A Leftist Perspective on China’s Environmental Destruction

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As “part of China,” we Hong Kongers have seen how China’s economic growth has contributed to the degradation of its environment. To be fair, Hong Kong’s economic takeoff had already harmed its environment before China took over the city. We witnessed all our beautiful beaches becoming polluted. The relocation of Hong Kong’s factories to Guandong since the 1990s, instead of alleviating pollution, has, ironically, further exacerbated the city’s environmental destruction. For decades thick clouds of smog have hung over us as Guangdong became a great export-processing zone. The sky only became cleaner, again ironically, when the pandemic swept across the nation, shutting down many factories.

Beijing and its supporters around the globe have always claimed that China’s kind of “socialism,” or whatever label one would prefer, gives it a strong advantage of governmental control over the nation and hence efficiency in overcoming disasters such as economic crises or pandemics. Even if this theory can be empirically proven, the question remains, at what cost?

This is the question Richard Smith tries to solve in his new book China’s Engine of Environmental Collapse. The book gives an overview of the depth of China’s environmental disasters. In 2018, China’s carbon dioxide (CO$_2$) emissions were nearly as great as the combined amount from the five next-largest emitters (the United States, India, Russia, Japan, and Germany). Yet China’s population was only 68 percent as large as the total population of those five countries, and its gross domestic product was just 32 percent as large as their combined GDP. The planet cannot be saved from cooking itself without significantly cutting China’s emissions.

Smith quotes climate scientists who published new research last year showing that, based on present trends, “Global warming is going to ‘all but erase’ Shanghai, Shenzhen, and ‘most of the world’s great coastal cities by 2050’—barely thirty years from now.”

Sweatshop of the Waterworld?

Waterworld, the 1995 post-apocalyptic movie, depicted a world totally submerged under the sea after the melting of the polar ice cap. When the film was released, climate skeptics saw it as just another science fiction movie. Meanwhile no one believed that China would soon emerge as the sweatshop of the world and as such would become an important part of the main engine of global
emissions, great enough to bring about a real waterworld in the not too distant future.

Behind the rise of China is first and foremost an obsessive drive toward more industrialization. In forty years, the party-state has turned a peasant nation into an increasingly urban one. The urban population now accounts for more than half the country’s total, and China has become the second largest economy in the world. Without China’s sweatshops, Americans would find it hard to acquire an affordable iPhone.

China’s Engine is impressive for the vast amount of empirical evidence it contains. But a reader may also be saddened, as I was, to learn how grave the crisis in China is today. For a country the size of China, industrializing is in itself a historic event, but that became catastrophic when done at breakneck speed. Smith tells us,

In 1990, China’s share of the world’s manufacturing output by value was just 2.4 percent. By 2006 this had risen to more than 12 percent, and to nearly 25 percent by 2015. By 2015 China produced 80 percent of the world’s air-conditioners, 70 percent of its smartphones, and 60 percent of its shoes, while accounting for 43 percent of global clothing exports. China became the world’s largest exporter in 2009, overtaking Germany, and world’s largest manufacturer in 2015, ending America’s 110-year run at the top. Its export industries now produce everything from basic consumer goods to computers, cars, and components for Boeing aircraft. In 1980 China’s per capita GDP was just $250, less than that of Pakistan. By 2014, total GDP had surpassed Japan to rank second behind the U.S.

China’s rising consumption and its rapid industrialization feed into one another, with little regard to the impact on resources. Smith quotes a 2011 study by the Earth Policy Institute at Columbia University that calculated that

If the Chinese economy were to keep growing by around 8 percent per year, average per capita consumption would reach current U.S. levels by around 2035. But to provide the natural resources for China’s 1.4 billion people to consume on a per capita basis like 330 million Americans consume today, the Chinese—currently 18.5 percent of the world’s population—would consume as much oil as the entire world consumes today. It would also consume more than 60 percent of other critical resources.

It does not require special talent to envisage that such a drain on resources will necessarily destroy the fragile ecological balances of our planet. Smith reminds us that

China’s cumulative emissions between 1965 and 2018 are now more than two-thirds those of the U.S., and according to one assessment, based on present trends ‘China will be responsible for the most atmospheric carbon dioxide in less than 20 years.’ The atmosphere doesn’t care about per capita emissions, only total atmospheric CO₂ concentrations. As the world’s largest emitter by far—accounting for 30 percent of total global emissions, against 15 percent for the U.S., 10 percent for the EU, and 7 percent for India—“socialist” China is by far the leading driver of planetary climate collapse.

Take the car industry as an example. Forty years ago most Chinese workers and even lower-ranking officials rode bicycles to work. I still remember the spectacular views of unending and gigantic streams of cyclists riding through the busiest roads in Beijing when I first visited there in 1983. In less than two decades, the Chinese Communist Party demolished most of the bicycle lanes in the cities to make way to motor cars. When “reform and opening” began in the early 1980s, China’s car industry was negligible. By 2017, China was producing 25 million cars per year and another four million commercial vehicles. Today China has more registered vehicles on the road than the United
States. The consequence: “In 2015 the government reported that 31 percent of Beijing’s smog came from motor vehicles, 22 percent from burning coal, 18 percent from industrial production, and 14 percent from construction dust.”

Smith devotes the whole of Chapter 4 to a report on how the rise of Chinese manufacturing has polluted China’s water, soil, and food: “The industries that are most responsible for this disaster are mining and chemicals. Of all the dirty industries that the West shipped to China in the 1990s, chemicals were the worst, and by the 2000s China had become the largest manufacturer of industrial chemicals.”

A big portion of these chemicals ended up in the food offered to Chinese people as well:

Chinese netizens joke that the food safety scandals have taught people a lot about chemistry. As one put it, “We learned of paraffin from toxic rice, learned of dichlorvos [an insecticide] from hams, learned of Sudan Red [a dye] from salted duck eggs and chili sauce, learned of formaldehyde from hotpot, learned of sulphur from tremella [jelly fungus], and ... melamine from Sanlu brand milk.”

**Labor and Environment**

One of the strengths of *Chinese Engine* is that it touches, although briefly, on how working people and their workplaces are directly affected by the degradation of the environment. Environmental protection in China has already gone beyond the phase where it is mainly a concern of the rising middle class, as common urban folk are now also getting involved whenever they are annoyed by polluting government projects such as incinerators and chemical plants. But the Chinese environmental protection community is rarely concerned about workplace pollution, and slum areas where migrant workers live are often without clean water and air. The book reminds us again how the two issues of environment and labor go hand in hand. Chapter 2 has a section on workplace deaths, which mentions that

workers are injured, or suffer from silicosis, chemical poisoning, cancers, and other industrially induced diseases. ... Chinese health authorities and researchers say that around 23 million are suffering and dying from silicosis, many of them the construction workers who drilled the tunnels and built the foundations of China’s cities and infrastructure with little or no safety equipment, sacrificing their lives to build and overbuild the country at “China speed.” This compares with 11.5 million silicosis-impaired workers in India, 2 million in the United States and 1.7 million in Europe.

This is confirmed by certain labor non-governmental organizations’ studies that are designed to raise awareness among workers and the public about the subject. Many industrial actions have been centered around these issues. A *China Labor Support Network* unpublished report of 2016 reminded us that

by the end of 2012, occupational disease hazards existed at around 12 million enterprises across the whole country and around 150 million people were exposed to occupational hazards. ... By the end of 2014, the country had a reported total of 863,600 occupational disease cases, of which 777,200 were reported pneumoconiosis cases, 53,700 were occupational poisoning cases including 26,300 acute occupational poisoning cases and 27,300 chronic occupational poisoning cases.

In 2019 the Hong Kong-based *Globalization Monitor* surveyed 651 Chinese workers about the pollution they had observed in their living and working environments. The migrant workers were
living and working in five cities across four provinces. It found that

“20 percent of all workers said that the air around where they were living was either polluted or very polluted.

34 percent of workers said that they did not have access to clean water where they were living.

27 percent of workers reported air pollution in the workplace, and many described experiencing adverse effects related to the polluted environment.”

Hasn’t the Regime Done a Lot for the Environment?

One of Beijing’s major arguments in defense of its “rights to development” (hence the “right to emissions”) is that although China is now the country with the most emissions, per capita they are still a fraction of those of the United States. This argument is problematic, not only because it quietly smuggles in its logic of a race to the bottom in relation to emissions (why always compare oneself with the worst practices instead of the best?) but also because it ignores the fact that China’s per capita emissions have more than tripled between 1990 and 2013. China does need development for its poorest population, but it does not necessarily have to be at the price of tripling per capita emissions. This is because China’s per capita resource consumption has also risen sharply, reaching 1.62 times the world average in 2008. Again, this kind of “per capita” statistic could be misleading if taken out of context. Let us not forget that while the rich enjoy extravagant lives, China has 600 million people with a monthly income of 1,000 renminbi, as we learned from our Premier Li Keqiang last May. This is more than 40 percent of the Chinese population. The two social strata emit very different amounts of CO\textsubscript{2}, obviously.

China’s state-led growth also means that when it decided to invest in certain industries, funds would immediately flow to them. The same is true of renewable energy. The 2005 Renewable Energy Law stipulated that renewable energy should account for 20 percent by 2020 (with non-hydropower renewable generation to account for 1 percent of all grid-connected electricity by 2010 and 3 percent by 2020). According to Smith, by 2018 the share of renewables was increased to 26 percent, which exceeded the target. China has invested more money in renewable energy and electric vehicles than the rest of the world combined. The problem, however, is that among renewables, it was hydropower that dominated, and the dams that hydropower rely on are not so environmentally friendly. On top of this, since solar and wind power have irregularity problems, they always need fossil fuel plants as backup, and in China the abundance of coal makes coal-powered plants a favorable choice for local governments. The choice here is not just a technical choice however. Smith tells us,

China’s political economy presents additional problems due to the fragmentation and compartmentalization of the economy, the nature of intra-bureaucratic competition in this system, and the strong preference of local officials for locally available and reliable coal over often distantly produced renewables with uncertain reliability and price. Consequently, even when solar and wind power are available, many local officials and SOE [state-owned enterprises] bosses in China prefer not to rely on it. And ... Beijing generally cannot compel its subordinates in the localities to adopt renewables over fossil fuels.

That is also why even out in Xinjiang, which has the most installed wind power in the country, the bulk of electricity is supplied by coal-fired plants. Given the ready availability and cheapness of coal, given its 24/7 reliability, and given the lack of electricity storage or the means to compensate for fluctuations via market trading, Xinjiang’s resource-intensive
industries such as mining ... prefer to rely on predictable and stable coal power and “export” their wind and solar power.

The result of the competition to use coal-powered plants locally while exporting renewable energy to other provinces is that much of the electricity produced fails to reach its destination. And some of the electricity generated is without any grid connection—local authorities’ investment in renewables is often driven by the sole aim of getting subsidies from the central government, with little regard to whether the electricity generated is properly transmitted and consumed.

Another example of the abuse of the word “renewable” is the electric car solution. Beijing planned to phase out fossil fuel cars while phasing in electric cars to solve urban pollution. Elon Musk opened a Tesla factory in Shanghai to tap into the market. But where does the electricity come from? It mostly comes from none other than coal-powered plants.

Smith worries that if China continues its path of “development,” and continues to double or triple its GDP, then its CO₂ emission is also set to double or triple. Yet as far as China is concerned, there is not much leeway left to emit more CO₂ into the air:

The UN IPCC [Intergovernmental Panel on Climate Change] calculated in 2013 that if we’re to keep global warming below 2ºC, humanity must not add more than 880 gigatons of CO₂ emissions to the atmosphere before 2050. Collectively, we’ve already used up more than half of that “carbon budget” leaving us a remaining budget of just 349 gigatons. Scientists say that if China’s planned coal bases come on-stream, its CO₂ emissions will soar and China will devour the budget for the entire world by 2050—and doom the climate.

The Peculiarity of the Chinese Regime

Smith heavily criticizes China’s performance in cutting emissions, placing China’s policies within the indictment of global capitalism, of which China is a part. The title of the first chapter suggests this: “The ‘China Price’: Police State Capitalism and the Great Acceleration of Global Capitalism.” Global capitalism’s triumph over working people all around the world in the past several decades has been partially underpinned by China’s “police state capitalism”: China’s “dramatic cost reductions is made possible by the provision of vast numbers of semi-coerced ultra-cheap workers to power light manufacturing for export—kept cheap, at least up to the mid-2000s, by the police-state-led militarization of employment in the export zones, including the suppression of worker resistance and unionization efforts.”

It is global capitalism that is responsible for accelerating environmental destruction. Consumerism has taken a new form in what the author calls, “disposable workers producing disposable products for a disposable world.” This is reflected in what Smith calls “trashion fashion,” where the number of fashion seasons increased from two a year in the 1960s to one hundred “micro-seasons” today. But this is impossible without the input of China. The garment industry, in which China is a big exporter, is one of the best manifestations of such absurdity. Today the world consumes nearly three times as much fabric per capita as in 1950, primarily thanks to China.

The sudden availability of such a huge pool of ultra-cheap workers also spurred a minor industrial revolution, enabling producers to annihilate most of the remaining categories of durable goods and replace them with cheaper, disposable alternatives. With the disposables revolution, local tailors and alteration shops, shoe repair shops, appliance repair shops, television [repairers], furniture restorers, re-upholsterers, and the like all but vanished in the West as it became cheaper to toss and replace than repair. This in turn spurred an unprecedented acceleration of global natural resource plunder.
The $2.5 trillion global clothing and footwear industry is responsible for 8 percent of global greenhouse gas emissions. It uses so much water that “in Central Asia the Aral Sea has nearly disappeared because cotton farmers have diverted the rivers that used to fill it.”

The discussion of China’s role leads us back to the question that Smith asks in the introduction: “Why can’t China’s ferociously authoritarian government suppress pollution from its own industries?” According to the author, this is because China’s existing “bureaucratic collectivism” forbids it. In discussing the above-mentioned “fragmentation and compartmentalization of the economy, the intra-bureaucratic competition,” Smith goes on to explain,

This book presents a Marxist “mode of production” theorization of China’s bureaucratic-collectivist political economy, its class structure, surplus extraction relations, its drivers, contradictions, and tendencies in which the foregoing policies and practices can be understood as built into, rational, and even necessary for ruling-class reproduction in this system. I argue that the Stalinist bureaucratic-collectivist system established by Mao Zedong, and then modified 30 years later with Deng Xiaoping’s marriage of capitalism and bureaucratic collectivism, is driven in the main by statist-nationalist extra-economic drivers that are at least as powerful, if not more powerful than the market drivers of capitalism.

He further elaborates this idea in the section “China’s Hyper-Growth Drivers” (Chapter 5) where he says, “Capitalist economies are driven by a single maximand: Profit. China’s statist-bureaucratic mode of production is driven by a different maximand: Maintaining the security, power, and wealth of the party bureaucracy. ... Central planning replaces market competition’s role in shaping economic development and prioritizing and funding desired industries.”

He then identifies three drivers of this bureaucratic collectivism: 1) maximizing economic growth and self-sufficient industrialization, 2) maximizing employment generation, and 3) maximizing consumption and consumerism.

The strength of this chapter is that it provides a vivid analysis of the mechanisms of bureaucratic collectivism, interweaving the three drivers with the peculiarities of the Chinese bureaucracy and arriving at the conclusion that China under this regime will necessarily continue its trajectory of state-led growth with no regard for the consequence of environmental collapse.

One cannot fully understand the bureaucratic regime without understanding the word guanxi. Chapter 6 deals with guanxi, or “connections.” But this English translation does not fully convey the Chinese meaning. The Chinese have a motto which literally says, “if you have guanxi then everything is mei-guanxi (If you have connections then everything will be fine).” This kind of clientelism is not unique to China, but the gigantic scale of the Chinese version is, to the extent that it has not only permeated within the state, but also across the whole of society. In Mao’s era the way that common people lived often relied on what kind of guanxi they possessed. In the post-Mao era guanxi may take new forms, but in substance it has become even more important. Guanxi subjects the country’s laws, the party’s charter, and governments’ regulations to its own hegemony, from top to the bottom. This is also what is causing the gigantic scale of corruption. In my view, this is also promoting huge centrifugal forces within the ranks of the government and the party.

However, there are questions about the thesis of bureaucratic collectivism that remain to be clarified. It is not very clear whether this regime as a whole is a version of capitalism or not. If China’s statist-bureaucratic mode of production is driven by a maximand other than profit, then does that suggest it is a distinctive mode of production other than capitalism? If it is a mixture of capitalism and bureaucratic collectivism, then what are their respective weights in the economy?
I have doubts about this theory because it greatly underestimates the significance of the private sector, which now accounts for more than half of the Chinese GDP. Even if the state controls the commanding heights of the economy, more than half of the economy is governed by market mechanisms. How are we going to factor in the private sector without jeopardizing the analytical value of the theory?

Even in the state sector, while it is true that the top command can make countless plans and investments to boost old and new industries, disregarding the profit imperative, once production begins, profitability is still one of the main criteria. Central planning does exist, but it has shrunk greatly compared to Mao’s era, and certain market mechanisms have been introduced to the state sector, especially at the provincial and local level. The fact that many zombie state enterprises made no profit at all does not nullify profitability as a measure when evaluating their performance. Yes, the regime may not be able to solve the profitability issue fully at home, but that is precisely one of the incentives for China to export its problems, that is, to export its superfluous capital, hence the great outflow of foreign direct investment (FDI), followed by the Belt and Road Initiative. This FDI will be deployed in the pursuit of both targets: the Chinese state’s expansionist ambition and profitability. Mao’s China never had that option.

A second lack of clarity concerning the bureaucratic-collectivist thesis is that it suggests continuity between Mao’s and post-Mao China, with no mention at all about a rupture between the two periods. In contrast, I argue that there is a rupture, summarized by a popular saying in the 1980s and 1990s among not only diehard Stalinists but also state sector workers: “We strived so hard for decades but woke up from a sleep only to find the country has regressed back to the pre-revolution era.” Mao’s China suffered from underinvestment and underproduction, while the post-Mao era faces the opposite scenario. In the former case, the bureaucracy did expropriate the working people collectively (I am skeptical about Mao’s China being a “deformed worker state”), but it was in the form of use value; the bureaucracy had no way to accumulate their wealth in the form of exchange value. In the latter case, the bureaucracy now is well known for owning overseas bank accounts. Mao’s regime relied solely on administrative coercion to whip up productivity, which proved to be unsustainable and hence was replaced by a leap forward to capitalism. Another incentive drove party leaders to join the club of global capitalism: Only with a full return to private property could they pass their wealth to their children. In order to do that, the party had to brutally repress those who demanded democracy and the punishing of corrupt officials. The rupture point was precisely the moment of the 1989 Tiananmen Massacre. Only from then did China’s takeoff (both in terms of the capitalist turn and of industrial takeoff) begin. In order to do this, Deng and his successors had to bury the old economic order, or at least major elements of it. A rupture does exist and this needs to be explained.

Despite certain theoretical ambiguities, the book is still valuable for readers. It not only gives us a reliable overview of how and why the Chinese regime necessarily destroys the environment but also points out that China’s “authoritarian advantage” (as argued by some) is not really the future. Smith asks repeatedly, if Xi Jinping is so powerful, why can’t he just ram through the transition to renewables and solve the fossil fuel problems? Smith’s answer is that he can’t because “for all his nominal authority, in reality power is shared widely throughout the 90-million-member party. Beijing can’t systematically enforce its writ against resistance from below because it can’t systematically fire insubordinate bureaucrats.”

Studies of bureaucracy have long showed that subordinate bureaucrats are far from powerless. The emperor can kill any mandarin at will, but he needs his bureaucracy to carry out his orders. Being so remote from real lives, the great emperor is easily fooled by high or low bureaucrats collectively, even sometimes becoming the prisoner of his subordinates. This kind of thing happened often throughout the history of Imperial China. For instance, it was said that Emperor Daoguang of the
Qing dynasty complained to his minister about the high price of the eggs he ate. “Five taels of silver per egg, how expensive!” The minister knew that he could not tell the truth about how corrupt the emperor’s kitchen had long been, and that one egg cost no more than a very tiny fraction of one tael of silver, so he only replied, “Oh yes, therefore I never eat eggs.” If the emperor did not even know the rough price of the eggs he devoured daily, how could one expect him to know the real national situation? The present pandemic has already proved the impotence of the party-state in stopping the COVID-19 virus from first spreading in Wuhan and then nationally. Increasingly the impotent bureaucracy and their chief become a problem, not a solution, for the crisis-ridden country. The Chinese pseudo-emperor and his bureaucracy are simultaneously strong and impotent. The next time someone talks about China’s “authoritarian advantages,” we need to remind ourselves that we must simultaneously grasp the thesis and antithesis of this same bureaucracy.