

Book review: China's environmental catastrophe

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A review of *China's Engine of Environmental Collapse*, Richard Smith (Pluto, 2020), £18.99

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In 2017, Xi Jinping, China's president, spoke of developing the country into an "ecological civilisation". China has signed all the usual international environment and climate agreements and leads the world in key technology fields, including renewable energy and electric vehicles. In this context, a book by an ecosocialist, and member of the anticapitalist System Change not Climate Change network, that mobilises a Marxist mode of production approach to explore the devastation of China's environment is of great importance. Unlike some on the left, Smith does not see China as a more ecologically sustainable alternative to Western capitalism. Rather, he views the Chinese model as an ecological disaster for both China and the rest of the world.

Devastation

The first half of Smith's book provides a detailed account of the environmental devastation that four decades of economic growth have brought to China's air, land and inland waters as well as the consequences for human health.¹ Toxic waste has poisoned rivers and lakes; many of China's rivers are so badly contaminated that the water is unsafe for human consumption. Agricultural land is also poisoned; in 2013, the Chinese central government admitted that "three million hectares of farmland, an area the size of Belgium, was 'too toxic to farm' because of the overapplication of fertilisers and pesticides, irrigation with toxic industrial wastewater, and the dumping of toxic waste on fields".² China's mega-rich often avoid food produced inside the country.

The consequences of environmental damage are not limited to China since its carbon dioxide emissions—similar in scale to those of the next five largest emitters combined (the United States, India, Russia, Japan and Germany)—contribute to global warming and pose a threat to the entire planet. Some who defend China point out that, although its carbon dioxide emissions are now twice those of the US, its per capita emissions are far lower because its population is nearly five times larger. However, China's population is only two-thirds the combined total of the next five largest emitters, and its national income is only one-third as large. Thus, China's emissions per capita and per unit of output are of huge concern. Furthermore, the argument that Western states have contributed more than China to historical emissions of carbon dioxide into the atmosphere is, on current trends, unlikely to remain true beyond 2040.

Smith paints a picture of environmental devastation in every area of human activity in China. There

is colossal waste in the form of unnecessary infrastructure (such as underused motorways and rail networks), ghost cities, and shoddy construction (and often premature collapse) of bridges and buildings. All this uses vast quantities of often poor quality cement, the production of which has an immense carbon footprint. As environmental scientist Vaclav Smil has pointed out, China poured more cement between 2009 and 2011 than the US poured in the entire 20th century.³

Urban air quality has been shockingly poor for two decades, in large part due to the generation of electricity from coal. China accounts for over half of global coal output and is currently engaged in a building frenzy aimed at increasing the number of coal-fired power stations. The cost to the urban population comes in the shape of respiratory diseases, including cancers. Lax environmental standards more generally entail the blighting, and loss, of lives, with industrial accidents taking place on a colossal scale.

The Chinese state's promotion of both renewable energy sources and the production of new technologies such as electric and hybrid vehicles over these past two decades has reinforced the view of some on the international left that China's "socialism" is superior to Western capitalism. According to the editors of the left-wing US journal *Monthly Review*, China leads the world in the development and implementation of solar and wind energy, with responsibility for "one out of every three of the world's solar panels and wind turbines, nearly half of all the electric passenger vehicles, some 98 percent of electric buses, and 99 percent of all electric two wheelers".⁴ They also highlight China's "world-record reductions in air pollution" and rapid improvements in water quality.

These developments flow less from Xi's commitment to an "ecological civilisation" than the needs of China's employers for healthy workers and, in the longer term, the state's drive for global leadership in strategically important technology sectors as well as its desire to maintain exports. In any case, such has been the scale of the increase in energy usage that even a rise in the proportion of renewables used by China following the 2005 Renewable Energy Law (and later revisions) has not stopped carbon emissions climbing. Moreover, solar and wind farms are often built to attract central funds, strengthening local authorities' rivalries with each other and their interdependent relationships with local private capitals. Their output is frequently not connected to the national grid, and local party leaders and managers of state-owned enterprises prefer the reliability of local coal-fired power production.⁵ This, in turn, maintains local employment. Even in Xinjiang, China's wind-power capital, most electricity comes from coal-fired power stations.⁶

There are similar problems with China's transportation system. At the same time that many of the world's city authorities are promoting cycling and public transport, China's has ripped up the old bus and cycle model. The cars produced as part of the promotion of domestic consumption, even if they were all electric vehicles, have large carbon footprints and also require electricity, often produced from fossil fuels, to power them. From a carbon footprint perspective running older cars into the ground is usually preferable to their early replacement by electric cars.

Smith concludes his analysis of Chinese power generation by arguing that, far from replacing fossil fuels with renewables, China is "building more capacity for both". How, though, does he explain his argument that it is "by far the leading driver of global climate collapse"?⁷

Drivers

China's staggering carbon dioxide emissions are propelled by what Smith calls "hyper-growth drivers". He identifies three of these drivers: maximising economic growth and self-sufficient industrialisation; maximising employment generation; and maximising consumption and consumerism. These express the specifics of China's history and politics, the party-state's attempts

to moderate external dependencies (for instance, on export markets) and its search for continued legitimacy (for instance, by reducing levels of absolute poverty and increasing employment and living standards). They also reflect the structure of the party-state and the relations between the local and the national levels of the bureaucracy, whose environmentally destructive policies and actions cannot easily be checked for fear of choking off the growth upon which legitimacy depends. As elsewhere in the book, Smith's two central explanatory chapters (five and six) contain much interesting detail, particularly on intra-bureaucratic relations and the mobilisation of networks of social connections ("guanxi") to achieve and maintain power. However, a key theoretical weakness lies in Smith's argument that the hyper-growth drivers are "if anything, more powerful and more ecosuicidal than those of 'normal' capitalism in the West".[8](#)

"Normal capitalism", Smith argues, in which the drive for profit is paramount, has an automatic mechanism that limits environmental destruction: when profits decline, growth slows or reverses and ecological destruction is moderated. Smith claims that, unbounded by profit maximisation, China's "bureaucratic collectivist" ruling class is driven by a different logic: "maintaining the security, power, and wealth of the party bureaucracy". In this system, "Central planning replaces market competition's role in shaping economic development".[9](#) Thus, in Smith's view, and contrary to most Marxist environmental analysis, profits are less the source of the problem of environmental degradation than a solution to it.

Smith is aware of China's rivalry with other capitalist powers, which flows from its position as part of a global mode of production. Yet, this rivalry is not a central feature of his thinking, which therefore substitutes a comparative analysis of the features of Chinese and Western capitalism for a dialectical account of capitalism as a differentiated, but integrated, whole. Moreover, in arriving at his rather underexplored conception of China as "the marriage of capitalism and Stalinist-Maoist bureaucratic-collectivism", he errs at times towards a view that the West is a better model.[10](#) China has, he says, "created a diabolically ruinous hybrid economic system that is ravaging its environment, destroying the health of its people, driving the country to ecological collapse and threatening the whole planet".[11](#)

The problem of isolating China as a national system in this way is that it understates the mutual relationships between China and the rest of the world, which have shaped both. China's articulation with Western capital over recent decades was not just a matter of grafting Western capitalism onto a China that remained otherwise Maoist and centrally planned. Instead, it was a process of mutual transformation. Benefitting from weak environmental regulation and a benign cost environment provided by China's party-state, Western firms shifted parts of their production processes to China. In particular, China "attracted many of the world's dirtiest and least sustainable industries which, facing increasingly tough environmental restrictions at home in the US and Europe, relocated to China after 1980".[12](#) Despite the specifically Chinese interests served by this process, China's party-state can in an important sense be regarded as an enabler of the environmental degradation perpetrated by Western firms.

What is to be done?

If we recognise China as one specific state-capitalist component of a global capitalist whole, we must question Smith's claim that China is the prime driver of the developing climate catastrophe. Instead, it is capitalist competition and inter-imperialist rivalry that are driving the world along the road towards devastation. Nevertheless, Smith's critics are mistaken in arguing that he simply favours Western capitalism. Despite the occasional nod in this direction and the theoretical weakness that underlies it, he concludes that "capitalism, democratic capitalism, or even 'green capitalism', is no

solution for China's environmental crisis... No amount of tinkering with the market can brake the drive to global environmental and ecological collapse".[13](#)

According to Smith, both "normal" capitalism and China's "bureaucratic collectivist" system are "unsustainable and suicidal". The first step in changing them is to recognise that "the only way to prevent runaway global warming is to slam the brakes on economic growth, shut down entire swathes of useless, superfluous, harmful and destructive industries, and replace these political and economic systems with an ecosocialist world economy based on public ownership of most means of production, democratically planned production for need, and democratic management of the economy and society".[14](#)

Recognition must lead to action. Smith ends by highlighting recent protests in China, sometimes involving thousands of people, over environmental issues such as pollution and the building of new coal-fired power stations. Allied to workers' strikes, these protests carry the seed, Smith argues, for a new Chinese revolution. The prospects for this are currently remote, but building mass action today in preparation for radical change tomorrow is a far better starting point than placing our faith in President Xi and the Chinese state to build an ecological civilisation.

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Notes

1. "Detailed" is an understatement—the book has 200 pages of text and 73 pages (in a smaller font) of references.
2. Smith, 2020, pvii.
3. Smil, 2014, p92
4. *Monthly Review*, 2021.
5. See also Yu, 2021.
6. Smith, 2020, p78.
7. Smith, 2020, p6.
8. Smith, 2020, p89. Smith's analysis of *guanxi* has been criticised by Andrew Burgin for its over-reliance on the views of political scientist Minxin Pei. This is an exaggeration, and it is possible, in any case, to read Pei's analysis of the power relations and corruption in the Chinese party-state without accepting his neoliberal agenda for China's transformation. See Pei, 2016, and Burgin, 2021.
9. Smith, 2020, p91.
10. The editors of *Monthly Review* underline this danger by pointing out that Smith has written for *Foreign Policy*, described as "the leading US neoliberal-imperialist journal" and a key promoter of "the New Cold War on China". Smith told this audience that China's environmental devastation flows from "a totalitarian police state that ruthlessly suppresses all resistance to the party agenda". It is hard to understand Smith's motives in writing for *Foreign Policy*.
11. Smith 2020, p17.

12. Smith, 2020, p10.
 13. Smith, 2020, p193.
 14. Smith, 2020, pxxii.
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<https://newpol.org/review/a-leftist-perspective-on-chinas-environmental-destruction>

P.S.

- International Socialism journal. Issue: 176. Posted on 10th October 2022:
<http://isj.org.uk/chinas-environmental-catastrophe/>

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