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Climate Change, Social Justice and Development

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ABSTRACT *Terry Barker, Șerban Scrieciu and David Taylor discuss the implications of climate change for social justice and the prospects for more sustainable development pathways. They state that the analysis and discussions surrounding the climate change problem, particularly those drawing on the traditional economics literature, have relied on a crude economic utilitarianism that no moral philosopher would endorse. Such arguments have typically ignored the concept of justice itself and wider ethical considerations. The authors argue that climate change is inherently inequitable and inevitably raises ethical issues. Climate change policy should therefore be informed by moral philosophy relating to scientific findings with respect to climate change impacts, rather than just informed by economics in isolation. Climate stabilization policies should be designed by international negotiation to support development and they should not jeopardize the prospects for the well-being of the poor.*

KEYWORDS *Intergovernmental Panel on Climate Change; future generations; equity; development; ethics; moral philosophy*

Introduction

Since the first Intergovernmental Panel on Climate Change (IPCC) Report appeared in 1990, it has been internationally recognized that one consequence of human economic activity has been the accumulation of greenhouse gases and that this is leading to climate change. The Fourth Report (IPCC, 2007) is unequivocal in stating that such change is already adversely affecting development in poor countries, which are most vulnerable to climate variability, and threatening to undo decades of international, national and local developmental efforts. If unchecked, it will threaten future generations, particularly the poor, with unknown but potentially catastrophic climate events. The danger largely arises from economic factors (although geo-politics also plays a crucial role), through the desire for 'modern' lifestyles and the availability of coal and unconventional oil at prices lower than those of carbon-free alternatives. Concentrations of greenhouse gases, already the highest for 650,000 years, may be raised to levels not seen for millions of years.¹

The problem of equity (across social groups living today and across generations) raised by climate change, and the need for urgent and deep mitigation, are ethical problems, and should be informed by moral philosophy (drawing on scientific findings

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with respect to climate change impacts) and not just by economics in isolation. Nelson (2008) points out the aversion of traditional economists to questions of ethics, and explains it as deriving from 'a romantic belief in the possibility of connection-free knowledge from an outside-of-nature, perspective-free viewpoint' (Nelson, 2008: 8). In effect, traditional economists adopt a utilitarianism of a particularly crude kind that no moral philosopher would be likely to endorse.² There is a highly questionable selection and application of rates for discounting the future, drawing on an economic ideology that assumes material consumption to be the sole determinant of human wellbeing. The philosophical literature, and indeed the concept of justice itself have been largely ignored. Whereas Nelson interprets this literature from a feminist viewpoint, we are seeking to supplement her analysis with an alternative treatment of the unacknowledged ethical dimension as it relates specifically to development.

Climate change is inherently inequitable and therefore unjust, because affluent individuals and groups may avoid much of the consequent harm by relocation and by other means of private protection. Moreover, climate change will particularly affect developing countries and regions located in highly climate sensitive areas and their inhabitants (IPCC, 2007; UNDP, 2007), most of them relying on subsistence farming or very low-income activities with little scope for diversification. Climate change will target systematically and mercilessly the vulnerable, the poor and the extremely poor. Mitigation of climate change needs urgent action with a view to alleviating and not exacerbating intragenerational equity (within the existing generation). Climate stabilization policies should be designed by international negotiation intended to support development; at least they should not jeopardize the development process of particularly poor nations.³ Contrary to traditional economic thinking, climate policies (if well-designed) *can* increase economic growth measured conventionally by GDP growth, through accelerating technological change and utilizing under-employed resources, globally and nationally (Barker *et al.*, 2008).

Ethics, equity and the economics of climate change

The implications for new economic thinking about climate change, justice and development are often unclear, provisional and tentative compared with the alleged certainties of cherished traditional, mainstream economic theory (Barker, 2008). Economics is relevant because it helps explain why human behaviour might lead to climate change (by economic choices and the use of the atmosphere for free waste disposal) and it provides systematic methods for assessing (and monetizing) the costs and benefits of different activities and policies. Stern (2007) concludes that 'the benefits of strong early action far outweigh the economic costs of not acting' and 'even at moderate levels of warming, all the evidence ... shows that climate change will have serious impacts on world output, on human life and on the environment' (Stern, 2007: xv and xvi). Stern (2007) asserts that the economics of climate change are more appropriately concerned with risk rather than return, and with the development of technologies for mitigation, both features of the problem that have been evident from the early 1990s, when the scientific assessments began in earnest. This realization itself implies that the economic problem is one of *achieving* political targets with the lowest costs compatible with equity and effectiveness, rather than with the political and scientific problem of choosing the targets themselves.

Ethics considers issues of intergenerational equity, when climate damages are uncertain and far in the future. Intrinsic values (non-monetized) of human suffering and damage to nature, and risks and uncertainties should be taken into account as criteria for social choice. Ethics is also concerned with current intragenerational equity issues and would advocate that the brunt of mitigation action be undertaken by those that have been historically responsible for the emission and accumulation of greenhouse gases in the atmosphere, that is, mainly the developed economies. The position of developing countries in climate change mitigation talks has focused on ethics as a redistributive social justice issue (as opposed to the developed-country perspective wishing to

engage developing countries in order to minimize their own compliance costs). The developing countries view the atmosphere as a 'global commons' public good to which all are equally entitled and advocate a per capita emission rights-based solution (Richards, 2003). Nevertheless, though developed countries need to take the lead in mitigation, as they are foremost morally responsible for creating the problem, developing countries also need to play an active role in avoiding dangerous climate change.⁴ Yet again, ethical considerations indicate that the action should not occur at the expense of development prospects. The strong implication is that there is a requirement for systematic and well-targeted human, financial and technical policies and measures to lead to sustainable low-GHG (green house gas) societies that can reasonably be considered as having higher well-being than business-as-usual development, for example by achieving a given target growth rate, but with lower GHG emissions and improved urban and domestic air quality, among other benefits.

Climate change may appear to some to be a relatively insignificant threat or at least a problem difficult to engage with due to the uncertainty, the subtlety of interactions between natural systems, and the very long-term nature of future damages. However, the scientific consensus is that, if left unchecked, potential damages are very likely to be catastrophic for our civilization, and particularly for poor societies less able to adapt, and that the effects of a changing climate are already being observed (IPCC, 2007). Climate change is seen by some leading scientists as the greatest threat of our days, more serious than that of terrorism (King, 2004). Nonetheless, even if one may find it difficult to engage with global challenges affecting future generations or people that have not been born yet, there is still the more fundamental problem of what economists refer to as negative externalities (adverse impacts of economic activities for which the respective economic agents are not held accountable) that apply to various aspects of the complex system of interactions between economic growth and natural resources. Within this context, greenhouse gas emissions are also usually accompanied by local air pollu-

tion with numerous and immediate adverse effects on ecosystems, human health and well-being. The necessary climate-change mitigation will provide a major additional benefit of improved air quality and enhanced human health. Furthermore, climate change with its potential catastrophes may occur more quickly than expected (WWE, 2008), affecting members of the current generation to whom we may relate in a more personal manner, such as our children and grandchildren.

An ethical approach to climate change: The market view

Before proceeding, let us get rid of some dust that is thrown in the eyes of anyone inclined to adopt an ethical approach to climate change. We are told by conventional, traditional economic theorists that in effect we should *not* adopt such an approach, and should just leave decision-making to the market. (This itself is an ethical approach, although it is a remarkably shallow one.) We should discount concern for future generations on the basis of market-interest rates, which show us how much we actually discount our money on deposit over a given period of time. If we do *not* discount future generations in this way, and disregard the 'revealed preferences' apparent in present financial markets, then we are flouting the consumer preferences of our fellow citizens, showing a lack of respect for democracy, and adopting a 'paternalistic view' (Weitzman, 2007: 707). For instance, Nordhaus (2007) argues that the choice of discount rates should follow market data, dismissing the adoption of a near-zero social discount rate based on ethical reasoning (as in the Stern review), on the grounds that Stern, for example, 'takes the lofty vantage point of the world social planner, perhaps stoking the dying embers of the British empire' (Nordhaus, 2007: 691).

Now let us wipe away this dust from our eyes, which merely serves the purposes of a free-market ideology, and feel free to *be* paternalistic in our attitude. Men should be paternalistic and women should be maternalistic toward their children and grandchildren, just as all of us should be caring towards other people, including the young and

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future generations. And if we care about our grandchildren, for example, then we shall care, if we are thoughtful parents, about the feelings that they will experience and suffer, in their own time, about their own grandchildren. And so on. Of course, even the most devoted parent probably does not care much about distant descendants. And we cannot add up the feelings of individual parents to produce a concern for society as a whole, now or in the future. Nevertheless, we do care about our families more than about the rate of interest on our deposit account. Indeed, parents often care more about their families than about themselves. Such social facts as these are as real as anything emphasized in conventional economic theory. And what about our own generational status? For each of us is necessarily the child of a network of thousands of parents. Our uncertainty is only whether the human race has a *future*, not whether it has a past. Would it have been acceptable for our own past, in the form of earlier generations, to have adopted the kind of casual attitude to *us* that traditional economists such as Nordhaus seem to think that we should adopt toward our own future? A thoughtful parent, like a thoughtful economist, will care about the kind of world in which grandchildren will find themselves living. It is not just a matter of the more immediate effects of climate change. There is also the matter of how our grandchildren will be regarded by *their* contemporaries in poorer regions of the world. The present appalling contrast between developed and less-developed (particularly least-developed) countries will only get worse because of climate change.

An ethical approach to climate change based on social justice

Moral philosophers have long debated the relative weighting to be given to the well-being of social groups living at different times. The Stern Review commissioned a review of the ethics of climate change from Broome (2006), who had written earlier on the issue (1992). He argues that economics is not ethics-free, that basing economics on the ethics of individuals assumed to be entirely self-interested can go badly wrong, and that 'willing-

ness to pay' is invalid as a means of valuation (Broome, forthcoming). This directly contradicts the analysis of Pearce *et al.* (1996: 196–197), when they contrast prescriptive with descriptive valuations of human life. In considering the ethics of climate change, Broome positions *justice* centre stage, arguing that those who cause climate change should desist from doing so because it is unjust, and if they think that they cannot desist, then they should compensate those who suffer.

Justice has always attracted as much serious attention as utility in the theory of ethics. Rawls (1971) deserves serious attention in the debate on climate-change analysis, although he does not discuss such change in itself. Let us adapt his theory to this issue. Consider two population groups: a well-off urban majority, burning fossil fuels, and a subsistence rural minority, in danger of losing access to food and water if the climate changes. Assume that the rural minority do not share in average global growth; they can be said, in Rawls' words, to be the 'least advantaged group'. In his concept of a better society, the standard of living of the most advantaged would be justified only if their privileges maximized the welfare of the least advantaged group, for example through the general economic effect of incentives. Let us assume that society is not influenced by such a Rawlsian concept of justice – perhaps it is dominated by neo-classical economists. We are then left with a triple injustice in the scenario described:

- The rural minority have not been responsible for the greenhouse gas concentrations causing climate change, and nor have they benefited from the comfort and power provided by the fossil energy services.
- The rural minority will suffer the most from climate change because of droughts and floods, and cannot buy their way out of the problem.
- When traditional approaches to climate policy ignore the distributional aspect of the harm caused, global consumption affected by the harm (including mortality) is discounted by an average figure dominated by the well-off majority's income growth, so the minority's future subsistence income counts for less in the

traditional cost-benefit analysis informing global climate-change policy.

Since global inequalities over the last century have been increasing (Maddison, 2001) and a subsistence minority of countries (and social groups within countries) may continue into the far future, these assumptions may be more realistic than those of the traditional model. Rawlsian ethics would focus social policy on preventing the climate change and caring for the subsistence minority in this scenario, instead of the traditional policies, which would have almost the opposite effect.

The limits to utilitarianism

Broome (2006) also considers expected-utility theory alongside justice as a guide to social policy. Importantly, he distinguishes 'value' from 'utility' and allows for intrinsic value in human life and in nature. He considers the debased version of utilitarianism applied to climate change, arguing first, that lives should not be valued by the method of willingness-to-pay, which makes the value of people's lives depend on how much they can afford to spend on prolonging it, and second, that future lives should not be discounted in value relative to present lives of similar quality.⁵

The argument that because people in the future are expected to be better off in real money terms, so that we can then ascribe to their lives or their health a discounted monetary value, runs into serious logical and moral problems, which are not solved by recourse to the term 'statistical lives'. Those who rely on the market to provide an estimate of the social discount rate are assuming that the relevant preferences are fixed, but their procedure is not empirically valid and short-circuits the political process, in which for example elected politicians try to lead and change preferences. They are also assuming that the preferences take a particular form, in which no *ethical* preferences are allowed, although in fact people might prefer that natural resources be preserved as a matter of principle, even though they attach no utility to these resources in themselves. Finally, they are assuming that natural and man-made assets can

be substituted for each other, that is, that they all have *monetary* values and can therefore be exchanged. Irreversible changes, for example a warming of the oceans leading to loss of coral reefs for the indefinite future, mean that such monetary exchanges are impossible.

There are ethical, aesthetic and other values, and it seems that all forms of life should not be simply converted into money, with the exchangeability that money permits (Ackerman and Heinzerling, 2004; Gowdy, 2005). The use of the discount rate to account for time preference and risk should be re-thought to allow for subjective time preference and a risk analysis independent of the return (Price, 2005). The distribution of rights consistent with sustainable development should be considered (Padilla, 2004). The anti-utilitarian moral philosopher Bernard Williams has criticized the reductionism of 'utilitarian thought' and 'the device of regarding all interests, ideas, aspirations and desires as on the same level, and all representable as preferences of different degrees of intensity, perhaps, but otherwise to be treated alike' (Williams, 1985: 86). He does not believe that someone's immediate gratification is to be given the same weight as that same person's life plan and hopes for his children, although traditional economists, with a reverence for market-driven consumerism, may see Williams' attitude as typical paternalism.

Policy implications

Social choice regarding climate policy involves social groups, that is, 'stakeholders', such as government, industry, NGOs, civil society and political parties, in a process of consensus (Ostrom, 1990). But it also requires information and the force of law (Heinzerling and Ackerman, 2007). A real choice requires the equal and simultaneous presentation of feasible alternatives. When a policy is the subject of political debate and possible implementation by government, policy advisors consider the benefit that such implementation would produce in each of various mutually exclusive possible futures that might follow it, the good being considered for each group affected over space and time.

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The process of developing such information for the global community for climate change has been impressive but erratic and controversial. The approach to establishing at least the information base to develop international climate policy is embodied by the UNFCCC (United Nations Framework Convention on Climate Change) and the IPCC. These bodies have arisen out of the international political process, and in their nature they are in keeping with the need for decentralized and varied political structures. This process has brought questions of equity to the fore as witnessed by the crisis in the IPCC's adoption of the Second Assessment Report in 1995, which brought out the neo-classical economists' insistence on valuing human life on an insurance basis. The use of values of 'statistical lives' came into conflict with a perception that human life at present and in the future should be valued equally, irrespective of income or circumstance, for the purpose of agreeing international policy. The governments of the developing countries arguing their case for equality prevailed over the expert economists advising them. It is perfectly feasible that a consensus approach in international negotiation can help to establish social values in difficult and controversial areas, such as abatement of climate change, where the interests of future generations are to be taken into account. For example, the IPCC's summaries for policymakers

are agreed by all governments explicitly at international meetings. Nevertheless, a consensus approach needs to be reached not only through negotiations at the government level but also through an iterative process of discussions and feedbacks between civil society representatives and policymakers to ensure that the concerns of the wider society regarding the climate problem are adequately factored in. The increasing importance of 'side events' at UNFCCC meetings represents progress in this direction.

Social justice, ethics and care for current and future generations represent fundamental values that need to be fully accounted for when dealing with the climate change problem and formulating mitigation and adaptation policies and measures. Addressing the climate change challenge, not only efficiently in an economic sense but also in an environmentally effective and socially equitable manner, may provide a crucial impetus for solving deep development inequities and imbalances. New economic thinking, allowing for induced technological change and observed market conditions (under-utilized resources, lack of information, barriers to action and institutional inertia), holds out the prospect of replacing growth strategies at odds with finite world resources with negotiated international actions recognizing the need for justice in social development and human well-being.

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Notes

- 1 http://www.esrl.noaa.gov/gmd/ccgg/trends/co2_data_mlo.html.
- 2 We adopt a 'new' approach to economics (Boulding, 1992), which places more emphasis on social choice and development (see Barker, 2008, for a discussion). 'Economics is the study of social activity undertaken with its primary purpose the expectation of reward, which usually involves money, the motivations of such activity and its consequences, both good and bad' (Barker, 2008: footnote 5). In contrast, the neoclassical economist Robbins (1932: 16) defined economics as 'the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses', asserting that economics is a value-free science.
- 3 However, climate mitigation implies dealing with conflicting interests, since businesses and economies dependent on fossil fuels may suffer as emissions are drastically curbed for the sake of future generations. Many of these future people will be poor and vulnerable, but many others will be more affluent than the present generation, which is the one we are asking to make sacrifices. In other words, when interests conflict, the message in ethics is likely to be mixed (Broome, 2008).

- 4 The north–south developed–developing dichotomy has lost some of its significance for climate change policy negotiation with the emergence of affluent social groups within the developing countries. Internationally, the poorest and most vulnerable countries with low emissions are applying pressure to large, developing, fast-growing economies, such as China, India and Brazil, to curb their soaring emissions.
- 5 The value of the pure rate of time preference can make an order-of-magnitude difference to the monetized costs of climate change, with high rates of 1.5–3 percent a year as advocated by Nordhaus (2007) reducing far-ahead damage costs to negligible present values. Broome's view of the pure rate of time preference (considering only the futurity of later generations) is supported by the utilitarian philosophers Henry Sidgwick and R.M. Hare and by the anti-utilitarian John Rawls. All of them argue that a rate above zero cannot be justified ethically (Rawls, 1971: 259–262; Hare, 1981: 100–101; Sidgwick, 1906).

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