

## OPEN PEER COMMENTARIES

# Distinguishing Mitigation and Adaptation

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Baer *et al.* (Baer, Athanasiou, Kartha & Kemp-Benedict, 2008) seek to develop a single index for distributing the burdens associated with climate change mitigation and adaptation, and to do so in a way that rectifies shortcomings that have been associated with other ‘burden sharing’ approaches. Commendably, they recognize the importance of ‘development’ as a moral imperative that often competes with environmental objectives in climate justice models, and acknowledge the importance of accounting for those affluent consumers residing in poor countries that are sometimes mistakenly not assigned any remedial burdens for climate change. Unfortunately, their GDR framework offers no unique mechanism ‘to prevent national elites from escaping all burdens and shifting them to their poorest citizens’ (Baer, 2009, p. 275), for which they fault the more popular equal per capita approaches. Aside from the dubious ‘moral support’ implied by a model that posits ‘development’ as a kind of individual negative right, the same disaggregation difficulties would seem to plague the GDR as have been invoked against other approaches that assign burdens to nation-states on the basis of aggregate national data. Indeed, the GDR would appear to do *less* for individual development interests than would equal per capita approaches (such as my own<sup>1</sup>) in that the former only posits an ‘exemption from costly climate policy-related obligations’ while the latter provide valuable resource rights that could at least in principle be earmarked toward improving conditions for the global poor. My focus here shall be on the first objective, however, which seems to purchase its parsimony at the expense of the moral foundations on which demands for climate justice rest.

National obligations must be quantifiable if they are to serve as the basis for global climate policy, and the approach to assigning national burdens on the basis of the ‘common but differentiated responsibilities and respective capabilities’<sup>2</sup> has the benefit of legal pedigree and philosophical respectability. Past and ongoing emissions as well as the capacity to reduce them both seem at first glance to be relevant to assignments of remedial responsibility, and the world’s nations have already committed to an approach that combines them through the UN Framework

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Convention. Now that harmful climate change is under way, remedial responsibility must include components geared toward both its *mitigation* (minimizing anthropogenic contributions to climate change by reducing ongoing greenhouse gas emissions and/or enhancing carbon sinks) and *adaptation* to its effects (reducing negative impacts on human welfare of present and future climatic changes that are not avoided and/or compensating affected parties for suffering to which they are exposed). The problem with the RCI lies not so much in its combining national capacity and responsibility into a single index—although I also find this problematic—as in its conflating mitigation and adaptations into a single problem toward which such an index might be applied.

Responsibility-based approaches assign national burdens in proportion to historical and ongoing greenhouse emissions, and can (like the GDR) be modified to exempt emissions that are associated with meeting basic needs or accommodating development interests. My own burden sharing proposal, for example, exempts national ‘survival emissions’ from fault-based liability for similar reasons. The hybrid RCI index adjusts these responsibility-based burden assignments to account for measures of national luxury income, increasing the EU’s burden from 22.6% (its share of post-1990 global luxury emissions) to 25.7% (based on its 28.8% of global luxury income), and reducing the United States’ burden from 36.4% to 33.1%. What justifies this increased remedial burden for Europe and reduced one for America? US per capita emissions are significantly higher than those in the EU, in part due to proactive efforts to reduce greenhouse emissions by European participants in the Kyoto protocol and the neglect of meaningful policy efforts on the part of the only industrialized nation to have rejected it. Hence, the EU gets more income out of each ton of carbon that it emits, and for this ecological virtue Baer *et al.* would increase its burdens, thereby in effect rewarding past US intransigence. The perverse rewards and punishments noted above provide one reason for jettisoning capacity indices in favor of a responsibility-based approach, and the differing natures of the mitigation and adaptation problems (discussed below) provide the other.

The assignment of burdens for adaptation activities relies upon an essentially backward-looking judgment: some party has been exposed to some risk or made to suffer some harm for which they are not at fault, and justice requires that the party that is responsible for that risk or harm either pay to insulate them from harm or else compensate them for the harm that occurs. Where no responsible party can be identified for an urgent problem (in famines, for example), capacity-based liability assignments are better than none at all, given the imperative to avoid undeserved harm to its victims, but fault-based liability is preferable in cases where culpability can be determined. In such cases, the respective capacity of other parties is irrelevant. If Smith, Jones, and I are comparably wealthy, and Smith loses her home in a fire for which nobody is at fault, then perhaps Jones and I should both help her rebuild. But if Jones intentionally sets the fire, the remedial liability accrues to her alone.

Mitigation burdens, by contrast, depend on an essentially forward-looking judgment: they ask what proportion of the planet’s finite emissions absorptive capacity each of us is entitled to claim for ourselves. Due to this different focus—and normative foundation in distributive rather than retributive justice—mitigation takes on a fundamentally different character and is based on wholly different factors.

The respective capacities and historical or ongoing responsibility for greenhouse emissions may be related to such judgments, but only indirectly. We must instead ask in determining mitigation burdens: how much of that limited capacity are we now and in the future entitled to claim, and (on this basis) what follows from the gap between our *de facto* claims on this capacity and our greenhouse entitlements?

As I have argued elsewhere, most of the variability between the widely disparate current *de facto* claims on atmospheric absorptive capacity cannot be justified. The average American may claim through their activities a much larger share of this common resource than does the average resident of the developing world, but this squatters claim in no way founds a defensible property right. Indeed, nearly all of the variables that explain (but do not justify) the inequality in current per capita claims can be easily dismissed as irrelevant to the just distribution of emissions shares, save perhaps those requiring unequal claims as a matter of basic subsistence. So while the *burdens* that Americans will carry as a result of their being assigned equal per capita emission rights will be considerably higher than those of the average Indian, the history that accounts for this disparity (in which historical responsibility for climate change as well as differential levels of development and national income are implicated) is not relevant to the *entitlement* itself. Mitigation is fundamentally about the allocation of greenhouse entitlements, from which such burdens are only contingently derivative. As before, the inequality in current emissions is relevant to differential mitigation burdens and thus also to responsibility, since bigger current polluters will have to shoulder greater expenses to reduce their emissions down to the level to which they are entitled, and some small polluters may enjoy transferable rights to a valuable commodity if they currently emit below that threshold, but differential capacity is again irrelevant. An affluent person or nation with a history of sustainable carbon footprints would not be culpable for climate-related harm and so would owe no remedial liability for it, and would likewise not deserve a smaller future share of the global resource as a consequence of relatively low-carbon infrastructure investments. Similarly, a big greenhouse polluter that unsuccessfully translated that ecological exploitation into wealth would warrant a larger share of liability for its futile but willfully profligate practices, even if this assignment of burdens appears regressive.

One further reason for distinguishing between the moral basis for and variables relevant to mitigation and adaptation deserves mention. By combining these two disparate climate justice problems, the authors imply that there is no moral difference between their basic imperatives, apparently endorsing the cost-benefit methodology of those who reject all mitigation activities on the grounds that future adaptation would be more cost-effective. Economic analysis may be indifferent between avoided harm and avoidable suffering that is imposed upon the world's least advantaged by its most affluent, but ethics and justice are not. Mitigation efforts ought to be prioritized over adaptation activities for familiar moral reasons, with the latter recognized as a second-best option that can only imperfectly redress the wrongs that result from inadequate mitigation. Combining them within a single index and remedial fund, despite parsimonious appeal, implies that they are commensurable, encouraging the very sort of irreversible harm that climate justice activists tirelessly aim to discourage.

## Notes

<sup>1</sup> See Vanderheiden (2008).

<sup>2</sup> Article 3.1, UN Framework Convention on Climate Change (1992).

## References

- Baer, P. (2009) Greenhouse Development Rights: a proposal for a fair global climate treaty, *Ethics, Place & Environment*, 12(3), pp. 267–281.
- Baer, P., Athanasiou, T., Kartha, S. & Kemp-Benedict, E. (2008) *The Greenhouse Development Rights Framework: The Right to Development in a Climate Constrained World*, 2nd edn (Berlin and Albany, CA: Heinrich Böll Foundation, Christian Aid, EcoEquity, and the Stockholm Environment Institute).
- Vanderheiden, S. (2008) *Atmospheric Justice: A Political Theory of Climate Change* (New York: Oxford University Press).