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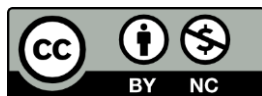
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Climate Change, Human Rights and the Problem of Motivation

Michel Bourban

In this paper, I discuss some of the human rights that are threatened by the impact of global warming and the problem of motivation to comply with the duties of climate justice. I explain in what sense human rights can be violated by climate change and try to show that there are not only moral reasons to address this problem, but also more prudential motives, which I refer to as quasi-moral and non-moral reasons. I also assess some implications of potentially catastrophic impacts driven by this ecological issue. My aim is to locate, by outlining a normative perspective based on sound empirical findings, urgent climate injustices, and explain why well-off citizens in developed countries have strong reasons to avert the potentially massive violation of the rights of present and future victims of climate change.

Climate change is one of the most challenging environmental problems of our time. Here I try to develop a strong case for addressing prominent climate injustices by dealing with important ethical questions about human rights and by bringing considerations of justice and feasibility together. To do so, I discuss moral reasons to mitigate the harmful impacts of global warming, alongside quasi-moral and non-moral reasons to combat climate change. The overall objective is to explore the human rights approach to climate change by highlighting its strengths and coping with some of its weaknesses. The main challenge ahead is to reconcile fairness with feasibility: to respect the constraint of feasibility, an approach of climate justice should be realistic and address the problem of motivation.

I begin by explaining why an approach of climate justice based on universally accepted human rights is normatively convincing as well as politically realistic. Next, I show how the impacts of global warming violate specific human rights of members of present and future generations. I then turn to some recent and challenging objections to this kind of approach. Last, I explain how to deal with the problem of partial compliance with the duties of climate justice.¹

¹ I stress that my position is only one normative approach to climate change among many others: for instance, it could be equally convincing to justify the existence and develop the content of duties of climate justice by referring to the notion of common ownership of the Earth. For instance, see Mathias Risse, *On Global Justice* (Princeton: Princeton University Press, 2012), Ch. 10.

Human Rights and Climate Change

While controversy surrounds the climate change debate, this paper follows the views of most scientists working in the field that climate change is real, man-made and harmful: the average global temperature is rising mostly because of anthropogenic emissions of greenhouse gases and the effects of this warming on the climate are overwhelmingly harmful for most forms of life on Earth, in particular for humans. A striking fact of climate change is that those who are the least responsible for it are those who suffer the most from it. If the Intergovernmental Panel on Climate Change (IPCC) has scientifically established this double inequality in responsibility for and vulnerability to climate change, a normative approach helping us to explain why these global inequalities are unjust is also needed. Human rights represent a convincing moral approach. Human rights, especially basic ones, are indeed the common denominator between the multiple positions that we can find in the highly complex field of global justice: most political theorists agree that fundamental individual rights represent the minimum standard that has to be guaranteed universally if the most urgent global injustices are to be addressed². This is the main reason why I think that this approach is normatively sound.

To make this position politically realistic as well, I focus exclusively on human rights that already exist in international law, rather than on new environmental human rights; I also refer only to negative rights, because they are less controversial than positive rights. The reason for this is that while negative rights seem to generate mere duties not to perform certain kinds of actions, positive rights also require corresponding duty-bearers (be it individuals, corporations, states or global institutions) to perform certain actions. Basic human rights represent 'the internationally recognized minimal standard of our age':³ by showing how climate change threatens negative human rights, one can find a fairly uncontroversial position. The idea is not to develop a theory of justice, but rather to present an approach of climate justice based on human rights: I do not attempt to ground pure principles of justice, but only to locate specific climate injustices and to explain how they could be prevented.⁴

There are very different – and competing – theories of human rights, such as legal, political and moral approaches. Like Simon Caney and Derek Bell,⁵ I advocate here a moral position, where human rights are characterized by four main elements:

² Even a minimalist such as David Miller acknowledges that basic human rights generate compelling duties towards distant strangers: see David Miller, *National Responsibility and Global Justice* (Oxford: Oxford University Press, 2007), Ch. 7.

³ Thomas Pogge, *World Poverty and Human Rights: Cosmopolitan Responsibilities and Reforms*, second edition (Cambridge: Polity Press, 2008), p. 25.

⁴ *Ibid.*: '[h]uman rights thus furnish a necessary, not a sufficient, condition of social justice: that some institutional design realizes human rights insofar as is reasonably possible may not guarantee that it is just. Only the converse is asserted: an institutional design is unjust if it fails to realize human rights insofar as is reasonably possible.'

⁵ Simon Caney, 'Climate Change, Human Rights and Moral Thresholds', in *Human Rights and Climate Change*, edited by Stephen Humphreys (Cambridge: Cambridge University Press, 2010), pp. 69-90, and Derek Bell, 'Does anthropogenic climate change violate human rights?', *Critical Review of International Social and Political Philosophy* 14:2 (2011), pp. 99-124.

- They are based on our common humanity and are therefore independent of the country in which people are born, the place where they live or the actions they have performed;
- They represent a moral threshold below which no one should fall, the most basic moral standards to which persons are entitled;
- They generate obligations on all persons to respect these basic minimum standards: everyone has a duty not to violate or contribute to the violation of human rights;
- They generally take priority over other moral values, such as promoting happiness.⁶

In short, 'human rights specify [a] minimum moral threshold to which all individuals are entitled, simply by virtue of their humanity, and which override all other moral values.'⁷ If duties without rights make sense, rights by their nature impose demands and constraints on others' action.

Human Rights under Threat

One good starting point to explain why human rights are jeopardized by climate change is the 2007-2008 Human Development Report, which reads: '[c]limate change is already starting to affect some of the poorest and most vulnerable communities around the world.' According to the United Nations Development Program (UNDP), if global greenhouse gas emissions keep on increasing, 'climate change will undermine international efforts to combat poverty', for instance by 'hampering efforts to deliver the [Millennium Development Goals] promise.' For this reason, our contribution to this environmental problem represents 'a systematic violation of the human rights of the world's poor and future generations and a step back from universal values'. In other words, '[t]he real choice facing political leaders and people today is between universal human values, on the one side, and participating in the widespread and systematic violation of human rights on the other.'⁸

⁶ As one of the anonymous reviewers pointed out, a serial killer's right to freedom could be overridden by other moral considerations. My response is that here we face a clash between two human rights: the right of the (potential) victims to physical integrity; and the right of the criminal to freedom. The right that has to be overridden is the one of the criminal, for the reason that his action violates the third requirement: everyone has a duty not to violate or contribute to the violation of human rights. The aim of the fourth requirement is to guarantee that human rights constraint the pursuit of other moral goals. If, say, promoting welfare in a given society requires the violation of a minority's or even a person's fundamental rights, then these rights should take priority.

⁷ Caney, 'Climate Change', p. 73. As Caney emphasises in a former paper on the topic, his approach is inspired by Pogge's political philosophy (Simon Caney, 'Human Rights, Responsibilities and Climate Change', in *Global Basic Rights*, edited by Charles Beitz and Robert Goodin (Oxford: Oxford University Press, 2009), pp. 227-247, at p. 229 n12).

⁸ UNDP, *Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided World* (New York: United Nations Development Programme Publications, 2008), pp. 3, 7, 10, online at: http://hdr.undp.org/sites/default/files/hdr_20072008_summary_english.pdf (accessed 2013-07-19).

Although there is evidence that climate change is already undermining and will increasingly undermine a plurality of human rights,⁹ I focus here only on two of the most accepted rights, both from a philosophical and from a political point of view: the rights to subsistence and to health. These rights are usually considered to be positive rights. In line with the minimalist approach I have introduced above, I will instead consider them as negative rights. I assess how climate change threatens them by using mainly the 2007 IPCC Report,¹⁰ the most authoritative scientific source for multidisciplinary debates on the topic.

Beginning with the right to subsistence, it can be minimally defined as the right not to be deprived of one's means of subsistence by other people's actions. Two consequences of global warming that will hit agriculture badly are sea-level rise and extreme meteorological events. Because of such (and many other) effects, the IPCC estimates that by 2020, in some African countries, agricultural production may be diminished up to 50 per cent, thereby exacerbating poverty in the most disadvantaged region of the world; by 2050, crop yields could decrease up to 30 per cent in central and south Asia; and finally, by 2100, mean yields for some crops in northern India could be reduced by up to 70 per cent.

One country in which massive violations of this right will occur if political inertia remains is Bangladesh: some lands will be lost to the sea, some will be flooded when there are storms, and even lands that remain dry will be damaged. All of this will cripple agricultural output, increase hunger and starvation, and push the country further into poverty. Rising sea will flood large tracts of land, interfering with existing infrastructure and food production, 'possibly creating the largest humanitarian crisis the world has ever faced.'¹¹ But small island nations such as the Maldives face an even worse fate: they may entirely disappear beneath the waves, which would cause massive migration, with entire populations becoming not only climate migrants, but also climate exiles.¹²

A second internationally recognized human right threatened by climate change is the one to health. It can be defined as the right not to have one's health seriously reduced or threatened by other people's actions. Climate change is likely to affect the health status of millions of people in the near future by aggravating the problem of malnutrition which in turn may lead to social unrest; by increasing disease and injury due to heat waves, floods, storms, fires and droughts; by increasing the frequency of cardio-respiratory diseases; and by altering the spatial distribution of some infectious diseases.

⁹ As Stephen Humphreys asserts, 'climate change will undermine - indeed, is already undermining - the realization of a broad range of internationally protected human rights: rights to health and even life; rights to food, water, shelter and property; rights associated with livelihood and culture; with migration and resettlement; and with personal security in the event of a conflict.' (Stephen Humphreys, 'Introduction: human rights and climate change', in *Human Rights and Climate Change*, edited by Humphreys, pp. 1-33, at p. 1)

¹⁰ IPCC 2007, 'Summary for Policymakers', in *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by M. L. Parry *et al.* (Cambridge: Cambridge University Press, 2007), pp. 7-22.

¹¹ Andrew Guzman, *Overheated: The Human Cost of Climate Change* (Oxford: Oxford University Press, 2013), p. 12.

¹² Sujatha Byravan and Sudhir C. Rajan, 'The Ethical Implications of Sea-Level Rise Due to Climate Change', *Ethics & Public Affairs* 24:3 (2010), pp. 239-260.

Let us take two existing diseases: malaria and dengue fever. If global temperatures increase by 2 to 3°C, malaria will present a risk to an additional 3 to 5% of the world's population, that is, up to 200 million *additional* people. Concerning dengue fever, if the temperatures increase by 2.5°C, then 2.5 *billion* additional people may be at risk. Climate change also increases the risk of a global health crisis by pushing more people into cities and refugee camps with unsanitary spaces, precisely the conditions facilitating the outbreak of serious and potentially global epidemics.¹³ Therefore, climate change reinforces and amplifies current as well as future socio-economic disparities, leaving the disadvantaged with greater health burdens, exacerbating global health inequities among current generations and establishing profound intergenerational inequities.¹⁴ A prominent reason why such inequities are unjust is because they force present and future persons to live under the minimal threshold set by human rights.

These different drivers of human rights violation do not operate in isolation: most of them are interrelated. For example, heat and droughts are often linked, along with fires and water shortages. Floods precipitate disease outbreaks such as cholera and other diarrheal disease, damage infrastructures and disrupt food and water security. Many regions will be exposed to multiple impacts and thus multiple human rights violations. More generally, the impacts of climate change 'will interact with wider social, economic and ecological processes that shape opportunities for human development.'¹⁵ Climate change thus magnifies existing risks by exacerbating world poverty, the most important cause of human rights violation.

Who Is Responsible?

At this point, an important question of definition arises: in what sense can we say that specific human rights of present and future persons are *violated* by the impacts of global warming? It is very difficult to assess who is responsible for and who is suffering from the harms resulting from the effects of global warming. Indeed, it is complex to know who, between individuals, corporations, states and global institutions, carries the main responsibility for historic and current emissions as well as who is a victim of a harmful consequence of climate change rather than of another social or environmental problem. As Dale Jamieson puts it, 'climate change is not a matter of a clearly identifiable individual acting intentionally so as to inflict an identifiable harm on another identifiable individual, closely related in time and space.'¹⁶

For this reason, *individual* responsibility for the harms that will likely result from global warming is very hard to track down – even if it may not be impossible.¹⁷ However, there is a *collective* responsibility for climate change-induced human rights violations. Even if each isolated agent's actions are not harmful, they are part of a causal chain that predictably causes climate change. Limiting our conception of human rights violations to

¹³ Guzman, Ch. 6. Here, Guzman mostly draws on the IPCC 2007.

¹⁴ Elizabeth G. Hanna, 'Health hazards', in *The Oxford Handbook of Climate Change and Society*, edited by John S. Dryzek, Richard B. Norgaard, and David Schlosberg (Oxford: Oxford University Press, 2011), pp. 217-231.

¹⁵ UNDP, p. 19.

¹⁶ Dale Jamieson, 'The Nature of the Problem', in *The Oxford Handbook of Climate Change and Society*, edited by John S. Dryzek, Richard B. Norgaard, and David Schlosberg, pp. 38-54, at p. 44.

¹⁷ See for instance Anne Schwenkenbecher, 'Is there an obligation to reduce one's individual carbon footprint?', *Critical Review of International Social and Political Philosophy* 17: 2 (2014), pp.168-188.

discrete actions that in isolation inflict a severe harm on a specific victim would be a mistake. If the cumulative result of the behaviour of multiple agents is likely to seriously harm other persons, and if the harm is foreseeable, then these agents are collectively responsible for this outcome.¹⁸

How should we conceive the responsibility for the harms generated by global warming? Climate change can be referred to as a 'new harm'.¹⁹ Our ordinary habits, our everyday activities, contribute to the harming of other people near and far, now and in the future. The classic conception of the harm principle – discrete, individual actions with observable and measurable impacts on particular persons – no longer suffices to explain the multiple ways our conduct may violate the rights of other people. No individual's action is the sole cause of harm; yet it does make a causal contribution to an overall harmful effect. Climate change is an aggregative harm generating systematic human rights violations. Consumers and producers share a responsibility in this new harm, less as individuals (there is arguably nothing intrinsically wrong in burning fossil fuels) than as members of a collective (where the multiple effects of people's actions are joined together and create harms).

Nation-states are the best candidates to represent such collectives. Determining all responsible nation-states would take us too far from the scope of this paper: suffice it to say that we cannot measure this responsibility only by statistics such as national or *per capita* emissions and national or *per capita* incomes; we must also take into account how nations differ with regard to the kind of political institutions or political regime they possess. Members of democratic nations can be held collectively responsible for their emissions because they all enjoy fair opportunities to participate in deciding the legal and political framework that structures individual decisions: since they persist in the pursuit of policies detrimental to the climate, members of democratic nations are collectively responsible for their emissions and the corresponding harms. By contrast, in authoritarian political regimes, citizens have no say in government, no fair opportunity to vote and elect representatives: they cannot be held collectively responsible. As David Miller writes, 'the more open and democratic a political community is, the more justified we are in holding its members responsible for the decisions they make and the policies they follow.'²⁰

Therefore, when I write that 'we' are collectively responsible for the human rights violations caused by climate change and that 'we' have a compelling moral duty to develop and implement strong climate policies that lessen these injustices, I mean mostly the well-off citizens of developed countries. Developed countries are the most (even if not the only) responsible for the violation of human rights, and as members of such collectives we must comply with duties of climate justice and prevent as many climate change-induced human rights violations as possible.²¹

¹⁸ For instance, see Elizabeth Ashford, 'Severe Poverty as a Systematic Human Rights Violation', in *Cosmopolitanism Versus Non-Cosmopolitanism: Critiques, Defenses, Reconceptualizations*, edited by Gillian Brock (Oxford: Oxford University Press, 2013), pp. 129-155.

¹⁹ Judith Lichtenberg, *Distant Strangers: Ethics, Psychology, and Global Poverty* (Cambridge: Cambridge University Press, 2014), Ch. 4.

²⁰ Miller, p. 130. See also Ludvig Beckman, 'Democracy, national responsibility and climate change justice', *Democratization* 19:5 (2012), pp. 843-864.

²¹ There is an extremely rich literature on the problem of responsibility for climate change that I cannot take into account here; but almost all philosophers working on this topic agree that

The Limits of a Human Rights Approach to Climate Change

So far, I have tried to highlight the strengths of a human rights approach to climate change; now I will try to defend it against important objections.

A Response To Gardiner's Objections

According to Stephen Gardiner, a human rights approach 'offers only a partial ethical framing of the climate problem.' Indeed, 'the widespread undermining of human rights is only one of the ethical dimensions of climate change', and does not explain, for instance, why 'our species' infliction of catastrophic damages on non-human animals and the rest of nature' is wrong.²² I agree with Gardiner's remarks, but I do not think that they question the approach: they only emphasise a limit that I already mentioned above by referring to additional ways to ground duties of climate justice. These different philosophical strategies (human rights, common ownership of the Earth, and so on) are complementary rather than mutually exclusive, as long as they do not exceed their own limits. Therefore, Gardiner is right to say that even if we manage to anticipate human rights violations likely to result from climate change, full climate justice would still be out of our reach. Again, this approach only locates some of the most important climate injustices, not all of them.

There is nevertheless an important problem with Gardiner's objection. Climate justice is only concerned with human activities whose consequences harm other human beings, especially the most disadvantaged, who are the main victims of climate injustices. If climate change may also violate the rights of nonhuman beings, it is not the role of an approach of justice to cope with this problem; it is rather the task of another field of climate ethics. For this reason, when Gardiner writes in a former paper that 'climate change raises issues of justice in relation to nature' or when he mentions the possibility to speak in terms of 'ecological injustice' or 'injustice between species', I think he is mistaking.²³ I do not deny that humans may have duties to nonhuman beings, such as an obligation to prevent unnecessary animal suffering. All I say is that justice focuses on the relationship between human beings, and therefore does not take into consideration such issues, that must be left for other fields of philosophical research such as nonhuman ethics.

Another worry of Gardiner's is that this kind of approach is too much victim-centred and does not say much about who the duty-holders are and how far their

developed countries should bear most of the burdens of climate change. I do not deny that well-off citizens in non-democratic nation-states such as China also have duties of climate justice: certainly, 'new consumers' in emerging countries are also partly responsible for global warming and its consequences. Given my purpose in this paper, it is nevertheless sufficient to focus on those who are the most responsible for the causes and the effects of the problem; but that does not mean that they are the only ones. Some papers on this topic can be found in Stephen M. Gardiner, Simon Caney, Dale Jamieson, and Henry Shue (eds.), *Climate Ethics: Essential Readings* (Oxford: Oxford University Press, 2010).

²² Stephen M. Gardiner, 'Human Rights in a Hostile Climate', in *Human Rights: The hard Questions*, edited by Cindy Holder and David Reidy (Cambridge: Cambridge University Press, 2013), pp. 211-230, at pp. 220-221.

²³ Stephen M. Gardiner, 'Climate Justice', in *The Oxford Handbook of Climate Change and Society*, edited by John S. Dryzek, Richard B. Norgaard, and David Schlosberg, pp. 309-322, at p. 311.

responsibility extend.²⁴ Even after explaining how to determine who the duty-bearers are, the question of the extent of their collective responsibility remains open. Gardiner's general concern is that it is unclear whether controversial conceptions of human rights can be successfully ruled out. One reason for this is that some supporters of this approach call for new environmental rights:²⁵ I avoided this problem by using only existing human rights. Still, one must admit that a basic human rights approach to climate change may imply more ambitious conclusions than it seems at first sight. The reason, not mentioned by Gardiner, is that negative rights do not only generate negative duties, but also positive ones. In order to guarantee the rights to subsistence and to health, refraining from harming is not enough; we also have to perform certain kinds of action. We have to make sure that vulnerable populations can adapt to the severe impacts of climate change, for instance by helping them to build sea-walls and better irrigation systems. We must compensate the victims of climate change, for instance by distributing immigration rights to climate migrants and exiles. We also have to reform existing institutions in order to ensure that a catastrophic climate change is avoided, for instance by improving existing cap-and-trade systems. Such duties are quite demanding, which shows that a human rights approach to climate justice is indeed more ambitious than it may seem at first glance.

That being said, I think that Gardiner exaggerates when he writes that 'a human rights approach faces philosophical difficulties that provide a *convenient distraction* for those wishing to take advantage of a perfect moral storm.'²⁶ For him, a human rights approach only names the problem, without telling us how to address it. But this is not accurate: this position clearly grounds a duty to promote effective institutions for the protection of basic human rights against the threats posed by greenhouse gas emissions – be it in terms of mitigation, adaptation or compensation. The harms generated by climate change are produced by the operations of social institutions that structure the behaviour of millions of agents; therefore, reforming those institutions is the best way to lessen these harms. Climate change results from institutional factors and the collective behaviour of individuals, and thus needs to be addressed in a concerted fashion. As Derek Bell puts it, '[a]nthropogenic climate change violates human rights because it is the consequence of our collective failure to fulfil our duty to promote effective institutions for controlling greenhouse gas emissions.'²⁷ If such a positive duty is more demanding than mere negative duties, it is justified by a minimalist account of human rights accepted by most of political theorists writing on global justice: for this reason, I believe that Gardiner's objection is incorrect.

An additional reason why Gardiner believes that a human rights approach is a convenient distraction is that it cannot respond to classical objections made to theories of intergenerational justice, such as the non-identity problem or the impossibility for future persons to have rights. These objections are indeed challenging; nevertheless, Simon

²⁴ Gardiner, 'Human Rights', p. 224.

²⁵ See, for instance, Tim Hayward, *Constitutional Environmental Rights* (Oxford: Oxford University Press, 2005). Caney himself, as Gardiner rightly points out, also sometimes endorses this kind of position, for instance when he mentions the 'right not to suffer from the ill-effects associated with global climate change', in Simon Caney, 'Cosmopolitan Justice, Rights and Global Climate Change', *Canadian Journal of Law and Jurisprudence* 19:2 (2006), pp. 255-278, at p. 263.

²⁶ Gardiner, 'Human Rights', p. 227. Emphasis in original.

²⁷ Bell, p. 112.

Caney, Gardiner's friendly target in this paper, has developed very convincing responses to these objections that he fails to take into account. Here again I can only refer to these complex debates.²⁸

For these reasons and the ones I have developed above, and despite the concessions that should be made to Gardiner's interesting objections, I cannot agree with his conclusion: '*even within a human rights approach there is a high risk of moral corruption.*'²⁹ I think that this approach remains a powerful moral and political approach in spite of Gardiner's reservations.

The Problem of Motivation

I now move to a more serious objection that can be made against a human rights approach to climate change, and indeed against any deontological approach: the problem of motivation to comply with moral duties.

Citizens and politicians, and consumers and producers, tend to worry about the short and (at best) middle term consequences of the actions they perform. This fact represents one of the best explanations of the deplorable state of climate policies. Moral considerations matter; but to make sure that they matter enough, they must somehow be connected to people's interests. This statement refers to the metaethical problem of motivation: there is a psychological gap between the acceptance of a rule and acting in accordance with it. Moral norms cannot by themselves compel conformity: all they do is prescribe a certain course of action. In order to make someone act accordingly, they often have to rely on further factors. According to Dieter Birnbacher, 'having moral reasons for an action and being motivated to carry it out are distinct items, so that a psychological mechanism independent of the acceptance of the moral rule is needed to explain action in conformity with it.'³⁰ Furthermore, we usually feel concerned when the effects of our actions are near and visible, but not so when they are dispersed through space and time: when we harm distant strangers, we tend not to feel any responsibility, which represents one more impediment to action.

For these reasons, referring exclusively to moral motives to combat climate change is not enough: a human rights approach to climate change is insufficient to trigger the fulfilment of corresponding duties. If the acceptance of moral duties is insufficient to motivate action in conformity with these duties when competing motivations exist, other psychological factors need to be integrated. 'Moral motives are usually too weak to effect appropriate action unless supported by quasi-moral and non-moral motives pointing in the same direction':³¹ if moral motives refer to acts performed from a moral conscience or simply in virtue of the fact that they are duties, quasi-moral motivations are altruistic motives such as love, compassion, solidarity or generosity, while non-moral motives refer to the desire for self-respect, social recognition and personal interest promotion. To motivate those who are collectively responsible for climate change to take action, we

²⁸ Caney, 'Cosmopolitan Justice', pp. 264-270, and Caney, 'Human Rights', pp. 234-237. See also Bell, pp. 104-110.

²⁹ Gardiner, 'Human Rights', p. 228. Emphasis in original.

³⁰ Dieter Birnbacher, 'What Motivates Us to Care for the (Distant) Future?', in *Intergenerational Justice*, edited by Axel Gosseries and Lukas H. Meyer (Oxford: Oxford University Press, 2009), pp. 273-300, at pp. 273-274.

³¹ *Ibid.*, p. 282.

must therefore show whether, and in what sense, specific quasi-moral and non-moral motives point in the same direction than moral duties.

Potentially Catastrophic Consequences

One way to achieve this objective is to assess the effects of an abrupt warming. If the 2007 IPCC Report uses a gradual model of climate change, more and more scientists emphasise the possibility of an abrupt increase in global temperatures due to positive feedbacks in the climate cycle. For instance, once certain tipping points are crossed in the earth's climate system, the terrestrial and the oceanic systems may be transformed from carbon sinks to sources of greenhouse gases.³² Catastrophic scenarios are so influent in climate sciences that even the 2012 IPCC Special Report mentions them:

Low-probability, high-impact changes associated with the crossing of poorly understood climate thresholds cannot be excluded, given the transient and complex nature of the climate system. Assigning 'low confidence' for projections of a specific extreme neither implies nor excludes the possibility of changes in this extreme.³³

If such a catastrophe happens in the future, it will not only affect the distant poor, it will also hit very affluent people and their children and grandchildren, wherever they live. Well-off citizens of developed countries will no doubt be concerned because of their interests in economic growth, health security and political stability; even their own fundamental interests in subsistence and life may be jeopardized. In that sense, they have non-moral reasons, based on their personal interests, to combat global warming. But they also have quasi-moral reasons to do so, since their descendants may be forced to live in an even more dangerous world: as long as present people care for their children, they have strong motives to tackle climate change, even if their short-term selfish interests point in the other direction.

Some catastrophic events could happen only in several centuries; but some may already take place before the end of the 21st century. According to Andrew Guzman, *if* global emissions go unchecked, 'within my lifetime, or, if we are lucky, within the lifetime of my children, there will be acute water shortages affecting hundreds of millions, or perhaps billions, people.'³⁴ Likewise, according to James Hansen, *if* political inertia remains, 'the best estimate I can make of when large sea level change will begin is during the lifetime of my grandchildren – or perhaps your children.'³⁵

The reason why I have stressed the 'ifs' in the two last sentences is that it is crucial to insist on the fact that catastrophic consequences are only possibilities, whose probability depends on our course of action in the coming decades. Catastrophic scenarios must be used carefully: if they are presented as something else than mere

³² A good reference on this topic is David Archer, *The Long Thaw: How Humans are Changing the next 100,000 Years of Earth's Climate* (Princeton: Princeton University Press, 2009).

³³ IPCC 2012, 'Summary for Policymakers', in *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change*, edited by C. B. Field *et al.* (Cambridge/New York: Cambridge University Press, 2012), pp. 3-22, at pp. 11-13.

³⁴ Guzman, p. 131.

³⁵ James E. Hansen, *Storms of my Grandchildren: The Truth about the Coming Climate Catastrophe and our Last Chance to Save Humanity* (London: Bloomsbury, 2009), p. 256.

projections, then they can have perverse effects. If people believe that a catastrophic climate change is inescapable, then they will have no reason to reduce their emissions. If the battle against climate change is already lost, as Dale Jamieson claims,³⁶ if the end is nigh, there is no reason to fight for our common future. This is why it cannot be too much emphasised that catastrophic impacts are only probabilities that can be reduced by existing generations' decisions. It is up to us to ensure that future generations will enjoy an open future rather than suffer from the severe impacts of an abrupt climate change, including massive human rights violations.

Much more can be said about catastrophic scenarios, but the point is that they represent a powerful driver of political action: they are scientifically based and deal with the non-moral and quasi-moral motivations of well-off citizens living in developed countries. They are not less realistic than the gradual model if global emissions keep on increasing; they are just, as the IPCC stresses, 'poorly understood', but it neither means that they are unlikely, nor that they will only happen in the distant future. As Henry Shue emphasises, '[t]hat something is uncertain in the technical sense, that is, has no calculable probability, in no way suggests that its objective probability, if known, would be small.'³⁷ And even if we discover later that the probability of a catastrophic climate change is low, then strong action to mitigate climate change remains crucial. Indeed, what is most likely to happen is not necessarily the most important consideration in making a choice: an unlikely possibility may be more important if its results will be extremely bad. A dangerous anthropogenic interference with the climate cycle would be so bad that, even multiplied by a small probability, its expected badness is more important than the harms that would be caused by its more likely results.³⁸

Additional Reasons to Take Immediate Action

To motivate existing generations to act, it is not even necessary to rely on pessimistic projections. If global emissions keep on growing in the coming decades, then even the most conservative scenarios project severe impacts. I illustrated this point above by using the projections of the IPCC and explaining how climate change threatens the rights to subsistence and to health of the global poor; but we can also anticipate what the effects of a warming of 2°C and more can look like in developed countries. Many of our interests are at risk: for instance, our economic security is threatened, with diminished importations, exportations and international financial transactions as the economy of other countries collapse under the severe impacts of climate change. Likewise, our health security can be seriously jeopardized by the creation and the spread of a global epidemic.

³⁶ See his quite pessimistic 'Climate Change, Consequentialism, and the Road Ahead', *Chicago Journal of International Law* 13:2 (2013), pp. 439-468. The title of his forthcoming book is also quite bleak: *Reason in a Dark Time: Why the Struggle Against Climate Change Failed – and What It Means for Our Future* (Oxford: Oxford University Press, forthcoming).

³⁷ Henry Shue, 'Deadly Delays, Saving Opportunities: Creating a More Dangerous World?', in *Climate Ethics: Essential Readings*, edited by Stephen M. Gardiner, Simon Caney, Dale Jamieson, and Henry Shue, pp. 163-177, at p. 148.

³⁸ See John Broome, *Climate Matters: Ethics in a Warming World* (New York/London: W. W. Norton, 2012), pp. 120-132.

In a globalized world, no country is protected from the impacts of climate change.³⁹

To take a concrete example: a striking fact with US leaders is that they recognise themselves that their interests are not any longer exclusively national, but also global. If so far they have rather used this fact to try to legitimize preventive wars, they are also forced to admit that this interconnectedness represents a strong motive to implement strong climate policies. To be coherent, US representatives must acknowledge that, since their national security depends on global factors, they have compelling interests to combat climate change. Take for instance two statements from members of the George W. Bush administration: '[t]oday the distinction between domestic and foreign affairs is diminishing. In a globalized world, events beyond America's borders have a greater impact inside them'; and

The United States has interests, responsibilities, and commitments that span the world. As a global power with an open society, the United States is affected by trends, events and influences that originate from beyond its borders.⁴⁰

Barack Obama himself declared in a speech to the UK Parliament that '[n]o country can hide from the dangers of carbon pollution.'⁴¹ US leaders must therefore stop using this observation only when it suits them; they should also recognise that their political inertia is inconsistent with their national security, especially when their leadership represents humanity's best hope to avoid a catastrophic climate change.

One final point before concluding. If we move from an intragenerational to an intergenerational point of view and ask what could motivate us to care for the future, the answer lies in our 'life-transcending interests.'⁴² The scope of individuals' interests is not confined to concerns of a lifetime: most of us have a conception of the good intimately bound up with our hopes for our descendants; we have projects and things we value that we want to pass on to our successors; we care about their heritage and what will happen to it; and we want our ideals to flourish in future generations. These interests, central to our lives and constitutive of our identities, can also motivate us to act in accordance with our duties not to violate the global poor's and future generations' rights by adopting strong climate policies. According to Guzman, 'the most important barrier to a sensible and determined response to climate change is a lack of public understanding about the ways in which our lives and the lives of children will be affected.'⁴³ Or, as Hansen writes, '[c]itizens with a special interest - in their loved ones - need to become familiar with the science, exercise their democratic rights, and pay attention to politicians' decisions.'⁴⁴

³⁹ For instance, see Jody Freeman and Andrew Guzman, 'Climate change and U.S. Interests', *Environmental Law Reporter* 41:8 (2011), pp. 10695-10711.

⁴⁰ Quoted in Neta C. Crawford, 'The False Promise of Preventive War: The "New Security Consensus" and a More Insecure World', in *Preemption: Military Action and Moral Justification*, edited by Henry Shue and David Rodin (Oxford: Oxford University Press, 2007), pp. 89-125, at p. 95.

⁴¹ Quoted in Elizabeth Cripps, *Climate Change and the Moral Agent: Individual Duties in an Interdependent World* (Oxford: Oxford University Press, 2013), p. 27.

⁴² Janna Thompson, 'Identity and Obligation in a Transgenerational Polity', in *Intergenerational Justice*, edited by Gosseries and Meyer, pp. 25-49.

⁴³ Guzman, p. 2.

⁴⁴ Hansen, p. xi.

Conclusion

Climate change is not just a problem for the future: it is already affecting humanity and the environment. It is too late to hold back global warming, but the longer we wait to respond to it the more difficult it will be to limit its most adverse impacts, and the more costly it will be to adapt. While the IPCC projected that many of the adverse effects of global warming would occur much later in the century, recent science tells us that they will occur much sooner – and in many cases may be happening already – and will likely be substantially more severe than the IPCC anticipated. If we want to avoid the most dramatic impacts of climate change, then action is needed now.⁴⁵

Contrary to what Gardiner claims, a human rights-based approach could guide this action. Identifying likely transgressions of human rights by the impacts of global warming could refocus attention on the human priorities that ought to drive policy: building human rights assessments into mitigation and adaptation scenarios would refine and improve policies, and provide criteria for their adoption or rejection.⁴⁶

I have explained in what sense specific human rights are violated by climate change, and what could at least partially motivate those who are collectively responsible for these violations to stop them. But global warming causes many other forms of harms, and to combat them we must deal with many other practical problems, in particular by finding politically realistic and environmentally efficient institutional reforms.

To ensure that existing and future people won't live in a dangerous world where systematic violations of human rights by climate change become unavoidable, strong climate policies must be adopted in the coming decades. To do so, developing moral reasons for action is an important task; but we also need to develop quasi-moral and non-moral reasons to guarantee that policymakers of the developed world will be motivated to sign and respect a binding climate treaty, and that consumers and producers will change their habits.⁴⁷

Michel Bourban, University of Lausanne
michel.bourban@unil.ch

⁴⁵ For instance, see Paul G. Harris, *What's Wrong with Climate Politics and how to Fix It* (Cambridge: Polity Press, 2013), pp. 3-16.

⁴⁶ See, for example, Stephen Humphreys, 'Conceiving justice: articulating common causes in distinct regimes', in *Human Rights and Climate Change*, edited by Humphreys, pp. 299-319, at p. 315.

⁴⁷ An earlier version of this article was presented at the Societas Ethica's 2013 Annual Conference held in Soesterberg on the theme 'Climate Change, Sustainability, and an Ethics of an Open Future' (22-25 August 2013): I am grateful to those present for their questions. I would also like to thank three anonymous reviewers and my thesis supervisor, Simone Zurbuchen, for their very helpful comments, objections and suggested improvements. Finally, I am also grateful to the Executive Editor, Marcus Agnafors, and the Editor in Chief, Brenda Almond, for their instructive suggestions on how to improve this article.

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