricate chain of finance, which is itself the object of speculation, is inherently placed in a crisis mode itself, creating additional vulnerabilities in an already fragile financial system.⁴⁷

Imperialism, Class, and the Pandemic

SARS-CoV-2, like other dangerous pathogens that have emerged or reemerged in recent years, is closely related to a complex set of factors including: (1) the development of global agribusiness with its expanding genetic monocultures that increase susceptibility to the contraction of zoonotic diseases from wild to domestic animals to humans; (2) destruction of wild habitats and disruption of the activities of wild species; and (3) human beings living in closer proximity. There is little doubt that global commodity chains and the kinds of connectivity that they have produced have become vectors for the rapid transmission of disease, throwing this whole globally exploitative pattern of development into question. As Stephen Roach of the Yale School of Management, formerly chief economist of Morgan Stanley and the principal originator of the global labor arbitrage concept, has written in the context of the coronavirus crisis, what the financial headquarters of corporations wanted was “low-cost goods irrespective of what those cost efficiencies entailed in terms of [the lack of] investing in public health, or I would also say [the lack of] investing in environmental protection and the quality of the climate.” The result of such an unsustainable approach to “cost efficiencies” is the contemporary global ecological and epidemiological crises and their financial consequences, further destabilizing a system that was already exhibiting an “excessive surge” characteristic of financial bubbles.⁴⁸

At present, rich countries are at the epicenter of the COVID-19 pandemic and financial fallout, but the overall crisis, incorporating its economic as well as epidemiological effects, will hit poor countries harder. How a planetary crisis of this kind is handled is ultimately filtered through the imperial-class system. In March 2020, the COVID-19 Response Team of Imperial College in London issued a report indicating that in a global scenario in which SARS-CoV-2 was unmitigated, with no social distancing or lockdowns, forty million people in the world would die, with higher mortality rates in the rich countries than in poor countries because of the larger proportions of the population that were 65 or older, as compared with poor countries. This analysis ostensibly took into

account the greater access to medical care in rich countries. But it left out factors like malnutrition, poverty, and the greater susceptibility to infectious diseases in poor countries. Nevertheless, the Imperial College estimates, based on these assumptions, indicated that in an unmitigated scenario the number of deaths would be in the range of 15 million in East Asia and the Pacific, 7.6 million people in South Asia, 3 million people in Latin America and the Caribbean, 2.5 million people in Sub-Saharan Africa, and 1.7 million in the Middle East and North Africa—as compared with 7.2 million in Europe and Central Asia and around 3 million in North America.⁴⁹

Basing their analysis on the Imperial College's approach, Ahmed Mushfiq Mobarak and Zachary Barnett-Howell at Yale University wrote an article for the establishment journal *Foreign Policy* entitled "Poor Countries Need to Think Twice About Social Distancing." In their article, Mobarak and Barnett-Howell were very explicit, arguing that "epidemiological models make clear that the cost of not intervening in rich countries would be in the hundreds of thousands to millions dead, an outcome far worse than the deepest economic recession imaginable. In other words, social distancing interventions and aggressive suppression, even with their associated economic costs, are overwhelmingly justified in high-income societies"—to save lives. However, the same is not true, they suggested, for poor countries, since they have relatively few elderly individuals in their populations as a whole, generating, according to the Imperial College estimates, only around half the mortality rate. This model, they admit, "does not account for the greater prevalence of chronic illnesses, respiratory conditions, pollution, and malnutrition in low-income countries, which could increase the fatality rates from coronavirus outbreaks." But largely ignoring this in their article (and in a related study conducted through the Yale Economics Department), these authors insist that it would be better, given the impoverishment and vast unemployment and underemployment in these countries, for the populations not to practice social distancing or aggressive testing and suppression, and to put their efforts into economic production, presumably keeping intact the global supply chains that primarily start upstream in low-wage countries.⁵⁰ No doubt the deaths of tens of millions of people in the Global South is considered by these authors to be a reasonable tradeoff for the continued growth of the empire of capital.

As Mike Davis argues, twenty-first-century capitalism points to "a permanent triage of humanity...dooming part of the human race to eventual extinction." He asks:

But what happens when COVID spreads through populations with minimal access to medicine and dramatically higher levels of poor nutrition, untended health problems and damaged immune systems? The age advantage will be worth far less to poor youth in African and South Asian slums.

There's also some possibility that mass infection in slums and poor cities could flip the switch on coronavirus's mode of infection and reshape the nature of the disease. Before SARS emerged in 2003, highly pathogenic coronavirus epidemics were confined to domestic animals, above all pigs. Researchers soon recognized two different routes of infection: fecal-oral, which attacked the stomach and intestinal tissue, and respiratory, which attacked the lungs. In the first case, there was usually very high mortality, while the second generally resulted in milder cases. A small percentage of current positives, especially the cruise ship cases, report diarrhea and vomiting, and, to quote one report, "the possibility of SARS-CoV-2 transmission via sewage, waste, contaminated water, air conditioning systems and aerosols cannot be underestimated."

The pandemic has now reached the slums of Africa and South Asia, where fecal contamination is everywhere: in the water, in the home-grown vegetables, and as windblown dust. (Yes, shit storms are real.) Will this favor the enteric route? Will, as in the case of animals, this lead to more lethal infections, possibly across all age groups?⁵¹

Davis's argument makes plain the gross immorality of a position that says social distancing and aggressive suppression of the virus in response to the pandemic should take place in rich countries and not poor. Such imperialist epidemiological strategies are all the more vicious in that they take the poverty of the populations of the Global South, the product of imperialism, as the justification for a Malthusian or social Darwinist approach, in which millions would die in order to keep the global economy growing, primarily for the benefit of those at the apex of the system. Contrast this to the approach adopted in socialist-led Venezuela, the country in Latin America with the least number of deaths per capita from COVID-19, where collectively organized social distancing and social provisioning is combined with expanded personalized screening to determine who is most vulnerable, widespread testing, and expansion of hospitals and health care, developing on the Cuban and Chinese models.⁵²

Economically, the Global South as a whole, quite apart from the direct effects of the pandemic, is destined to pay the highest cost. The breakdown of global supply chains due to canceled orders in the Global North (as well as social distancing and lockdowns around the globe) and the refashioning of commodity chains that will follow, will leave whole countries and regions devastated.⁵³

Here, it is crucial to recognize as well that the COVID-19 pandemic has come in the middle of an economic war for global hegemony unleashed by the Donald Trump administration and directed at China, which has accounted for some 37 percent of all cumulative growth of the world economy since 2008.⁵⁴ This is seen by the Trump

administration as a war by other means. As a result of the tariff war, many U.S. companies had already pulled their supply chains out from China. Levi's, for example has reduced its manufacturing in China from 16 percent in 2017 to 1–2 percent in 2019. In the face of the tariff war and the COVID-19 pandemic, two thirds of 160 executives surveyed across industries in the United States have recently indicated that they had already moved, were planning to move, or were considering moving their operations from China to Mexico, where unit labor costs are now comparable and where they would be closer to U.S. markets.⁵⁵ Washington's economic war against China is currently so fierce that the Trump administration refused to drop the tariffs on personal protection equipment, essential to medical personnel, until late March.⁵⁶ Trump meanwhile appointed Peter Navarro, the economist in charge of his economic war for hegemony with China, as head of the Defense Production Act to deal with the COVID-19 crisis.

In his roles in directing the U.S. trade war against China and as policy coordinator of the Defense Production Act, Navarro has accused China of introducing a "trade shock" that lost "over five million manufacturing jobs and 70,000 factories" and "killed tens of thousands of Americans" by destroying jobs, families, and health. He is now declaring that this has been followed by a "China virus shock."⁵⁷ On this propagandist basis, Navarro proceeded to integrate U.S. policy with respect to the pandemic around the need to fight the so-called "China virus" and pull U.S. supply chains out of China. Yet, since about a third of all global intermediate manufacturing products are currently produced in China, most heavily in the high-tech sectors, and since this remains key to the global labor arbitrage, the attempt at such restructuring will be vastly disruptive, to the extent that it is possible at all.⁵⁸

Some multinationals that had moved their production out of China learned the hard way later that the decision did not "free" them from their dependency on it. Samsung, for example, has started flying electronic components from China to its factories in Vietnam—a destination for companies that are eager to escape the trade-war tariffs. But Vietnam is also vulnerable, because they rely heavily on China for materials or intermediate parts.⁵⁹ Similar cases have happened in neighboring Southeast Asian countries. China is Indonesia's biggest trading partner, and roughly 20 to 50 percent of the country's raw materials for industries come from China. In February, factories in Batam, Indonesia, already had to deal with raw materials from China drying up (which counts for 70 percent of what was produced in that region). Companies there said that they considered getting materials from other countries but "it's not exactly easy." For many factories, the feasible option was to "cease operations completely."⁶⁰ Capitalists like Cao Dewang, the Chinese billionaire founder of Fuyao Glass Industry, predicts the weakening of China's role in the global supply chain after the pandemic but concludes that, at least in the short term, "it's hard to find an economy to replace China in the global industry chain"—citing many difficulties from "infrastructure shortcomings" in Southeast Asian countries, higher labor costs in the Global North, and the obstacles that "rich countries" have to face if they want to "rebuild manufacturing at home."⁶¹

The COVID-19 crisis is not to be treated as the result of an external force or as an unpredictable “black swan” event, but rather belongs to a complex of crisis tendencies that are broadly predictable, though not in terms of actual timing. Today, the center of the capitalist system is confronted with secular stagnation in terms of production and investment, relying for its expansion and amassing of wealth at the top on historically low interest rates, high amounts of debt, the drain of capital from the rest of the world, and financial speculation. Income and wealth inequality are reaching levels for which there is no historical analogue. The rift in world ecology has attained planetary proportions and is creating a planetary environment that no longer constitutes a safe place for humanity. New pandemics are arising on the basis of a system of global monopoly-finance capital that has made itself the main vector of disease. State systems everywhere are regressing toward higher levels of repression, whether under the mantle of neoliberalism or neofascism.

The extraordinarily exploitative and destructive nature of the system is evident in the fact that blue-collar workers everywhere have been declared essential critical infrastructure workers (a concept formalized in the United States by the Department of Homeland Security) and are expected to carry out production mostly without protective gear while the more privileged and dispensable classes socially distance themselves.⁶² A true lockdown would be much more extensive and would require state provisioning and planning, ensuring that the whole population was protected, rather than focusing on bailing out financial interests. It is precisely because of the class nature of social distancing, as well as access to income, housing, resources, and medical care, that morbidity and mortality from COVID-19 in the United States is falling primarily on populations of color, where conditions of economic and environmental injustice are most severe.⁶³

Social Production and the Planetary Metabolism

Fundamental to Marx’s materialist outlook was what he called “the hierarchy of... needs.”⁶⁴ This meant that human beings were material beings, part of the natural world, as well as creating their own social world within it. As material beings they had to satisfy their material needs first—eating and drinking, providing food, shelter, clothing, and the basic conditions of healthy existence, before they pursue their higher developmental needs, necessary for the full realization of human potential.⁶⁵ Yet, in class societies it was always the case that the vast majority, the real producers, were relegated to conditions in which they were caught in a constant struggle to meet their most basic needs. This has not fundamentally changed. Despite the enormous wealth created over centuries of growth, millions upon millions of people in even the wealthiest capitalist society remain in a precarious condition in relation to such basics as food security, housing, clean water, health care, and transportation—under conditions in which three billionaires in the United States own as much wealth as the bottom half of the population.

Meanwhile, local and regional environments have been put in danger—as have all of the world ecosystems and the Earth System itself as a safe place for humanity. An emphasis on global “cost efficiencies” (a euphemism for cheap labor and cheap land) has led multinational capital to create a complex system of global commodity chains, designed at every point to maximize the over-/superexploitation of labor on a worldwide basis, while also turning the entire world into a real-estate market, much of it as a field for operation of agribusiness. The result has been a vast draining of surplus from the periphery of the global system and a plundering of the planetary commons. In the narrow system of value accounting employed by capital, most of material existence, including the entire Earth System and the social conditions of human beings, insofar as these do not enter the market, are considered externalities, to be robbed and despoiled in the interest of capital accumulation. What has mistakenly been characterized as “the tragedy of the commons” is better understood, as Guy Standing has pointed out in *Plunder of the Commons*, as “the tragedy of privatizing.” Today, the famous Lauderdale Paradox, introduced by the Earl of Lauderdale in the early nineteenth century, in which public wealth is destroyed for the enhancement of private riches, has the entire planet as its field of operation.⁶⁶

The circuits of capital of late imperialism have taken these tendencies to their fullest extent, generating a rapidly developing planetary ecological crisis that threatens to engulf human civilization as we know it; a perfect storm of catastrophe. This comes on top of a system of accumulation that is divorced from any rational ordering of needs for the population independent of the cash nexus.⁶⁷ Accumulation and the amassing of wealth in general are increasingly dependent on the proliferation of waste of all kinds. In the midst of this disaster, a New Cold War and a growing likelihood of thermonuclear destruction have emerged, with an increasingly unstable and aggressive United States at the forefront. This has led the *Bulletin of Atomic Scientists* to move its famous doomsday clock to 100 seconds to midnight, the closest to midnight since the clock started in 1947.⁶⁸

The COVID-19 pandemic and the threat of increasing and more deadly pandemics is a product of this same late-imperialist development. Chains of global exploitation and expropriation have destabilized not only ecologies but the relations between species, creating a toxic brew of pathogens. All of this can be seen as arising from the introduction of agribusiness with its genetic monocultures; massive ecosystem destruction involving the uncontrolled mixture of species; and a system of global valorization based on treating land, bodies, species, and ecosystems as so many “free gifts” to be expropriated, irrespective of natural and social limits.

Nor are new viruses the only emerging global health problem. The overuse of antibiotics within agribusiness as well as modern medicine has led to the dangerous growth of bacterial superbugs generating increasing numbers of deaths, which by mid-century could surpass annual cancer deaths, and inducing the World Health Organization to declare a “global health emergency.”⁶⁹ Since communicable diseases, due to the unequal conditions of capitalist class society, fall heaviest on the working class and the poor, and

on populations in the periphery, the system that generates such diseases in the pursuit of quantitative wealth can be charged, as Engels and the Chartists did in the nineteenth century, with social murder. As the revolutionary developments in epidemiology represented by One Health and Structural One Health have suggested, the etiology of the new pandemics can be traced to the overall problem of ecological destruction brought on by capitalism.

Here, the necessity of a “revolutionary reconstitution of society at large” rears its head once again, as it has so many times in the past.⁷⁰ The logic of contemporary historical development points to the need for a more communal-commons-based system of social metabolic reproduction, one in which the associated producers rationally regulate their social metabolism with nature, so as to promote free development of each as the basis of the free development of all, while conserving energy and the environment.⁷¹ The future of humanity in the twenty-first century lies not in the direction of increased economic and ecological exploitation/expropriation, imperialism, and war. Rather, what Marx called “freedom in general” and the preservation of a viable “planetary metabolism” are the most pressing necessities today in determining the human present and future, and even human survival.⁷²

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