

Hope, Pessimism, and the Shape of a Just Climate Future

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Mobilizing Hope: Climate Change and Global Poverty, Darrel Moellendorf (Oxford: Oxford University Press, 2022), 256 pp., cloth \$37.99, eBook \$25.99.

Climate Change and Political Theory, Catriona McKinnon (Cambridge, U.K.: Polity, 2022), 224 pp., cloth \$64.95, paperback \$23.95, eBook \$18.

The Paris Agreement faces its first test this December, when progress in achieving each country's national emissions reduction targets will be presented at the 28th Conference of the Parties to the UN Framework Convention on Climate Change (COP28). As readers of this journal will be aware, submitting emissions reduction pledges and reporting on progress are the only legally binding requirements of the Paris Agreement. Whatever else COP28 produces, it will confirm what many already know: the window to limit global warming to below 1.5°C has effectively closed, and the world is heading for climate disaster. The United Nations Environment Programme's *Emissions Gap Report 2022* estimates that the world is on track for 2.8°C warming above pre-industrial levels and finds no credible policy pathways to achieve the 1.5°C target.¹ It is difficult to predict the political implications of this momentous failure. Responses are likely to vary considerably between nations, social groups, and individuals. The failure to achieve even these minimal existing national pledges may

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Ethics & International Affairs, 37, no. 3 (2023), pp. 344–361.

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doi:10.1017/S0892679423000254

produce a backlash from climate activists and an incensed public. Yet failure may also breed fatalism given how much emphasis has been placed upon the dangers of warming above 1.5°C. Outside of publics attuned to the climate crisis, this failure may pass relatively unnoticed in a fractured media landscape already polarized about climate change, and where attention is displaced by concerns such as the Russian invasion of Ukraine, or simply politics as usual.

The two books under consideration here speak to this political moment. *Mobilizing Hope* by Darrel Moellendorf and *Climate Change and Political Theory* by Catriona McKinnon articulate to a broader public why climate change is a matter of profound injustice, and examine the policies and political actions needed to address it now. Moellendorf's book aims to support climate action by interlinking it with poverty alleviation, which he sees as the most promising basis upon which to build a successful mass climate movement. McKinnon provides a political vocabulary to articulate the many faces of climate injustice and to critically examine proposed policy solutions, technologies, and permissible forms of civil disobedience. Both find reasons to be hopeful for a better climate future and argue for a precautionary approach to climate policy. However, they reflect different visions of what a just and sustainable future might look like, and the most promising means to achieve it. These differences are clearest in relation to their views on sustainable development and environmental values, green growth or "degrowth," the scope of permissible climate activism, and the ethics of geoengineering. Some of the reasons for hope about the future presented by one theorist become reasons for pessimism in the eyes of the other. This reflects the difficulty in unifying the variety of moral perspectives and political ideologies in climate politics around common aims.

Building upon these accounts, I argue that we need a pluralistic vision of a just climate future, one that is capable of speaking to the range of moral interests bearing upon the climate and biodiversity crises. The first section of this essay examines the views of Moellendorf and McKinnon on climate justice and sustainable development and argues for a broader understanding of human development that is inclusive of diverse human-nature relationships. The second section examines the books' differing views on the growth-vs.-"degrowth" debate, and argues that environmental and societal progress should be measured in ways that accurately reflect human well-being. In the section after that, I argue that a more pluralistic vision of a just climate future is likely to support effective climate

activism. Finally, in the last section, I explore both authors' views on the permissibility of geoengineering and argue that these views are connected to the broader debate about what constitutes a just and sustainable future.

SUSTAINABLE DEVELOPMENT, POVERTY, AND ENVIRONMENTAL VALUES

In *Mobilizing Hope*, Moellendorf provides a powerful defense of the obligation to eradicate extreme poverty while addressing climate change. While this normative position is little changed from his earlier work,² it is now applied to an impressively wide range of topics, including mitigation responsibilities, climate adaptation, geoengineering, and even political mobilization. Moellendorf invites us to read his argument as supporting “the politics that fall under the broad banner of the Green New Deal” (p. 8). This is not a defense of the policy package of the same name proposed by U.S. congressional Democrats, but of sustainable development supported by green economic growth. As such, it reflects the United Nations' *2030 Agenda*³ and the European Union's European Green Deal.

On Moellendorf's view, involuntary poverty is a sufficiently serious and uncontroversial moral harm that avoiding it should underpin all of climate policy. Poverty undermines the pursuit of many goals that we have reason to value and increases people's vulnerability to climate change. As such, we ought to respect a human right to sustainable development in the context of climate policy. Moellendorf provides three reasons in support: (1) it protects development that eradicates extreme poverty, which is already an obligation of states under Article 25 of the Declaration of Human Rights; (2) it is fair to low- and middle-income states that might otherwise not cooperate in climate mitigation, potentially undermining globally coordinated mitigation; and (3) the right to development is “a promissory obligation of states that derives from their ratification of the Framework Convention” (pp. 83–84). While poverty alleviation is less central to *Climate Change and Political Theory*, McKinnon also defends the moral importance of sustainable development as a means of protecting the most vulnerable (p. 43). Emissions are an “avoidable necessity” in Shue's useful phrase,⁴ but the needs of future generations cannot be met by fossil fuel infrastructure. Thus, emissions must be separated from needs fulfillment (p. 96). This is an essential point. If India alone were to follow China's past development strategy, for example, the global carbon budget would be exceeded.

Moellendorf's normative position goes beyond recognizing the importance of the right to sustainable development, holding that poverty alleviation is the *overriding* moral consideration in relation to climate change. This involves an argument reinterpreting "dangerous" climate change to mean any climate policies that impose involuntary poverty (p. 28), replacing the undefined sense of danger in the United Nations Framework Convention on Climate Change's commitment to preventing "dangerous anthropogenic interference with the climate system."⁵ One benefit of this move is that it would apply to unchecked climate change *and* climate policies that reduced emissions while harming the poor, such as regressive carbon pricing. However, the claim that climate change is dangerous *only* insofar as it prolongs or worsens poverty is difficult to accept. As Stephen Gardiner argued in a review of Moellendorf's earlier book, "Many other climate threats seem genuinely dangerous to humanity and to other species."⁶ Warming can impose serious harm upon the wealthy and the poor alike—albeit not in equal measure. A recent study revealed that there were over sixty-one thousand heat-related deaths in Europe between May and September 2022.⁷ If even one of these deaths cannot be attributed to severe poverty (rather than age, poor health, or bad luck), we will require a broader description of why climate change is dangerous.

Moellendorf grounds his approach in the ability to pay principle (APP), which holds that agents with the most means ought to take the lead in climate mitigation, leaving the poorest to pursue economic development. He rejects the polluter pays principle on the basis that it is normatively controversial and bears only a contingent relationship to the right to promote sustainable development. The same goes for hybrid accounts combining these principles (pp. 88–9). Since McKinnon's *Climate Change and Political Theory* is intended as an introduction to political theory and climate change, it does not advocate for one principle of climate justice, but compares the merits of each principle (p. 53). McKinnon's discussion raises two problems for Moellendorf's reliance on the APP. First, the APP justifies taking action on climate change to alleviate poverty in the present, but "taking this seriously could have damaging unintended consequences for future people," especially if it created "new pockets of disposable income" resulting in high emissions (p. 104). This is a problem for Moellendorf, since if poverty alleviation and climate stabilization can come apart, one must be independently committed to the latter. Second, if we were only to look to the APP to allocate climate responsibility, and we assume that future generations will be better off—a standard assumption in

economics—then future generations would “bear primary responsibility for addressing climate injustice” (p. 105). This could be used to justify passing onto future generations a mountain of debt from current climate policies, despite the fact that they had not caused the problem.⁸ Moellendorf might respond that such an outcome need not be entirely unfair, because future generations would also benefit from a stabilized climate.⁹

Much more can be said about the merits of these principles. Nonetheless, McKinnon shows convincingly that the differences between them no longer matter in practice: “All roads lead to Rome” (p. 55). All theorists of climate justice hold that the current generation owes obligations of justice to future generations; that radical policy changes are required; that we are failing to do what justice demands; and that the longer we delay, the more unjust the outcome will be (p. 55).

McKinnon’s discussion of the many victims of climate change also shows why a singular focus on poverty alleviation would overlook other important aspects of climate injustice. McKinnon draws attention to the colonial roots of climate vulnerability (p. 40); the potential for climate change to displace people from their territories (pp. 48–49); and just approaches to climate migration (pp. 51–52), including her own bottom-up proposal of “naming, blaming, claiming, and framing,” which she argues to be more effective than establishing new international institutions to assist climate migrants (p. 50).¹⁰ McKinnon also finds that previous work on climate justice was blind to the worldviews of indigenous peoples, which “tell a very different story” about climate injustice (p. 44), one shaped by cultural memory of colonialism, capitalist exploitation, and the loss of kinship relations with nonhumans.

This last point marks a significant difference in the values recognized in the accounts of these two authors, and therefore in their visions of sustainable development. McKinnon acknowledges the moral significance of nonanthropocentric values at considerable length (pp. 69–70, 73, 123–24). In contrast, without rejecting nonanthropocentric values tout court, Moellendorf argues that poverty-targeting economic development overrides the interests of nonhuman nature, while indigenous conceptions of a wider ecological community are not really live options (p. 198).¹¹ To justify this, Moellendorf constructs a thought experiment in which humanity needs to destroy some artworks in order to eradicate poverty (p. 200). The implication is that although we should regret the loss of our masterpieces, what we are doing is required by justice.

A more pluralistic vision of the values underpinning sustainable development is necessary here. Although theorists of justice have largely ignored the significance of biodiversity for human development,¹² it is far more significant than the comparison with artwork suggests and further losses to biodiversity would undermine poverty alleviation.¹³ Just and effective approaches to sustainable development must include multiple values and reflect the diversity of human-nature relationships found across the world.¹⁴ The recent *Methodological Assessment of the diverse values and valuation of nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, produced by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) found that a genuinely sustainable future depends on recognizing multiple environmental values in policy, and moving beyond narrow understandings of development as economic prosperity.¹⁵ A more pluralistic conception of climate justice will be required to account for the diverse values bearing upon sustainable development, including the ways in which these values shape well-being.¹⁶

This includes values associated with nonhuman nature. Citing E. O. Wilson on the extent of humanity's decimation of biodiversity, Moellendorf claims that "ending the human development project is morally not an option" (p. 191). Yet in his last book, Wilson came to a very different conclusion, writing, "Only a major shift in moral reasoning, with greater commitment given to the rest of life, can meet this greatest challenge of the century."¹⁷ Nonanthropocentrists would agree, and would challenge the analogy with artworks, which cannot have moral interests of their own. McKinnon's discussion, along with Elizabeth Cripps's recent emphasis on the interests of nonhumans as part of climate justice,¹⁸ may signal a new direction in climate ethics, given the widespread anthropocentrism of previous work.¹⁹

GREEN GROWTH, DEGROWTH, AND THE AIMS OF CLIMATE JUSTICE

Questions about the values implicit in sustainable development connect directly to another serious disagreement between the two books—namely, the desirability of green growth or "degrowth." This is fast becoming one of the sharpest controversies in contemporary sustainability discourse. Degrowth proponents argue that economic growth undermines decarbonization and that well-being and climate

protection can be secured without such growth. As McKinnon notes, degrowth does not imply that all nations ought to enact the same economic policies, which would be “morally outrageous” (p. 135) as it would require that the poorest countries that have contributed the least to climate change should slow their economic development at the same rate as wealthy countries. Instead, wealthy countries should degrow to “make space” for the development of the poorest ones. Moellendorf draws the opposite conclusion. Citing World Bank figures of the impacts of historical recessions upon poverty, Moellendorf claims that degrowth “would foreseeably result in tens, perhaps hundreds of millions of people in low- and medium-income countries being caught in poverty,” and is therefore “a disastrous violation of the right to sustainable development” (p. 148). Thus, “green growth is the most credible path in pursuit of a zero-carbon economy” (p. 151).

A key point of contention between proponents of green growth and degrowth is the “decoupling” of growth from emissions. GDP growth and emissions have been extremely tightly correlated, and there is no evidence of successful absolute decoupling. Recognizing this, green growth proponents such as the economist Robert Pollin, whom Moellendorf cites extensively, argue that decoupling will only occur through technological innovation, which would occur faster by boosting growth (pp. 149–50). Pollin and Moellendorf characterize degrowth, tendentially, as a global form of “planned austerity” (p. 143), rather than the regionally specified policy approach described by McKinnon. However, Moellendorf may respond that this characterization is justified because regional degrowth would seemingly collapse into global austerity due to global capital flows (pp. 146–47).

The debate about degrowth need not imply abandoning sustainable development, but it does require rethinking how this notion is conceptualized and measured, and the values that such choices reflect. Given the risks Moellendorf highlights, the onus is on proponents of degrowth to demonstrate how their proposals would not harm the poorest globally. The onus is also surely on proponents of green growth to show how decoupling can be achieved, beyond mere faith in technology. Moellendorf recognizes that degrowth proponents are skeptical about decoupling (p. 142) but claims that Intergovernmental Panel on Climate Change (IPCC) modeling typically assumes that mitigation will be compatible with economic growth (p. 140). However, this is an a priori modeling assumption and not based on *evidence* that can be derived from models.²⁰ It is also no longer true, as the most recent IPCC report includes modeling critical of indefinite

growth.²¹ Global biodiversity assessments cast further doubt on the sort of decoupling that seems necessary for economic growth to be genuinely sustainable.²² Beyond the correlation between growth and emissions, this includes many other harmful impacts on the biosphere. The running down of biodiversity is significant enough that even neoclassical stalwart Partha Dasgupta concludes in an important recent report that indefinite growth is likely impossible.²³

The normative justification of pursuing growth is also important to consider and relates to how human well-being is conceptualized and measured. McKinnon argues that the indefinite pursuit of growth is ethically dubious because GDP fails to measure “what really matters in human life” (p. 85). This claim finds support in a large economic literature on the need to move away from GDP in order to reliably measure well-being and societal progress.²⁴ This has recently translated into studies examining the potential for energy and nutritional demands to be satisfied without growth while stabilizing climate change.²⁵ Growth-promoting policies have also been shown to harm vulnerable groups in the Global South, especially indigenous peoples.²⁶ These considerations undercut the claim that sacrificing growth necessarily implies unjustly harming the vulnerable.

Recent work in climate economics shows that growth may not even be necessary to support human development outcomes. For instance, the redistribution of carbon taxation shows impressive potential, whether or not the global economy grows.²⁷ Purely domestic redistribution of carbon revenues could provide access to water, sanitation, and electricity in all world regions except sub-Saharan Africa, while redistribution from rich to poor nations would ensure universal access.²⁸ Recent modeling has also explored how climate mitigation affects multiple dimensions of well-being and sustainable development goals,²⁹ while there are cost-optimization approaches that seem to better reflect precautionary thinking about climate risks than cost-benefit approaches.³⁰

A shortcoming of both accounts is the lack of consideration of economic approaches featuring broader conceptions of well-being. McKinnon and Moellendorf stick to rather well-worn critiques of cost-benefit analysis and “discounted utilitarianism.” This is regrettable because there are now economic approaches that depart from the welfare maximization structure underpinning the ethical debate about discounting the welfare of future generations. While there is much to say about the ethical shortcomings of climate economics,³¹ further research in both climate ethics and economics will be needed to explore the

interconnections between climate policies and the multiple dimensions of well-being. This includes the contribution of diverse human-nature relationships, which affect how well-being is understood and measured.

HOPE, PESSIMISM, AND CLIMATE ACTIVISM

Mobilizing Hope's analysis of the prospects of mass climate mobilization is an important and timely contribution to the literature on climate justice. Tracing the history of the U.S. Civil Rights Movement and Martin Luther King Jr.'s thoughts on building a successful mass movement, Moellendorf identifies the attitude of hope as necessary to support mass climate mobilization: "Hoping for a future state of affairs supports motivation to act to achieve the good and avert the ill" (p. 32). According to Moellendorf, "Hope does not require optimism" (p. 9). Hope is a counterweight to the self-interested thinking that prevents collective action and the "problems of political economy," especially lobbying from the fossil fuel industry: "Political mobilization can be supported by a hopeful vision of a possible better order. Broad mobilization requires a vision of global solidarity, increased prosperity for working people, and sustainable communities" (p. 9).

Moellendorf's analysis here is insightful and at times inspiring. Nonetheless, the analysis could be sharpened by a fuller consideration of activism in the context of contemporary climate politics. The prospect of successful mass mobilization is likely to be affected by the rise of far-right politics, and compounded by political polarization and misinformation about climate change. President Biden's promotion of Green New Deal policies met opposition and was perceived in partisan terms, while in Europe the success of far-right governments may spell trouble for mobilizing in support of green growth.

It is also unclear what conception of climate politics is in play. Consider McKinnon's discussion of "reformist" and "radical" approaches (pp. 122–26): Reformists work within existing democratic institutions and through Green political parties, while radicals "more often stand outside these institutions and call for them to be gutted or abolished" (p. 123). McKinnon lists the activist group Extinction Rebellion as an example of the radical position. While Moellendorf considers degrowth to be incompatible with a climate movement based upon "a hopeful vision of a better future" (p. 142), what counts as a better future seems to be in the eye of the beholder here. As McKinnon notes, Extinction Rebellion already rallies around critiques of capitalism and support for degrowth (p. 136).

This leaves unclear where more radical climate activist groups might fit into Moellendorf's envisaged mass climate movement.

This connects to a question about permissible means. While Moellendorf focuses upon nonviolent protest, McKinnon considers a wider range of permissible forms of civil disobedience (pp. 136–38), including Simon Caney's argument justifying the limited use of violence as a part of rightful resistance to injustice.³² This viewpoint may have become more relevant for the climate movement due to the popularity of Andreas Malm's *How to Blow Up a Pipeline*,³³ recently even adapted into a film. Faced with the ongoing failure to mitigate, questions about the morality and efficacy of sabotage appear likely to grow and may further divide the climate movement's radical and reformist camps.

As McKinnon notes, the climate crisis is planetary in scope and defies particular jurisdictions (pp. 137–38). Thus, we should expect a wide range of visions about a desirable climate future. It seems doubtful that mass climate mobilization could be unified by a *single* vision of a better climate future, such as may be implied by both reformist and radical climate politics. Instead, a pluralistic view of better climate futures is likely a strength in supporting mass climate movements. This can be supported by the wide range of values pertaining to sustainability found across the world.³⁴ These values are likely to have implications for the prospects of building a successful climate movement based upon common aspirations about a desirable future.

Hope for a better future is an important motivation for climate activism in Moellendorf's account. Building upon this, future work should consider the role of other powerful motivations and their underlying moral psychology. For Moellendorf, solidarity with the poor supports the motivation of hope, yet this remains self-interested and strategic (p. 95). However, being motivated by solidarity may also require being able to empathize with the vulnerable.³⁵ Moellendorf also requires "hope-makers"; that is, evidence warranting hope (p. 34), yet climate activists seem to recognize the *absence* of evidence for hope as a reason to do more.³⁶ Such responses show courage, an attitude appealed to in Shue's argument that the present generation must take up the responsibility of radical mitigation.³⁷ Justified anger may be equally motivating.³⁸ The speeches of Greta Thunberg and other youth climate activists reflect considerable anger at the failure to address climate change, and even a sense of betrayal at their future being undermined.

While youth climate activism is indeed a reason for hope, it is important to recognize how psychologically disturbing the climate crisis has become for young people. A recent study finds that 59 percent of young people report feeling sad or helpless in the face of climate change.³⁹ The other group most affected are climate scientists, with 82 percent of IPCC authors expecting that they will live to see catastrophic climate change.⁴⁰ What might political theory offer?⁴¹ At the end of *Climate Change and Political Theory*, McKinnon recommends “radical hope” as “a form of courage in the climate crisis. To live with this courage is to go on despite not knowing what will replace the world we know in the conviction that ‘going on’ can yield something worthwhile albeit unimaginable in the present” (p. 164). McKinnon plausibly suggests that we will need political theory for whatever comes next. An ethics will also be needed that, borrowing a phrase from Anna Lowenhaupt Tsing, asks what it means to live well in the ruins.⁴²

McKinnon also responds admirably to the philosophical, physical, and institutional sources of climate pessimism, concluding that “we should take heart: all is not yet lost” (p. 34). McKinnon’s first argument to this effect is that even in a catastrophic climate future there will remain morally better and worse options, and thus we will still need normative theory (p. 30). This is an important point: avoiding every tenth of a degree of warming will result in a less dangerous world. The second argument contests the thought that human nature itself prevents us from addressing climate change (p. 33). According to McKinnon, “The most sceptical view that can be justified is that the jury is out. As a species, we have never before faced a problem like climate change, so we have no historical precedent to look towards” (pp. 31–32). There are also good examples of people foregoing consumption in crises, while “many of the world’s poorest people already live without luxury goods; and only unloved psychopaths always act on their own narrow self-interest” (p. 32). Nonetheless, pessimists might not be convinced. Indeed, Moellendorf rejects degrowth partly because calling for reduced living standards “seems highly unlikely to be a mobilizing demand” (p. 143). Third is the worry that democratic institutions might prove incapable of addressing climate change. McKinnon plausibly suggests that it is not obvious that nondemocratic institutions would “generate forms of motivation, commitments, and a social ethos that would enable them to endure in ways effective for the purpose of climate justice” (p. 33). That said, the democratic pessimist might respond that nondemocratic regimes may nonetheless mitigate faster, which would protect the interests of future generations.⁴³

GEOENGINEERING: PRO-POOR OR PROMETHEAN DELUSION?

Views on the moral permissibility of geoengineering reflect the wider assumptions about sustainable development, values, and political action we have been considering. This includes both forms of geoengineering; that is, carbon dioxide removal (CDR) and solar radiation modification (SRM).⁴⁴ Optimists about green growth, like Moellendorf, tend to be similarly optimistic about utilizing geoengineering to support human development. Indeed, Moellendorf connects this prospect to a Promethean vision of reason and human self-mastery (p. 187). On the other hand, McKinnon warns about the dangers of geoengineering being used to cynically justify the continuation of the status quo, asking rhetorically whether geoengineering technologies represent “dangerous Promethean fantasies, or something altogether more messy?” (p. 144).

McKinnon endorses Shue’s argument that using “remedial CDR” to remove historical emissions is morally required due to the extremely small carbon budget that remains,⁴⁵ while “enhancement CDR” that complements mitigation might be permissible in order to achieve the speediest transition to a net zero economy, although this might displace near-term mitigation—a problem known in the literature as “moral hazard” (p. 146). However, like Shue, McKinnon regards “asset rescue CDR” as impermissible, based on these techniques enabling fossil fuel reserves to be utilized for longer, or even indefinitely.

Nonetheless, McKinnon’s discussion suffers from a narrow focus on one form of CDR—namely, the BECCS technique (bioenergy production with carbon capture and sequestration)—and does not consider the range of values or the implementation contexts bearing upon other techniques. The result may be an overly negative view of CDR. It is true that earlier climate modeling featured BECCS as a single technique and consequently raised concerns with food security, water, biodiversity, and land dispossession.⁴⁶ However, recent modeling has moved to a portfolio approach comprising several forms of CDR that lessens the side effects of single techniques.⁴⁷ And as McKinnon acknowledges, robust governance of biomass might lessen concerns with BECCS.

Unconsidered are “nature-based” forms of CDR such as reforestation, soil carbon, and agroforestry, which the IPCC’s most recent assessment found to have significant removal potential.⁴⁸ These forms of CDR—tied as they are to land-based practices—might reflect a wider range of values and human-nature relationships and have significant co-benefits for people and nature. For example,

rainforest conservation can significantly improve carbon sequestration, while supporting justice, environmental values, and territorial land rights.⁴⁹

Taking CDR as a general category at another point in her discussion, McKinnon sides with Shue in rejecting Morrow and Svoboda's proposal for CDR to allow for temporary emissions overshooting to allow for poverty-targeting economic development.⁵⁰ The reason is that doing so would risk slower mitigation. Perhaps it is for this reason that Moellendorf does not see CDR as a way to prolong fossil-fueled development, despite the apparent similarity of Morrow and Svoboda's argument to his anti-poverty approach.

Both theorists' support for some kind of CDR reflects an emerging consensus in climate ethics on the urgent need for investment in promising and ethically sound forms of CDR, without undermining mitigation or creating unjust side-effects. However, while McKinnon's support for CDR remains highly qualified, Moellendorf seeks to dismiss several prominent ethical concerns that have been raised in the literature.

Given the limits on space, I will comment only on Moellendorf's rejection of the worry that CDR could create a "moral hazard" that undermines mitigation.⁵¹ Moellendorf argues that unlike in standard cases where a moral hazard emerges, a lack of motivation is not our primary problem with respect to CDR (p. 159). This seems to assume that policymakers are genuinely committed to mitigation, and to assume away Gardiner's warning about "moral corruption" affecting policy justifications.⁵² Politicians who make emissions pledges are typically not held accountable for failing to achieve them, and such pledges typically lack crucial details—including the timing and scale of reliance upon CDR.⁵³ To avoid the potential for CDR to be a convenient excuse for policymakers seeking to delay mitigation, any promise to implement it in the future must be contingent upon more mitigation now.⁵⁴

Unsurprisingly, given their views of CDR and the wider context of climate policy, Moellendorf and McKinnon also take opposing views on the permissibility of SRM. The most discussed technique, stratospheric aerosol injection (SAI), is so controversial that the few attempts at outdoor testing were stopped due to public opposition.⁵⁵ The recent announcement by the Biden administration that it would invest in SRM research, including provisions for field testing, has significantly increased the urgency of establishing research governance.⁵⁶ McKinnon provides an authoritative review of the ethics of SRM, finding that ethical questions concerning the governance of research into SRM have been overlooked in favor of

questions about eventual deployment (p. 152), noting the predominant argument for this would be to “buy time” for mitigation. This raises several ethical issues related to responsible research, including a moral hazard effect, and the potential for a “socio-technical lock-in” (p. 155) making deployment more likely. McKinnon argues for establishing SRM governance that includes “strenuous flexibility mechanisms by which research programmes can be shackled, or even quickly shutdown, at minimal cost if research stops serving the public interest (for example, if mitigation deterrence becomes evident) or moves beyond the control of ethically sound governance institutions (for example, if it is captured by a military)” (p. 159). Any institution governing research must also be politically legitimate in the sense that it “is authorised by those affected by it, that it represents their interests, and that it is accountable to them” (p. 159).

While echoing this call for robust research governance (p. 170), Moellendorf argues that research and even the implementation of SRM, including SAI, is justifiable according to his anti-poverty principle. Moellendorf’s conclusion is that “these risks make it clear that SAI is by no means an all-purpose solution to the problem of dangerous climate change. But the reality that we must face is that there is no risk-free policy for addressing climate change” (p. 169). This risk-risk framing is echoed in the Biden administration report, which compares the risk of research and deployment of SRM against the risk of not doing either. This framing is rejected by a prominent group of environmental governance scholars calling for a global “non-use agreement” on SRM.⁵⁷

Moellendorf utilizes the risk-risk framing to argue that an overriding moral reason can justify “messing with nature,” and poverty alleviation is such a reason (p. 176).⁵⁸ The argument given above concerning the multiple values pertaining to sustainable development threatens this claim, which rests upon the assumption that poverty is always of overriding moral importance. There may be safer options (that is, a fairer distribution of wealth) to serve poverty alleviation and climate protection. While Moellendorf does not suppose that SRM would be implemented on behalf of the poor, his claim is that it would benefit the poorest in comparison to a scenario in which SRM was not implemented. This may be the case, although the risk-risk framing cannot be used to compare slower mitigation with or without SRM since such scenarios are incompatible with climate justice. The ethically relevant comparison is between scenarios in which ambitious mitigation is pursued in both and where SRM is implemented in only one of them.

As with CDR, ethical discussion of SRM would benefit from a wider understanding of the values bearing upon a just climate future. While essential, a view highlighting only the economic and human rights impacts of SRM would ignore the diversity of human-nature relationships found across the world, and their implications for research and any potential implementation. Most extant research focuses upon the values and attitudes of people in the Global North. Power asymmetries bearing upon the research and implementation of SRM imply the need for meaningful involvement of diverse stakeholders from the Global South in research governance, including having a say in whether or not to ever implement it, and if so under what conditions.

As we have seen, *Mobilizing Hope* and *Climate Change and Political Theory* are timely and impressively wide-ranging contributions, and will be of interest both to scholars and to a wider public concerned about climate change. They belong to a recent wave of stirring public-facing works on the urgency of climate justice, including Henry Shue's *The Pivotal Generation*⁵⁹ and Elizabeth Cripps's *What Climate Justice Means and Why We Should Care*.⁶⁰ Moellendorf's focus on climate activism is likely to become a key topic in future climate ethics. McKinnon's broader conception of climate justice and critical view on sustainable development also create fruitful ground for future contributions. I have argued that such future work would benefit from a more pluralistic vision of what might constitute a just climate future, one that includes the range of moral interests bearing upon the climate and biodiversity crises. Such a vision has implications for the meaning of sustainable development, and for the policies and technologies that may be justly pursued.

NOTES

- ¹ United Nations Environment Programme, *The Closing Window: Climate Crisis Calls for Rapid Transformation of Societies; Emissions Gap Report 2022* (Nairobi: United Nations Environment Programme, 2022).
- ² Darrel Moellendorf, *The Moral Challenge of Dangerous Climate Change: Values, Poverty, and Policy* (Cambridge, U.K.: Cambridge University Press, 2014).
- ³ United Nations, *The 2030 Agenda and the Sustainable Development Goals: An Opportunity for Latin America and the Caribbean*, LC/G. 2681-P/Rev. 3 (Santiago: United Nations, 2018).
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Abstract: The urgency of climate change has never been greater, nor the moral case for responding to it more compelling. This review essay critically compares Darrel Moellendorf’s *Mobilizing Hope* and Catriona McKinnon’s *Climate Change and Political Theory*. Moellendorf’s book defends the moral importance of poverty alleviation through sustainable economic growth and argues for a mass climate movement based on the promise of a more prosperous future. By contrast, McKinnon provides a political vocabulary to articulate the many faces of climate injustice, and to critically examine proposed policy solutions—notably including the indefinite pursuit of economic growth. While both find reasons to be hopeful, their wide-ranging accounts reflect different visions of what a just and sustainable future might look like. They reflect different understandings of sustainable development and the significance of environmental values; the scope of permissible climate activism; and the ethics of geoengineering. Building upon them, I argue in favor of a more pluralistic vision of a just climate future, one that is capable of speaking to the range of moral interests bearing upon the climate and biodiversity crises, and that supports sustainable development that is inclusive of diverse human-nature relationships.

Keywords: climate justice, sustainable development, green growth, degrowth, climate activism, hope, geoengineering, environmental values