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### The non-cooperator pays principle : pragmatic norms and the US-China mitigation standoff

Jonathan SYMONS  
*La Trobe University*

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**The Non-Cooperator Pays Principle:  
Pragmatic Norms and The US-China Mitigation Standoff**  
Jonathan Symons<sup>1</sup>

**Abstract**

If the US and EU agree to stringent emission targets in a post-Kyoto successor agreement but China does not, would carbon tariffs on Chinese imports be justified? A dominant view of climate justice affirms the 'polluter pays principle' as the most appropriate distributive principle for allocating the costs of mitigating climate change and asserts that carbon tariffs on developing world imports are unjust. Against this widely accepted standard of justice this paper defends the appropriateness of more pragmatic climate norms. In particular the paper defends a forward-looking 'non-cooperator pays' principle which states that under the condition of anarchy, actors negotiating to secure a public good that cannot be provided without wide-spread cooperation are justified in seeking to induce cooperation by imposing costs on non-cooperators, even if this cost-allocation would be considered unjust in the absence of the collective action problem. This principle's most likely application would be in the form of border tax adjustments (or carbon tariffs) that equalise the embodied cost of greenhouse gas emissions on imports and exports. This position is contextualised within a broader argument that the climate regime's norm of 'common but differentiated responsibility' is a barrier to the creation of an effective international climate agreement. Taking the interests of the most vulnerable climate victims seriously may require us to move beyond existing conceptions of inter-state justice and to accept that the distribution of costs under a climate agreement that is both effective and politically viable may not reflect historical responsibility.

**1 Introduction**

The first report of the Intergovernmental Panel on Climate Change (IPCC) in 1990 marked the beginning of what might be called a 'twenty years crisis' in the global climate regime. In the two decades since a scientific consensus emerged warning of the dangers of global warming, emissions of greenhouse gasses (GHG) have accelerated and the atmospheric concentration of CO<sub>2</sub> has tracked steadily upward from around 350 ppm in 1988 to approximately 385 ppm in 2008 (Hansen et al., 2008). Predictions suggest that on the basis of existing emissions alone the globe is now committed to a period of significant warming, diminishing biodiversity, climatic instability and unnecessary human suffering. (Intergovernmental Panel on Climate Change, 2007: 45-54) This continuing failure of international cooperation has prompted many suggested reforms of the climate regime (e.g. Müller, 2008; Müller and Winkler, 2008; Prins and Rayner, 2007; Tickell, 2008). Most normative analysis calls on the developed world to finance the bulk of climate mitigation and adaptation measures and to repay their accrued 'climate debt' (Caney, 2005; Dobson, 2006; Mace, 2006: 55; Vanderheiden, 2008).

This article cuts against this analysis by arguing that there is a trade-off between fairness and effectiveness in the climate regime. It outlines why a more 'pragmatic' set of climate regime norms would be more likely to lead to stringent global emission cuts and proposes that these pragmatic norms might be normatively preferable to ineffective idealist

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<sup>1</sup>Jonathan Symons is an Associate Lecturer in international relations at La Trobe University in Melbourne (Australia). Research for this paper was conducted during his time as a research fellow in the Hong Kong APEC Study Centre and the Environmental Studies Programme at Lingnan University. Email: jonsymons@gmail.com

norms. This argument draws on realist conceptions of political ethics such as those articulated in Edward Carr's analysis of the 'twenty years crisis' of 'idealist' policy-making which led to WWII (1946). I argue that the United Nations Framework Convention on Climate Change's (UNFCCC) incorporation of a norm of 'common but differentiated responsibility' (CDR) involves an analogous excess of idealism. CDR has become an impediment to effective global action.

My argument springs from comparative analysis of the domestic politics of climate change and the barriers within national political processes to the attainment of an effective global agreement. The Kyoto Protocol set emission limits for developed states but not for the developing world. In doing so it threatened to undermine the competitiveness of first world industry. As a result, trade-exposed industries became implacable domestic opponents of Kyoto's ratification and implementation. In several states including the US this opposition appears to have tipped the political balance against acceptance of significant emission limits. This analysis of barriers to collective action within both international and domestic politics of climate change forms the practical justification for the proposed 'non-cooperator pays principle'. Cooperation – in the form of international agreement to limit GHG emissions – is key to the success of the climate regime. And yet, for reasons relating to the uneven distribution of costs and benefits both within and between states, as well as the moral hazards that emerge from the spatial and temporal separation of pollution from its consequences, effective international co-operation remains unlikely. Given the value of the public good (a habitable climate) at stake, and the severity of the cooperation problem, I argue that traditional standards of justice might need to be suspended. It is more important that cooperation and non-cooperation be rewarded and penalized within an effective climate agreement than that the agreement achieves conventional standards of fairness.

The proposed 'non-cooperator pays principle' responds to the difficulty of solving collective action problems in the absence of government. It proposes that *under the condition of anarchy, actors negotiating to secure a public good that cannot be provided without widespread cooperation are justified in seeking to induce cooperation by imposing costs on non-cooperators, even if this cost-allocation would be considered unjust in the absence of the collective action problem.* This principle suggests that participants in an international agreement that promises to stabilise atmospheric greenhouse gas (GHG) concentrations would be justified in seeking to impose some costs on non-participants (e.g. through border tax adjustments). While it has long been recognised that the climate regime should contain incentives to attract developing world participation the 'non-cooperator pays principle' would also justify penalties, such as carbon tariffs, which are currently perceived as unjust to the developing world. The non-cooperator pays principle should not be the climate regime's only distributive principle. However, recognition of its normative appropriateness might be an important step toward a more effective climate regime.

My argument proceeds in four parts. Section two briefly outlines the origins of the norms of 'common but differentiated responsibilities' (CDR), 'historical responsibility' and 'polluter pays' and considers the relationship between these norms and the provision of global public goods. The third section reviews the failure of the UNFCCC and the Kyoto protocol to limit global GHG emissions. It argues that in the last two decades the climate regime's idealist norms have worked against the acceptance of stringent greenhouse policies within the domestic politics of many industrialised states.

Section four seeks to assess how this crisis of ineffective policy-making might be ended by drawing implications for the design of an effective global climate regime from comparative analyses of the national politics of climate policy. It proposes that if a global climate regime is to both set stringent emission limits and be politically viable within powerful industrialized states it must not disadvantage first world industry vis-à-vis

developing world competitors. Just as the Montreal Protocol on Substances that Deplete the Ozone Layer induced developing world membership through a mix of carrots and sticks (technology transfer funding and trade incentives) so must the international climate regime restructure the calculus of state incentives so that participation is in the interest of the developing world. Border tax adjustments (BTA) are valuable tools because they protect the competitive position of developed world industries and also create incentives for developing world participation in the climate regime.

The final section articulates the case within non-utopian normative theory for 'pragmatic' measures, such as BTAs, which would impose costs on non-parties to a global climate agreement. It draws on the realist tradition of political ethics, which argues that international institutions must be designed, via a balance of pragmatic and idealist thinking, to work with the forces that motivate states. The argument for a non-cooperator pays principle emerges from the need for norms that are effective in solving collective problems. At first blush this argument – that an effective climate regime should be imposed on a reluctant developing world by powerful states, and that such an agreement must not disadvantage first world industry – might seem a piece of sophistry defending global iniquity. However, if we place a high value on averting a catastrophic climate outcome then a philosophical commitment to survival justify pragmatic norms. Likewise, assessed in terms of Rawls' difference principle (applied globally) the relative justice of competing approaches should turn on the empirical question of which is most favorable to the earth's least advantaged people.

## **2 Global Public Goods and Norms Promoting Cooperation**

There are three distinct ethical questions at stake in an assessment of the non-cooperator pays principle. First, when, if ever, is it just for actors who contribute to securing a public good to *impose* a fair share of costs on actors who do not contribute. Second, is it ever just for actors to *induce cooperation* by promising to impose punitive costs on non-cooperators. Third, should normative standards for state behaviour take into account domestic constraints on the state's freedom of action, or should the state be judged against ideal standards.

The third question concerns how to judge ethics in the context of a 'two level game' where action in each game is constrained by conditions in the other game (i.e. statespeople whose international actions are constrained by domestic politics). Robert Putnam's (1988) analogy of international relations as being like a two-level game<sup>2</sup> describes the foreign policy decisions engage with both an international audience and a domestic audience. Making judgements about ethics in two levels games might require a understanding of the level of 'agential power'<sup>3</sup> or 'autonomy' the state possesses in respect of the pressures of domestic society and international structure (Hobson, 2000, pp 4-7). For example normative argument concerning the obligations of a nation-state may require actions that are politically impossible for a democratic government. If an ideal normative analysis says that state X owes \$Y in compensation for the harms caused by its historical pollution, but this level of voluntary compensation is not possible given domestic political structures – how should we judge the government which achieves the maximum possible outcome?

If we combine the second and third question we come to the nub of the climate change dilemma. Imagine that an ideal normative analysis says that industrialised states should meet the total costs of climate change mitigation and adaptation in order to compensate the developing world for their historical responsibility for causing climate change. In this scenario state X should contribute \$100 billion per annum to domestic climate

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<sup>2</sup>Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-Level Games," *International Organization* 42, no. 3 (1988).

<sup>3</sup>John Hobson, *The State and International Relations* (Cambridge: Cambridge UP, 2000) 4-7.

mitigation efforts and to mitigation and adaptation in the developing world. Now suppose that domestic political constraints mean this level of expenditure could not gain congressional approval. Instead, two different deals are possible. In one X commits only \$40 billion meaning that a portion of the historic debt is repaid on just terms but that the mitigation and adaptation efforts will be insufficient and future generations will suffer unnecessary harm. The other politically possible outcome sees the state contributing a possible \$60 billion but using the promise of adaptation payments and threats of punitive tariffs to extract \$40 billion of contributions from the developing world. In this scenario the threat of climate change is dealt with effectively but on unjust terms. Future generations are spared unnecessary suffering by an unfair international agreement. This paper seeks to identify which of these approaches is more just.

The paper works from the premise that part of the purpose of social norms is to promote behaviour that is mutually beneficial. Norms coordinate behaviour into patterns that solve various forms of collective action problem. However the social norms with which we are most familiar (e.g. shouting drinks in turn) have evolved within small communities where the costs of non-compliance are obvious. The challenge posed by anthropogenic climate change has a number of features – such as a time delay between emissions and their environmental consequences, the difficulty of observing emissions, and the absence of an authority to enforce compliance – that might make norms that have evolved in other contexts ineffective in solving this global cooperation problem. For this reason, to understand the UNFCCC’s failure we might begin with an analysis of the compatibility of the climate regime’s norms and its stated goals.

### ***‘Common but Differentiated Responsibility’***

The UNFCCC’s most significant norm, established in Article 1, states that:

the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their *common but differentiated responsibilities* and respective capabilities and their social and economic conditions

While the practice of differentiating responsibilities in multilateral agreements is long-standing, and ‘differential and more favourable’ treatment has previously been given to developing countries, the UNFCCC embodies differentiated responsibility as a central principle. (Stone, 2004: 278-9) Adoption of the norm of differentiated responsibility in the UNFCCC followed from earlier acceptance of the right to development. Once the right to development was accepted it would have been inconsistent (and unjust) to ask developing states to limit development by restricting GHG emissions. (Shue, 1995: 459).

While the UNFCCC contains no binding emissions targets, the CDR norm found its practical expression in the differentiated targets negotiated at the third annual ‘conference of the parties’ (COP-3) in 1997 and codified in the *Kyoto Protocol to the United Nations Framework Convention on Climate Change*. The Kyoto Protocol establishes binding emission restrictions for Annex B states (developed plus some former communist eastern European states), but includes no mandatory targets for non-Annex B (developing) states. The decision to limit emission targets to Annex B states in this first commitment period appears to have been largely a tactical move to delay dealing with the thorny question of emission limits for developing powers such as India and China. (Vanderheiden, 2008: 69) The intractable problem here is that while a climate treaty that excludes India or China will not avert dangerous climate change, neither would these states accept emission limits that restrict their capacity to develop. By deferring resolution of this impasse to another day – negotiators

left unanswered the question of whether it is possible to achieve a climate regime that is both effective and fair (as understood through UNFCCC norms).

***‘Historical Responsibility’ and the ‘Polluter Pays’ Principle.***

The argument in favour of CDR also draws on two subsidiary normative principles. The ‘polluter pays principle’ (Gardiner, 2004: 579; Shue, 1999: 534) (Jagers and Goran, 2008; Shue, 1999: 537) reflects both goals of *fairness* (that the beneficiary of pollution should pay for associated costs), and of *efficiency* (that collective wellbeing is optimised if full costs of production are internalised rather than imposed on the community as a whole). The Rio Declaration on Environment and Development makes the clearest articulation of the polluter pays principle in international law:

*Principle 16. Internationalization of Environmental Costs* National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

In many cosmopolitan accounts of atmospheric justice, the ‘polluter pays’ principle of compensation for harm is supplemented by an ‘ability to pay’ principle (Caney, 2005; Jagers and Goran, 2008: 581-2; Shue, 1999: 537) or a ‘beneficiary [of past GHG pollution] pays’ principle (Page, 2008: 562-4) which is akin to the concept of ‘historical responsibility’ pushed by many developing states. For normative theorists allocation of responsibility for present day costs on the basis of historical emissions raises questions about the fairness of penalising acts whose harmfulness was not clear at the time (in the case of emissions pre 1990) or for imposing costs on present day generations for the actions of their parents and grandparents. (Caney, 2005; Jagers and Goran, 2008: 581-2; Shue, 1999: 537) Politically, the question of historical responsibility is also contentious because it demands enormous transfers of wealth from industrialised states to the developing world. By way of example, the UNDP’s estimate of the annual cost of climate adaptation in 2015 is \$86 billion. (UNDP, 2007: 194)

Christopher Stone divides CDR into three types. Rational bargaining CDR emerges from rational bargaining between parties who obtain an efficient agreement (Pareto-improving in the sense of leaving at least one party better off without disadvantaging others) by recognising that parties’ contributions and benefits will differ. (Stone, 2004: 278-9) Equitable CDR describes a negotiation where parties are still committed to a Pareto-improving outcome but agree to constraints on bargaining that limit possible outcomes to those that ‘tilt the cooperative surplus more favourably toward a designated group of parties’. (Stone, 2004: 278-9) In contrast to these two Pareto-improving forms inefficient CDR awards the poor more than the entire net surplus of cooperation. Instead the negotiated outcome seeks to correct previous injustices by transferring wealth from some parties to others. (Stone, 2004: 278-9)

Recognising that climate negotiations involve bargaining over the provision of a global public good helps to clarify why CDR may be an inappropriate norm for the climate regime. Global public goods are, by definition, goods that are both non-excludable and non-rival in the sense that once provided no state can be prevented from enjoying them, and no state’s enjoyment of the good impinges on others. (Barrett, 2007, p. 1) Because public goods are non-excludable they are amenable to free-riding and so, in the absence of government, are likely to be undersupplied. A state choosing whether to spend money on climate change mitigation measures will be aware that the vast majority of the benefits of expenditure will accrue to others. In contrast the benefits of adaptation expenditure are exclusively local.

Further, since the benefits of adaptation spending are more immediate and tangible it is likely to attract greater political support. In the absence of a global agreement which guarantees proportionate state contributions to mitigation efforts it may be rational for states to preference adaptation to mitigation even if this approach is the less efficient (measured globally). For these reasons the public good of climate safety is likely to be underprovided. If climate regime negotiations are constrained by expectations of inefficient CDR then the motivation for powerful states to make the necessary investment will be very low. Analysis of the climate regime's failure over the last twenty years demonstrates this point in greater detail.

### **3 The Climate Regime's 20 Years Crisis**

In 1988 the World Meteorological Organization and the U.N. Environment Programme established – with authorisation from the U.N. General assembly – the Intergovernmental Panel on Climate Change (IPCC). The IPCC is an intergovernmental panel of scientific experts charged with the responsibility to continually assess the risk of climate change caused by human activity and to provide policy-relevant summaries of scientific knowledge. By 1988 there was a high degree of scientific certainty that carbon dioxide (CO<sub>2</sub>) and other greenhouse gasses such as methane and nitrous oxide were accumulating in the earth's atmosphere and creating anthropogenic warming through their heat-trapping properties. Concerns about global warming were also gaining prominence in the international political agenda. The first IPCC report of 1990 confirmed the scientific evidence for anthropogenic climate change and prompted the negotiation of the 1992 United Nations Framework Convention on Climate Change (UNFCCC) in the lead up to the Rio Earth Summit. Despite these clear warnings and promising early negotiations, subsequent inaction means that warming of considerably more than 2°C is now almost inevitable.

A picture of this coming crisis can be gained by comparing IPCC climate projections against emission trends predicted in the International Energy Agency's annual *World Energy Outlook* reports. The IEA's reference scenario, which predicts future carbon emissions factoring in only conservation measures that have already been committed to, sees global energy-related CO<sub>2</sub> emissions rising from 28Gt in 2006 to 42 Gt in 2030. This projected increase 'puts us on a course of doubling the concentration of' GHGs 'in the atmosphere by the end of the century, entailing an eventual global average temperature increase of up to 6°C.' (IEA, 2008: 11). Warming of this speed and magnitude is unprecedented in human history. It is also possible that warming of this scale would take the planet past tipping points that would trigger catastrophic change. At minimum it would result in unprecedented harmful transformation to human and biological systems and mass extinctions of plant and animal species.

The IEA's assessment of alternative emission trajectories is also sobering. Two alternative emissions scenarios are considered. The more plausible – which nevertheless requires much more stringent emission limitations than we have seen to date – results in 550ppm CO<sub>2</sub> equivalent that is projected to result in around three degrees of additional global warming. Warming in excess of 2°C is generally considered unacceptably dangerous. Limiting warming to this agreed 'safe' level would necessitate stabilizing atmospheric CO<sub>2</sub> at 450ppm. The IEA's 450ppm emission trajectory would require unprecedented financial, scientific and political commitment. The IEA report notes:

'The scale of the challenge in the 450 Policy Scenario is immense: the 2030 emission level for the world as a whole in this scenario is less than the level of projected emissions for non-OECD countries alone in the Reference Scenario. In other words, the OECD countries alone cannot put the world onto the path to 450-ppm trajectory, even if they were to reduce their emissions to zero. Even leaving aside any debate

about the political feasibility of the 450 Policy Scenario, it is uncertain whether the scale of the transformation envisaged is even technically achievable, as the scenario assumes broad deployment of technologies that have not yet been proven. The technology shift, if achievable, would certainly be unprecedented in scale and speed of deployment. (IEA, 2008)

Yet even this, seemingly unachievable goal, may be insufficient to avert dangerous warming. Some climate scientists argue that IPCC climate modeling, while accurate over a period of decades, does not model a set of slow feedback mechanisms that are apparent from paleoclimate data. According to this view “If humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth is adapted, paleoclimate evidence and ongoing climate change suggest that CO<sub>2</sub> will need to be reduced from its current 385 ppm to at most 350 ppm.” The possible consequences of prolonged overshoot of this target includes the “possibility of seeding irreversible catastrophic effects.” (Hansen et al., 2008)

The eventual response to doubling pre-industrial atmospheric CO<sub>2</sub> likely would be a nearly ice-free planet, preceded by a period of chaotic change with continually changing shorelines.(Hansen et al., 2008: 16)

The IEA emission trajectories also illustrate the need for the climate regime to limit developing world emissions. In the reference scenario a full three quarters of the projected increase in energy-related CO<sub>2</sub> emissions arises in China, India the Middle East, while 97% of increases are sourced from non-OECD countries as a whole. The pressure for emission increases from the developing world only adds to the urgency of cuts in industrialized states. For example, the IEA’s 450ppm emission trajectory ‘requires emissions in OECD countries to be reduced by almost 40% in 2030, compared with 2006 levels. Other major economies are required to limit their emissions growth to 20%.’ (Agency, 2008) The IEA also points out that the long life of electricity infrastructure means that most of the emissions of the next 20 years are effectively ‘locked in’. The cost of past policy failures is high. If the required future emission reductions look impossible a large measure of blame must go to the previous 20 years of policy inertia.

### ***The Failure of the Kyoto Protocol***

The Kyoto Protocol was always intended as a first step and a foundation upon which future negotiations would build. However, it is instructive to review how complete the failure to arrest emissions has been. In the period 2000 to 2006 global CO<sub>2</sub> emissions increased at an annual rate of 3.1% - a rate of increase which is more than double that of the 1990s (van Vuuren and Riahi, 2008: 241). Whether this increase is a short term aberration, or is reflective of a long term shift that renders the IPCC emission scenarios on which climate predictions have been based as unduly conservative – is debatable (van Vuuren and Riahi, 2008: 241). What is clear is that emission levels are trending in the wrong direction and that the Kyoto Protocol has done little to alter this trend. Whatever the future of the UNFCCC process, the first 20 years since the creation of the IPCC has been a period of relatively unconstrained emissions growth in which atmospheric GHG concentrations have overshoot a level of relative ‘safety’.

Given that Kyoto was intended to be only the first round of an ongoing negotiation process, and only entered into force in February 2005 a defender of the UNFCCC process might argue that my negative assessment is premature. However, the delay in the protocol’s adoption (it only came into effect once states 55 states responsible for 55% of global

emissions had ratified) and the modest targets adopted might equally be seen as key aspects of the protocol's failure.

Even the European Union – generally regarded as the green demandeur of climate negotiations – agreed to aggregate targets under Kyoto that reflect little more than a business as usual emissions trajectory. (Harrison and Sundstrom, 2008: 5) Germany's post-reunification closure of inefficient industries in the east, and the UK's decommissioning of inefficient coal power stations as part of a switch to natural gas meant that these two states were recipients of windfall emission reductions. Together, their promised reductions account for more than 100% of EU wide commitments. (Harrison and Sundstrom, 2008: 5) Major states that took on significant reductions below a business as usual scenario in Kyoto either refused to ratify (the United States), ratified but subsequently announced an intention to not comply (Canada), or have adopted compliance plans based on investment in international flexibility mechanisms rather than domestic taxation or regulation (Japan). (Harrison and Sundstrom, 2008). While the Kyoto process has resulted in some efforts to limit GHG emissions, evidence suggests that this form of agreement is hopelessly ill-equipped to meet the challenge at hand.

### ***A Cosmetic Treaty?***

One possible explanation for the failure the UNFCCC process and its Kyoto Protocol is that some parties never intended them to succeed. During the cold war the term 'cosmetic treaty' described an arms-control treaty that created the impression of progress without implementing significant change. Such agreements might be domestically useful for both sides. The Kyoto protocol is not purely cosmetic – for example it has led to the creation of a carbon market that today is worth over US\$10 billion per year. (Tickell, 2008: 35) However, it seems likely that the protocol (and future treaties) may be cosmetic in the sense that their claimed benefits are not matched in reality. It would be logical for politicians facing a costly, long-term, complex problem whose solution involves significant short term costs and job losses to opt for an ineffective treaty that satisfies public expectations by creating the appearance of progress at minimal cost. Such a treaty would very likely be in the short-term political interests of all governments.

The Kyoto Protocol's lack of an effective compliance mechanism might be viewed as one sign of treaty-makers' cosmetic intent. As Scott Barrett argues the Kyoto Protocol overreaches through reliance on its own specific compliance mechanisms. A failure to meet commitments in the first commitment period does attract a notional penalty of more onerous targets in the subsequent period. However, since subsequent commitments have not been negotiated yet future bargaining positions will reflect (and therefore negate) Kyoto penalties. Barnett contends that this problem arises because Kyoto fails to engage the 'elemental forces of sovereignty' and states' tendency to place their national economic advantage before the protection of global public goods. (Barrett, 2007: 93-4)

### ***Fingering Common but Differentiated Responsibility as The Culprit***

The inherent cooperation problem involved in provision of a costly global public good is surely one part of the explanation for the Kyoto protocol's ineffectiveness. However, the UNFCCC's idealist norms have been another culprit ensuring that Kyoto has not lived up even to its limited promise. Of particular significance is the expression of the norm of 'common but differentiated responsibility' in the Kyoto Protocol in the form of binding emission targets that are applicable to some states and not others. This differentiated treatment has been a significant contributor to the wasted years in which virtually no progress toward limiting GHG emissions has been made.

Most analysis of the climate regime by political scientists has sought to explain the

prospects for international cooperation by considering the motivations of states as unitary actors. Recently this ‘structural’ international relations approach has been complemented by comparative research that explains the climate regime’s ineffectiveness via analysis of the domestic processes through which national climate policy is formed. (Harrison and Sundstrom, 2008; Lantis, 2006) This research exposes the nature of the ‘two-level’ cooperation problem inherent in global climate change, and the way in which the norm of ‘differentiated responsibility’ has interacted with domestic political processes. International-level cooperation to achieve the deep emission cuts required, is only realizable after the resolution of domestic cooperation problems. By placing developed world industry at a competitive disadvantage the norm of ‘differentiated responsibility’ tilts the playing field of domestic politics: it gives powerful industries an additional economic incentive to lobby against effective national climate policy and arms them with an appealing nationalist argument. In advantaging developing states over developed, and in particular China over the United States the norm of ‘differentiated responsibility’ also defies the realist precept that internationally effective agreements should work with, rather than against, the forces that motivate states.

Across a variety of western states such as the United States, Canada and Australia, the seemingly one-sided nature of the Kyoto commitments empowered a nationalist argument that *‘we should not reduce emissions unless developing states like China do so too.’* The US Senate’s Byrd-Hagel Resolution (S. Res. 98, 2001) – which was passed unanimously and stated that the United States should not be a signatory to any protocol that does not include binding targets for developing nations as well as industrialized nations – is perhaps the most significant expression of this perspective. It is a clear demonstration of the political obstacles to US adoption of an international agreement that is obviously injurious to US economic competitiveness. President Bush’s subsequent justification of his decision to withdraw from the Kyoto Protocol, underscores the point through its focus on the unfairness of differentiated responsibility:

I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India from compliance, and would cause serious harm to the U.S. economy. The Senate’s vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns.(Bush, 2001; cited in Vanderheiden, 2008: 64)

### ***‘Jumping as High as the Political System Will Tolerate’***

US Special Climate Envoy Todd Stern’s defense of the Obama Administration’s climate policy that ‘we are jumping as high as the political system will tolerate’ underscores the reality that congressional representation of sectional interests limits the US’s capacity for strong climate action. The limited change to US policy under the Obama administration perhaps provides the clearer evidence of domestic constraints than do Bush’s words (above). Since the Bush administration appears to have been ideologically opposed to taking action on climate change Bush’s words about fairness probably masked an underlying preference for inaction. In contrast, Barack Obama was elected on promises to address climate change. In the context of this apparent ideological support the limited emission cuts promised (20% reduction on 2005 levels by 2020) by the Waxman-Markey ‘American Clean Energy and Security Act’ (ACES) illustrate the enormity of the climate challenge. Even in the unlikely event that this Bill obtains congressional approval without further dilution, this Bill is not consistent with a global deal that even comes close to stabilization at 450ppm.

The evidence that the norm of ‘common but differentiated responsibilities’ has prevented (or been used to justify opposition to) climate action is strongest in the case the

United States and other opponents of the Kyoto Protocol. However the fact that no major polluter has achieved substantial emission reductions below business as usual projections during the Kyoto Protocol period suggests that this dynamic may be influencing the policy of many other states. EU members such as the UK and Germany which have pushed hardest for stringent emission cuts have largely been riding on the back of windfall emission reductions. Their incapacity to deliver substantial emission reductions despite a receptive political environment also suggests that the competition concerns of business may be at play.

The norm of ‘common but differentiated responsibility’ is responsible for one additional aspect of Kyoto’s failure – that it has encouraged the relocation rather than reduction of GHG emissions. One consequence of a regime which limits emissions in some states, but not others, is that it has encouraged the relocation of GHG intensive industry but not the reduction of GHG intensive consumption. Analysis of the differences between ‘production-based’ and ‘consumption-based’ carbon accounting mechanisms is illustrative of this point. Whereas on the UNFCCC production based methodology, UK Greenhouse Gas emissions have fallen by 15% since 1990 considered in terms of consumption based accounting, the illustrative outcome is a rise of 19% over the same period’ (Helm et al., 2007) While the de-industrialisation of the west is obviously beneficial for developing world economies it does not address climate change.

#### **4 Practical Advantages of Imposing Costs on Non-Cooperators**

“The essential challenge of a treaty is to restructure incentives so that countries are better off participating than not participating, and better off complying than not complying. (Barrett, 2007: 93)

Addressing climate change is a strikingly challenging political problem because the immediate costs of action are high, the costs of inaction are delayed, and only cooperative multilateral action can address the problem. An international collective action problem (where states have differing commitments to addressing the problem, and all are reluctant to take unilateral action that would create an economic disadvantage) is layered on top of a series of national collective action problems (where the interests of polluting industries tend to outweigh more diffuse general interests in national political process). (Harris, 2007) Given the barriers to international cooperation the capacity to impose costs on non-cooperators – in particular through carbon tax equalization measures – is important because it: 1) can act as an incentive for participation in an effective international agreement; 2) reduces domestic political opposition to emission restrictions by protecting trade-exposed industries; 3) enables GHG emissions to be taxed at the point of consumption rather than production (a point with important equity implications as discussed later). This section first outlines debate over the legality and uses of carbon tariffs and border tax adjustment and then discuss these three arguments in detail.

##### ***Carbon Tariffs***

Adoption of carbon tariffs in conjunction with domestic GHG trading or taxation schemes is the most likely form in which the non-cooperator pays principle might be applied. Amid growing attention to the trade-related aspects of climate policy, plans to impose countervailing duties, or equalizing ‘border tax adjustments’ are particularly contentious. BTAs are taxes or subsidies that level the playing field between domestic industries subject to GHG-limiting measures and competitors in states that do not take on binding emission limitations. Such measures promise to reduce GHG emission by limiting ‘carbon leakage’ while creating incentives for all states to participate in the post-Kyoto successor agreement.

Yet, despite their political appeal BTAs are commonly critiqued for amounting to ‘green protectionism’ that is both economically damaging and unjust when directed against developing states (Biermann and Brohm, 2005: 291). According to this view it is unjust to impose western environmental standards on the developing world as to do so defies the ‘polluter pays principle’.

As we have seen key argument raised against emission trading schemes or tax regimes that create incentives to reduce GHG emissions is that such measures will harm the competitiveness of domestic industries. Border tax adjustments offer a solution to this problem by imposing equalizing taxes on imports from states where GHG emissions are not regulated, and by granting subsidies or tax-relief to exports. In so doing BTAs reduce domestic opposition to environmental measures, create incentives for other states to adopt similar laws and by protecting domestic industries from international predation encourage technological innovation that minimizes environmental harm.

While Article III.2 of the GATT allows for BTAs that adjust for direct taxes on both imports and exports there is no settled law on the question of whether adjustment is legal on ‘an input that is fully consumed during production, such as energy’ (Tarasofsky, 2008: 11). Indeed, some argue that rebate of ‘taxes on embodied fuels is barred by the GATT Subsidies Code’s ban on rebating *prior stage cumulative indirect taxes.*’ (Hoerner, 1998: 8) Advocates of BTA’s commonly argue that these measures are appropriate for use between developed economies but not against imports from developing economies. Such discrimination, which is justified by the developed world’s historical over-use of the atmospheric commons, would probably be legal under WTO jurisprudence which must take into account widely ratified treaties (Biermann and Brohm, 2005: 291). In this context the UNFCCC’s CDR norm probably provides legal cover for discrimination based on participation in a treaty that imposed differentiated burdens on different parties. (e.g. under the Bush administration many Europeans argued that BTAs should be used to target US imports.) Non-discriminatory application of the BTAs (application on imports from all non-parties to a Kyoto successor agreement) would obviously be less vulnerable to legal challenge.

### ***Restructuring Incentives to Make Cooperation Attractive***

In the past, global environmental cooperation has often been achieved through what Elisabeth DeSombre terms the ‘internationalisation’ of US domestic policies (DeSombre, 2000). In this process once environmental standards have been adopted domestically by the US, industry and environmentalists find common cause in demanding that these standards be imposed on other states through economic threats. The cost of the overhaul of global energy systems necessary to combat global warming is of an order of magnitude greater than any of DeSombre’s examples of endangered species, air pollution, and fisheries conservation, so the situations are far from comparable. Further, the United States is neither able nor willing to impose global limitations on GHG emissions. However, it may be that if a group of influential states were to agree to place a price on GHG emissions and to create appropriate incentives for developing world participation, this agreement could be adopted widely.

The Montreal Protocol on Substances That Deplete the Ozone Layer (September 1987), although tackling a much simpler problem than global warming, offers an instructive model as to how this process might work. This protocol limited the global use of chlorofluorocarbons (CFCs), which were suspected to destroy stratospheric ozone. One of the most impressive elements of the agreement was that it was achieved prior to full scientific certainty about the link between CFCs and Ozone depletion. By offering funds to assist developing countries with adjustment costs, and using market access as carrots and sticks (parties to the Montreal protocol were given continued market-access during a phase-out

period, but non-parties were immediately excluded) this agreement gained almost universal acceptance.

Eric Haas's analysis of this highpoint of international environmental cooperation reveals many of the reasons as to why Ozone-depleting substances and GHGs are not analogous. There were only seventeen companies producing CFCs in a \$100billion industry with operations in sixteen countries. (1992: 197) In "this oligopolistic market, DuPont was the world leader" holding 50% of the US and 25% of the global market". In 1989 at the first government review of the Montreal protocol, 81 countries agreed on faster phase-out times, and to establish a fund to assist LDCs with adjustment costs (approx \$240 mill with \$40-\$60 mil contributed by the united states). Since CFCs accounted for only about 2% of total corporate profits, DuPont was able to take a long-term view. (Haas, 1992: 197) The size of its other business made its corporate reputation more important than maximising profitability of CFC production. DuPont's scale also meant that once it decided to support a freeze and then phase-out of CFCs, other industry players were forced to follow. Yet, despite the obvious difference in the number of players and size of the industry affected the Montreal Protocol example may still contain lessons for the climate regime as to how a group of powerful states can coax a reluctant world into a treaty.

Existing efforts to encourage developing world participation in a post-Kyoto successor agreement center on 'carrots' – such as technology transfer funding, adaptation funding, and participation in an emissions trading market. These carrots all involve transfers of resources from industrialized states to developing states and for this reason have, to date, been poorly funded. It seems unlikely that these inducements alone will be sufficient to motivate developing world acceptance of emission restrictions. The developing world also makes a strong argument that this assistance should not be conditional. Since industrialized states' emissions have created climate change – assistance is viewed as repayment of a historic debt. This is a key argument in favour of the 'stick' of BTAs. If avoiding taxes on GHG emissions gives a state a trade advantage this militates against their participation in a climate agreement. If participation instead carries an economic cost (via carbon tariffs) the incentives are partially reversed.

A likely riposte to this argument points out that the changing economic power of the industrialized world vis-à-vis developing powers like China and India means that it is no longer possible for a small group of powers to impose solutions on the globe. Further, the global character of GHG emissions – each state is involved – means that it is not possible to round up all major emitters in a single agreement. Against these arguments we can note first, that the severity of the challenge make rebutting counterproductive fairness arguments all the more important. Second, we can observe various concentrations of emissions that create possibilities for an effective treaty being reached by a limited number of parties. For example, the production emissions are heavily concentrated (looking out to 2050 the IEA predicts that the five largest emitters of energy-related CO<sub>2</sub> – China, the United States and the European Union, India and Russia will together account for almost two thirds of global CO<sub>2</sub> emissions;(IEA, 2008: 12) the consumption of GHG-intensive good is heavily concentrated in OECD countries, and that most GHG-intensive industries have a limited number of 'supply' points (such as oil refineries or coal washing states) whose regulation would have extra-territorial effect. (Tickell, 2008)

### ***Changing Incentives Within Domestic Politics.***

“If other countries don’t impose a cost on carbon, then we will be at a disadvantage...[and] we would look at considering perhaps duties that would offset that cost,” - Energy Secretary Steven Chu<sup>4</sup>

We have seen that the tendency for costs to fall on a limited number of polluting industries creates strongly motivated opponents of GHG regulation, and thus tips the balance of domestic politics against effective action. The argument that unilateral action to place costs on GHG emissions will put domestic industry at a disadvantage is an important part of this opposition. Carbon tariffs address this argument by re-establishing an even playing field between domestic and foreign production. Obviously this change will not neutralise domestic opposition to emission limitations. Polluting domestic industries will continue to resist regulation of GHG emissions because they wish to minimise their costs. However, carbon tariffs will have two important advantages. First, in situations where domestic industries have lower emissions per unit of production than their competitors they may become advocates of BTAs. Further, a BTA scheme will create economic incentives promoting the transfer of low emission technologies even to states that are not party to a climate agreement.

The second domestic political advantage of BTAs lies at the level of rhetoric. As President Bush’s argument about the unfairness of the Kyoto Protocol attests, arguments against national action on climate change are normally couched in nationalist terms. Fairness toward a state, and the risk of disadvantage in international competition are emphasized. BTAs neutralize this nationalist rhetoric. Without the claim of being disadvantaged internationally, polluting industries would be forced to argue against emission restrictions on other grounds. It seems likely that public opinion will be less sympathetic to polluters’ arguments once the cloak of ‘shared national interest’ is removed.

### ***Taxing Emissions at The Point of Consumption***

A third advantage of a carbon tariff regime is that it allows emissions to be taxed at the point of consumption. At present in Europe consumption of domestically produced goods incurs carbon taxes, but imports do not. The developing world’s argument that their right to development and improved living standards should not be sacrificed to protect western over-consumption is a strong one. But this argument militates in favour of, not against, carbon tariffs. For example if exports from China to the E.U. were subject to equalising GHG duties, this would mean that European consumers would be paying for the cost of GHG emissions but Chinese consumers would not.

The ethical argument for differentiated treatment of states ultimately rests on a concern for the wellbeing of people in developing states. This argument justifies opposition to limits on emissions that contribute to developing world consumption. It does not justify opposition to restricting emissions on developing-world production that is destined for first world consumption. BTAs in fact offer an ideal mechanism for targeting emissions that are linked to developed world consumption without penalising so-called ‘survival emissions’

## **5 A Normative Defense of Pragmatic Norms**

I characterised the post-1988 climate regime as the subject of a ‘twenty years’ crisis’ both because of the manifest lack of effective action over the two decades since the scientific basis for global warming was firmly established, and to evoke E.H. Carr’s analysis of the earlier ‘twenty years crisis’ where creation of overly idealist international institutions following WW1 ultimately led to the collapse of the international system and a second great war.(Carr, 1946) I suggest that the UNFCCC is at the centre of similarly ineffective and idealist climate

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<sup>4</sup>[http://online.wsj.com/article/SB123733297926563315.html?mod=googlenews\\_wsj](http://online.wsj.com/article/SB123733297926563315.html?mod=googlenews_wsj)

regime, and that if current trends continue the eventual outcome of flawed idealist policy may be a planetary catastrophe whose human impacts dwarfs WWII. The impacts on human wellbeing of the 6°C or more of warming anticipated by the IEA's 'reference case' projection are extreme and unknowable. If averting such potentially catastrophic warming can be considered an absolute moral good, then we might have reason to consider pragmatic policies that avert dangerous global warming as ethical, *even if they involve unfairness among states*. The argument in this section first outlines the lessons for non-ideal normative theory contained in the moral thinking of the classical realists. It then considers how a concern for probability of truly catastrophic climate change or for the interests of the least advantaged should influence our assessment of pragmatic climate norms.

### ***Non-Utopian Ethics, Idealism and Realism:***

Henry Shue describes 'non-utopian ethics' as amounting to an 'ethics of transition', asking how to move from the present toward the ideal (Shue, 1995: 464). Unfortunately, the timeline for addressing dangerous climate change is tight. Action to reduce emissions must begin now and be sustained over the coming century. It may be that no path leads toward the 'ideal' within the available timeframe. If so, then 'non-utopian ethics' must describe the politically practical path toward averting catastrophe that is least ethically repugnant. This is the ethics of the 'least bad' alternative, rather than an ethics of transition toward the ideal. Fortunately, a developed literature on the subject of pragmatic ethics can be found within twentieth century realism.

In his response to the interwar 'twenty years crisis' Carr, like most other classical realists, did not argue that there was no place for idealism or morality in international politics – but rather that 'idealist' policies which take insufficient account of the realities of power will generally be counterproductive. Whereas classical realism is often characterized as an amoral doctrine whose adherents advocate the naked pursuit of national interest, it might better be understood as a form of 'non-utopian theory'. For example, Carr proposes that moral outcomes must be pursued through realist analysis:

All healthy human action, and therefore all healthy thought, must establish a balance between utopia and reality, between free will and determinism. The complete realist, unconditionally accepting the causal sequence of events, deprives himself of the possibility of changing reality. The complete utopian, by rejecting the causal sequence, deprives himself of the possibility of understanding either the reality which he is seeking to change or the processes by which it can be changed (Carr, 1946: 11-12)

This pragmatic approach to political ethics is echoed by other traditional realists. Morgenthau, proposes:

The individual may say for himself: 'Fiat justitia, pereat mundus (Let justice be done, even if the world perish),' but the state has no right to say so in the name of those who are in its care...Realism then, considers prudence – the weighing of the consequences of alternative political actions – to be the supreme virtue in politics. Ethics in the abstract judges action by its conformity with the moral law; political ethics judge action by its political consequences.(Morgenthau, 1972: 10-11)

Within contemporary political rhetoric and academic literature there is a resurgence of the liberal view that order cannot be sustained without justice and that justice should be a goal of statecraft. This resurgence reflects a perception that international society is less fragile

in a time of lowered global tension. Indeed this confidence in the potential of interstate cooperation and in the capacity for norms to constrain state behaviour seems to be strongest in relation to environmental and other 'new agenda' issues..

### ***Survivalist Ethics: Political Ethics Under The Shadow of Catastrophe***

The flourishing of twentieth century classical realism occurred in the shadow of potential nuclear annihilation. To understand the thinking of theorists as diverse as Raymond Aron, George Kennan, Hans Morgenthau or even Hedley Bull, we must remember the immanent risk of nuclear catastrophe that lead these writers to focus upon the attainment of order through balance and consensus among great powers. When Morgenthau spoke of the 'moral principle of national survival' or of working with, rather than against, the forces that motivate states his advocacy of pragmatic policy making was premised in the knowledge that the nuclear clock was set at five minutes to midnight. (Morgenthau, 1972: 10) Here, I advance the general proposition that where there is a serious risk of planetary catastrophe, that the goal of survival should be secured prior to recognition of claims of distributive or procedural justice.

Economists seeking to provide a cost benefit analysis of action to mitigate climate change have described the probably of a catastrophic climate outcomes (a fat tail in the relevant probability distribution function) as confounding efforts to develop rational policy. (Weitzman, 2009: 1). After identifying a 5% chance of a catastrophic outcome (greater than 10C of warming in the next two centuries) Martin Weitzman argues that the economics profession is simply unable to provide authoritative guidance on a rational response to such a risk. (Weitzman, 2009) Forming a response to the looming probability of catastrophe must be a collective, political decision.

As I have argued above, normative political theorists have overwhelmingly responded to this probable planetary catastrophe by demanding that the developing world shoulder the costs of climate adaptation and mitigation. Their analysis has not been troubled by the obvious political barriers to such altruism. Whether such idealism can be justified might depend on how significant we regard the risk of planetary catastrophe as being. If the risk of catastrophic climate change is as low as 5% then perhaps it would be wrong to accept present-day injustice in order to avert a possible greater injustice against future generations. However, this question – of the relationship between looming catastrophe and weighting of present day injustice, intergenerational injustice, and recognition of the practical constraints limiting on state action is one that deserves sustained attention.

Any coherent account of normative legitimacy must involve the application of *normative principles* via a process of *strategic reasoning* informed by contemporary *political realities*. (Macdonald and Macdonald, 2008) it proposes that potentially catastrophic situations may render actions which would ordinarily be considered grossly unjust, normatively legitimate. Any normative perspective which places survival as a primary value is likely to endorse exceptional actions in the face of potentially system-destroying threats. If actions that would normally be considered unjust, are necessary to ensure the survival of all actors in a system, then these actions may be normatively legitimate.

### ***Climate Policy for The Least Advantaged***

I have argued that the existing climate regime is not constraining emissions and will not lead to stabilization of atmospheric GHG levels at a safe level and that the norm of differentiated responsibility is a major obstacle to a more effective agreement. If these claims are true, and we also accept the IPCC's finding that impacts of climate change 'will fall disproportionately upon developing countries and the poor persons within all countries.' (IPCC), 2002: 12) then we might wonder if the interests of the earth's most vulnerable people (now and in the future)

would be best served by a climate regime that effectively limits GHG emissions – even if this occurs at the cost of some developing world growth. This is an empirical question whose definitive answer is beyond the scope of this paper. However, the answer to this question might also determine our assessment of the legitimacy of pragmatic climate norms. Assessed in terms of Rawls’ difference principle (applied globally) the relative justice of competing approaches should turn on this empirical question of which is most favorable to the earth’s least advantaged people. Given that most LDC growth processes initially bring few benefits for the rural poor – the empirical claim that it is not worth sacrificing a small amount of developing world growth in order to address climate change warrants careful examination. Assessed from a utilitarian perspective – wherein justice is held to depend upon achievement of the greatest good for the greatest number- the argument for pragmatic norms is even stronger. The present (practically ineffective) climate regime may incorporate norms that reflect standards of interstate justice – but an ineffective climate regime manifestly fails to achieve justice between people.

### **Conclusion:**

In today’s climate negotiations the developing world’s claim for compensation for the consequences of climate change is presented as a moral entitlement. This paper has argued against the unconditional repayment of this historic debt for that practical reason that doing so would reduce the incentives to cooperate in mitigating future climate change. International assistance for climate mitigation and adaptation should instead form part of a climate bargain. Within the climate regime there appears to be a trade-off between justice and effectiveness. At present justice norms are being honoured at the expense of effectiveness. Norms do not erase states underlying material interests - they simply shape their expression. If climate regime norms pull too far away from the interests of powerful states then it is likely that those states will seek to undermine regime effectiveness.

Even absent the CDR norm, the cost-benefit structure of climate change mitigation suggests that under-investment in climate protection is the most likely outcome. For this reason efforts should focus on attaining a global agreement that will win domestic acceptance. Fairness should be a secondary criterion. It seems likely that if a global agreement is to achieve favorable reception within the domestic politics of powerful states it must: not disadvantage the domestic industries of developed states vis-à-vis their major international competitors; seek to animate new political allies for emission-constraint policy by strengthening low emission industries in early negotiation rounds (in a process analogous to that through which successive rounds of trade negotiations have reshaped domestic politics by empowering the advocates of free-trade policies); separate politically challenging equity measures from measures that promote emission reductions so that the one is not sabotaged by the other; restructure incentives so that all states are better off participating and complying than not; and create price-signals that stimulate private-sector innovation and investment.

I do not argue that a norm of CDR would not be ideally appropriate. However, the application of CDR within the climate change regime has been counterproductive because it strikes the wrong balance between ‘utopia and reality’. Nevertheless, it is important to observe that the pragmatic political ethics which counsels states to prioritise practical outcomes do not apply to individuals. If excessive first world consumption harms the global poor then first world people may have obligations to compensate. Those most disadvantaged by climate change have a *moral* entitlement to compensation, even if their *practical* interests will be best served through effective international cooperation. Taking the interests of the most vulnerable climate victims seriously may require us to move beyond traditional conceptions of interstate justice but the imperative for cosmopolitan justice among people has never been stronger.

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