

LOLA SEATON

GREEN QUESTIONS

AS TIME ROLLS ON and the IPCC's deadlines for reducing the rise in global temperatures get closer, the prospect of climate catastrophe looms larger, and the problem of how to avert it becomes ever more pressing. This is the question that has been under discussion in recent numbers of *NLR*. The debate has featured interventions from a number of distinct positions, on both sides of the Atlantic and across different political generations. Herman Daly, a pioneer in the field of ecological economics, was quizzed on his programme for a steady-state system by Benjamin Kunkel, *n+1* founding editor and author of *Buzz*. Canadian environmental historian Troy Vettese argued for a pollution-shrinking 'half-earth' project of natural geo-engineering and eco-austerity. Taking the opposite tack, the radical economist Robert Pollin called for massive global investment in renewable energy. In the current number, UK-based scholar-activists Mark Burton and Peter Somerville reply with a defence of 'degrowth'. Still to come are contributions from an eco-feminist perspective and from the global South.¹

At this mid-point in the debate, it may be helpful to pause and take stock. As well as putting forward their own solutions, the contributors have responded—sometimes with assent, but often in the form of rebuttals or correctives—to each other's. The result of this direct engagement is that, reading the texts in sequence, one feels one has witnessed a conversation. Yet, in a conversation stretched across twelve months and congealed in text, the latest voices can become the loudest—having both the opportunity to respond to everything that has come before, and the privilege of going temporarily unanswered. So, in order to collect

one's thoughts on the debate so far—to reflect on the progress made, the problems thrown up, the questions still untabled—it may be worth, as it were, putting the thinkers in a room together, to help the existing strands of dialogue become more audible.

Sacrifice?

One way of comparing the contributions is to regard them as providing different answers to the question: what does the world need to cut in order to avoid global disaster? Herman Daly defines 'environmental impact' as 'the product of the number of people times per capita resource use'. Following the logic of this equation, Daly thinks we need to reduce our use of resources, including, but not limited to, fossil fuels, and to limit population growth. To implement these reductions, he envisions some kind of cap-and-trade system. In the case of resources, there would be a 'limit on the right to deplete what you own', and that right would be purchasable 'by auction from the government'. In the case of population, everyone would be given the right to reproduce once, but since not everyone can, or wants to have children, those rights could be reallocated 'by sale or by gift'. Daly also advocates a minimum and maximum income. These redistributive policies are critical accompaniments to his caps on resource use and population growth since without setting a limit on inequality too, the distribution of the rights to consume and to have children could be drastically uneven and unfair (the mega-rich could, for example, monopolize reproduction).

Taking land scarcity as the 'fundamental metric' for his 'alternative green political economy', Troy Vettese's 'eco-austere' answer is that we must reduce our energy consumption and cut out meat and dairy. Mandatory veganism would free up farmland for 'land-hungry' clean-energy infrastructure like wind turbines and solar panels, which could then become the world's primary way of meeting its energy needs. The extra land could also be used for natural geo-engineering projects like large-scale rewilding ('half-earthing') to create ecosystems that would act as carbon sinks.

¹ Herman Daly, 'Ecologies of Scale: Interview by Benjamin Kunkel', NLR 109, Jan–Feb 2018; Troy Vettese, 'To Freeze the Thames: Natural Geo-Engineering and Biodiversity', NLR 111, May–June 2018; Robert Pollin, 'De-Growth vs a Green New Deal', NLR 112, July–August 2018; Mark Burton and Peter Somerville, 'Degrowth: A Defence', NLR 115, Jan–Feb 2019.

Robert Pollin takes issue with Vettese's 'fundamental metric': he thinks Vettese's estimates about how much land renewable-energy systems would require are inflated. With land scarcity not a limiting factor in Pollin's account, cutting our energy consumption—beyond reducing energy wastage—becomes unnecessary. So, unlike Daly and Vettese, Pollin is almost exclusively concerned with reducing not energy use but fossil-fuel use: 'To make real progress on climate stabilization, the single most critical project is to cut the consumption of oil, coal and natural gas dramatically and without delay.' Through concerted global investment in both clean-energy infrastructure and more energy-efficient 'technologies and practices', we can cut out fossil fuels while continuing to 'achieve the same, or higher, levels of energy service'.

In the latest contribution to the debate, published in this issue, Mark Burton and Peter Somerville agree with Pollin about the necessity for 'targeted curtailment of [carbon] emissions' through a transition to clean energy. But, whereas Pollin is wary about the political and economic viability of massively shrinking the economy—which he fears could result in 'a green great depression', featuring impossibly high unemployment and unacceptable drops in living standards—Burton and Somerville argue that a drastic contraction of the material size of the economy through cutting industrial production, construction, agriculture and distribution is the essential complement to a switch to renewables. They calculate that to generate enough energy at current usage levels without recourse to oil, coal or natural gas would require 'an 18-fold increase in renewables deployment', and so argue that if energy consumption were to increase further—as it would if economic activity continues to expand—weaning ourselves off fossil fuels would only be more difficult.

Pollin's answer stands out from the rest because his version of the transition to clean energy would mostly not be felt by individual consumers, whose energy use, unaffected by the change of provenance in quantitative terms, could continue as normal. This prompts a second question that may throw the specificity of Pollin's contribution into relief: how much sacrifice do the different proposed cuts require? However costly Pollin's proposals—he estimates they would suck up 'between 1.5 and 2 per cent of global GDP every year', which amounts to roughly \$1 trillion—and however temporarily painful the transition (necessary job losses in fossil-fuel industries, which would need to be cushioned by adequate social provision including retraining and relocating workers),

the question of sacrifice in Pollin's text is largely out of frame.² By using different energy resources, and using them better, we don't have to use less energy; we can even use more. Far from climate change 'changing everything',³ as long as 'energy consumption, and economic activity more generally' are '*absolutely decoupled* from the consumption of fossil fuels', both can go on as before. The key, repeated figure in Pollin's proposal sounds small—a mere 1.5 per cent—whilst the scale of the projected changes is huge—global and industrial, even supra-industrial. This combination makes their human cost seem at once negligible and abstract. Predominantly affecting large-scale industries and to be handled by remote global bureaucracies, Pollin's solutions release us from significantly altering our lifestyles and call for little curtailment of individual freedom.

Vettese's solutions, by contrast, deprive everyone of meat and require many people in the world to use *a lot* less energy, especially Americans, who would have to reduce their energy consumption by more than 80 per cent: currently the average US citizen uses about 12,000 watts per day, whereas in Vettese's eco-austere society each person would use no more than 2,000. Though neither local nor small in scale ('half-earthing'), Vettese's proposals feature behavioural changes at the level of the individual, and he makes no secret of the relative hardship these changes might entail ('eco-austerity'). Though Pollin mentions job losses and a 'just transition', his emphasis is on net job creation, and our imaginations are not seriously engaged in thinking through the personal loss and upheaval that would surely accompany the elimination of whole industries.

Daly's proposals provide something of a bridge between Pollin's technology-enabled unlimited consumption and Vettese's non-optional austerity. In Daly's steady state, the rights to deplete resources and to

² The latest issue of *n+1* expresses approval for Pollin's approach precisely by suggesting that the question of sacrifice in green debates is misplaced: 'The most radical and hopeful response to climate change shouldn't be, What do we give up?', but 'How do we collectively improve our overall quality of life? It is a welfare question, one that has less to do with consumer choices—like changing light bulbs—than with the spending of trillions and trillions of still-available dollars on decoupling economic growth and wealth from carbon-based fuels and carbon-intensive products, including plastics': 'The Intellectual Situation: The Best of a Bad Situation', *n+1*, no. 33, Winter 2019, p. 8.

³ Naomi Klein, *This Changes Everything*, Harmondsworth 2014, p. 4.

populate the world are both exchangeable. This means that the inverse deprivations can be traded too: the seller of a right is buying an obligation to make a sacrifice—though, crucially, this may not feel like a sacrifice (the seller of their right to reproduce may not want children). Cushioning the iron fist of state-mandated sacrifice is thus the glove of flexibility in terms of how that sacrifice is distributed: using the organizational genius of the market, privileges and privations would be allocated according to individual need and personal choice. This is why Daly is fond of cap-and-trade systems: they combine aggregate control—over the total amount of carbon we collectively emit or the total number of children born—with as much personal autonomy as is compatible with such macro-restrictions.⁴

Pollin's appeal

Pollin's proposal stands apart in a more general way because it has a kind of *prima facie* plausibility that the others lack. Its exclusion of the necessity of permanent personal sacrifice no doubt accounts for much of this impression. Particularly in the US—with its almost fanatical enshrinement of freedom, particularly the freedom to consume and to acquire property—it is hard to imagine either Daly or Vettese's policies, let alone those of Burton and Somerville, gaining much traction. Intuitively one suspects that the consumption habits of American citizens—whether meat-eating or car-driving—would be tough to crack.⁵ Daly's wealth restrictions seem perhaps more quixotic than his ecological ones. During the interview, Kunkel reports that, anecdotally, Daly's population proposal is the one that people tend to 'find most difficult to contemplate', but the prospect of America's oligarchic governing

⁴ Vettese, on the other hand, is sceptical about the efficacy of cap-and-trade systems. 'The world's biggest cap-and-trade programme for CO₂ emissions, the European Emissions Trading System (ETS), has largely functioned to forestall meaningful action', he argues, since prices are kept deliberately low to placate industry by ensuring the impact is trivial. To be effective, Daly's cap-and-trade systems would need to 'address the problem of the class capture of markets'.

⁵ J. R. McNeill suggests obduracy—led by the US—was very much the tone at the UN environmental conference held in Rio de Janeiro in 1992: 'The Americans made it clear that US "lifestyles" were not up for negotiation. Other countries matched this stance.' See his *Something New Under the Sun: An Environmental History of the Twentieth-Century World*, Harmondsworth 2000, p. 355. But the intransigence of UN delegates is not just about protecting consumerist 'lifestyles', but livelihoods, and reflects the fragile situation of ordinary people, who often can't afford to compromise as they struggle to sustain themselves in conditions of rising inequality.

class overseeing the implementation of Daly's maximum income seems almost more unthinkable.

Pollin's exclusion of sacrifice also appeals because it speaks to the scepticism some feel about the efficacy of small-scale, individual efforts to reduce humankind's ecological footprint. Unlike households switching to greener light bulbs or avoiding plastic-wrapped goods, the global scale of Pollin's suggestions seems adequate to the size of the problem.⁶ His programme is attractive from certain angles on account of its narrow focus, too. Daly and Vettese's contributions include multiple policies—depletion quotas *and* population caps, or veganism *and* reduced consumption—and their concerns are several and broader. Pollin's exclusive concern is fossil fuels. His logic is streamlined: burning fossil fuels 'is responsible for generating about 74 per cent of overall global greenhouse gas emissions';⁷ greenhouse gases warm the planet; therefore the most direct and immediate way to stabilize global temperatures is to stop burning fossil fuels. Past effective environmental action—against ozone-destroying CFCs for example—suggests that single-issue, or single-substance initiatives, which attract public support more easily and are more conducive to targeted legislation, have a greater chance of success.

All the other contributors express concerns that go beyond fossil fuels, including ecological ones: both Daly and Burton and Somerville are interested in depletable natural resources other than those carbon-based ones we can turn into energy, whilst Vettese is concerned for biodiversity, which, he argues, 'needs to be upheld' not just because it increases carbon retention, but 'in its own right'. In Pollin's more anthropocentric contribution, by contrast, in which global warming is the sole focus, nature features only as an economic category, a potential energy resource; its existence is scarcely imagined outside of its human use.

The other contributions contain extra-ecological reflections, too, or carry extra-ecological implications—social, economic and political ones about

⁶ George Monbiot has argued that even well-intentioned citizens need governments to regulate their ecological behaviour for them because 'self-enforced abstinence is both ineffective' and 'unattractive': 'Environmental Feedback: A Reply to Clive Hamilton', NLR 45, May–June 2007, p. 113.

⁷ Robert Pollin, 'Global Green Growth for Human Development', UNDP Human Development Report, 2016, p. 3.

how we could organize ourselves better and more fairly, and particularly about whether continuing to produce and circulate increasing quantities of commodities constitutes a social good. Though prompted by the climate crisis, these questions about value and fairness nevertheless exceed it. Other than Pollin—who admits current consumption can be ‘wasteful’, but doesn’t advocate setting limits on it—all the contributors are critical of the amount we consume. But these criticisms frequently stem from concerns that go beyond sustainability. Vettese, for example, approvingly quotes Alyssa Battistoni’s reflections on how converting to a ‘climate-stable future’ might be an opportunity to re-think which kinds of work are truly socially useful and improve people’s lives ‘without consuming vast amounts of resources’. Likewise, Burton and Somerville at one point suggest ‘voluntary downscaling’ of the material economy might be ‘a desirable end in itself’.

This extra-ecological critique of the untrammelled consumption on which economic expansion depends is most pronounced in the interview with Daly, who, in Kunkel’s words, believes ‘that life, or a society, ought to have some purpose beyond economic growth’. Kunkel suggests that some of Daly’s readers—though not Kunkel himself—‘detect a certain religious orientation’ in this notion that societies ought to be guided by more enlightened values than mere enthusiasm for material increase. Whether or not we agree in calling this conviction ‘religious’—perhaps it is to the extent that it replaces the ‘fidelity to GDP’ which Kunkel dubs the modern world’s religion (about which more below)—it is not an *economic* rationale for degrowth, nor, significantly, an exclusively ecological one. Endless expansion may well not be ecologically sustainable, but the suggestion here is that even if it were, it would still not be desirable—on other, extra-ecological grounds. This is not an objection to the environmental havoc unlimited growth wreaks, but to its meaninglessness, and a call to stop being carried away by its autotelic pretensions.

Pollin’s text is distinctive for its relative silence on these matters. Giving his single-minded attention to how we generate energy and how well, rather than how much, we use it, he does not articulate a broader socio-economic vision within which his global clean-energy programme might fit. Daly’s existential meditations on human purpose and his concerns about wealth distribution barely enter Pollin’s text, such is its tactical, dedicated focus on renewables. In the short passage where Pollin does discuss the possibility of introducing measures that would equalize

emissions between rich, high-emitting countries and their poorer, low-emitting counterparts, he is categorical: yes, Americans emit far more carbon per capita than anyone else, and yes, they have been doing so for the past century, but—as for measures preventing US citizens from emitting more than the rest of the world, measures for which Pollin acknowledges there is ‘a solid ethical case’—‘there is absolutely no chance that they will be implemented’, and ‘we do not have the luxury to waste time on huge global efforts fighting for unattainable goals’.

Strategy in the second sense

Pollin dismisses these social and ethical questions on the grounds of political realism, abetted by a sense of urgency. He thinks it is ‘more constructive’ to concentrate on specific, concrete goals, than to ‘present broad generalities about the nature of economic growth, positive or negative’. Pollin’s strategic reticence about problems of value and fairness, coupled with his insistent single-mindedness, is part of what makes his text persuasive at one level—and distinctive, since Pollin’s pragmatism, and his seeming certainty about the limits of the politically possible (‘absolutely no chance’), is largely missing from the other contributions. This series, as its title suggests, is about strategy; its emphasis, as Pollin points out, is on ‘what is to be done’. But the question of how to avert planetary disaster is not just a question calling for prescriptive technical strategies that examine the efficacy and priority of green technologies and behaviours, and imagine future, greener scenarios. It is also a question about *political* strategy, which calls for descriptive analysis of the present moment, and for attempts to identify what kind of political obstacles sit in the way of implementing those technical solutions at the required speed and with the necessary thoroughness, with a view to asking how those obstacles might be overcome.

We have little trouble envisaging greener futures—wind turbines, solar panels, afforestation and so on—but what we mostly don’t seem to know is the answer to this second question about how to get from here to there, or, in Daly’s words, to map the route between ‘how things are’ and ‘how things ought to be’. This question is hugely complicated, and is left to different degrees unanswered in all the contributions—including Pollin’s, despite his ostensible shrewdness. The absence is most conspicuous in the interview with Daly, where Kunkel gently presses him on it. Distrustful of historical materialism, Daly fails to provide any alternative

theory of what motors historical change, and of who or what would secure the uptake of his policies, except through ‘an appeal to morality, whether that’s sufficient or not’. Discussing the political unfeasibility of his population policy, he says his instinct is to ‘back off the idea’, ‘because people just don’t want it. I’m not a dictator. I just present this as an idea. If one day people come to the realization that it’s necessary to limit total population’, then, he challenges, ‘show me a better way’. Daly rejects the philosopher-king role: his conception of his intellectual task is to think up methods for achieving goals, but the problem of winning public support for them is left to others. He is an economist, not a political scientist, and not an activist, and certainly ‘not a dictator’; politics will catch up with him—or it won’t (‘sufficient or not’). In the absence of more robust theorizing about how this hypothetical change would come about—except through mass epiphanic conversion—Daly’s policies risk political irrelevance, since we are left without any meaningful sense of how they would come to seem necessary to the people in a position to implement them. The same could apply to Vettese; Burton and Somerville, too.

Impersonating ‘a sort of doctrinaire Marxist for a moment’, Kunkel explores this limit of Daly’s thinking: ‘Engels might say that your steady-state economy is too utopian’ since ‘you don’t specify a material or “scientific” historical process that would effect the change.’ Daly says he doesn’t ‘believe the story of determinism’. This prompts Kunkel to ask: ‘You don’t believe it because you think ethical, moral, religious conversions do have a material effect on how things happen?’ ‘Yes’, Daly replies. ‘Purpose is causative in the world. If it is not, then we should all go back to sleep.’

What exactly is ‘purpose’, for Daly? People have all kinds of purposes, and they need not be ethical (and ethical purposes may not win out). The desire to make a profit could be construed as a kind of purpose; it is certainly causative.⁸ Daly seems to exclude these callous kinds of motivation, since he has in mind purposes ‘beyond economic growth’. Nonetheless, his striking statement—‘Purpose is causative’—in a sense crystallizes this failure—not Daly’s alone—to address the question of

⁸ Although perhaps profit-making, however consciously willed, is not best described as a ‘purpose’ since it is not so much a subjective desire as an objective requirement of the capitalist system—the way aiming to win a race is not really a personal motivation, but more like a premise of participating.

political strategy. ‘Purpose’ is an abstraction, floating free of any specific historical actors, and one senses that its predicate, ‘causative’—an unusual adjectival rendering of the more familiar noun or verb from which it is derived—is a slight grammatical evasion, which allows Daly to avoid saying ‘purpose causes’—a claim that sounds more conspicuously metaphysical and unsubstantiated. Which purposes, and whose, prove causative, Daly doesn’t specify. This is a species of idealism, semi-concealed by grammar, and it induces scepticism even as it elicits sympathy: moral awakenings may have material consequences, but they do not necessarily outweigh the causativeness of the purposes of, for example, the coal lobby.

But Pollin, too, despite being less starry-eyed about the power of dogooders, and generally more politically worldly (his jargonistic phrase ‘climate-stabilization imperative’ is characteristic in this respect), fails to specify how the intergovernmental global bureaucracy his investment plan presumably requires would obtain enough political clout to override the interests of the fossil-fuel industries. Pollin raises this issue only to swiftly drop it:

Of course, both privately owned fossil-fuel companies, such as Exxon-Mobil and Chevron, and publicly owned companies like Saudi Aramco and Gazprom have massive interests at stake in preventing reductions in fossil-fuel consumption; they also wield enormous political power. These powerful vested interests will have to be defeated.

Pollin straight away moves on, passing over the question of precisely how the interests of these powerful, extremely wealthy industries are to be overcome. Pollin’s passive construction—‘to be defeated’—is symptomatic of his leaving this question unanswered.

Growth as such

In his introduction to the interview with Daly, Kunkel wrote, as we saw, that ‘fidelity to GDP amounts to the religion of the modern world’. These innocent words caused a small storm. Everyone weighed in with their thoughts on whether increasing GDP is in fact essential to contemporary capitalist societies (which became a *de facto* synonym for ‘the modern world’), and, if so, whether this is a result, as Kunkel’s claim implies, of the ‘ideological’ sway it holds (as a ‘religion’), or whether growth is an internal economic necessity reducible to the logic of capital.

Vettese takes issue with both parts of Kunkel's remark, reminding us, firstly, that GDP is just an 'abstract measurement', and as such 'mere foam' to 'what goes on in the [economy's] churning depths', and secondly, that growth is not a 'religion' insofar as it is not, primarily, occasioned by an ideological devotion to what measures it. What drives capitalist economies and motors their perpetual expansions is not a collective theoretical commitment to increasing their size, but individual producers' unrelenting compulsion to make ever-increasing profits. This is not an optional matter, and it is in some significant sense not a subjective one, but a 'structural imperative'. Vettese implies it is Kunkel's mistake to suggest that GDP also motivates the expansion it quantifies.

Though sticking with Kunkel's word 'religion' rather than Vettese's de-ideologized and depersonalized 'structural imperative', Pollin agrees with Vettese that 'the real religion' of the modern world—at least of the world since 'neoliberalism became the predominant economic-policy model' in the mid 70s—is not growth, but 'maximizing profits for business in order to deliver maximum incomes and wealth for the rich'. And devotees of these gods of profit-making, Pollin tells us, mostly pay little heed to growth. The massive concentration of wealth effected by neoliberal policies has in fact come at the expense of growth in the advanced economies, the average rate of which has fallen to less than half that sustained during the *trente glorieuses*.

Burton and Somerville are in agreement with Vettese's initial correction that GDP is the 'foam' to the churning 'depths' of profit-making, and—echoing Vettese's spatial metaphor—argue that growth is driven by the accumulation of capital in private hands, and so fixating on GDP risks missing this underlying reality. Yet, shifting their weight slightly to take Kunkel's part, Burton and Somerville also emphasize GDP's importance on the ideological plane, and insist, against Vettese, that it is an influential 'cultural notion', which has a determining effect on economic behaviour: 'growth remains a powerful ideological force in its own right', which focuses 'debate on the idea of expansion as an inherent good'.

Burton and Somerville stress the material economic effects of this GDP 'imaginary': it 'has a significant influence on decisions regarding production, distribution and consumption'. But growth fetishism does not only affect the running of the economy; it also influences electoral politics. The stamp of economic ascendancy, a steadily increasing GDP

is also a prerequisite for electoral success, and failure to achieve it is punished at the polls. An expanding economy and rising living standards are what consuming citizens in advanced economies expect, and it is what politicians in capitalist liberal democracies must promise to secure majorities. The *sine qua non* of electoral viability, growth is thus not just a self-activating outcome of capitalism's drive for profit, but the ideological cornerstone of its social legitimacy. Or, to borrow two of Michael Mann's pithy formulations: 'GDP growth is why capitalism is seen as a great success story', whilst 'political success is actually measured by economic growth'.⁹

Yet growth is not just a fetish of politicians; that fetish reflects the perceived desires of the consumers who vote for them. Mann reminds us of this dynamic when he writes that 'the political treadmill is not imposed by states on unwilling subjects, for these measure their own success by material consumption, and they will support politicians who they think will deliver this.'¹⁰ This would suggest that if giving up growth is to become electorally viable, the electorate needs to enable politicians to give up their promise to deliver it, which means consumer-voters giving up their expectations of increasing affluence, or finding other ways to 'measure their own success'.

But if GDP is the electorate's 'religion', it is also, as Vettese says, just an 'abstract measurement', so when people believe in GDP, what is it, specifically, that they are believing in? That is, when people demand growth, what is the content of their demand? Perhaps 'material consumption', as Mann suggests, but only if by this he is not simply talking about the latest Apple gadgets but those consumer goods—like food and shelter and central heating—essential to a decent quality of life. In that case, to believe in growth is to subscribe to the notion—capitalism's historic self-justification, famously captured in the slogan 'what's good for General Motors is good for America'—that sustaining profitability for private companies is ultimately a public good because it leads to higher living standards. Then one could see GDP as something like the symbolic marker of capitalism's putative conversion of 'private vices' into 'public benefits'.¹¹ This is where Daly's critique of GDP as

⁹ Michael Mann, *The Sources of Social Power: Globalizations, 1954–2011*, vol. 4, New York 2013, pp. 325, 365.

¹⁰ Mann, *The Sources of Social Power*, p. 364.

an empirical measure becomes relevant. He argues that this connection between profit and welfare—a connection institutionalized by GDP—hardly holds: ‘the coupling of GDP and welfare is loose, or even non-existent beyond some sufficiency threshold.’ A figure that records how much we collectively produce and consume does not tell us much about our quality of life.

As Pollin points out, self-sustaining growth is no longer a reality in capitalist economies in the West. This is the fact with which Robert Brenner begins his introduction to the inaugural issue of *Catalyst*: ‘The capitalist system long ago lost the capacity to realize its ostensible historic comparative advantage and justification—to drive unceasing capital accumulation, which makes for self-sustaining economic growth and creates the potential for rising living standards.’ But Brenner goes further than Pollin, and suggests that as growth has slowed, so has people’s belief in it. ‘In the last thirty years or so’, as ‘upward redistribution’ of wealth has increasingly replaced its production, even the notion that higher private profits lead to higher living standards has lost its purchase on the public imaginary: the ‘cliché has ceased to hold—and the world’s capitalist classes no longer really proclaim it’.¹² Brenner suggests that people no longer take seriously the idea that there is a necessary connection between increased company profits and enhanced social well-being. According to Brenner’s account, it is not just the rate of growth that is in decline, but the ideological aura surrounding it.

Degrees of capitalism

Pollin seems to partly subscribe to this view insofar as he takes the former to be a kind of proof of the latter: growth has stagnated since the onset of neoliberalism; this indicates that the capitalist classes have other priorities (profits). But Burton and Somerville offer an alternative understanding of financialized neoliberalism, which, they suggest, was ‘capitalism’s response to the crisis of profitability’ that ensued after the postwar boom. In other words, neoliberal policies—including massive deregulation of a surging financial sector—were not expressions of some GDP-spurning mutation of the capitalist system whereby the desire

¹¹ These phrases are Wolfgang Streeck’s. See his ‘How Will Capitalism End?’, *NLR* 87, May–June 2014.

¹² The Editors, ‘Introducing *Catalyst*’, *Catalyst*, vol. 1, no. 1, Spring 2017.

to amass extreme private wealth suddenly overshadowed the growth imperative, but were rather symptoms of an ongoing commitment to that imperative insofar as they represent capitalism's improvised reaction to the falling rate of return on productive investment.

Burton and Somerville complete their criticism by wondering whether Pollin's 'misidentification of the villain(s)'—his blaming financialized neoliberalism and thus the stagnation of growth, rather than growth itself—is what allows him to make ecological proposals that operate essentially within 'mitigated capitalism'. They suggest that by implying a distinction between forms of capitalism—a mid-twentieth-century, less maleficent variety, and the contemporary, 'unleashed', neoliberal kind—Pollin can associate a welfare-enhancing and ecologically sensible version of growth with the former, and the bastardization of these values with the comparatively anaemic growth rates of only the most recent iterations of capitalism.

It is perhaps no coincidence that Daly, the other contributor whose proposals ostensibly operate within the prevailing mode of production, also wants to insist on the idea of degrees of capitalism: 'Capitalism in the sense of financialized monopoly capitalism, geared towards continuous growth and concentration of incomes, is really bad', but it also has less terrible incarnations: a 'small-scale capitalism, operating within scale and distributive limits'. By making such evaluative distinctions, Daly can adumbrate a better angel of capitalism—associated with rising living standards, an effective welfare state, regulation and so on—to which we can revert while saving the planet.

But whereas Daly's eco-friendly capitalism is 'small-scale' and stationary, under Pollin's 'green new deal', a bigger economy may be better. This is a key difference. Ironically, the name 'green new deal' was popularized by *New York Times* columnist and ardent free-marketeer Thomas Friedman in 2007.¹³ Friedman is in favour of capitalist solutions to the climate crisis because he believes in the preternatural power of the market: 'There is only one thing as big as Mother Nature, and that is Father Greed—a.k.a., the market. I am a green capitalist. I think we will only get the scale we need by shaping the market.'¹⁴ Pollin, on the

¹³ Thomas Friedman, 'A Warning From the Garden', *New York Times*, 19 January 2007.

¹⁴ Thomas Friedman, 'The Green New Deal Rises Again', *NYT*, 8 January 2019.

other hand, obviously no fan of ‘Father Greed’, and for whom ‘green capitalist’ is a flagrant misnomer, believes in the social value of healthy growth rates. This is his priority, and his sense of the urgency of the climate crisis means that while he does discuss how different ownership forms might advance his renewables agenda, he is prepared to postpone the question of an alternative economic order.

Why is growth such a priority for Pollin? That it becomes particularly evident, paradoxically, when he is ostensibly conceding its deficiencies:

It is obvious that growth *per se*, as an economic category, makes no reference to the distribution of the costs and benefits of an expanding economy. As for Gross Domestic Product as a statistical construct, aiming to measure economic growth, there is no disputing that it fails to account for the production of environmental bads.

Unwilling to give up on growth itself, he distances it from what he calls variously ‘growth *per se*’, or growth ‘as an economic category’, or GDP ‘as a statistical construct’. Though the paragraph begins with Pollin assuring us that he shares ‘virtually all the values and concerns of degrowth advocates’, by its end, one has the sense that all he has really conceded is that GDP is an imperfect measure because it fails to tell us a lot of important information about economies other than their size—a point with which Daly would of course agree. Pollin’s wish to preserve growth by surrounding it with this thicket of qualifications is partly explained by the funding mechanism that underpins his programme: since investment comes from a portion of global GDP, ‘a higher economic-growth rate will also accelerate the rate at which clean energy supplants fossil fuels’.¹⁵ But this is to beg the question, since one must then ask why Pollin decides to tie his programme’s investment prospects to global growth rates. Although he does not dwell on them here, it becomes clear that there are two, connected reasons Pollin remains committed to growth. Firstly, he regards it as politically non-negotiable: ‘most political leaders remain convinced that significantly cutting fossil-fuel dependency will slow economic growth and cost jobs—a price they are

¹⁵ Burton and Somerville reject this claim, arguing that Pollin ignores the fact that a faster-growing economy will be using more energy, thus annulling the progress made by a speedier transition: though moving faster up it, we will simply be adding ‘to the hill that has to be climbed’ by renewable-energy systems.

unwilling to pay.¹⁶ If this is the brute political fact from which all green strategizing must begin, as it is for Pollin, then the only meaningful path forward is to develop policy instruments that will allow politicians to oversee major losses to fossil-fuel industries while sustaining healthy growth rates overall.

But Pollin's commitment to growth is not simply pragmatic: author of *Back to Full Employment* (2012), he also recognizes that growth means jobs, and he believes that 'the single best form of protection' for workers in all countries who are displaced by the switch to clean energy—more than 'adjustment assistance programmes', like retraining and relocating workers—is 'a full-employment economy' in which 'there is an abundance of decent jobs available for all people seeking work'.¹⁷ Correspondingly, Pollin's central objection to degrowth is to its 'immediate effect': 'huge job losses and declining living standards for working people and the poor'. This prospect is in turn a central reason that maintaining growth is politically compulsory. Pollin says he has 'not seen a convincing argument from a degrowth advocate' about how to avoid this eventuality. Can Burton and Somerville be said to supply one? They support Pollin's call for a 'just transition'—but who would oppose it?—and suggest that the rich world and high-income consumers would be hit hardest. But in the short term at least, the effects of their 'drastic' cuts in industrial food and goods production, construction and international trade would send prices soaring, while millions would be thrown out of work.

Displacement

Whatever the persuasiveness of its application to Pollin, Burton and Somerville's complaint of a 'misidentification of the villain(s)' helps explain why Kunkel's remark about GDP provoked such sustained response. One of the reasons for this ripple effect might be that it enabled a minor displacement of the argument.¹⁸ For another faultline in the series—a line that recedes from the prominence one would expect of

¹⁶ Pollin, 'Global Green Growth for Human Development', p. 3.

¹⁷ Pollin, 'Global Green Growth for Human Development', p. 15.

¹⁸ This is not to suggest that such 'displacement' is evasive, or leads to irrelevant quibbling: the discussion about the significance and durability of GDP is one of the liveliest threads of the debate.

it—separates those who envisage saving the world within the framework of a mitigated capitalism (Pollin, and, somewhat half-heartedly, Daly), from those who think averting climate catastrophe means ridding ourselves of the economic system largely responsible for it (Vettese, Burton and Somerville).

But though the difference this faultline marks is fundamental—one between political-economic systems that are not simply alternatives, but *incompatible* alternatives—it is not always immediately discernible. This is partly because contributors on both sides of the line—whether because they are unwilling or merely uninterested—mostly do not explicitly categorize their proposals in these terms. Daly doesn't think 'we should just abandon capitalism and opt for eco-socialism', yet he also says that if you want to call his more egalitarian brand of capitalism, 'eco-socialism, that's fine with me'.

The anti-capitalists are similarly casual about how to classify their policies politically. Like Daly, Vettese is pluralistic: 'The project might take on any number of mantles: "egalitarian eco-austerity", "eco-socialism" or, borrowing from Wilson, "half-earth economics".' That is the only time Vettese uses the word 'socialism'—its radical edge blunted by being enclosed in quotation marks and preceded by a prefix. And though Burton and Somerville speak of the 'collapse of the capitalist system', they also slightly hedge their mention of socialism with a qualification that makes it sound indeterminate or approximate: 'an ecologically sustainable world economy' would require 'a socialist mode of production of some sort'.

This evasion of binding political distinctions has visible consequences. Instead of debating whether the planetary rescue operation can be conducted within the capitalist system—or, if not, what would be required to establish a different economic order within which it could—much of the argument, spurred on by Kunkel's opening comment, becomes focused on growth, and its compatibility with ecological recovery. So part of the point of insisting, as Burton and Somerville do, that neoliberalism is continuous with mid-twentieth-century kinds of capitalism, and that both are equally beholden to the profit-making imperative, is to demonstrate that capitalism—including, necessarily, the ongoing economic expansion it requires—is, indeed, the villain. In other words, the crux of the disagreement is not exactly about the benefits of untrammelled

growth—which no-one, including Pollin, is unequivocally in favour of—but about whether or not growth as such is ecologically destructive. If, like Daly, Burton and Somerville and other degrowth advocates, you think the answer to this question is ‘yes’, then the question becomes whether or not growth-limitation or shrinkage can happen with the basic parameters of the capitalist system still in place (Daly, yes; Burton and Somerville, probably not).

To revert to the question that was slightly dislodged by the discussion of GDP following Kunkel’s contentious claim: is capitalism capable of ecological self-healing, or does it, as well as fossil-fuelled growth, need to be jettisoned if the planet is to remain habitable? Broadly speaking Daly and Pollin seem to converge in thinking capitalism can prevent the worst of the oncoming climate crisis—as long as it is prevented by massive state intervention from doing *its* worst. Of course, Daly and Pollin are not free-market ideologues but pragmatists who start from the conviction that capitalism is what we’re stuck with for the moment, and we haven’t got much time. They do not believe that markets will be the sole agent of the transition to clean energy. If they did, they would presumably have nothing to add to the debate, since the problem of ‘what is to be done’ would magically dissolve: we could simply sit back, relax and watch capitalism autopilot itself to ecological repair.

Vettese raises cautious reservations about capitalism’s capacity to fix the crisis it partly precipitated: he believes that state-inflected market solutions to the climate crisis like those offered by Daly ‘underestimate the difficulties of shackling capitalism so as to slow it down’. Taking the view that the industrial-scale contractions of the economy necessary to protect the planet are unlikely to take place within a mitigated capitalism that ‘leaves the overall system of commodification, and the motors of expansion, firmly in place’, Burton and Somerville possibly put it more strongly, suggesting that the necessary downsizing will probably happen only after some kind of breakdown of the prevailing economic order.

There are reasons to be doubtful about the idea that ridding the planet of capitalism is the answer to the ecological crisis we face. Firstly, though we must surely acknowledge the minimum fact that ‘there is a link between capitalism and emissions of carbon dioxide’, at least since the adoption of coal at the onset of industrialization, we must also ask whether the link between economic activity and ecological impact is distinctive of this

mode of production.¹⁹ Communism, too—famously, in both the Soviet and Chinese cases—has been no less devastating for the environment in recent times, if over a briefer historical period. The industrialization of the USSR and the PRC was not at all different, in ecological terms, from that of their capitalist counterparts with whom they were trying to catch up. ‘All modern states’, Michael Mann writes, ‘have sacrificed the environment to GDP, regardless of regime type.’ Indeed, Mann is convinced that ‘if we all had state socialism, the problem would be just the same’. Perhaps this is partly why the contributors have mostly preferred to concentrate on the basic principle of cutting consumption, rather than on the finer details of who owns the means of production.

Instrumentalizing the crisis?

Mann identifies three ‘fundamental social actors of our time’ whom he thinks are responsible for climate change: capitalism, nation-states and individual consumers. For Mann, avoiding planetary disaster is a matter of curbing the powers of all three. He makes two other important points about the kind of problem climate change poses: it is ‘a genuinely global issue’—‘emissions in all countries affect everyone’s climate’ so ‘legislation must be international’, and—though the time-span in which meaningful action can be taken is getting shorter—it is a long-term problem.²⁰ These factors combine to make solving the climate crisis particularly difficult: short-termism characterizes the thinking of both politicians, beholden to the rhythm of election cycles, and the capitalist classes, bound to the profit-making imperative, whilst the nation-state remains the fundamental political and jurisdictional unit, and the performance of the national economy, the overriding political priority. These conditions encourage or compel governments to keep kicking the ecological can down the road. Everyone’s problem and no one’s problem, it is an international crisis that has not yet become any nation’s domestic priority. Until and unless it does so, it seems clear that the necessary sacrifices will not be made.

Bearing in mind Mann’s pointers about the specific difficulties climate change presents, can any conclusions be drawn from this comparative survey of the debate so far about the kind of strategizing that is required?

¹⁹ Andreas Malm, ‘Long Waves of Fossil Development: Periodizing Energy and Capital’, *Mediations*, vol. 31, no. 2, Spring 2018, p. 17.

²⁰ Mann, *The Sources of Social Power*, pp. 366, 362, 380.

It seems unarguable that an essential component of any viable green strategy must be the existence of a global, intergovernmental body with genuine legislative capabilities and practical powers of implementation. The problem with Pollin's programme is that it assumes that this kind of truly effective international organization either already exists, or could easily be created. Recent UN climate talks suggest this assumption is unjustified. The central strategic question, then, is how to mobilize global green coalitions that would make such a transnational body genuinely cooperative, productive and powerful—which might require governments to accept severe limitations on their national sovereignty.²¹

Putting the question this way also provides an opportunity for a critique of capitalism—rather than just of growth—that goes beyond enumerating the ways in which it is a socially blighted and ecocidal system, or providing apophatic, counterfactual arguments about the environmental fringe benefits if capitalism were to be replaced with an alternative economic order. That means producing evidence to support the claim that capitalism is not only killing the planet, but that the geopolitical arrangements it enshrines are what is preventing us from taking necessary action to save it.

An example of this kind of argument is given in *Climate Leviathan*. There, Geoff Mann and Joel Wainwright argue that globalized capitalism is itself an impediment to cooperation on a world scale, since—though it gives rise to economic interdependence—it also heightens inter-state competitiveness and exacerbates global inequality, which ‘undermines the capacity for collective action by reducing willingness to share sacrifices’.²² This economic inequality is intensified by a kind of ecological inequality: the skewed geographical distribution of where ecological harm is predominantly caused, and where it is most felt. While Michael Mann is right to point out that ‘carbon emissions anywhere affect everywhere’ since ‘the climate knows no boundaries’, it is also true that these effects are uneven: rich, high-emitting citizens of the global North continue to bear most of the responsibility for the warming of the planet, while poorer citizens of the global South are most likely to suffer the unpredictable consequences. These low-emitting countries are also

²¹ To increase ‘the power of the collectivity of nation-states’, it might be necessary to reduce their individual autonomy. See Mann, *The Sources of Social Power*, p. 380.

²² Geoff Mann and Joel Wainwright, *Climate Leviathan: A Political Theory of Our Planetary Future*, London and New York 2018, p. 101.

less well-resourced when it comes to recovering from environmental calamities. It is the problem of how to overcome such economic and ecological unevenness—and how to compel high-consuming countries to accept sacrifices on behalf of the safety and sustainability of low-consuming countries—that is so intractable.

Vettese is alert to these issues: he discusses the way environmentalist programmes can ‘ossify the inequality between the global North and South’, since the former’s development was enabled by an offloading of its ecological costs onto the latter, whose own, more recent development is now being regulated by the richer countries. Vettese claims that this ‘hypocrisy has prevented greens from building coalitions across international borders and between social movements, but the half-earthing adoption of the 2,000-watt framework would overcome this history of division’, since ‘it would allow the poorest to double or triple their consumption, while requiring a commensurate reduction by the rich.’ The difficulty here is that Vettese does not explain how this drastic reduction in consumption would be accomplished in advanced economies without the hemispheric divisions he identifies *already* being overcome—assuming, that is, that such radical policies would require the international green coalitions the current system prevents to already exist.

Moral and ecological arguments abound for consuming less and organizing our economies more thoughtfully and fairly, and in ways that show greater respect for nature, as well as each other (and these arguments are in plentiful supply in the series so far). But, as Mann writes, though ‘eco-socialist arguments are morally valid, morality does not rule the world’—even if it does, as Daly and Kunkel discuss, have some ‘material effect on how things happen’.²³ If Pollin’s contribution disappoints because it doesn’t articulate any broader socio-economic vision, more radical, composite contributions can encounter the opposite problem, which is that the concern for social and economic justice can seem to predominate over ecological considerations. These last can then come to seem tacked on or subsidiary. Rather than lining up arguments for why we need to combat capitalism and climate change in one fell swoop, eco-socialist visions can leave one with the impression that they are proposing to kill the two birds with one stone—instrumentalizing

²³ Mann, *The Sources of Social Power*, p. 390.

the climate crisis to co-opt its urgency in order to expedite socialist transformation.²⁴ However sympathetic one is to the latter aspiration, there is a danger that the result of this opportunism will be to drain the eco-socialist hybrid strategy of its political plausibility and to achieve nothing—neither its social nor its ecological objectives.

Given this, are there political projects which not only combine social and economic justice with ecological rescue, but integrate them so tightly that they become structurally dependent²⁵—not just once the transition has already been made, and we are comfortably settled in our eco-socialist world, but prior to this hypothetical transition? It may be true that ‘it is easier to imagine the end of the world than to imagine the end of capitalism’,²⁶ but can it be shown that we need to attempt the latter—the hardly imaginable—in order to prevent the former—the easily imaginable—from befalling us in reality?

Pragmatic impossibilism vs utopian realism

Pollin’s political pragmatism—his avoidance of radical restrictions and fairness measures, his exclusive focus on where we get our energy from, and his reticence about making evaluative or normative claims about how we ought to live—is, as we saw, what makes his proposal seem plausible. But is Pollin’s variety of *Realpolitik* as pragmatic as it seems in the context of a crisis of such scale and urgency? Does pursuing the unimaginable or advocating the impossible paradoxically have a greater chance of effecting change at the magnitude and speed required? This is to pose a final, meta-strategic question about the appropriate or expedient posture one should assume in climate change debates.

²⁴ Listen, for example, to how Naomi Klein describes her awakening to environmentalism: ‘I began to understand how climate change . . . could become a galvanizing force for humanity, leaving us all not just safer from extreme weather, but with societies that are safer and fairer in all kinds of other ways as well . . . This is a vision of the future that goes beyond just surviving or enduring climate change, beyond “mitigating” and “adapting” to it in the grim language of the United Nations. It is a vision in which we collectively use the crisis to leap somewhere that seems, frankly, better than where we are right now’: *This Changes Everything*, p. 7. The instrumentalism—‘use the crisis’—is here undisguised.

²⁵ See, for example, George Monbiot’s ‘scheme for tackling climate change’, which aims to be ‘fair and progressive’ only because ‘that is what would make it politically plausible . . . Let us hammer the rich by other means, but let us not confuse this programme with an attempt to cut carbon emissions’: ‘Environmental Feedback’, p. 112.

²⁶ Fredric Jameson, ‘Future City’, NLR 21, May–June 2003.

In ‘Who Will Build the Ark?’, a text that precedes this series but informs much of its discussion, Mike Davis stages his own psychological oscillations ‘between analytic despair and utopian possibility’. Davis’s conclusion in that text was that ‘on the basis of the evidence before us, taking a “realist” view of the human prospect, like seeing Medusa’s head, would simply turn us into stone.’ It can be reasonable and prudent to make overambitious, unrealistic demands, as Davis explains: ‘Only a return to explicitly utopian thinking can clarify the minimal conditions for the preservation of human solidarity in face of convergent planetary crises.’ Davis’s species of utopianism is judicious, for just because it is so drastic, it illuminates what is indispensable and essential: ‘the minimal conditions’ for human survival, ‘the Necessary rather than the merely Practical’. Realism and utopianism are thus not always simple opposites: utopianism can be strategic, in some version of what Francis Mulhern, writing about $n+1$ and referring to one of its founding editors, Mark Greif, calls ‘calculated impossibilism’—in Greif’s words, ‘asking for what is at present impossible, in order to get at last, by indirection or implausible directness, the principles that would underlie the world we’d want rather than the one we have’.²⁷

Yet, propelling Davis’s lurches between hopelessness and utopianism is the perception that reality—the all too real prospect of global disaster—has become, so to speak, *unrealistic*. What is scientifically ‘necessary’ to avert this disaster may be politically ‘impossible’: ‘Either we fight for “impossible” solutions to the increasingly entangled crises of urban poverty and climate change, or become ourselves complicit in a *de facto* triage of humanity.’ The scare quotes provide some small hope that these solutions are not truly impossible, but only ‘impossible’, and that the humanitarian catastrophe is preventable as well as our complicity in it. Yet there is a sense that this hopefulness is bred by a despair of alternatives, and is a reflex response to the dread that the two realities—scientific and political—may not harmonize in time.²⁸

During the latest dispiriting episode of the UN climate talks, held in Katowice in December, Wells Griffith, Trump’s international energy and climate adviser, insisted: ‘We strongly believe that no country should have to sacrifice their economic prosperity or energy security in pursuit

²⁷ Francis Mulhern, ‘A Party of Latecomers’, *NLR* 93, May–June 2015, pp. 82–3.

²⁸ Mike Davis, ‘Who Will Build the Ark?’, *NLR* 61, Jan–Feb 2010.

of environmental sustainability.²⁹ Here is eloquent evidence for the truth of Jameson's claim about our imaginative capacities, only twisted to express preference: Wells Griffith would apparently rather die with the world than live to see the end of capitalism. Or rather, perhaps, the end of America.

For this is what a devotion to GDP also means: as an index of the size of *national* economies, it is not just a commitment to the economy over the environment, it is a commitment to the *nation* over the rest of the world—and not just to the national economy, but to national security.³⁰ Indeed, the former is the key to the latter, since economic strength is critical for the industrial militarization that helps ensure geopolitical dominance. And, to cite another of Michael Mann's terse formulae: 'The more militarized a country is, the more it damages the environment.' Among the ways, as Mann points out, of enhancing national security—'currently the most sacred goal of American politicians'—is to achieve 'resource independence', by, for example, seeking out new fossil-fuel reserves on home soil in order to reduce dependence on imported oil. The irony, then, is that what countries do in the name of 'national security' may help to imperil the ecological security of the planet they share.³¹

In the month before the Katowice talks, a US climate report warned—echoing the metaphysical absurdity of Griffith's putting the economy before the planet (as if the former could proceed without the continued existence of the latter)—that global warming could reduce America's GDP by 10 per cent by the end of the century.³² Not confined to undoing decades of economic progress in developing (and comparatively ecologically innocent) countries, climate change is set to shrink the world's largest and most ecologically culpable economies, too. Based on this report—leaving aside the distressing implications of its inhuman economism (one can imagine a scenario where it makes 'economic

²⁹ Editorial Board, 'Trump Imperils the Planet', *New York Times*, 26 December 2018.

³⁰ J. R. McNeill thinks that 'among the swirl of ideas, policies and political structures of the twentieth century, the most ecologically influential probably were the growth imperative and the (not unrelated) security anxiety that together dominated policy around the world': *Something New Under the Sun*, p. 355.

³¹ Mann, *The Sources of Social Power*, pp. 365, 376.

³² Coral Davenport and Kendra Pierre-Louis, 'US Climate Report Warns of Damaged Environment and Shrinking Economy', *New York Times*, 23 November 2018.

sense' to allow much of the planet, including many of its inhabitants, to go to waste)³³—if the developed world doesn't degrow now, by choice, it will be degrown later, by force. The logic of the warning—save the planet to save (America's) GDP—suggests that if 'fidelity to GDP amounts to the religion of the modern world', the faith of the modern world's leading per capita polluter shows no sign of waning. Yet it also implies that even if the rich world's GDP idols are not to be smashed, the ecological gods may still punish its devotion to them.

³³ See Monbiot's critique of such attempts to calculate the 'economics of climate change' in 'Environmental Feedback', pp. 109–11.