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The Fossil Fuelled Monster and the Climate Failures of States

https://www.e-ir.info/2020/02/02/the-fossil-fuelled-monster-and-the-climate-failures-of-states/

SIMON PIRANI, FEB 2 2020

Millions of school students, by striking to protest at government inaction on climate change, have brought popular rebellion back to the centre of international politics. The "Fridays for Future" strikes could turn out to be among the roots of deeper, wider, civil society movements to avert dangerous global warming. Whether or not the students see themselves as anti-capitalist, they are up against a web of relationships inherent to capitalism. Powerful older men such as US president Donald Trump and Russian president Vladimir Putin have not contained their anger at the school strikes – a tribute to their effectiveness. Far more important, though, is the strikes' political character. Unlike many past protesters, the school strikers are not trying to convince governments with good arguments in letters or petitions. Their starting point is governments' failure to act on climate change. As Greta Thunberg, who initiated the school strikes, said in her speech to the UN climate summit: "For more than 30 years, the science has been crystal clear. How dare you continue to look away and come here saying that you're doing enough, when the politics and solutions needed are still nowhere in sight."

Putin recycled the myth that greenhouse gas emissions are rising mainly due to higher living standards in poor countries, and claimed Thunberg did not understand that people in the global south "want to live at the same wealth level as in Sweden". Perhaps Putin did not listen carefully to Thunberg's speech, which made clear she understands a great deal about the global south. She pointed out that global warming is not only about the future, but about suffering there, now. On the idea of halving emissions in ten years, which the science says produces a 50% chance of keeping global temperatures no more than 1.5 degrees higher than pre-industrial levels, Thunberg said:

Fifty percent may be acceptable to you. But those numbers do not include tipping points, most feedback loops, additional warming hidden by toxic air pollution or *the aspects of equity and climate justice* [my emphasis]. They also rely on my generation sucking hundreds of billions of tonnes of your CO2 out of the air with technologies that barely exist.

An analogy with 1914

By denouncing the international climate negotiations launched in 1992 with the UN Framework Convention on Climate Change (UNFCCC) as the work of liars and hypocrites, the school students open up a vital political issue. Why have the negotiations failed so disastrously? Why has the rate of fossil fuel use, the main cause of greenhouse gas emissions, risen by more than 60% in the quarter of a century since the convention acknowledged the need to cut it? This is a historic failure of the world's leading states. In a book on the history of fossil fuel consumption, I argued that:

In a century's time, when the impacts of global warming will be much more ruinous than they are today, people may look back at this failure as collective madness. There may be an analogy with the way that people today view Europe's descent in to the barbaric slaughter of the First World War [...] as collective madness. It was madness, but it had definite political, social and economic causes. (Pirani 2018: 2.)

Colleagues questioned this analogy. Certainly, it understates the wilful deception at the heart of the process: the

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twisted economic logic of the Kyoto protocol, that sought unsuccessfully to reduce carbon emissions by creating a market in them; the cynicism of rich-world emissions targets that ignore the outsourcing of energy-intensive industrial processes to the global south over the last forty years; and the hypocrisy of the G20 decision in 2009 to phase out fossil fuel subsidies ... which then continued as before, running at tens of billions of dollars annually (Koplow, 2012; Bast et al, 2014).

The doublethink at international level is reproduced by national governments. The obvious example is the UK, which this year announced its intention to legislate a net-zero carbon target by 2050. Government commentaries on the target, in line with the integrated assessment models used by the Intergovernmental Panel on Climate Change (IPCC), assume large-scale use of geoengineering to suck carbon from the atmosphere, derided by researchers of the technologies as "science fiction". The government has assured the aviation and shipping industries that their limits will not be written into law, or even into carbon budgets until 2033; it says it does not want to use discredited carbon offsets, but reserves the right to do so. And it continues to pump hundreds of millions of pounds worth of subsidies into the oil industry. While the UK should be reducing North Sea oil output as fast as possible, if it had any intention of meeting climate targets, it has just finished taking bids for 768 new licences: these fields, if developed, will *start* producing at the end of the 2020s. As a recent report pointed out: "The UK's 5.7 billion barrels of oil and gas in already-operating fields will exceed the UK's share in relation to the Paris climate goals – whereas industry and government aim to extract 20 billion barrels."

Nor does the chain of doublethink stop at national level. Local councils routinely adopt "climate emergencies", only to sanction huge fossil-fuel-supporting infrastructure projects, such as the Silvertown Tunnel in London. These layers of distortion and evasion are statecraft. Why have the international climate negotiations have failed? In my view, because statecraft is inadequate to deal with a crisis produced by the expansion of the world capitalist economy since the mid 20th century. Statecraft could in 1987 deal with the threat of a hole in the ozone layer, by agreeing to slash production of chlorofluorocarbons used to manufacture fridges (the Montreal protocol). But coal, oil and gas are much more fundamentally inscribed into every sector of the relentlessly expanding economy.

The IPCC, like some state bodies in capitalist countries, produces work of great value. Indeed its report on achieving the 1.5 degree target probably helped trigger this year's resurgence of mass political protest on climate change. Nevertheless, measured by the level of greenhouse gas emissions, the UNFCCC has been a terrible failure. The monster of fossil-fuelled economic activity is out of control. In this sense, the analogy with the pre-1914 slide to war may be valid. Could the world's capitalist states reach agreement on how to deal with climate change? Geoff Mann and Joel Wainwright, in their insightful book on climate geopolitics, posit a future of "climate leviathan", in which planetary sovereignty marshalls adaptation to a warming world on northern capitalist elites' terms. Geoengineering would be a key element. The logic of the interstate system points to "a shift towards a world-scale authority" (Mann and Wainwright 2018: 151). The drivers towards world government are not that strong, in my view. As global warming accelerates, the large capitalist states are more likely to deal with the consequences by turning on each other, by pulling away from globalisation, and by trying to separate their own populations from those suffering in the global south. By building walls. Such a reactionary state of capitalism without planetary sovereignty is termed "climate behemoth" by Mann and Wainwright.

The systems that consume fossil fuels

The fundamental role of fossil fuels in the capitalist economy makes still greater the problem facing the school students, and all who work alongside them – "climate emergency" advocates, Extinction Rebellion, communities battling on social and ecological issues across the global south. Previous protest movements aimed for changes that, no matter how inimical to capitalism or counter to its logic, could be at least partly achieved by the hand of governments: the granting of democratic rights to women in early 20th century Europe, or to black South Africans in 1994; British withdrawal from India; US withdrawal from Vietnam in 1975; and so on.

Could government action reduce fossil fuel use? Obviously. But, just as obviously, it has failed to do so for a quarter of a century. To understand better the complex combination of wilful deception, paralysis and puppetry involved, it is worth analysing the social nature of fossil fuel use. The international climate talks have long focused on consumption-

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per-head statistics, used by nations of the global south to underline the fact that rich, powerful nations of the north bear the lion's share of responsibility for global warming.

But these statistics conceal as much as they reveal. Final consumption by individuals is actually a secondary aspect of fossil fuel use; the overwhelming majority of fuels are consumed by technological systems. These, in turn, are embedded in the social and economic systems. The transition away from fossil fuel use, made necessary by the threat of global warming, implies fundamental changes of all these systems. The history of fossil fuel use provides valuable insights into these relationships. Take road transport, which accounts for around a quarter of all fossil fuel burned. The manufacture of cars with internal combustion engines, predominantly in the US, started before the first world war, with the installation of the first automated production lines in Detroit. During the war, motor transport was developed for military purposes.

In the inter-war period, in the US, cars became a mass phenomenon. The industry was consolidated, into three huge corporations and a few slightly smaller ones. General Motors pioneered planned obsolescence, that devastatingly effective sales technique, when it introduced the annual style change in 1924. The motor manufacturers were early practitioners of political lobbying, used to support road construction and to undermine alternative forms of transport. Public transit in cities, and railways between them, were permanently damaged in the US. (Luger, 2000.) The second world war produced a huge expansion of road and air transport infrastructure for military purposes; the post-war boom gave another twist to the spiralling growth of car manufacture. Political support for it hit a new apex with the US's government-funded highway construction programme, which cost at least four times as much as the entire Marshall Plan (US aid to post-war reconstruction in Europe).

From the 1950s, US-type car-based urban transport systems spread, albeit not uniformly, across the rich countries. Cities were re-made: roads and parking spaces covered ever greater proportions of their land; suburban housing mushroomed and the daily commute became the stuff of nightmares. (Huber, 2013.) These technological and social systems in the global north were bound up with the plunder of the global south not only for oil, but for minerals to make cars (among other things) and materials to build car-based cities. Efforts were made to export the car-based city model to parts of the global south from the 1980s, and to former Soviet countries from the 1990s. These efforts were supported by the international financial institutions, who already knew of the cost in terms of global warming and city dwellers' health. The capitals of middle-income nations became synonymous with air pollution and hours-long traffic jams.

Meanwhile, in rich countries, regulators tried – and mostly failed – to compel manufacturers to make smaller, lighter, more fuel-efficient cars. The car corporations used their lobbying skills to resist. In the US, they convinced drivers to switch to Sports Utility Vehicles (SUVs), so that by the year 2000 more than half the vehicles on US roads were classified as trucks. (Oge, 2015.) Atlanta in the US became the symbol of car-dependent living: its transport-related carbon emissions are 11 times higher per head than those of Barcelona, Spain, which has similar population and GDP per capita, and 100 times higher than those of Ho Chi Minh city, Vietnam.

In the mid twentieth century, the corporate chiefs, politicians and others who ensured the dominance of car-based transport systems sought to normalise the perils of air pollution and the huge death toll from traffic accidents. They did not understand the causal relationship between greenhouse gas emissions and global warming, or its effects: neither did climate scientists, for sure, until the mid 1980s. But even after the facts of climate change were acknowledged by governments, car-based transport remained central to urban development.

Car-based transport systems are only one of the technological systems through which fossil fuels are consumed. Others include electricity networks; industrial systems reliant on carbon-heavy materials like steel; industrial agriculture systems that soak up gas-based fertilisers; aviation; and the military. Capitalism not only exploits technologies, and the workers who use them; it shapes those technologies for its own purposes.

The roads taken by urbanisation, industrialisation and electrification under capitalism were not inevitable, not socially just and not fuel-efficient. The post-second-world-war boom hastened all these trends, underpinned by cheap fossil fuels. The 1970s oil price shocks caused political and corporate elites to realise that the supply of fuels would not

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always be unlimited or cheap, and they found ways to adjust. Technological changes to the labour process, paradoxically, made aspects of it more fuel intensive as often as it produced improvements. Mass consumption and consumerism, overwhelmingly in the global north, grew in this context. This historical picture of consumption growth is more complex than a row of figures, but also much more accurate.

What next?

Consideration of this history leads to the conclusion that transition away from fossil fuels requires a transformation of social and economic systems, no less than technological ones. (Pirani, 2018: 181-192.) The inadequacy of technological fixes on their own is plain to see. The most successful of these by far – heavy investment in renewable electricity generation, and the resulting steps e.g. by Spain and Germany away from coal and gas – falls woefully short of what is needed, outside a more comprehensive programme for reducing electricity consumption. The claim that the day will be saved by electric cars, rather than by urban transport systems that break the reliance on mobile metal armchairs, is a fantasy.

It remains difficult to envisage how a transition away from fossil fuels will be effected. Anyone who proposes neat formulas should be treated with suspicion. A starting point, in my view, is that this process, on which society's future depends, must become the concern of society as a whole, beyond the confines of the UNFCCC process. I do not see how the changes can be made without breaking the centres of power and wealth that hold capitalism together. But rather than turning that proposition into a vague slogan ("system change not climate change"), it can be made concrete: without a *perspective* that transcends the limits imposed by capitalism, without *imagination* of post-capitalism, we will be pulled back into the web of hypocrisy built by the governments who adopted the UNFCCC. To this end, the huge store of experience of resisting plunder and ecological damage, and envisioning alternatives, in the global south needs to be thought about in the north. The welcome and overdue debate among radical scholars about "degrowth" and various versions of the Green New Deal (see, e.g., Daly et al, 2018-19) needs to be brought out of academic confines.

We are staring disaster in the face. The UN Environment Programme, no less, pointed out this month that even if all nations met the targets they gave themselves at the Paris climate conference in 2015 – and there are plenty of indications that they will not – then temperatures would rise by 3.2 degrees, with destructive impacts. That these impacts could lead to uncontrollable chain reactions has been emphasised, once again, by a high-profile group of scientists, who write that "we are in a state of planetary emergency", and that: :"The intervention time left to prevent tipping [towards uncontrollable climate disasters] could already have shrunk towards zero, whereas the reaction time to achieve net zero emissions is 30 years at best." Disaster can summon up qualities of creativeness and solidarity that in ordinary times people do not know they have. (Solnit, 2009.) These are the qualities that we need collectively, now.

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About the author:

Simon Pirani is author of *Burning Up: A Global History of Fossil Fuel Consumption*, and Senior Research Fellow at the Oxford Institute for Energy Studies. His previous history writing includes *The Russian Revolution in Retreat* (Routledge, 2008) and *Change in Putin's Russia* (Pluto, 2010).