Editorial

Next to the swelling book shelves in the natural sciences, there is a growing library on the ethics of climate policy. This is of small surprise as anthropocentic climate change is one of the greatest problems facing mankind. The impacts of climate change pose a clear threat to the rights and freedoms of many existing and future persons; and they will exacerbate inequalities between rich and poor countries. Dangerous climate change was usefully defined by the UN Framework Convention on Climate Change as a state of affairs where concentrations of CO_2-equivalent (CO_2^e) in the atmosphere trigger climatic impacts sufficiently grave to threaten global food production, prevent sustainable economic development, and prevent ecosystems from adapting naturally. There are essentially four distinct ethical concepts involved:

- Distributive justice: The capacity of the atmosphere to absorb CO_2^e is limited. The acceptable level of emissions is therefore a good to which everybody is entitled a fair share; and this involves everyone being permitted to emit a certain amount of CO_2 into the atmosphere. These 'permissions' are scarce, that is: the demand is higher than the availability. Well-established distributive justice principles can be applied to the problem of allocating the absorptive capacity of the earth's atmosphere in a broadly analogous fashion to the problem of the just division of other scarce resources (food, water, shelter) between households. From an ethical point of view, the logic is the same regardless of whether the item in question is a good or a bad (or a resource or a sink).
- International justice: This is the problem of justice between different countries, regardless of the distribution that exists within those countries. In reality, it is countries and their political leaders, rather than citizens of those countries, that negotiate emissions rights and adaptation costs in the international arena. Pure distributive justice could be applied if there existed a single world government that allocated fairly among its citizens. But the reality is that the international climate arena is divided into quarreling nations enjoying differential bargaining power and often pursuing a narrowly defined set of national interests.
- Intergenerational justice: This is justice between members of different generations, each generation represented by an average individual. The capacity of the atmosphere to serve as a sink for CO_2^e is non-renewable in a human time-scale. How should this unique absorptive function be divided between members of different generations? The logic of intergenerational relations is that, while a delay in mitigation will only necessitate even more drastic emissions cuts in the future, each generation faces the cognitive problem that they can only guess how efficiently, and effectively, subsequent generations will be able to continue to the mitigation effort. Yet, each generation also has the duty not to engage in the wishful thinking that the problem can be left for descendants to solve. An additional argument is that all of the main greenhouse gases remain in the atmosphere for many decades after release. Combined with other inertias integral to the climate system, the bulk of the expected harm to humans from climate change will be felt by future generations.
- Historical justice: Industrialized states bear the brunt of the historical responsibility for climate change but most of the regions suffering from the impacts of global warming are in developing countries. Should the current inhabitants of the major emitter countries compensate the victims of their ancestors' emissions of greenhouse gases? Take for instance the case of Bangladesh and the US. Do present US-citizens owe present Bangladeshies compensation for the wrongdoings of their ancestors?

Historical justice is often grouped together with intergenerational justice, as both seem to have to deal with justice in time. But this seems to be matter of analytical convenience rather than any underlying equivalence. Objections of compensatory (or historical) injustice rest upon the identification of distinct groups of descendants, at least one injured party and at least one causer of the damage; whereas intergenerational justice typically focuses on the way in which inequitable acts or social policies affect the well-being of a typical member of a subsequent generation.

Fulfilling its interdisciplinary approach, IGJR 3/2009 brings together articles from distinct, but overlapping, disciplines including ethics (Lumer), epistemology (Hillerbrand), social contructivism (Rothe) and political science (Oleson et al.). The paper of Christoph Lumer (University of Siena, Italy) establishes a new criterion for our moral duties, dubbed 'progressive norm welfarism', and deduces a principle of 'no harm to developing countries' from it.

Rafaela Hillerbrand (RWTH Aachen, Germany) addresses the question of how epistemic uncertainties are of relevance for practical decision making. It is shown that the precautionary principle fails to adequately deal with uncertainties as they arise in climate modeling.

Following a social constructivist approach, Delf Rothe (Helmut-Schmidt-University, Hamburg, Germany) shows how the interests of the actors in climate conferences have shifted between Rio 1992 and now. As a result, adaptation became more and more widely accepted as a necessary step in international climate politics whereas mitigation strategies lost ground.

Kirsten Oleson, Lauren Hartzell and Michael D. Mastrandrea (Stanford University, USA) explore the advantages of a climate agreement of those key nations responsible for 90 percent of current emissions (instead of a global agreement). The authors give three reasons why these nations should act alone: ability to act; responsibility to act; self-interest in acting.

We hope you will enjoy the articles in our current issue.

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