

WHY SPACE IS NOT ENOUGH: LOOKING FOR CLIMATE JUSTICE THAT WORKS IN THE INTERNATIONAL CLIMATE REGIME¹

Jesse H. Vogel²

For years, justice theorists have grappled with the challenges climate change poses to traditional understandings of ethical responsibility. “We cannot simply say that climate change confronts us with a clear case of ethical responsibility,” Dale Jamieson writes in his 2009 essay “Climate Change, Responsibility and Justice.” It’s possible to conceptualize the problem as one of moral responsibility, but “this argument would have to be revisionary,” he says — it would require transformation of our understanding of what ethical responsibility is.³ But while theorists have worked to adapt 20th century justice theory to climate change, international negotiators have moved ahead, working to develop ethical principles that can serve as necessary tools for spurring international climate action. A look at international negotiations in the United Nations Framework Convention on Climate Change (UNFCCC) — the body tasked in 1992 with addressing anthropogenic climate warming — shows that political leaders, foreign ministers, diplomats and bureaucrats haven’t let the daunting task of revising contemporary justice theory get in their way. That’s because policymakers believe that concepts of equity — and the theories of justice that underlie them — have a unique power that many advocates for action believe must be harnessed in the pursuit of global cooperation. Christiana Figueres, the Executive Secretary of the UNFCCC has said that “equity is the heart and soul of the new [climate] agreement,” which the body has been tasked with signing at the end of this year. The crucial question regarding equity, she notes, is, “how can we turn the effort to reach common understanding of the implications of equity into a key enabler for accelerated action rather than an impediment to collective action?”⁴

In this paper, I will argue that participants in the UNFCCC process have developed a set of justice principles that address the development versus climate mitigation divide, just as theorists emerging from and reacting to classical liberal political thought have developed principles to deal with similar conflicts. In fact these two sets of principles — those underlying the Convention text, and those emerging from the work of Charles Beitz and Steve Vanderheiden — have more in common than not. As such, the debates on

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² 234 Florida Avenue NW, Washington, D.C. 20001, jesse.vogel@gmail.com.

³ Dale Jamieson, “Climate Change, Responsibility, and Justice,” *Science, Engineering & Ethics* 16 (2010): 439.

⁴ Christiana Figueres, “Opening remarks by the Executive Secretary of the United Nations Framework Convention on Climate Change at the workshop on equitable access to sustainable development held on May 16, 2012 in Bonn,” *UNFCCC*, accessed March 28, 2015, http://unfccc.int/files/bodies/awg-lca/application/pdf/20120516_cf_remarks.pdf.

the floor and in the halls of UNFCCC negotiating sessions provide a rich example of theory-in-practice. I'll argue that the on-the-ground applications of justice theory that privilege autonomy — despite attempts at revision reacting to a changing understanding of human-ecology relations — have not succeeded in spurring international action, highlighting weaknesses in the attempt to stretch distributive justice principles. In order to figure out why, I'll turn to Iris Marion Young, whose understanding of self-determination as based on non-domination rather than non-interference will clarify the internal workings of traditional climate justice theory. Furthermore, her concept of shared responsibility, I believe, will help pave the path toward more ambitious international climate action.

From the earliest days of international climate talks, practitioners have understood that useful ethical principles must address a tension between the need for economic development in developing countries and the need for swift greenhouse gas mitigation necessary to maintain human life. That tension was clear in the inaugural session of the UNFCCC, held at the 1992 U.N. Conference on Environment and Development — the Rio de Janeiro Earth Summit — from where the world walked away with two texts. One was the the U.N. Framework Convention on Climate Change, charging countries to stabilize “greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system,” and the other was the U.N. Declaration on Environment and Development, a text of principles meant to guide countries towards international agreements that “protect the integrity of the global environmental and developmental system.”⁵ ⁶ There was worry in these meetings amongst developing countries about combining discussions of economic development and environmental sustainability, hence the opposition of the two in the document's title — the Rio declaration was on the environment *and* on development, not on sustainable development itself, a concept that did not gain steam until the late 1990s. And reflecting that worry, the text includes several principles that seem to gird against the unwanted prioritization of environmental causes over economic growth. The document states that there is a “right to development” and that “states have ... the sovereign right to exploit their natural resources pursuant to their own environmental and developmental policies,” as long as such activities “do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”⁷

These concerns lie behind two ethical frameworks set out in the UNFCCC foundational text. First, the Convention says that any global mitigation action must protect climate stability without endangering

⁵ UNFCCC, “United Nations Framework Convention on Climate Change,” 1992, http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

⁶ UNFCCC, “Report of the United Nations Conference on Environment and Development,” 1992, <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>.

⁷ Ibid.

necessary food production or stifling economic development. While the job of the body is to stabilize greenhouse gas emissions at a level necessary to prevent dangerous climate change, parties agreed that “Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”⁸ In this sense, while international climate action must be swift enough to allow ecosystems a chance of survival, there are constraints on such action; one is subsistence-based (action to limit climate change must not get in the way of food production) and the other is development-based (action to limit greenhouse gas emissions must not threaten sustainable economic development). Second, the Convention states that responsibility for action is “common but differentiated” between countries and such differentiation is tied to countries’ “respective capabilities.”⁹ Additionally, the Convention directs the parties in a balance of efforts between developed and developing countries when the text reads that, “developed country Parties should take the lead in combating climate change and the adverse effects thereof.”¹⁰ Further, Parties should give “full consideration” to the “specific needs and special circumstances” of “developing country parties, especially those that are particularly vulnerable” to climate change and to “developing country Parties that would have to bear a disproportionate or abnormal burden under the Convention.”¹¹

While negotiators have worked to develop these guiding principles that suit the needs of policy, justice theorists have worked to outline the revisions that the climate problem suggest are necessary in traditional liberal justice theory. For climate change does highlight important challenges to the traditional Rawlsian approach. It is an unintentional byproduct of human action — harm by emitters to climate vulnerable people is not done on purpose.¹² It is embedded in a history of global imbalances, involving “long-term patterns of action,” and many of those who have contributed the most to the problem have known and acknowledged this fact for decades.¹³ It is related to long-standing patterns of development that are by-products of centuries of domination and deep global inequality. Moreover, It negatively affects us all, but deepens already existing inequalities, since though all of humanity is vulnerable, those who are poorest

⁸ UNFCCC, “United Nations Framework Convention on Climate Change.”

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Stephen Gardiner, “Is no one responsible for global environmental tragedy? Climate change as a challenge to our ethical concepts,” in *The Ethics of Global Climate Change*, ed. Denis G. Arnold, (New York: Cambridge University, 2011), 45.

¹³ Ibid., 47.

are the most vulnerable.¹⁴ Finally, it does not only implicate people alive today, but it ties present persons to the actions of past persons, and it ties future persons to the actions of present persons. The climate problem is complex, and so it is understandable that most traditional conceptions of justice fail to completely grasp it. That's why ongoing work of justice theorists to build an innovative account of justice that can address these complexities is important, hard work.

Charles Beitz, in his understanding of global natural resource distribution as a subject of justice, provides a foundation for necessary justice theory innovations. In *Political Theory and International Relations*, Beitz establishes that a global political order exists, allowing the application of principles of justice to questions of international relations. His work comes before global climate conversations, but his discussion of inequality of natural resource wealth across countries is illustrative and deep. Rawls's understanding of inequality of natural talents in individuals applies to inequality of natural resources in countries, Beitz writes. Natural endowments are "neither just nor unjust," according to Rawls, "nor is it unjust that men are born into society at any particular position. These are simply natural facts. What is just or unjust is the way that institutions deal with these facts."¹⁵ Distribution of natural resources — unequally, to different states — can be considered as Rawls considers distribution of natural endowments — unequally, to different individuals — in which case international society ought to deal with such inequality by redistributing resources in order to make up for such inequality. "The resource redistribution principle would function in international society as the difference principle functions in domestic society," Beitz writes, providing assurance to the resource-poor that their morally-arbitrary unlucky situation (being born into countries without large supply of iron ore, say, or petroleum, or natural gas) "will not prevent them from realizing economic conditions sufficient to support just social institutions and to protect human rights guaranteed by the principles for individuals."¹⁶

Such a formulation could be applied to the climate problem as well, though doing so stretches what a "natural resource" is. Just as there is a need for a global institution that protects the resource poor, one might say there is a need for a global institution that protects the climate vulnerable. In that sense, justice requires that we work towards a redistribution of the arbitrarily-distributed "natural resource" of climate change resilience, say, and the concomitant arbitrarily-distributed "natural resource" of global historical luck that allowed developed countries to emit greenhouse gases consequence-free from the Industrial Revolution until now. This is the impulse behind a recent push for a "loss and damage mechanism" in the United Nations that, though still in early stages, many recognize as a kind of global catastrophe insurance

¹⁴ Ibid., 45-6.

¹⁵ Charles R. Beitz, *Political Theory and International Relations* (Princeton: Princeton University, 1999), 137.

¹⁶ Ibid., 141-2.

mechanism that could spread the risk of disadvantageous uncontrollable circumstances.¹⁷ It's a powerful thought, but a closer look at the theoretical basis exposes an awkward flattening effect. Perhaps one can easily imagine climate change resilience as a natural resource that some countries have more access to than others. One could say that the vulnerability of the Maldives is morally-arbitrary and unfairly unequal compared to the landlocked relative safety of Germany, or Ohio. But considering historical economic success as a "natural resource" simplifies and contorts a complex history involving powerful geopolitical forces for the sake of metaphor. Even the vulnerability example requires ignoring the complicated nature of scientific truth — for if climate change really is as dangerous as we say it is, its danger, in part, comes from the fact that its effects are unpredictable and from the truth that we don't have full knowledge of what a transformed climate system really means for human life.

Steve Vanderheiden gives us a more plausible way to use Beitz, by showing that access to ecological and atmospheric space can act as the natural resource that must be fairly allocated. Liberal justice theory is traditionally concerned with protecting spheres of autonomy, within which "each of us should be free to pursue our own ideas about the good" without impinging on the autonomy of others.¹⁸ But the fact of ecological limits, Vanderheiden says, means that such spheres are smaller than Locke and Mill once thought. As such, theories of justice must address unequal distribution of claims on "ecological" and "atmospheric" space, by which Vanderheiden means the territory necessary to sustain demand for environmental goods and services, and the atmosphere necessary to absorb greenhouse gas emissions without destabilizing the climate.¹⁹ Since current claims on ecological and atmospheric space outpace what actually exists, an allocation decision can either be justified, based on global cooperation, or it will be forced and left to existing and unequal patterns of action. Justice requires that we allocate ecological and atmospheric space "among various claimants, present and future," Vanderheiden writes.²⁰ Here we can apply the Beitzian model. Historically, some countries have had the morally-arbitrary luck to access larger shares of the atmosphere's greenhouse gas absorptive capacity. Such luck, though, should not legitimize unequal de fact claims on such capacity, since the atmosphere is in fact a global resource spanning international boundaries, and the result of such unequal claims is continuing and deepened global inequality. In this sense the "adverse fate" Beitz writes of is to be born into a country that has not

¹⁷ Jamieson, referencing Ronald Dworkin, 30. See also Kenneth Shockley, "The Responsible Path Between Scylla and Charybdis: Making Sense of Appeals to Equity in Climate Change Loss and Damage Mechanisms," *Philosophy and Public Policy Quarterly* 32, no. 2 (2014): 22-30.

¹⁸ Steve Vanderheiden, "Allocating Ecological Space," *Journal of Social Philosophy* 40 No. 2 (2009): 257.

¹⁹ Ibid., generally; Steve Vanderheiden, "Climate Change, Environmental Rights, and Emission Shares," in *Political Theory and Global Climate Change*, ed. Steve Vanderheiden (Cambridge, MA: MIT, 2008), 44.

²⁰ Vanderheiden, "Allocating Ecological Space," 257.

already claimed more than its fair share of atmospheric capacity in an age where a growing understanding of ecological limits requires that all reduce their claims on the atmosphere, regardless of past claims.²¹

A fair allocation of atmospheric space, according to Vanderheiden, involves balancing rights to atmospheric capacity with a right to climatic stability and a right to development.²² This right to development might be seen as fundamentally different than the other two in its economic rather than environmental connotations. But in fact, the right to development is a fundamental right to environmental space (in this sense, combining “ecological” — land — with “atmospheric” — air), according to Vanderheiden.²³ Atmospheric absorptive capacity is about more than survival, he says here, which is the aim of the first right; the right to development includes the notion that “nations or persons must be allowed adequate atmospheric absorptive capacity ... to allow for economic or human development, and therefore for human flourishing.”²⁴ By balancing these rights, Vanderheiden writes that we can determine a specific formula for divvying up emissions shares. The task is straightforward: we must allocate emissions in such a way that “avoids causing future climatic instability” — there must be a global cap — while ensuring that shares of allowed emissions are distributed in such a way as to allow for “adequate economic and human development” and assigning costs of emissions reductions in “in accordance with a defensible account of moral responsibility,” which he writes is one in which liability is assigned based on “luxury” rather than “survival” emissions.²⁵

There are problems with this formulation. The first two principles are relatively straightforward — policymakers can develop models to determine an acceptable global limit to greenhouse gas emissions, and it’s uncontroversial that domestic caps on emissions should not perpetuate global poverty — but the distinction between survival emissions and luxury emissions raises questions. The idea is that wealthy developed countries produce emissions that are not necessary for survival — think Hummer limos on the Las Vegas strip — and that in a world facing ecological limits, such excess emissions are morally wrong. But this formulation slips into the claim that there are actually categorically different kinds of emissions that ought to be addressed differently in international regulations. That is, the emissions of poor countries are defined as “survival” while those from wealthy countries are defined as “luxury.” But given that “limited claims on ecological space are viewed as benign, but excessive ones as harmful and unjust,” it is impossible to classify many choices as “categorically benign and therefore subject to consumer

²¹ Beitz, 141-2.

²² Vanderheiden, “Climate Change,” 46-7.

²³ *Ibid.*, 47.

²⁴ *Ibid.*, 47.

²⁵ *Ibid.*, 46.

sovereignty alone,” Vanderheiden has said in addressing the actions of individuals.²⁶ The same argument should apply on the international stage. Yet in sweeping a broad brush across developing countries — by categorizing developing country emissions as always necessary for “survival,” or to fulfill a right to development, particularly considering the massive domestic inequality in many developing countries — is to classify some consumer choices as categorically benign. In that sense, carving out a right to atmospheric capacity in the form of “survival emissions” as well as a right to development maintains a sphere of autonomy from international regulation that ignores the dual facts of global interdependence (Beitz) and ecological limits (Vanderheiden). Though the right to development is a matter of justice, though one can argue that countries have a right to do what they can to end poverty within their borders, the morality of emitting greenhouse gases in order to do so is blemished.

But despite its theoretical problems, Vanderheiden’s revision to liberal justice theory is powerful, for it parallels the principles that UNFCCC negotiators have developed to address the development versus greenhouse gas mitigation tension. That’s in part because he develops his argument out of real conversations ongoing in policy circles. The distinction between luxury and survival emissions, Vanderheiden notes, was developed by a think tank in Delhi, the Centre for Science and Environment, which has been involved in shaping public understanding of climate change politics since the founding of the UNFCCC.²⁷ More, his understanding of the tensions of the climate change problem that implicate justice — the necessity of carbon emissions balanced by the necessity of global climatic stability and economic development — is the same as those outlined in the principles of the U.N. Framework Convention on Climate Change text. The idea that stabilization of the climate should occur “within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner,” as the Convention text establishes, is not far at all from Vanderheiden’s argument for a right to climatic stability balanced by a right to absorptive capacity (survival) and a right to development.²⁸ This parallel allows for a fruitful comparison of theory and practice. That’s valuable, for the importance of the ethical questions raised by climate change to the practical progress of international negotiations means that we must test our ethical principles in order to develop ones that work for international cooperative action.

And such a comparison shows that an understanding of the justice problem as one of allocation of atmospheric space shapes the conversation in a few unique ways. Such an understanding has been the driving force of advocates for “climate justice” working with and on behalf of developing countries and it

²⁶ Vanderheiden, “Allocating Ecological Space,” 266.

²⁷ Vanderheiden, “Climate Change,” 44.

²⁸ UNFCCC, “United Nations Framework Convention on Climate Change.”

has led to perverse results. First, it's played a part in the solidification of the divide between wealthy developed and poor developing countries, when in fact such a distinction is a dynamic one that changes with the winds of economic forces. Second, it has led to an understanding of global responsibility for climate change as a monetary debt owed to the less fortunate and historically oppressed, often phrased in anti-colonialist language. And finally, it has turned complex and often-evolving scientific understandings into expert mathematical truths, cutting off opportunities for critical dialogue. All three moves are not inherently wrong; post-colonial theory might in fact give us reasons to support moves by developing countries to band together in strict opposition to the developed world. But the way in which all three have polarized international dialogue, shutting down many potential opportunities for the kind of cooperation necessary to address global climate change, as the clock continues to tick, means that we must look for an alternative conception of climate justice. Before doing so though, I will first work to outline how the atmospheric-allocation conception of climate justice has functioned on the ground in international dialogue.

The solidification of the divide between “have” and “have-not” countries was formalized with the first substantive moves of the U.N. Framework Convention. Guided by the Convention text that calls for protection of the climate system from carbon emissions “on the basis equity and in accordance with common but differentiated responsibilities and respective capabilities,” the Kyoto Protocol — the first and international agreement coming from the UNFCCC — established binding emissions caps for developed countries, postponing emissions limits for developing countries.²⁹ Countries were placed into two categories — termed in the text as Annex 1 and non-Annex 1, respectively — based on their membership in the Organization for Economic Cooperation and Development (OECD) when the Convention was signed in 1992.³⁰ This was a contentious move, and it was ultimately a large stumbling block for global ratification, as the United States pulled out of the treaty because of “unfair disparity of treatment” between countries.³¹ It also does not quite make sense, given the global economic environment — China, for example, has developed extensively since 1992, and it is hard to compare its level of development to that of many other deeply poor nations. But it is difficult to find an alternative formulation, for if we believe climate change to be a question of allocation of global atmospheric space — a clear-cut matter of inappropriate allocation — we need to know who must give up some of their share to repay the less fortunate. The 2011 Conference of the Parties in Durban established that the next international agreement will be “applicable to all parties,” but continuing appeals to the Convention’s principle of “differentiated responsibility” means that negotiators continue to rearrange the differentiation

²⁹ Vanderheiden, “Climate Change,” 43.

³⁰ UNFCCC, “Kyoto Protocol to the United Nations Framework Convention on Climate Change,” 1998, <http://unfccc.int/resource/docs/convkp/kpeng.pdf>.

³¹ Vanderheiden, “Climate Change,” 43.

deck chairs, so to speak.³² Brazil has suggested a concentric circle model, which allows countries to graduate into levels of increasing amounts of responsibility, but the developing versus developed divide remains strong.³³

Further, the atmospheric-allocation conception of climate justice, compounded by a polarized divide between developed and developing countries leads to a belief that remediation of the climate problem requires a “repayment of debt.” A quick review of the recent history of negotiations demonstrates this. The Ad Hoc Working Group on Long-Term Cooperative Action (AWG-LCA) was the body established in Bali in 2007 to guide longer-term visioning for the Convention through 2012. There, references to “equitable access to atmospheric space” were often proposed and often contested in Cancun in 2010. In the same conversations, references to “climate debt” began to emerge; one party proposed, for example, to require developed countries to contribute 6 percent of their gross national product to finance mitigation and adaptation in developing countries as “repayment of their climate debt.”³⁴ And again in Doha in 2012, Ecuador, for example, described in one session how historic responsibility is an “ecological debt” that must be repaid.³⁵

These notions of climate debt are often combined with an understanding of climate change contextualized within legacies of colonial oppression. In December 2014, for example, President Evo Morales of Bolivia used a high-level ministerial to connect greenhouse gas emissions to a legacy of domination, sharply telling developed country negotiators not to steal atmospheric capacity that does not belong to them. “There are some greedy countries that want to consume all of this atmosphere on their own,” he said. “These countries have stolen from us in the colonial period, and they are still stealing from us – they are stealing our future, and the possibilities to develop ourselves in a sustainable fashion.”³⁶ This is an old argument, and the colonialist connotations of the metaphor — theft and occupation — are not to be discounted. A paper developed for a U.N. conference on “equitable access to sustainable development” by an expert group from Brazil, South Africa, India and China (the BASIC group in the UN talks) demonstrates how the atmospheric-allocation conception of climate justice is often backed by anti-

³² UNFCCC, “Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011,” 2011, <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=2>.

³³ UNFCCC, “Views of Brazil on the Elements of the New Agreement Under the Convention Applicable to All Parties,” 2014, http://www4.unfccc.int/submissions/Lists/OSPSubmissionUpload/73_99_130602104651393682-BRAZIL%20ADP%20Elements.pdf.

³⁴ iisd Reporting Services, “Cancun Highlights,” *Earth Negotiations Bulletin* 12, no. 495 (2010).

³⁵ iisd Reporting Services, “Doha Highlights,” *Earth Negotiations Bulletin* 12, no. 559 (2012).

³⁶ Personal observation, December 9, 2014.

colonialist language.³⁷ The Indian contribution is Vanderheidian in a lot of ways, understanding the “foremost issue ... in solving the problem of global warming” as “the question of how the rights of access to the global atmospheric commons are to be assigned.”³⁸ The paper lays out a scheme for allocating such rights. But instead of arguing that to forgo some sort of allocation system within this scenario (global demand in excess of global limits) would be an international injustice, as Vanderheiden writes, the Indian report says something blunter, more politically resonant: “Any unilateral declaration of a share, without a scheme of equitable access, as is practiced currently by Annex-I countries (whereby they declare a global goal and also unilaterally announce their share in this goal), amounts to unilateral occupation of carbon space.”³⁹ Here the metaphor of ecological space is no longer used in service of refinement of how we understand justice, rather it is made concrete and used to politically justify an allocation scheme.

And the political resonance of such anti-colonialist appeals as well as the tangible nature of the concept of a “climate debt” means that international negotiators work hard to define exactly what a just allocation of atmospheric space looks like. In so doing, they work to turn constantly evolving scientific understandings of how emissions in the past and present affect our climate system into expert mathematical truths, protected from critical dialogue. The Indian report cited above proposes that we determine “based on purely scientific considerations,” using “the maximum global temperature increase that is considered acceptable” the total atmospheric space available from some date in the past, accounting for historical emissions, to a target date in the future.⁴⁰ That forms the global carbon budget, which we can allocate to countries. From each country’s allocations, we can subtract what they have already emitted (from the initial date to now), and what’s left becomes each countries’ domestic carbon budget. Charts, tables, line graphs are involved in these determinations, as well as complex optimization models. Ultimately, the determination is that since developed countries have emitted so much more, historically, than developing countries, developed countries owe a “carbon debt,” which the authors write can be repaid through financial transfers and funding for sustainable activities in developing countries.⁴¹ There are significant questions here — what is a “purely scientific consideration”? For all variables — the maximum global temperature “considered acceptable,” the amount of greenhouse gas emissions that are permissible before we hit such a temperature, the method for converting carbon debt into financial debt — are based on mathematical models formulated through scientists’ best judgements, if not on subjective judgements

³⁷ T. Jayaraman, Tejal Kanitkar and Mario Dsouza, “Equitable Access to Sustainable Development: An Indian Approach,” in BASIC Expert Group, *Equitable Access to Sustainable Development: Contribution to the Body of Scientific Knowledge* (Beijing, Brasilia, Cape Town, Mumbai, 2011).

³⁸ *Ibid.*, 60.

³⁹ *Ibid.*, 64.

⁴⁰ *Ibid.*, 63.

⁴¹ *Ibid.*, 64.

alone. Further, greenhouse gas pollution includes more than just carbon. Do these budgets include other powerful greenhouse gases? How do they account the fact that quick-acting greenhouse gases like black carbon (soot), come with short-term localized health effects that are responsible for millions of shortened lives in developing countries around the world?⁴²

The limits of appealing to “pure science” are even more clear in a creative proposal from Bolivia last year to formulate a method for allocating shares in a global emissions budget based on indices representing four factors — historical responsibility (historical responsibility index, HRI), ecological footprint (ecological footprint index, EFI), technological capacity (capacity index, CI) and sustainable development (sustainable development index, SDI). The “compound index of countries’ participation in a global emission budget” turns these factors into one formula, the Carbon Budget Distribution Index (CBDI):

$$\text{CBDI} = 0.3(\text{HRI}) + 0.15(\text{EFI}) + 0.25(\text{CI}) + 0.3(\text{SDI})^{43}$$

Based on this formula, the Bolivian delegation suggests, international negotiators can determine a “fair share of effort for each country in order for the world to stay within the remaining emissions budget.”⁴⁴ It is unclear where these values come from — what gives historical responsibility twice the weight of ecological footprint, in the formula, for example — but we are assured that these values have been determined by experts in the field. Here the allocation scheme seems to incorporate more principles of equity than the Indian proposal, yet again, even more bluntly, it falls back on expert judgement, taking the question of how principles are to be operationalized into action to mathematical Gods for a final determination. This is opaque, shutting off opportunities for dialogue.

None of these three approaches, it turns out, are useful in spurring international climate cooperation — they’ve led to widened polarization and deeper mistrust between countries. Records of international dialogue show that each iteration of a global carbon budget proposal is met with fierce opposition; such proposals often become roadblocks to international action, rather than clarifying tools necessary to reduce transaction costs of international cooperation. Further, the concept of “common but differentiated responsibility” in light of such proposals has become shorthand for a much blunter understanding of

⁴² Institute for Governance and Sustainable Development, “Primer on Short-Lived Climate Pollutants,” November 2012, <http://www.igsd.org/documents/PrimeronShort-LivedClimatePollutants.pdf>.

⁴³ UNFCCC, “Plurinational State of Bolivia Proposal on the Compound Index of Countries’ Participation in the Global Emissions Budget Under the Convention Applicable to All Parties,” November 20, 2014, http://www4.unfccc.int/submissions/Lists/OSPSubmissionUpload/106_99_130617739555048267-submission%20bolivia%20ADP%20GLOBAL%20EMISSION%20BUDGET.pdf.

⁴⁴ *Ibid.*, 2.

international obligation — it has come to be invoked only by developing countries who attempt to include references to the principle in every paragraph of every decision text coming out of the UNFCCC, surely a waste of negotiating time. A review of notes from one afternoon of negotiations in one working group in the 2014 Lima talks demonstrates this. Requests to add references to “principles of the convention” arose 18 times, from Bolivia (then acting as the chair of the G77-China negotiating block), Sudan (then acting as chair of the AFRICA group of countries), Guatemala, India, China, Egypt, Nigeria, Algeria, Nicaragua, Saudi Arabia, Fiji — the list goes on, but includes one developed country party, the E.U.⁴⁵ “We need textual proposals that contain explicitly the principles of CBDR,” the Venezuelan negotiator stated at one point, adding that “Differentiation needs to be respected in every paragraph, in every proposal.”⁴⁶ In these conversations, common but differentiated responsibility — referred to as CBDR — is treated as a settled mechanism for allocation of obligations, and any attempt to open for conversation what exactly CBDR means, and how its meaning could shift in this period after the Kyoto Protocol, where a sharp line was drawn between developed and developing countries, raises the outrage of developing country parties. CBDR is a legal fact that must shape every possible outcome, these countries seem to be saying, rather than a principle of fairness that ought to guide action and be informed by action. “To modify CBDR, we need to amend the Convention itself,” the Malaysian negotiator warned at one point in Lima, indicating that the Convention’s guiding principle of equity has a hard and fast meaning that cannot change, showing how ethical principles can become as static and unchanging, within the domain of legal experts, as the scientific and mathematical formulas discussed above.⁴⁷

The failure of these approaches emerges from the fact that they are principles based on an understanding of justice as a matter of distribution, while climate change — marked as it is by global interdependencies and ecological limits — is really a structural injustice. Climate change is not the result of intentional oppression or deprivation, but rather it’s the “consequence of many individuals and institutions acting in pursuit of their particular goals and interests, within given institutional rules and accepted norms,” as Iris Marion Young puts it, ultimately putting “large categories of persons under a systematic threat of domination or deprivation of the means to develop and exercise their capacities” while enabling “others to dominate or have a wide range of opportunities for developing and exercising their capacities.”⁴⁸ And the structural injustice of climate change is hard to right through a “liability model” of responsibility that

⁴⁵ Personal observation, December 12, 2014.

⁴⁶ Iris Marion Young, “Responsibility and Global Justice: A Social Connection Model,” *Social Philosophy and Policy* 23, no. 1 (2006): 114.

⁴⁷ *Ibid.*

⁴⁸ *Ibid.*

seeks to assign blame, punish wrongdoers, and absolve everyone else.⁴⁹ When dealing with a diffuse structural injustice, where massive inequality is not the result of intentions, or even of specific actors — where everyone in some sense is implicated — the traditional conception of responsibility breaks down.⁵⁰ This is the challenge of climate change theorizing that Jamieson pointed out initially, and its the driving force behind Vanderheiden’s work to adapt liberal justice theory for a world with ecological limits.

And the challenge of addressing structural injustice, marked by complex interdependencies, with traditional justice theory is what Vanderheiden is trying to address in his ecological space-based revision. He writes that liberals prioritize freedom, about which they make two claims — one, that control within a private domain is the ultimate expression of individual liberty, and two, that “each person must be free to define and pursue the good life for themselves.”⁵¹ There’s a limit to such freedom, he notes, for it cannot restrict the freedom of others. Though Young talks about this in a different context (in this passage, she’s writing about the idea of state sovereignty), she notes a similar theoretical basis when she says that the traditional liberal account is that “the state’s obligation is to maximize its own interests and those of its citizens without equal consideration for how this pursuit may affect the interests of outsiders, so long as in doing so the state does not directly interfere with the internal affairs of other states.”⁵² This is the Millian notion that “each of us should be free to pursue our own ideas about the good within our own space, bounded only by the space of others, where our acts impinge upon their autonomy.”⁵³ But in a globalized, interdependent society, where countries are bound together through international institutions, Beitz shows us, the hard and fast treatment of state sovereignty begins to fail. Vanderheiden offers a further innovation in writing that our spheres of autonomy — though he applies this directly to individuals, I believe it’s an argument underlying his treatment of states as well — is strictly limited by the fact of ecological limits. Still, Vanderheiden refuses to give up on individual autonomy. He does not abandon the idea that each of us has a sphere of individual autonomy that must be defended; in fact, he argues that better understanding the limits on such spheres will make the freedom within them that much stronger.⁵⁴ This is the same tension that lies behind his defense of “survival emissions” and a “right to development” — it is the sense that, despite the fact that ecological limits restrict countries’ spheres of total autonomy, certain basic rights exist that must be protected from international regulation.

⁴⁹ Ibid.

⁵⁰ Ibid.

⁵¹ Vanderheiden, “Allocating Ecological Space,” 257.

⁵² Iris Marion Young, *Inclusion and Democracy* (Oxford: Oxford University Press, 2000), 237.

⁵³ Vanderheiden, “Allocating Ecological Space,” 257.

⁵⁴ Ibid., 259.

And it's right to refuse to give up freedom, to insist that poor countries ought to have the right to develop their full potential free from continued oppression, but in a world of structural injustice, the account of freedom that Vanderheiden offers — freedom from interference — does not hold up. For if “ecological limits suggest that very little of our conduct is genuinely ‘self-regarding,’” as he says, if “nearly all of our conduct ‘concerns others’ and thus makes us ‘amenable to society,’” and if, further, as he writes, “nearly everything we do to survive (e.g., eating, breathing), not to mention activities associated with living well, makes a de facto claim on ecological space,” it seems that defending any sphere of total personal autonomy would be to cling desperately to something that very well may not exist.⁵⁵ More, any kind of distinction between self-regarding and other-regarding activities is further muddled when we consider his claim that, since the injustice does not occur until one has exceeded their ecological limits, many acts “become harmful and unjust beyond some threshold that defines fair shares of ecological space.”⁵⁶ These are harsh words from the point of view of defenders of individual liberty. And they conflict, I believe, with Vanderheiden's account of rights and emission shares. For the distinction between survival and luxury emissions, as well as an emphasis on the right to development, both seem to be moves that work to carve out spaces of total freedom from interference for poor and developing countries.

Young clarifies why freedom as non-interference does not work. While “on the one hand, claims of the self-determination of peoples have a prima-facie validity[,] on the other hand, recognizing those claims by awarding each people an independent territorially bounded jurisdiction constantly threatens peace and freedom,” Young writes.⁵⁷ Those threats are clearer and more explicit when we're talking about physical land, but the analysis holds in the application to atmospheric space when considering the global interdependencies and ecological limits Beitz and Vanderheiden illuminate. In a world where some emissions are considered benign — the survival emissions of developing countries — while others are considered harmful — the luxury emissions of developed countries — and where the bounds of such emissions are guarded by principles of non-interference, prospects for international cooperation, as we've seen, are harmed. That's because not only does such a distinction carve out a realm where emissions are not to be regulated — the emissions of developing countries — but it limits the range of obligations that developing countries have to other countries. “Just as it denies rights of interference by outsiders in a jurisdiction,” the model of self-determination as non-interference of which Vanderheiden's account is an example “entails that each self-determining entity has no inherent obligations with respect to outsiders.”⁵⁸

⁵⁵ *Ibid.*, 258.

⁵⁶ *Ibid.*, 266.

⁵⁷ Young, *Inclusion*, 257.

⁵⁸ Young, *Inclusion*, 257.

This cuts down opportunities for climate action, particularly since the nature of the climate problem is structural, arising from patterns of action that build on one another rather than strictly causal chains.

Instead, freedom — self-determination as Iris Young fashions it — is better understood in a world of structural injustice as non-domination, rather than non-interference. She draws on the work of Philip Pettit, writing that “an agent dominates another when the agent has power over that other and is thus able to interfere with the other *arbitrarily*.”⁵⁹ Understanding freedom as non-domination widens the scope of what it means to limit an agent’s freedom, for domination can occur without direct interference. It “consists in standing in a set of relations which makes an agent *able* to interfere arbitrarily with the actions of others.”⁶⁰ This means that, at times, interference is actually necessary in order to promote freedom, for regulations that interfere with the internal actions of states may be required “in order to restrict dominative power and promote cooperation.”⁶¹ This understanding reorients the discussion of international regulations on greenhouse gas emissions. As Vanderheiden himself says, excess greenhouse gas emissions in a world facing ecological limits forces an allocation that arbitrarily interferes in the self-development of developing countries.⁶² Young shows us that such arbitrary interference is a kind of continuing domination. And since the response to domination in an interdependent world is not to create strict spheres of autonomy — since doing so is actually impossible, given the level of interdependence in which we live and given the fact that domination works without direct interference — the goal must be instead to minimize domination itself. Further, this account shows how states are heterogenous entities, rather than black boxes that carry development rights and to which others owe obligations. Domination can be carried out by all sorts of powerful agents, including the governments of developing countries over their poor citizens. This is an important point in international climate talks where so much of the battle between developing and developed countries has to do with “climate finance” (the kinds of loans by multilateral development banks for climate mitigation and adaptation activities), “technology transfer” and access to greenhouse gas mitigating intellectual property — all important, but easily employed for the benefit of the already rich and powerful within the borders of developing countries.

Since non-domination requires positive obligations, as opposed to the isolationist stance of non-interference, addressing structural injustice through the principle of non-domination requires that we consider the strength of and level of inclusive democracy in our international institutions. For failure to seriously address the strength of global democracy within our institutions would warrant the sorts of

⁵⁹ *Ibid.*, 258.

⁶⁰ *Ibid.*, 258-9.

⁶¹ *Ibid.*, 259.

⁶² Vanderheiden, “Allocating Ecological Space,” 266.

claims listed above, that global greenhouse gas regulations are just the next stage of oppression led by neo-colonial forces. But since “individuals usually cannot act alone to promote justice,” Young writes, and since “they must act collectively to adjust the terms of their relationships and rectify the unjust consequences of past and present social structures, whether intended or not,” the real work involves developing just and robust international institutions based on inclusive democracy.⁶³ Given the state of the United Nations — the non-inclusive holdover of the Security Council, the power of multinational corporations on the global level, the absence of robust international civil society infrastructure — the task of developing inclusively democratic international institutions is real work.

But, unfortunately, critical international legal scholars have failed take the quality of our international institutions seriously. The work of Martin Adamian is one such example. With Young, he writes of the importance of building robust global democracy, but he diverges in his complete rejection of liberal international institutions. While the liberal tradition seeks to right injustices through “impersonal rules and laws,” Adamian writes that the existing climate regime “is simply inadequate to ensure that the rules, laws and norms that are established are impersonal.” In failing to ensure impartiality, the climate regime simply reinforces existing “global power hierarchies.”⁶⁴ He says this fact is clearly illustrated in the way the climate regime perpetuates an oppressive system of private property through market mechanisms and market valuations of the negative externalities of global capitalism. “This liberal reliance on a system of private property rights justifies a class-based system that benefits certain groups at the expense of others,” Adamian writes.⁶⁵ Further, in denying that states can develop a sense of global responsibility, Adamian refuses to engage with any existing institutional structures – the kinds of institutional structures that hold great power and potential. In so doing, he effectively gives up on the institutional aspects of Young’s writing. By denying any possibility that states could develop a sense of global responsibility, Adamian seems to endorse an understanding of justice that focuses purely on interactional relations between individuals, groups, and states. That is disappointing, because institutions are often very necessary in addressing large scale, collective action-based injustices like climate change. As Young writes, “Institutions are a *necessary* means for promoting justice, if indeed social justice concerns broad patterns of social positions and relationships in the society. For the promotion of justice requires collective action, and that requires organization.”⁶⁶

⁶³ Young, *Inclusion*, 250.

⁶⁴ Martin J. Adamian, “Environmental (In)justice in Climate Change, in *Political Theory and Global Climate Change*, ed. Steve Vanderheiden (Cambridge, MA: MIT, 2008), 79.

⁶⁵ *Ibid.*, 80.

⁶⁶ Iris Marion Young, *Responsibility for Justice* (New York: Oxford University, 2011), 69. See also Jesse Vogel, “The Problem with Consensus in the U.N. Framework Convention on Climate Change,” *Philosophy and Public Policy Quarterly* 32, no. 2 (2014): 14-21.

As opposed to traditional liberal conceptions of climate justice that are tied to allocation of resources — an approach that we’ve seen only exacerbates international divisions — and as opposed to critiques of liberalism that abandon serious engagement with international institutions altogether, Young offers the social connection model of responsibility. It’s her answer to the question she asks in her posthumously-published *Responsibility for Justice* — “How shall moral agents think about our responsibility in relation to structural injustice?” — and it’s one she develops through an insightful and careful reading of Hannah Arendt on guilt and collective responsibility. Though Arendt, in a 1968 essay, argues that political responsibility for indirectly causing harm only exists if the harm is caused in the name of one’s political community, she implies an alternate understanding of political responsibility in *Eichmann in Jerusalem*. There, Arendt indicates that political responsibility is connected to action or inaction — even if one did not directly harm, one could be determined *politically* responsible based on ones’ actions or failures to act. This is important, for it means that responsibility for harm can exist outside of the traditional moral and legal framework, where “it is necessary to connect a person’s deeds linearly to the harm for which we seek to assign responsibility.”⁶⁷ Therefore, one can trace strands of responsibility to individuals in the context of structural injustice, a situation where “it is not possible to identify how the actions of one particular individual, or even one particular collective agent, such as a firm, has directly produced harm to other specific individuals.”⁶⁸

A new model of responsibility is necessary, Young writes, for addressing structural injustice with traditional liberal approaches produces the roadblocks we’ve identified in the international climate negotiations. First, she notes that the traditional liberal approach, which she describes as a “liability model” of responsibility, seeks to blame specific individuals, and absolve others, operating like the strict division within the UNFCCC between developed and developing countries that turns regulation of developing countries’ emissions into a morally indefensible act. “This often oversimplifies the causes of injustice, and renders most people passive or comparatively unable to help remedy the problem,” Young writes.⁶⁹ This seems to be the case in the U.N., where the Annex divisions have failed to change as the international political economy has changed. China and India, for example, are still viewed as non-Annex 1 “developing countries,” and as such are given less stringent requirements for action, even as their carbon emissions levels rise to rival those of “developed countries.” And it’s the problem underlying Vanderheiden’s non-interference approach to survival emissions and development rights. By insisting that

⁶⁷ *Ibid.*, 96.

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*, 116.

the problem is one of ill distribution, parties seek to differentiate responsibilities sharply based on strict categories, thus cutting off possibilities of action and cooperation from those who are “absolved.”

Further, I believe that the liability model that seeks to blame some and absolve others also requires that the problem addressed be envisaged as a relatively static one. If the task of justice is to re-allocate goods — natural resources, access to atmospheric space — than not only do we need to know who ought to get more from whom (requiring a bright line distinction between those who are blameworthy and those who are not), but we need to know exactly what it is that must be re-allocated. And attempts to define those goods, as we’ve seen them, the kind of complex mathematical formulas that spit out carbon budget allocation schemes, in the context of a structural injustice is fraught with peril. That’s because structural injustice is more than ill-distribution — it is a set of patterns of action and relationships — so whenever agents involved get into the details of what an appropriate re-allocation looks like, disappointment is inevitable.

That leads to the second problem of applying a liability approach to a structural injustice. The blame language that results, and the lack of satisfaction from overly formalistic allocation mechanisms “often impedes discussion that will end in collective action, because it expresses a spirit of resentment, produces defensiveness, or focuses people more on themselves than on the social relations they should be trying to change.”⁷⁰ We’ve seen this in international talks, as redundant demands for inclusion of references to the principles of common but differentiated responsibility in decision texts come from a place of defensiveness rather than from a forward-looking attempt to come to an international solution. There is danger in this claim, of course, for there is often real reason for the internationally marginalized and the poor to be resentful and defensive in international conversations. It raises the question, is the language comparing international climate regulation to colonial histories an example of resentment? Or is it simply an expression of the way current international dialogues resonate with the personal experiences and histories of historically oppressed people? Though I’m sympathetic to the second account, a quick return to an example of such language gives us reason to be wary. Recall that the Indian defense of a global carbon budget characterized the “unilateral occupation of carbon space” by developed countries as a situation in which developed countries “declare a global goal and also unilaterally announce their share in this goal.”⁷¹ There’s a sloppiness here, for that’s not exactly the international situation. Many developed countries, including the United States, are in favor of no hard global goal, and many developing countries, including the most vulnerable, say that a strict global goal is necessary. Though not always the case, appeals to anti-colonialism often can act in the pernicious ways Young suggest, as backward-looking excuses for non-cooperation.

⁷⁰ Ibid., 114.

⁷¹ T. Jayaraman, “Equitable Access,” 64.

Young's social connection model includes five features that seek to overcome the problems of a liability approach to structural injustice. She writes that: (1) it is "not isolating," meaning that it does not seek to mark some as responsible, and others as absolved; (2) it seeks to judge background conditions by considering harm as part of ongoing structural processes, rather than discrete, time-bound incidents (as a liability model might); (3) it is more forward-looking than backward-looking, working to engage participants in structural injustice in collective action to change course, rather than working to assign responsibility for harms that are done and over, in the past; (4) it conceptualizes responsibility as shared, rather than collective, meaning that agents are all individually responsible, but they are in individual ways that cannot be isolated from others in the collective; (5) finally, Young writes that the social connection model of responsibility is "discharged only through collective action."⁷²

The first three of these features are clearly useful in building the trust necessary for stronger international cooperation. Following the first would require that we move from an understanding of common but differentiated responsibility that means nothing more than a strict division between developed and developing countries to one that allows responsibilities to develop along with capabilities and shifting global economic factors. Embracing the second feature of the model would require that we integrate climate considerations into all international action, since the harm of climate change originates in more than just greenhouse gas emissions — it is the result of economic decisions and regulations, for example, and climate vulnerability is connected to international conflict in addition to natural geographical facts. Additionally, taking the second feature of Young's model seriously would require that we acknowledge the limits of attempts to catalogue completely incidents and monetary values of climate-related harm, for this feature shows us that such harms are hard to predict and our attention might be better spent developing adaptable processes for addressing catastrophe and building international climate resilience. Finally, embracing the third feature of Young's model would require a move away from the politically-resonant concept of "historical responsibility." Such a concept still might be useful in international dialogues — it may be helpful for those who have benefited from greenhouse gas-fueled economic development to recognize their unique responsibility for the climate problem — but Young points out that, given the high stakes, it is only useful inasmuch as it builds trust necessary for forward-looking international climate action.

For the fourth and fifth features of Young's model emphasize that responsibility must mean action. For *political responsibility*, Young writes, is not related to membership in political community or to guilt for harm done, but it is instead related to forward-looking collective action. Still, the fact that responsibility is "shared" rather than "collective," as Young puts it means that responsibility and action are separate, and

⁷² Young, "Responsibility and Global Justice," 119-123.

that degrees of each are determined differently. While people don't "bear different degrees and kinds of responsibility as contributors to structural injustice," meaning that we should "not try to divide and measure" our shared responsibility, we *may* (and probably should, given Young's affirmation of difference) work to distinguish different degrees and kinds of "forward-looking action" that each individual or state takes to discharge the responsibility. In this sense, Young gives us a way to preserve the principles of the U.N. Framework Convention on Climate Change that developing countries have held to — common but differentiated responsibility — for responsibility is always held in common, in her view, and cannot be cut out of the conversation. Rather, Young shows that action ought to be based on differentiated capabilities while holding responsibility constant.

CONCLUSION

As the above analysis shows, ethical principles carry weight in international policy conversations. Negotiators at the UNFCCC have worked to build ethical principles that allow for a fair balance of the need for economic development in poor countries and the need to stabilize the climate by reducing greenhouse gas emissions. These principles have much in common with the work of contemporary justice theory that envisages climate change as a problem of allocation of atmospheric absorptive capacity, and yet they have done little to spur ambitious international action. In fact, a close look at how international conversations go — marked as they are by an increasingly polarized division between developed and developing countries, as well as a demand for repayment of ecological debts and an understanding of the climate problem as static and based on unchanging expert scientific and mathematic truths — show that an atmospheric-allocation conception of climate justice may be working to slow international cooperative action. This is not good, and it contradicts the idea that ethics, in order to truly serve justice, must work to promote the destruction of injustice.

But potential for remediation lies in the work of Iris Marion Young. She shows us that the failure of traditional justice theory, even that theory that's revised based on an understanding of an increasingly interdependent global society, cannot work to address climate change, for climate change is a structural injustice, not easily solved by a conception of responsibility based on redistribution and liability for harm done. Embracing the principles of Young's social connection model of responsibility could work to break down the roadblocks to international cooperation that I've outlined by building trust and strengthening a cross-sectoral approach to climate change. And since our international institutions work by clarifying the goals of governments, reducing information asymmetry and the transaction costs associated with cooperation — since trust is crucial — embracing the principles of Young's approach could spur more ambitious international action.