PRE-PUBLICATION DRAFT. THIS REVIEW ESSAY WAS PUBLISHED IN CAPITALISM NATURE SOCIALISM, MARCH 2021.

==

Review Essay: The Direct Air Capture Road to Socialism?

Andreas Malm. 2020. *Corona, Climate, Chronic Emergency: War Communism in the Twenty-First Century.* London: Verso. 215 pages, £10.99. ISBN 9781839762154.

by Simon Pirani, University of Durham. simonpirani@gmail.com.

State-directed geoengineering must be central to ecological Marxism's political programme, argues Andreas Malm, the scholar of political ecology. The "central transitional demand for the coming years", he writes, should be "for nationalising fossil fuel companies and turning them into direct air capture [DAC] utilities" (143).

Direct air capture devices suck carbon dioxide from the air. There is a big energy cost, in electricity that has to be produced, and cannot then be used for something else. A substantial body of research indicates that this energy cost means DAC may never work at scale: for a valuable literature review and discussion of policy issues, see Sekera and Lichtenberger 2020.

The devices would "make no sense" if carbon dioxide were still "belching out into the atmosphere", Malm acknowledges. But "a worldwide cessation of fossil fuel combustion would not be enough" to meet the climate crisis; "everybody admits it" (139).

A first objection to this is that not "everybody" agrees that giant geoengineering schemes are necessary. Two research teams recently published scenarios that constrain global warming to 1.5 degrees, without, or largely without, using negative emissions technologies. (Grubler et al. 2018, 515-527; Van Vuuren et al. 2018, 391-397; see also Creutzig et al. 2018, 260-271). This material has to be read critically, given its social and political framing, but cannot be ignored.

Secondly, by focusing on geoengineering, Malm turns attention away from the potential for ending fossil-fuel-consuming practices by transforming social, political and technological systems – and the myriad innovations, large and small, that that would involve. For an expansion of this argument, see my own history of fossil fuel consumption (Pirani 2018), especially Chapter 12.

Thirdly, Malm is surely right that carbon-sucking technologies, if they work at all, could only work at scale if marshalled by the state. But technologies requiring state power also tend to enhance it. Does that not make them by their nature inimical to socialist transformation? I think it does. If it does not, what about nuclear power? At least we know it works. (I oppose nuclear. I am seeking to tease out the implications of the argument.) For arguments on geoengineering technologies and socialism, see Buck (2019), which Malm strongly endorses, and Levy 2020.

For Malm, the state – the capitalist state – is the primary means to deal with the climate emergency. Social and labour movements must put pressure on it. "No capitalist state is likely ever to do anything like this [nationalise oil companies and make them do carbon capture] of its own accord", he writes. "It would have to be forced into doing it, through application of the whole spectrum of popular leverage, from electoral campaigns to mass sabotage" (146).

A few pages further on he clarifies that, since there is "no other form of state on offer", and "no workers' state based on soviets will be miraculously born in the night", then:

[A]ll we have to work with is the dreary bourgeois state, tethered to the circuits of capital as always. There would have to be popular pressure brought to bear on it, shifting the balance of forces condensed in it [...] But this would clearly be a departure from the classical programme of demolishing the state and building another (152).

Beyond pronouncing "obituaries" for social democracy and anarchism (119-125), Malm does not reflect on the myriad ways that social movements have confronted the state in recent years, nor on ideas such as the "commons" or struggle "in, against and beyond the state". See, for example, Dawson (2020, 173-194) and Angel (2016).

The result is a false dichotomy: either "hard [state] power", exemplified by geoengineering, or disaster. Which of Hal Draper's (1966) "two souls of socialism" – statist or self-emancipatory – is Malm embracing?

Corona, Climate, Chronic Emergency is a passionately-argued pamphlet. The first of three chapters compares the coronavirus pandemic and the climate crisis, and state reactions to them. Malm first proposes that governments have responded more decisively to the pandemic than they have to the climate crisis, with public health measures "bringing out the best in modern bourgeois democracies, the respect for life trumping the respect for property" (25). The second chapter then questions this hypothesis, showing convincingly that "the appearance of energetic action against the pandemic is but a semblance" (31). The inequalities, the subordination of both nature and people to capital that characterise climate policies are also inherent in its approach to Covid-19.

Malm capably explores the connections between the zoonotic spillovers that produce infectious diseases, deforestation and the "ecologically unequal exchange" between rich countries and the rest. He is fond of sweeping generalisations, and I was unconvinced for example that "China could become the cradle of this disease only because global tendencies were present in concentrated form" (61-62). But I learned much from the thoroughly-researched passages on ecology that reinforced the conclusion that coronavirus and climate are "interlaced aspects, on different scales of time and space, of what is now one chronic emergency" (91).

What is to be done? Malm compares corona-related lockdowns and the "shutdown of fossil capital" to tackle the climate emergency, which would have to be "permanent", "something more akin to war communism" (29). The third chapter develops this analogy. Malm describes the Bolshevik regime's birth and bitter struggle for survival in 1917-19. When central Russia was cut off from the Donbass coalfields, during the civil war, peat and wood fuels were used. A twenty-first century repetition is "implausible"; "slightly more conceivable is an international scramble, even if not as synchronous as the reaction to Covid-19, when the climate crisis reaches some global breaking point" (162).

The analogy's inherent contradiction remains unresolved: that whereas "war communism" marked an attempt to break with capitalism, Malm sees no such prospect now. Perhaps the analogy's main purpose is to support Malm's proposed "ecological Leninism", the essential elements of which are "a predisposition for emergency action" and "an openness to some degree of hard power" (153).

To substantiate "ecological Leninism", Malm claims, bizarrely, that the Bolshevik Decree on Land was "Lenin's passion for wild nature [...] turned into practical policy" (167-168), and a prelude to Lenin's support for expanding nature reserves. But Malm is silent on the land decree's main (and, arguably, historically much more significant) effect, of ensuring peasant sympathy for the Bolshevik government (Wade 2005, 245-246).

So far, so much daft hero-worship. But there is a methodological problem. Positing an "ecological Leninism" that ignores Lenin's view of the Russian peasantry, and agriculture, is ecology with people and their labour taken out. Lenin's schematic theory of class struggle in

the countryside, his political success in outmanoeuvring the Socialist Revolutionaries (the land decree helped), his ruinous policy of mobilising poor peasants against the "rich", and his prejudices against "petty bourgeois" rural migrants who became urban workers – all this was Leninism, as much as his support for nature reserves. But it is all overlooked. On the realisation of Lenin's approach to the peasantry and peasant labour in practice, see for example Smith 2017, 44, 126-127 and 224-229; Read 1996, 101-102, 225-228 and 235-237; Channon 1992, 117-124; Figes 1989, 6-7 and 154-163. On Lenin and migrant workers, see Pirani 2008, 136-137 and 162-165.

Moreover, "ecological Leninism" would surely also have to settle with Lenin's productivism, present in his economic policies, but most eloquently summed up by Lev Trotsky, who famously looked to a future in which "nature will become more 'artificial'", and technology would be "actually able to cut down mountains and move them [...] on an immeasurably larger scale" than previously (1924, Chapter 8). John Locke, whose Prometheanism Malm excoriates (77), eat your heart out! Trotsky envisaged that humanity will "earnestly and repeatedly make improvements in nature" until it "will have rebuilt the earth, if not in [its] own image, at least according to his own taste". Again, no word on all this from Malm.

This productivism was generated under horrendous post-revolutionary conditions, when Soviet state policy equated raising labour productivity with survival (Smith 2017, 273-274). But it exerted powerful ideological influence on the labour movement internationally for a century.

In his previous book, *Fossil Capital* (2016), Malm explained why he has deprioritised research of such issues. Why "Communist states performed at least as abysmally" as capitalist ones, in ecological terms, need not detain us, he wrote, because "history has closed the parentheses around the Soviet system [...] and so we are back at the beginning, where the fossil economy is coextensive with the capitalist mode of production". The "communist" economies are compared to smallpox: no need to investigate it, because it has been eradicated (Malm 2016, 227, 446fn).

This contention that something need not be studied because it is in the past, or (according to a highly contestable argument) was part of a completed past process, is a-historical. It invites us to cherry-pick parts of the past that suit our arguments, instead of trying to understand it.

References

Angel, James. 2016. "Towards an Energy Politics in-against-and-beyond the State: Berlin's Struggle for Energy Democracy." *Antipode* 13 October. *doi/10.1111/anti.12289*. Buck, Holly. 2019. *After Geoengineering: Climate Tragedy, Repair and Restoration*. London: Verso.

Channon, John, 1992. "The Peasantry in the Revolutions of 1917." In *Revolution in Russia: Reassessments of 1917*, edited by E. R. Frankel, J. Frankel, and B. Knei-Paz. Cambridge: Cambridge University Press, 105-130.

Creutzig, Felix, Joyashree Roy, William F. Lamb, Inês M. L. Azevedo, Wändi Bruine de Bruin, Holger Dalkmann, Oreane Y. Edelenbosch, et al. 2018. "Towards Demand-Side Solutions for Mitigating Climate Change", *Nature Climate Change* 8: 260-271.

Dawson, Ashley. 2020. *People's Power: Reclaiming the Energy Commons*. New York: OR Books.

Draper, Hal. 1966. The Two Souls of Socialism.

https://www.marxists.org/archive/draper/1966/twosouls/index.htm.

Figes, O. 1989. *Peasant Russia, Civil War: the Volga Countryside in Revolution 1917-1921*. Oxford: Clarendon Press.

Grubler, Arnalf, Charlie Wilson, Nuno Bento, Benigna Boza-Kiss, Volker Krey, David L. McCollum, Narasimha D. Rao, et al. 2018. "A Low Energy Demand Scenario for Meeting

the 1.5 °C Target and Sustainable Development Goals without Negative Emission Technologies." *Nature Energy* 3: 515-527.

Levy, Gabriel. 2019. "Geoengineering: Let's Not Get it Back to Front", November. https://peopleandnature.wordpress.com/2019/11/01/geoengineering-lets-not-get-it-back-to-front/.

Malm, A, 2016. Fossil Capital: The Rise of Steam Power and the Roots of Global Warming. London: Verso.

Pirani, S. 2008. The Russian Revolution in Retreat. London: Routledge.

Pirani, S. 2018. Burning Up: a Global History of Fossil Fuel Consumption. London: Pluto. Read, C. 1996. From Tsar to Soviets: The Russian People and their Revolution 1917-1921. London: UCL Press.

Sekera, June, and Andreas Lichtenberger. 2020. "Assessing Carbon Capture: Public Policy, Science, and Societal Need", *Biophysical Economics and Resource Quality*, 5(3): 1-28. Smith, S.A. 2017. *The Russian Revolution: an Empire in Crisis*. Oxford: Oxford University Press.

Trotsky, Lev, 1924. Literature and Revolution.

https://www.marxists.org/archive/trotsky/1924/lit_revo/ch08.htm.

Van Vuuren, D. P., Elke Stehfest, David E. H. J. Gernaat, Maarten van den Berg, David L. Bijl, Harmen Sytze de Boer, Vassilis Daioglou, et al. 2018. "Alternative Pathways to the 1.5 °C Target Reduce the Need for Negative Emission Technologies". *Nature Climate Change* 9: 391-397.

Wade, Rex. 2005. The Russian Revolution 1917. Cambridge: Cambridge University Press.
