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# The Ends of Justice: Climate Vulnerability beyond the Pale (pre-proof version)

#### Michael Mason

It was the fifth successive year of drought in Yatta District, with the winter rains yielding 180mm - 40% of average annual totals for the arid landscape of the Hebron hills, which fill out the southern edge of the West Bank. Abdallah Al Tabaneh gestured at his herd of 140 sheep and goats, complaining that the parched rangelands has supported only 15 days of grazing that season, such that he was forced to buy concentrated feed and tankered water for his animals. At the time of our conversation, in May 2009, he was paying 50 New Israeli Shekels (NIS) a month (almost US \$13) for 2500 litres of water and facing concentrated feed prices in excess of 2000 NIS (US \$510) a metric ton. The rain-fed barley and wheat that traditionally provided fodder for the Bedouin herds was stunted, increasingly overrun by spiny shrubs unpalatable even to goats. For Abdallah the recurrent drought was unprecedented in the living memory of the 500 Bedouin households of this region, with profits from herding plummeting. Yet herd sizes had increased significantly in the past ten years (with sheep numbers tripling to 90,000 in 2008), as non-Bedouin households turned to small ruminants breeding to cope economically in the face of Israeli movement restrictions. Since the onset of the Second Intifada in 2000, Israeli work permits had been very difficult to obtain for West Bank Palestinians.<sup>1</sup>

In the nearby village of At-Tuwani, the 240 inhabitants were receiving water deliveries from international humanitarian agencies. The sole spring serving the community had seen its winter peak output drop from 30m<sup>3</sup>/day to 4m<sup>3</sup>/day in the past five years. Saber Akhurini, the Head of the Village Council, attributed this loss to a long-term reduction in rainfall as well as the growing extraction of groundwater by residents from the adjoining Israeli settlement of Ma'on, established in 1981 on occupied Palestinian land. At-Tuwani's farming community has seen over 1.500 dunums of agricultural land appropriated by the settlers, who regularly subject the villagers to physical and verbal assaults: the victims include Palestinian children who walk from other villages to At-Tuwani School. Local olivepickers and shepherds are continually harassed and have even been shot at from Hill 833, an Orthodox Jewish outpost to the east of At-Tuwani. In May 2009, villagers reported that, in the previous month, Israeli setters had destroyed the yield from 100 dunums of their planted barley and beans.<sup>2</sup> No settlers have ever been prosecuted for property destruction or violence against the villagers of At-Tuwani. Indeed, the Israeli Civil Administration in control of this region recognises only 30 dunums of the original village area of 110 dunums: outside this narrow space, the local mosque, school and a new Spanish-financed community water cistern all face Israeli demolition orders.

It is not surprising that we should encounter high social vulnerability in the occupied Palestinian territory (oPt),<sup>3</sup> nor that such life experiences largely remain out of sight to the

<sup>&</sup>lt;sup>1</sup> Interviews conducted by the author with Abdallah Al Tabaneh, Yatta District; and Head of the Hebron Agriculture Department, Hebron, both 11 May 2009. The regional description accords with a survey undertaken by the Food and Agriculture Organization (2009) *Assessment of Small Ruminant Breeders in Rural Hebron, Jericho, Bethlehem and Ramallah* (Jerusalem: FAO).

<sup>&</sup>lt;sup>2</sup> Interviews conducted by the author in At-Tuwani Village, 16 December 2008 and 11 May 2009. The scope of Israeli settler violence in the region, and elsewhere in the West Bank, has been documented by the UN Office for the Coordination of Humanitarian Affairs (OCHA); e.g. OCHA (2008) *Unprotected: Israeli Settler Violence Against Palestinian Civilians and their Property*, Jerusalem: OCHA.

<sup>&</sup>lt;sup>3</sup> My use of the term 'occupied Palestinian territory' follows the accepted nomenclature employed by the United Nations in reference to a series of UN Security Council Resolutions on the Israeli-Palestinian conflict, beginning with Resolution 242 in November 1967.

mainstream Western media. Whatever the reasons for this under-reporting, we might nevertheless expect that our prevailing notions of social justice would allow us to examine the threats to human well-being and alleged abuses of authority noted above, indicating that this state of affairs is unlikely to be fair or right. We can draw confidence from the knowledge that, at least in the academic world, the most prominent liberal theories of justice, as discussed below, reach out and address the interests of those most disadvantaged. As several authors in this volume argue convincingly, while there are significant challenges in applying our notions of social justice to climate change, we also have the theoretical resources to ensure that we can take into account the justice impacts of climate stresses for the most vulnerable peoples. Finally, our democratic intuitions would insist that justice claims are tested openly, that all evidence is shared and that all views are equally respected.

Yet I argue in this chapter that if the litmus test for the moral credibility of a liberal framework of social and environmental justice is its ability to accommodate the victims of multiple and/or enduring injuries, then it must reckon with the unredeemed justice claims of a people under occupation for over 40 years. This is more than the empirical inclusion of a particular ledger of grievances; for reasons given below, it disrupts the conceptual perimeters of liberal theories of justice – the 'ends of justice'. By itself, the problem of climate vulnerability generates issues about the bounds of justice, including duties to those deemed most vulnerable to present and future climate hazards. In the next section, I outline the issue of climate vulnerability in poorer countries. This is followed by an overview of two leading liberal theories of justice as applied to those most likely to be burdened by the impacts of climate change. I then show how the Palestinians, who can plausibly make claims to being amongst the most vulnerable peoples to climate change, nevertheless remain beyond the pale of climate concern – both in a legal and geopolitical sense. Their exclusion as legitimate subjects for climate justice demonstrates the arbitrary and abrupt delimiting of the international discourse on climate vulnerability.

### **Climate Vulnerability in Developing Countries**

For the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), developing countries are the most vulnerable to adverse climate change impacts, because they have higher sensitivity and lower adaptive capacity than industrialised countries. The UNFCCC obliges Parties to take into account the specific needs of particularly vulnerable developing countries in addressing the adverse effects of climate change, while the Kyoto Protocol provides a financial mechanism to assist such countries in climate adaptation. Under the Nairobi work programme adopted by UNFCCC in 2005, developing countries are supported in undertaking vulnerability and adaptation assessments to enhance the effectiveness of their responses to climate change and variability (UNFCCC 2007: 10-11). Recent interest in climate vulnerability is also shared by the Intergovernmental Panel on Climate Change (IPCC), which sponsored an international research project – Assessment of Impacts and Adaptations to Climate Change (AIACC) – to conduct studies of adaptation and vulnerability in 46 developing countries.

In this important research, vulnerability is taken to mean the propensity of people or systems to be harmed by hazards or stresses, which is determined by 'their exposures to

<sup>&</sup>lt;sup>4</sup> 'Climate change' here means 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere which is in addition to the natural climate variability observed over comparative time periods' (UNFCCC Article 1.2).

hazard[s], their sensitivity to the exposures, and their capacities to resist, cope with, exploit, recover from and adapt to the effects' (Leary et al. 2008, p. 4). There is a claim that climate change is changing exposures to climate-related hazards, understood as extreme weather events (e.g. flooding, extreme heat, droughts) which may trigger various societal shocks (e.g. food productivity falls, population displacements). What the IPCC labels 'key' vulnerabilities to climate change – those meriting policy attention as symptomatic of 'dangerous anthropogenic interference' with the climate system (UNFCCC Article 2) – are seen to depend on the magnitude, timing and distribution of climate impacts (Schneider et al. 2007, p. 784). While early IPCC formulations favoured biophysical framings of climate impacts and ecosystem vulnerability, it is now recognised that vulnerability to climate change properly extends to the socio-economic and political conditions that affect how communities cope with the impacts of climate-related hazards. This has led to a more integrated understanding of vulnerability, which is designed to capture the role of non-climatic pressures on individuals and groups who are also facing climate hazards (Adger 2006; Patt et al. 2009). This broader vulnerability perspective is the one adopted in this chapter.

Climate vulnerability thus denotes the idea of exposure to climate-related hazards in the context of biophysical and social vulnerability, as well as in relation to response capabilities in both the short-term (coping) and long-term (adaptation). Efforts to derive single metrics of vulnerability to global climate (and environmental) change typically falter in the face of substantial scientific uncertainties and, more importantly, the value-laden nature of vulnerability assessments (Barnett et al. 2008). Vulnerability is about values perceived to be at risk by affected communities, who bring diverse preferences and ethical judgments to bear in socio-political evaluations of particular climate impacts. As the IPCC elaborates, open deliberations on climate impacts are likely to feature value judgments about the acceptability of potential risks, and potential adaptation and mitigation measures, taking into account such wider themes as development, equity and sustainability (Schneider et al. 2007, p. 784).

Equity considerations are unavoidable given the differential vulnerability of populations and groups exposed to climate hazards. The IPCC has long maintained that the geographical regions at greatest risk tend to be developing countries at low latitudes, because of higher susceptibilities to damage. This general claim is supported empirically by recent global reviews of climate vulnerability (Leary et al. 2008; Schneider et al. 2007), demonstrating that developing countries at low latitudes are particularly vulnerable to predicted water resource impacts (e.g. flooding, reduced water availability and quality) and food supply impacts (e.g. falls in farming productivity) – impacts which increase in severity with greater projected increases in global mean temperature by 2100. However, the mapping of aggregate vulnerability patterns in the tropics and subtropics can displace scientific and policy attention away from key vulnerabilities facing poorer populations in distinctive sub-regions including, for the purposes of this chapter, the eastern Mediterranean.

At least in terms of exposure to climate change, Palestinians in the Gaza Strip and the West Bank face disruptive climate impacts alongside the populations of other semi-arid territories in Western Asia. In the eastern Mediterranean sub-region, climate predictions are compromised by deficits in meteorological data and uncertainties regarding the incorporation in climate models of region-specific conditions and processes (Mellouki and Ravishankara 2007). Nevertheless, climate simulations recently undertaken with three regional models have delivered generally consistent results (GLOWA-Jordan River Project 2009; Kitoh et al. 2008; Somot et al. 2008). Over the course of this century, and depending

on the global emissions scenario employed, there is predicted to be: (i) a decrease in precipitation of up to 35% (with significant seasonal variation), (ii) a significant warming of between 2.6°C and 4.8°C, and (iii) a tendency towards more extreme weather events. For the population of the oPt, the biophysical impacts expected from these trends include an increased probability of flash floods, droughts, desertification and saline intrusion into groundwater (Mason, Mimi and Zeitoun 2010, pp. 49-56).

By themselves, of course, climate impacts say little about the vulnerability of affected populations or groups. In the scholarship on environmental vulnerability, there is a growing interest in the ways in which vulnerability is constituted by multiple processes interacting across different spatiotemporal scales. More precisely, hazards acting on people and systems are seen to arise from influences outside and inside the area of immediate exposure although, given their complexity, their particular character is usually specific to that area (Barnett et al. 2008, p. 105; Turner et al. 2003, p. 8077). This conceptual insight has far-reaching methodological implications insofar as vulnerability analysis is thereby compelled to engage with human-biophysical conditions and dynamics that spiral out from locales and regions of high-level concern. Arguably, these implications have still to be fully grasped. For example, a common finding in the AIACC work on climate change and vulnerability was that socio-economic and political processes are pivotal in accounting for the harm caused by climate impacts, but these non-climatic drivers were mainly derived by comparing discrete national-level studies (Leary 2008). A revealing contrast is provided by Roberts and Parks (2007, pp. 103-132), who undertook a cross-national analysis of over 4,000 climate disasters from 1980-2002 to test proximate and structural causes of human vulnerability: their contention that the root causes of climate vulnerability lie in enduring constraints on the development space of poorer countries invites the critical scrutiny of global political and economic structures.

Indeed, the climate vulnerability of developing countries is inseparable from, and exacerbates, global disparities in wealth and relative power: the most disadvantaged face a disproportionate burden of climate-related risks even though they are least responsible for contributing to dangerous levels of greenhouse gases, and have received little or no benefit from the economic activities causing climate change (Vanderheiden 2008, p. 78). In the next section, I summarise the challenges to two competing liberal theories of social justice posed by the high levels of climate vulnerability experienced by populations in many poorer countries. I argue that, while these justice frameworks profess to have conceptual resources to register the justice claims of those most disadvantaged, there are critical domains of climate vulnerability that escape their reach.

#### Climate Vulnerability and the Ends of Liberal Justice

Under the UNFCCC, the overriding duty imposed on Parties is that they prevent dangerous interference with the climate system (Article 2). Arguably the main articulation of justice pertinent to differential climate vulnerability relates to the legal acknowledgment in the Convention of the inequitable impact of climate change within and across generations, including the recognition that measures for mitigation and adaptation also entail different allocations of costs between states. UNFCCC Article 3(1) expresses succinctly the normative idea informing these concerns:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly,

the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

There is a general understanding of distributive justice at work here, which divides obligations for action on the basis that industrialised (Annex I) Parties are both more culpable for global warming and have greater capacity for limiting anthropogenic greenhouse gases and adapting to the harms caused by climate change. The concept of common but differentiated responsibilities, which is also invoked in the Preamble and Article 10 of the Kyoto Protocol, has wider currency in international environmental law. While the principle sets broad parameters for international burden-sharing on climate change action, its justice-oriented implications for UNFCCC Parties nevertheless remain under-specified (Brunnée 2009, pp. 324-328): this is evident in conflicting interpretations between industrialised and developing country Parties over the nature and scope of assistance due to vulnerable populations regarding climate change mitigation and adaptation.

These disagreements not only indicate that international climate negotiations have left unresolved divergent interpretations of equity under the UNFCCC framework, they also point to treaty commitments which reveal the inequitable treatment of vulnerable developing countries. In the first place, the asymmetry of bargaining power in climate negotiations is manifest in the greater decision costs borne by participating poorer countries, whose shortcomings in technical and administrative capacity are reinforced by their political marginalisation in the global political order. This suggests a procedural *injustice* at odds with the international legal norm prescribing equality of treatment for sovereign states (Roberts and Parks 2007, pp. 14-19). Secondly, while the principle of common but differentiated responsibilities would seem fairly to oblige industrialised country Parties to be the first to undertake reductions in greenhouse gas emissions, its operationalisation in the Kyoto Protocol has also triggered distributive injustices to poorer countries. For example, the designation of 1990 as a base year for emission reduction commitments under the Protocol exempts greenhouse gas emissions preceding this starting-point to the obvious advantage of countries already industrialised.<sup>5</sup> Similarly, the Protocol's Clean Development Mechanism, which is designed to foster green technology investment in developing country Parties, is arguably constraining the economic development space in these states, insofar as transnational companies are investing in carbon reduction opportunities that may not reflect host country economic priorities (Schreuder 2009, pp. 191-193).

Can those liberal theories of justice featuring egalitarian maxims find normative space for those most disadvantaged by climate change? If we turn to John Rawls's (1999a) theory of justice – the seminal modern expression of social contract theory – there is, of course, in the difference principle an explicit rule for the structure of society that justifies inequalities only if they are to the greatest benefit of the least advantaged. The difference principle applies to the allocation of so-called primary social goods (e.g. income and wealth, rights and liberties), the distribution of which is deemed necessary for citizens to participate fully in society. While Rawls said little on environmental problems, it has been suggested that a healthy environment should be included as one such primary good in his schema of justice

<sup>&</sup>lt;sup>5</sup> To be sure, there is a moral case for selecting this base year, which is that, prior to 1990, polluting states can claim 'excusable ignorance' in not being aware of the climate harm being caused by otherwise legal economic activities conducted by their nationals. However, this defence becomes less plausible by 1990 when the IPCC released its *First Assessment Report*, setting out clearly the nature and scope of human-induced climate change. On 'excusable ignorance' see Caney (2005: 761-762).

<sup>&</sup>lt;sup>6</sup> This is within a society in which basic liberties for all are extensive and protected (Rawls 1999a: 52-56).

(e.g. Bell 2004a). Yet, as Vanderheiden (2008, p. 79) argues, the capacity of the atmosphere to absorb greenhouse gases at safe levels for human well-being is essentially a finite good, and current atmospheric levels of greenhouse gases preclude the equalisation move recommended by Rawls where there is pronounced inequality; that is, maximising the allowances of the primary good to the least advantaged. Even if we accept atmospheric absorptive capacity as a primary good, historic inequalities in global greenhouse gas emissions could, under the difference principle, invite carbon-intensive allowance transfers that would be unsafe for human well-being. To retain the egalitarian intent of the difference principle but also effectively to address climate change, the irreversibility of dangerous climate change justifies instead regulatory priority being given to dramatic curbs on the carbon footprint of industrialised countries, accompanied by substantial adaptation assistance to vulnerable populations.

The Rawlsian theory of justice also falters in the face of the spatio-temporal dynamics of climate change. Significantly, Rawls judged the difference principle not to be applicable between states, deriving principles of international justice from what liberal and nonliberal societies would find to be mutually acceptable for global co-existence (1999b). This includes the assumption that states are responsible for the environmental integrity of their territories, although there is no obligation for international environmental cooperation. As Bell (2004b, pp. 142-143) observes, this renders the Rawlsian global compact ill-suited to addressing climate change, as the common property attributes of the global atmosphere are simply ignored. Furthermore, the one principle of international co-existence from this framework that might give moral consideration to the plight of populations with high climate vulnerability – the duty to assist other peoples burdened by unfavourable conditions (Rawls 1999b, pp. 105-113) – is restricted to institutional capacity-building: the toleration of global inequalities of wealth under Rawls's 'law of peoples' blunts the effectiveness of this principle as a means of allocating the costs of climate change mitigation and adaptation (Bell 2004b, p. 145).<sup>7</sup>

If the Rawlsian framework struggles with the spatial extension of distributive justice to climate harms, there is at least the prospect of environmental justice between generations. From his domestic specification of a social contract, Rawls (1999a, pp. 251-259) posits a principle of 'just savings' – that mutually disinterested individuals, in the original position, would agree that it is rational for them to pass to succeeding generations both reasonably just institutions and also a level of capital and wealth sufficient to meet the social minimum for the least advantaged. Present generations would agree to this, he claims, by their representation of family lines (with duties to their immediate descendants) and a wish that all earlier generations in their domestic society had followed the principle. The just savings principle includes constraints on current consumption to conserve and regenerate the capacity of the natural world to sustain its human population (1999b, p. 107), which leads some to register its relevance for determining inter-temporal climate justice (Brunnée 2009: 321). However, the long-term, cumulative onset of global climate change disrupts the model of a neat succession of national governments or populations preserving safe climatic conditions for their own vulnerable descendants. Simon Caney has pinpointed this inter-generational loss of control of climate benefits and burdens, with domestic populations affected by the decisions of previous members of other societies (2006, p. 273). Indeed, until recently, populations could not even have recognised the climate harm to future generations being caused by carbon-intensive pathways of economic development. Thus, the just savings principle cannot capture essential facets of justice to climate vulnerable future generations.

<sup>&</sup>lt;sup>7</sup> For a similarly restrained notion of international justice, which locates 'residual responsibilities' to vulnerable foreign populations, see David Miller (2007) *National Responsibility and Global Justice*, Oxford: Oxford University Press.

Climate vulnerability seems thus to fall outside the moral parameters of Rawlsian social justice. What of the major liberal egalitarian alternative to social contract theory – the capabilities approach associated above all with the work of Martha Nussbaum (2006) Amartya Sen (2009)? The capabilities perspective understands global (and domestic) social justice in terms of social entitlements compatible with the equal dignity of human beings, where people are able adequately to secure minimal thresholds of core capabilities. These core capabilities are freedoms to accomplish things deemed necessary for a dignified life, such as being able to achieve bodily health and integrity, as well as control over one's environment (Nussbaum 2006, pp. 76-78). For Nussbaum, being able to live with concern for and in relation to animal, plants, and the world of nature is a core capability, although she examines its justice implications with reference to the speciesspecific entitlements of animals rather than any analysis of climate change or other global ecological interdependencies. Nevertheless, the capabilities approach has been employed by Wolf and de-Shalit to address those involuntary social and environmental risks which, they claim, entrench disadvantage for vulnerable people. Drawing on almost 100 extended interviews conducted in Israel and Britain, Wolf and de-Shalit contend that exceptional vulnerability compounds disadvantage by compelling individuals to undertake harmful coping strategies, giving as one example the plight of poor Bedouin herders in Southern Israel exposed routinely to contaminated water, because of constraints on their ability to move and control over their political environment (2007, pp. 67-68).8

Surprisingly. Wolf and de-Shalit do not consider the role of global and transnational flows of harm in entrenching social disadvantage, which weakens their commentary on environmental justice. Where capability theorists have considered the value of their approach for tackling global inequalities, the Rawlsian focus on primary goods serves as a foil: capabilities are viewed as a richer conceptual repertoire for locating social positions than resources alone, reflected in an outcomes interest in human development rather than wealth creation and transfer (Nussbaum 2006, pp. 283-284; Sen 2009, pp. 260-263). Nussbaum has provided the fullest account of a capabilities perspective on global justice, arguing for a global equality of opportunity in which a minimum threshold level of capabilities, for all persons, extends beyond national political communities to humanity as a whole (2006, pp. 291-295). In the most developed account of her position, global warming is briefly mentioned as an example of a type of collective harm that justifies the allocation of institutional responsibilities to states and corporations for promoting human capabilities across national boundaries; and effective international environmental regulation is presented as one of the necessary layers of a 'thin system' of decentralised global governance for protecting core human capabilities (Nussbaum 2006, pp. 308, 320). Nussbaum's principles for a minimally just global order include also a priority principle directed at poor and developing countries – that there is a substantial redistribution of resources from prosperous nations to poorer nations. In this way the capabilities approach has a greater redistributive ambition at the global level than the Rawlsian approach.

At the inter-generational level, there is also the claim that the capabilities perspective can better protect the ecological well-being of future generations than invoking a just savings principle or the kindred (Brundtland) notion of sustainable development – that the needs of the present generation are met without compromising the ability of future generations to meet their own needs. Sen (2009, pp. 248-252) argues that environmental sustainability

<sup>&</sup>lt;sup>8</sup> For a work (Wolf and de-Shalit 2007) preoccupied in part with the least advantaged in Israel, those subject to Israeli occupation in the Gaza Strip and the West Bank are conspicuously absent: Palestinians are glimpsed only fleetingly – as suicide bombers, Kassam missile launchers or, at best, the clients of paternalistic concern by Israeli NGOs.

should be reconfigured to encompass sustainable freedom – the preservation or expansion of current freedoms and capabilities without compromising the capabilities of future generations. In other words, each generation acts as a trustee for the core capabilities of succeeding generations. This suggestion has the virtue of integrating environmental protection considerations into human development thinking: it would therefore seem appropriate for capturing the hybrid socio-ecological character of climate vulnerability. As with social contract theory, though, it is by no means clear that a capabilities approach can grasp the particular risk profile of climate change, including the non-substitutable sink capacity of the atmosphere in regards to greenhouse gases (and other pollutants). As there is no priority accorded in the capabilities approach to the ecological conditions necessary for human survival (as might be provided, for example, by a human right not to suffer from the disadvantages caused by climate change: Caney 2005), there is little guidance available on how to address the inevitable tensions and trade-offs between the capabilities of the present vulnerable and the future vulnerable. In a world of escalating climate adaptation costs and global governance failure on climate change, this leaves the capabilities perspective seemingly unable to generate special obligations of climate justice.

The brief overview above of two prominent liberal perspectives on social justice suggests that, despite their egalitarian intentions and interests in wider communities of justice (transnational and inter-generational), climate vulnerability is not yet ensconced within the scope of their moral concern. I have highlighted conceptual challenges associated, above all, with the unprecedented threat of dangerous climate change (as defined by the IPCC), particularly to the least advantaged. In the last section of this chapter, I indicate how one population with high climate vulnerability remains beyond the geopolitical pale of international climate concern. The Palestinian 'exception' to the UNFCCC discourse on climate responsibility exposes vividly the moral shortfall in its constituent norms of climate harm prevention and procedural equity.

#### The Occupied Palestinian Territory: Beyond the Pale of (Climate) Concern

Across all fields of human security, the high social vulnerability of the Palestinian people is widely acknowledged by the international community. Following the end of the Second Intifada in 2005, expectations were raised that socio-economic conditions would improve in the West Bank and Gaza, but recent trends reveal instead a sharp deterioration. UN surveys indicate a deepening of poverty: by 2008 48% of Palestinians in the West Bank and 70% in Gaza were judged to live below the poverty line (UNDP/PAPP 2009; see also UNRWA 2009). There are also serious problems concerning secure access to affordable food and water. In 2008 25% of the West Bank population and 56% of the Gaza population were deemed by the Food and Agriculture Organization to be food secure (FAO 2008), while the daily water consumption for three-quarters of Palestinians was estimated to be 60-100 litres per person for domestic use (Zeitoun 2008, p. 14), which compares with a WHO minimal daily standard of 100 litres per person for direct consumptive and hygiene needs. According to the United Nations Development Programme, food and water insecurity in the oPt are likely to be exacerbated by forecasted climate change, on account of worsening environmental conditions for the domestic agricultural sector (which consumes 66% of Palestinian withdrawn water) and a fragile water supply infrastructure. For both the agriculture and water sectors the political and economic constraints of a belligerent occupation severely restrict the development of Palestinian resilience to present and future climate hazards (Mason, Mimi and Zeitoun 2010).

Of course, it is the fact of belligerent occupation that renders Palestinian climate vulnerabilities *legally* beyond the pale of responsibility of Israel and the international community. In the first place, this has to do with the contested scope of international humanitarian law within the oPt, which Israel maintains is not *de jure* applicable to the West Bank and Gaza, while at the same time undertaking to comply *de facto* with the provisions of the Fourth Geneva Convention and customary law governing belligerent occupation (Dinstein 2009, pp. 20-25). The stance of the international community is less ambiguous: the applicability of the Fourth Geneva Convention to the oPt – including the designation of Israel as an occupying power – has consistently been affirmed by the High Contracting Parties to the Geneva Convention, as well as the United Nations Security Council (UNSC). However, as I note below, even the acknowledgment that international humanitarian obligations hold in the West Bank and Gaza leaves little space for the consideration of environmental justice claims by the occupied.

Secondly, Palestinians are *physically* cast away from, and beyond, dignified treatment by literal pales, which recall the derivation of the noun from palus (stake) as a protective fence defending a settlement. For Israel this refers to various material manifestations of a 'security fence' or barrier complex constructed first along the border with Gaza in 1987 in response to the First Intifada, and then, since 2002, a Separation Barrier from the West Bank (eventually to reach a planned 763km), running mostly within the Palestinian side of the Green Line, encompassing major Israeli settlements in occupied territory. Outside the constitutional protections afforded to Israeli citizens are the Emergency Regulations imposed on the oPt: these empower the State of Israel to declare closed military areas. exercise arrest without trial, expel and even execute individuals (Pappe 2008, p. 148). The Emergency Regulations have given rise to a pervasive set of controls and movement restrictions which intrude into Palestinian daily life. Gazans also face economic sanctions and a blockade, imposed after the January 2006 victory of Hamas in the Palestinian Legislative Elections, then tightened further in September 2007 following the declaration by Israel that the Gaza Strip was a 'hostile entity'. Operation Cast Lead, the Israeli military offensive of December 2008-January 2009 in the Gaza Strip, was only the most recent, albeit shocking, example of how Palestinians have been collectively exposed to the securitised and highly asymmetrical effects of occupation.9

It is recognised in international law that states have a legitimate right to protect their populations, and the State of Israel has consistently invoked self-defence to justify its extensive use of coercive force against Palestinians perceived to threaten its citizens, though even the US has been uncomfortable with the Israeli propensity to favour disproportionate military actions. The routine use of violence against Palestinians by the Israeli state unsettles the assumption of liberal justice theories that constitutional democracies are inherently pacific (e.g. Rawls 1999b: 8). Indeed, Israel has been presented as a prime example of the 'state of exception' taken to be constitutive of the Western political system; that is, the unexamined foundation of political authority on unaccountable sovereign violence (Agamben 2005). Those individuals and groups excluded from membership of the state (the exiled and the bandits) serve at the same time to constitute the 'other' by which the normalcy of national citizens is measured. It is not difficult to view the treatment of Palestinians in these terms, reaching back to the exiled and refugees of 1948, recording the displaced of 1967 and then registering more recent

<sup>&</sup>lt;sup>9</sup> While Israel has stated that, with its unilateral withdrawal from the Gaza Strip in September 2005, its status as an occupying power there has finished, it still retains effective control of the Strip, and acknowledged in the 2003 Israeli-Palestinian Interim Agreement that the West Bank and Gaza Strip constitute a single territorial unit: Israel therefore remains bound by international humanitarian obligations regarding belligerent occupation (Dinstein 2009: 276-280).

victims of Israeli state and settler violence (e.g. Lentin 2008; Hanafi 2009). The state of exception of Israel's constant emergency footing has justified multiple contraventions of international humanitarian law, such as the domestic incarceration of 8,000 Palestinians, many without charge or under military detention orders. In the midst of the 'war on terror', which has seen liberal democracies suspend civil liberties and freely scatter derogations from due legal process, the enduring state of exception in Israel and the oPt seems to have been confirmed as the juridical paradigm of Western political authority.

Proponents of the state of exception thesis treat as hypocritical any liberal formulation of international justice that does not concede the bogus universalism of its appeals to a common humanity. Yet it is the existence of cosmopolitan norms in international law that at least gives moral weight to the justice claims of those vulnerable to social and environmental injury. Thus, the prospects for international distributive justice in assisting Palestinians to meet climate adaptation burdens caused by other global actors finds support in those harm prevention rules with currency in international humanitarian and environmental law. For example, customary and treaty-based humanitarian obligations on Israel as an occupying power oblige it to not to degrade or destroy property and resources indispensable to the survival of the Palestinian population, including agricultural areas, drinking water installations and irrigation works. Any such infrastructure oriented to food and water security becomes more critical should climate change significantly increase the physical scarcity of water, especially if movement restrictions continue to restrict economic development options for the oPt. From an international environmental law perspective, Palestinians already benefit indirectly from UNFCCC obligations on Parties effectively to prevent dangerous climate change. Insofar as customary norms of environmental harm prevention are acknowledged as pertaining to climate change, the high climate vulnerability of the oPt would justify also international assistance for Palestinian adaptation measures as a form of direct damage prevention (Verheyen 2005, p. 35).

The weak enforceability both of international humanitarian and environmental law is of course the key institutional deficiency hindering the reach of cosmopolitan rules of harm prevention. At the level of state responsibility, international obligations to assist climate adaptation are more practically relevant to the immediate well-being of the Palestinians that states' mitigation duties under the UNFCCC. In the absence of Israeli compliance with key humanitarian obligations – including those pertaining to food and water security – the international community continues to pour substantial aid into the oPt. committing \$4.48 billion in March 2009 at the donors conference in Sharm el-Sheikh to assist vulnerable sections of the Palestinian population and to carry on strengthening the Palestinian National Authority (PNA). The need to address climate risks barely registers in these donor commitments, even though international humanitarian organisations have now identified climate change as the most important emerging humanitarian challenge for the global community (OCHA/IFC/WFP 2009). Humanitarian assistance in support of Palestinian adaptation to climate change would logically target the disaster risk reduction capacity of the PNA, which suffers from a number of structural weaknesses (Al-Dalbeek 2008). Integrating climate risks in national disaster risk reduction is necessary for building climate resilience in the oPt, but would inevitably be compromised by the far-reaching limits to administrative and judicial authority of the PNA set by the Israeli occupation. This unyielding reality perpetuates both the need for, and ultimate ineffectiveness of, international assistance to the Palestinians (Le More 2008).

The high thresholds of (potential) harm necessary to trigger state obligations under international humanitarian and environmental law leave unchecked the ongoing effects of the occupation that serve to increase the climate vulnerability of Palestinians. Some of

these arise from Israel's de facto control of Palestinian natural resources – from Gazan fisheries and natural gas reserves to the groundwater supplies of the three transboundary aguifers underlying the West Bank. 10 Combined with the numerous restrictions on the free movement of goods and people, this control smothers development pathways out of vulnerability. For example, to take the critical issue of physical water scarcity forecast to increase under climate change, Israel consumes six times the Palestinian withdrawal from shared freshwater resources (Zeitoun 2008, pp. 57-58). For the crucial Western Aquifer Basin, which is the largest groundwater resource between the two territories, Israeli prohibition of new Palestinian wells and access restrictions to existing Palestinian wells caught on the Israeli side of the Separation Barrier are significantly reducing supplies of agricultural water for the northern West Bank (Trottier 2007, p. 121). Sari Hanafi (2009), who subscribes to the state of exception theory, has termed 'spacio-cide' the creeping dispossession and degradation by Israel of Palestinian living spaces, which he claims has undermined the material conditions of a viable Palestinian state. Spacio-cide also disables the means by which Palestinians have historically coped with climate hazards, e.g. changes in agricultural land use, settlement locations and livelihood choices during times of drought; and which, with an end to occupation, could serve as cultural templates for effective adaption to new climate stresses (Mason, Mimi and Zeitoun 2010). The Israeli erosion of the material and social conditions by which Palestinians cope with climate (and other) hazards has unjust consequences for the distribution of adaptation costs between the two territories, yet its insidious agency slips past the watch of international norms of humanitarian and environmental harm prevention.

The humanitarian safeguards against harm offered by the international law of belligerent occupation operate in acknowledged conditions of coercion – the civilian population has not consented to be occupied. In a protracted period of occupation, as for the oPt, this suggests the firm exclusion of the occupied from *international procedural justice* in the sense of their participation and recognition as citizens of a sovereign state with formal equality in the global community. Just as norms of environmental protection are sidelined by the particular (*lex specialis*) rules governing military occupation under the laws of war, political norms of collective self-determination and human autonomy seem effectively suspended. Avoiding here the state of exception rests on the expectation that the international community will make good its commitment to facilitate a comprehensive Israeli-Palestinian peace settlement where two democratic states live side by side in peace with recognised borders (e.g. UNSC Resolution 1850). Prior to any such final settlement, is there any scope for the Palestinians to determine collectively their own climate vulnerability with a view, if necessary, to seeking adaptation assistance from the international community?

It is the absence of state sovereignty for the Palestinians that precludes their political representatives from signing up to, and participating in, the UNFCCC – the most important international regime for allocating state duties regarding climate change mitigation and adaptation. To be sure, following the proclamation of the 'State of Palestine' by the Palestinian National Council in November 1988, 'Palestine' was recognised as an entity by the UN General Assembly (UNGA Resolution 43/177) and has since been afforded rights and privileges of participation in the work of the UN system (UNGA Resolution 52/250). This unique diplomatic identity – between a non-state and a state – has allowed PNA actors to represent the oPt in areas where they have particular expertise and authority; thus the Palestinian Environmental Quality Authority participates as an observer in a

<sup>&</sup>lt;sup>10</sup> This de facto control stands opposed to the principle that an occupied population retains permanent sovereignty over its natural wealth and resources, as stated for the oPt in UN General Assembly Resolution 305 in December 1972: see Okowa (2009: 244-245).

number of multilateral environmental agreements (e.g. the 1994 UN Desertification Convention and the 1976 Barcelona Convention for the Protection of the Mediterranean). Supported by the Arab League, the PNA has sought Palestinian observer status at the UNFCCC, but so far with little success: 11 there has been little appetite, outside Arab Parties to the Convention, to pull the highly charged issue of Palestinian climate vulnerability within the orbit of a treaty sustained still by a fragile global consensus between Northern and Southern states. As the occupying power in the oPt, and also a Party to the UNFCCC, Israel could reasonably be expected to represent the interests of the Palestinian population in avoiding climate-related harm forecast to affect vital interests in water and food security, but the issue of Palestinian climate vulnerability is absent from Israeli national statements on adaptation to climate change (e.g. Office of the Chief Scientist 2008). Without any direct representation, on an ongoing basis, within the UNFCCC of Palestinian vulnerability to climate-related harm, they remain beyond the pale of the international climate regime – frozen out, for example, from access to the financial mechanisms available under the UNFCCC to support climate adaptation activities in poorer countries.

The procedural injustice that is the exclusion of Palestinian representatives and interests from the international climate regime is founded, of course, on a more general denial of national self-determination. It has been noted that participatory failings in global decisionmaking on climate change are intertwined with the *lack of recognition* of the needs of vulnerable peoples (Paavola, Adger and Hug 2006). In the Palestinian case, where ethnic identity has been forged by collective and individual experiences of oppression, injury and humiliation at the hands of an occupier – one whose own singular ethnic ideology (Zionism) precludes the treatment of Palestinians as equals – cultural recognition is fraught with violence. This is the case internally as well as externally: the political and often bloody polarisation of the population into factions – pro- and anti-PNA, secular versus religious, refugee versus non-refugee – has frustrated moves to present a unified governing authority (Jamal 2007). The efforts of the international community have often made matters worse: the ongoing dependence of the Palestinians on substantial flows of humanitarian and development assistance has fostered corrupt, clientelistic networks, as well as bending domestic institutions to donor preferences and political interests. It would be unwise to imagine that the development of a Palestinian position on climate justice would not be affected by these broader political currents and power relationships. Yet, the international community is obliged at least to recognise the right of Palestinian political representatives to address the potentially dangerous impacts of climate change on their vulnerable population.

#### Conclusion

So over-determined is the vulnerability of Palestinians to physical and psychological harm that consideration of the dangerous effects from potential climate change represents, paradoxically, an entitlement – the luxury to attend to impacts to well-being that are uncertain and diffuse. As noted above, climate scientists do forecast disruptive biophysical impacts for the eastern Mediterranean, by the end of the century, as a result of climate change, yet these predictions are dwarfed into insignificance by the immediate and enduring injuries caused by the Israeli occupation in the West Bank and Gaza. Indeed, it is practically irrelevant to Palestinians if the climate hazards they face are ultimately caused

<sup>&</sup>lt;sup>11</sup> Palestine was granted observer status at the UNFCCC COP 15 meeting at Copenhagen in December 2009, but with no access to the formal negotiations and no prospect of a more permanent observer status in the international climate convention.

or by anthropogenic greenhouse gas emissions (climate change) or are the expressions of 'natural climate variability': both are the effects of intangible forces outside their control. The international allocation of mitigation and adaptation responsibilities under the UNFCCC is a justice concern for this population only insofar as those states more culpable for global warming, and/or more capable of assisting poorer countries, might be obliged to assist Palestinians in becoming more resilient to dangerous climate change. However, for reasons already given, Palestinians are beyond the pale of the UNFCCC process: their statelessness ensures their formal exclusion from the international regime (including access to climate adaptation financing), while their contentious political subjectivity is viewed by key Convention Parties as toxic to the fragile global consensus on climate action.

As discussed in this chapter, liberal theorists of justice with egalitarian credentials have conceptual resources for bringing the least advantaged into the fold of moral concern, but are found wanting when confronted both with the problem structure of climate change and the challenge of a protracted belligerent occupation. Both conditions are under-examined in liberal political theory, and when these circumstance converge, as with the climate vulnerability of the Palestinians, the limitations are compounded. In contrast, Giorgio Agamben's (2005) 'state of exception' thesis seems to give theoretical justification to conditions beyond the legal and moral pale of liberal justice: here the exceptional case unmasks the unacknowledged conditions of conventional political authority, notably the arbitrary violence of a 'force of law without law' (Agamben 2005, p. 39) against those seen as threatening the security of the state. And it is the nature of Israel as a security state, under a constant emergency footing, that gives force to claims that it embodies a state of exception in its domestic polity and its occupation of the Palestinian territory. There is, of course, also a globalisation of violence that feeds into, and out from, the Israeli-Palestinian conflict and structures the production of Palestinian (and Israeli) vulnerabilities. 12 However. the normative cost of Agamben's theory arguably outweighs its critical intent, for there is no escape from the state of exception, no prospect of justice. Indeed, its philosophical erasure of autonomous agency is, arguably, theoretically more corrosive than the weaknesses of egalitarian liberal approaches. Much needs to be done to rework the latter to make space for the consideration of, and engagement with, the injustices of climate vulnerability.

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<sup>&</sup>lt;sup>12</sup> Consider, for example, the extraordinary asymmetry of US Government support for 'security assistance' in the region, with a congressional budget request in 2009 of \$2.55 billion for Israel (part of a new 10-year \$30 billion security-assistance agreement) and \$25 million on 'non-lethal' security assistance to the Palestinian Authority: see US Department of State (2009) *Congressional Budget Justification: Foreign Operations*, Washington: DC, <a href="http://www.usaid.gov/policy/budget/cbj2009/110415.pdf">http://www.usaid.gov/policy/budget/cbj2009/110415.pdf</a>

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