

Climate Hope

By Pierre André

Even though scientific data give us grounds for pessimism, philosopher Darrel Moellendorf shows that hoping for climate justice is not vain. To mobilize hope, he puts mass mobilization, technological progress and realistic utopia forward.

About: Darrel Moellendorf, [Mobilizing Hope. Climate Change and Global Poverty](#), Oxford, Oxford University Press, 2022, 240 p.

In his second opus dedicated to climate ethics, Darrel Moellendorf speaks to a vast audience without compromising on the rigor of his argumentation¹. The political philosopher, a professor at Goethe University in Frankfurt, follows the track of hope, a capital issue: are there still reasons to hope for curbing climate change and its disastrous effects on the poorest as well as future generations? There are, in his opinion. Although scientific predictions prompt pessimism, people can - must, even! - legitimately mobilize hope for climate justice by relying on mass social mobilization, technological progress and a realistic utopia. This central thesis is remarkably developed throughout eight chapters, as many aspects of the climate issue. However, the conception of hope developed by Moellendorf raises questions, especially in its relation to facts and perspectives offered by technological progress.

¹ He uses some concepts and key arguments from his previous book, namely his normative conception of dangerous climate change, the distinction between epistemic uncertainty and moral uncertainty, his interpretation of the precautionary principle and the antipoverty principle. See Moellendorf (2014).

The possibility of hope

Confronted with climate change and the collapse of biodiversity among other things, our era is a breeding ground for pessimism, or even eco-anxiety. Even worse, despair could indeed contribute to the fulfillment of the dreaded outcome². Hence the importance of Moellendorf's reflection on the concept of hope in the context of climate change. Even when there are reasons for pessimism, one can hope for the improbable, as long as it is possible - hope thus copes with the uncertainty that comes with climate scenarios. Besides, hope has a practical and political dimension. On the one hand, as an ability to look to the future, hope makes action possible: "Hope is a tonic against resignation and debilitating anxiety" (p. xii). On the other hand, some measures can stimulate hope. Both a cause and an effect of action, hope becomes a political object in the service of climate justice. It therefore differs from optimism, the confidence in the probable fulfillment of a better future, which can sometimes justify inaction. Let us not be mistaken, though! Moellendorf does not fall into a blind voluntarism either. Hope must be based on evidence, "hope-makers", which simultaneously attest to the possibility of the hoped-for outcome and make it more probable (p. 33). Throughout the book, the author thus seeks to avoid the different pitfalls of despair, carefree optimism and daydreaming.

An essential question arises, then: can we still hope to limit global warming to 1.5°C by the end of the century (compared with the pre-industrial era), considering the latest assessment report by the IPCC claims that [the planet is already 1.1°C warmer](#)? The role of uncertainty is crucial here. Both "epistemic uncertainty", relative to the limits of our understanding of climate systems, and "moral uncertainty", relative to the actions that will or will not be undertaken, still leave room for the possibility of avoiding a 1.5°C global warming. Because of these uncertainties, hope is possible. It is even morally required, based on the "precautionary principle" that Moellendorf interprets as such: necessary steps to avoid a catastrophe must be taken if i) some of its potential causes can be observed or inferred and ii) the costs of prevention do not outweigh those of the catastrophe. If it is not our duty to protect ourselves against an alien invasion (p. 47), we must however limit global warming to 1.5°C because a 2°C warming could push [hundreds of millions more people into poverty](#), whereas climate policies are less costly.

² On the threat represented by despair and the instrumental role of hope in the fight against climate change, see McKinnon (2014).

The hope for climate justice

The central chapters address the more classic questions around climate justice. Insofar as fossil fuels have also generated numerous economic benefits, the fight against climate change inevitably raises questions of distributive justice. Specifically, how to fight both climate change and poverty? Based on the “antipoverty principle”³, Moellendorf underlines the obligation for rich states to proceed to financial and technological transfers, so that poorer states are able to implement mitigation and adaptation policies without sacrificing the fundamental needs of their citizens. However, arguments in terms of justice not always being enough to motivate states to act, the author calls for the solidarity of interests: all states share an interest in promoting collective action against climate change. That would imply giving everyone the means to reduce their greenhouse gas emissions as well as financing adaptation of the poorest countries. Without that, rich countries will not be able to protect themselves against potential indirect consequences of climate change, such as conflicts and political instability sparked by mass migrations: “Countries around the world share an interest in international peace and security. And peace and security are threatened by insufficient funding for adaptation.” (p.118)

Nevertheless, the commitments to reduce emissions, freely taken by states in the context of the Paris Agreement (2015) are barely enough to have a reasonable chance at avoiding “dangerous climate change”⁴. And there is no guarantee that states will keep their commitments, as illustrated by the unfulfilled financial commitments of rich countries. However, Moellendorf rejects potentially desperate analyses of climate change as a tragedy of the commons or an intergenerational tragedy, in which the agents would inevitably be pushed to inaction by their narrow rationality⁵. Quite the contrary, he puts the numerous local and short-term co-benefits of the energy transition forth, whether it be health and environmental advantages linked to the

³ This principle claims that the costs of climate policies must not be borne by the poor (of current or future generations) if avoidable. It is similar to the ability-to-pay principle developed by Caney (2005).

⁴ Article 2 of the United Nations Framework Convention on Climate Change (1992) sets the objective of limiting atmospheric concentrations in greenhouse gasses so as to avoid a “dangerous anthropogenic interference with the climate system”. Nevertheless, Moellendorf shows that science alone cannot define what dangerous climate change means. Danger inevitably refers to normative judgements, about which philosophy can help us think. See Moellendorf (2014).

⁵ Developed by Hardin (1968), the fable of the tragedy of the commons considers that without property rights, agents exploiting a common resource will destroy it by blindly following their individual interests. To Gardiner (2011) though, the problem is more fundamentally ethical and intergenerational: the fight against climate change has long-term benefits but short-term costs, and current generations thus tend to toss their responsibilities onto future generations.

reduction of combustion cars and coal-fired power plants or the economic benefits of [renewable energies that, in most countries, have become less costly than fossil fuels for electricity generation](#). According to the author, it is rather the conflicts between common interest and *some* private interests, namely those of the powerful industry of fossil fuels, that explains the inaction of states. The hope of reversing the trend is therefore allowed. Drawing inspiration from Martin Luther King Jr., Moellendorf sees in mass mobilization, a succession of large protests in strategic places, the only way of countering the power of money (p. 129). But to be able to mobilize hope, a transition project susceptible to getting support from a critical mass of citizens, a *Green New Deal* capable of creating more and better jobs than those it shatters, is necessary.

Mobilizing hope

However, even such a grassroots movement could fail to limit global warming to 1.5°C if emissions reductions are not fast enough. To nurture hope, Moellendorf hence turns to two more types of measures, often qualified as “geoengineering”: negative emissions⁶ and solar radiation management⁷. After examining the criticisms of both, he defends deploying a portfolio of negative emissions technologies, partly by pointing to the fact that most IPCC scenarios limiting global warming to 2°C assume a more or less extensive use of this type of measures. As far as solar geoengineering is concerned, the author concludes that no objection justifies not seriously investing in research on stratospheric aerosol injection. According to Moellendorf, the precautionary principle would not apply here, and it would more so be about finding balance between the beneficial effect of cooling the atmosphere and the negative effect of reduction of precipitation (p. 165-166).

Does geoengineering not contribute to the acceleration of the destruction of nature, though? To the author, nature free from all human action has no longer existed since we entered the Anthropocene (Crutzen and Stoermer 2000), this geological era

⁶ Negative emissions or “carbon capture and storage” measures aim at reducing the atmospheric concentration of CO₂. Those terms encompass heterogenous measures. Some are based on photosynthesis, such as reforestation and afforestation, or the more industrial measures that are bioenergy with carbon capture and storage. Others are not based on biomass, such as the nascent technologies of direct air capture.

⁷ Solar radiation management, also called “solar geoengineering”, aims at reducing the amount of energy received from the sun by enhancing the reflection of its rays. Some measures are not too technical, like painting buildings and roads white. Others have a direct impact on ecosystems, like ocean fertilization or marine cloud brightening. The most seriously considered and debated measure is to imitate the great volcanic eruptions by regularly injecting aerosols in the stratosphere.

dominated by human action. What should be avoided is rather the bad Anthropocene, or “Misanthropocene”, a world of wars and fortified walls in which mankind turns out to be unable to peacefully take on the climate challenge (p. 183). In order to fight against that hopeless perspective, we need realistic utopias, conceptions of the world that are feasible, sustainable and prosperous for all. Moellendorf outlines two of them: on the one hand, the “Arcadian Anthropocene”, based on the ideal of harmony between humans and nature, and on the other hand, the “Promethean Anthropocene”, based on international cooperation, technology and socio-economic transformation (p. 187-188). Because he deems an end to poverty impossible without a certain alteration of nature impossible, he nonetheless rejects the Arcadian Anthropocene. If the intrinsic value of ecosystems justifies an imperative of protection of nature, the latter does not outweigh that of fighting against poverty in case of a conflict between the two.

Courage or optimism?

In this thought-provoking book, Moellendorf takes the crucial problem of articulating imperatives of fighting against climate change and fighting against mass poverty seriously. The main originality of his thinking is the conception of climate hope he comes up with. By acknowledging the importance of “hope-makers”, including “facts about the world, social processes, theories, realistic utopias, and the actions of others” (p. 202), the author avoids the pitfalls of voluntarist conceptions of hope as courage⁸. However, by asserting that hope is not just an effort of the will, insulated from facts, Moellendorf invites his readers to question his socio-economic and technological hypotheses as to what is or is not possible all the more meticulously.

Readers may well wonder if he is not, at times, unduly optimistic regarding technology, namely when he assumes that economic growth and emissions growth can be decoupled (p. 141) and in his analysis of geoengineering. For example, he rejects the application of the precautionary principle to the risk of termination shock⁹ that stratospheric aerosol injection poses, arguing that there are institutional solutions to protect us from it (p. 164). According to C. McKinnon (2020), on the contrary, we should question the legitimacy of such an intervention by taking the most pessimistic

⁸ For a conception of hope as courage, see Lear’s “radical hope” for example (2006).

⁹ The notion of termination shock refers to the risk of accelerated climate change if stratospheric aerosol injection, by artificially and temporarily offsetting global warming, unexpectedly stopped due to a conflict, a terrorist attack or any other form of economic or political instability.

scenarios into account and not supposing, like Pangloss, that we live in the best possible world.

As to negative emissions, Moellendorf sees them more as a hope-maker than as a moral hazard¹⁰ (p. 159). He is right to note that negative emissions will be necessary to reach carbon neutrality. However, H. Shue (2021) also shows that it is necessary to question the temporality of implementing those technologies and the finality of the hope invested into them, pointing a finger at the risk of distraction that carbon capture and storage could represent compared to the urgent - and less costly! - reduction of emissions.

Finally, the conceptual analysis of hope could have benefited from a shift and a targeted study of the particular forms of despair which threaten the peoples living on the forefront of climate change, such as the inhabitants of small island states or of the Arctic, whose cultural identity is threatened (André 2020). It may be by drawing inspiration from non-Western cultures, *pace* Moellendorf (p. 190), that we could develop social utopias independent from economic growth and technical progress.

translated from French by Ludivine Da Silveira

Go further

- Pierre André, « Pertes et préjudices : quelles obligations de justice climatique ? », *Ethica* vol. 23, n° 2, 2020, p. 173-199.
- Simon Caney, « Cosmopolitan justice, responsibility, and global climate change », *Leiden journal of international law*, vol. 18, n° 4, 2005, p. 747-775.
- Paul Crutzen, Eugene F. Stoermer, « The “Anthropocene” », *Climate Change Newsletter*, vol. 41, n° 17, 2000.
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- Garrett Hardin, « The Tragedy of the Commons », *Science*, vol. 162, n° 3859, 1968, p. 1243-1248.
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¹⁰ Moral hazard mainly refers to the fact that agents may tend to adopt riskier behaviors if they are insured against some risks. In this case, negative emissions may be seen as insurance against climate change, leading people to take the imperative reduction of greenhouse gas emissions less seriously.

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First published in *laviedesidees.fr*, 9 november 2022.

Published in *booksandideas*, 10 november 2022.