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Climate Change and International Law in the Grim Days

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Abstract

The 2009 Copenhagen Conference of the Parties to the UNFCCC epitomizes the stalling of international negotiations on climate change mitigation and adaptation. In the grim days of climate change governance, the literature tends to neglect ethical arguments on the responsibility of polluting states. Rather, it turns to a desperate quest for 'whatever works'. This article addresses the development of a discipline round an emerging regime. It reviews in particular the principled approaches of climate governance, doctrinal analyses on mitigation, the shift from 'enforcement' to 'facilitation' and to 'liability', the fragmented governance of adaptation in the human rights, development and migration regimes, and innovative scholarship on the transnational regime complex concerning climate change.

1 Introduction

This article reviews the recent literature at the crossroads of international law and climate change. It focuses on books (monographs and edited volumes) and a few major articles published over the last few years. Although the review is not exhaustive, it aims at putting in perspective a range of different strands of the literature on 'climate law', thus identifying common features and points of tension. By doing so, it intends to provide food for thought not only on the role of international law in addressing climate change, but also on the impact of climate change governance on international law. Stepping back and glancing at existing literatures may promote a dialogue between different arguments, authors, and perspectives that too often remain isolated.

Climate change is now well recognized as one of the major contemporary issues for international cooperation. However, by contrast to a significant excitement about

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the cataclysmic consequences of climate change in other social sciences, the international law community has shown a certain degree of restraint, as if the resilient structure of law could remain unshaken in front of even earth-shattering circumstances. Twenty years after the adoption of the UN Framework Convention on Climate Change (UNFCCC), 'climate law' has appeared in the curricula and the institutional structures of relatively few universities[1] and there is no proper textbook on international climate change law.[2] In most cases, climate change remains part of courses on international environmental law, treating climate change as only one of many environmental inconveniences.

Yet, the recent surge in international law publications on climate change prompts the question whether 'climate law' is about to become a new international law regime, separated from the tutelage of international environmental law, with its own 'managerial mindset'.[3] Three elements may evidence the emergence of climate law as a distinct regime, or at least as a distinct discipline. First, specific legal issues are identified with respect to climate change, relating for instance to the global responsibilities for past or current greenhouse gas (GHG) emissions, to the urgency of addressing the harms affecting mostly those who have benefited least from industrialization, and to the legal implications – if any – of the sheer possibility of an existential threat to our collective existence. Secondly, specialized forums are established, for example periodicals such as the *Carbon and Climate Law Review* (2007), the *San Diego Journal of Climate and Energy Law* (2009), and *Climate Law* (2010). Thirdly – and perhaps most importantly – a new generation of specialized researchers is taking shape. This nascent community often shares elements of a common identity: those who turn to 'climate law' are often young researchers animated by a transformative project, often retaining a foothold in advocacy, and urged by the conviction of something like *having a planet to save*.[4]

Some contemporary developments hinder, however, the construction of 'climate law' as a legal regime. The 2009 Copenhagen Conference of the Parties to the UNFCCC (in)famously epitomized the failure of international responses to climate change:[5] States remained far from committing to the necessary emission reductions to limit the global average temperate rise to 1.5 or 2°C, and each annual climate conference is arguably a 'climate disaster'.[6] This naturally gave rise to general discontentment among the climate change lawyers, which is reflected (and has been for some time

1 A recent survey of 'climate law teaching resources' was conducted by IUCN. It is available at: www.iucnael.org/en/online-resources/climate-law-teaching-resources.html.

2 Some teaching supports are available on mitigation law, although those rarely follow a purely international perspective. A recent publication, however, gives a comprehensive overview of the discipline: E.J. Hollo, K. Kulovesi, and M. Mehling (eds), *Climate Change and the Law* (2013).

3 Koskenniemi, 'The Fate of Public International Law: Between Technique and Politics', 1 *MLR* (2007) 1, at 26.

4 On the representation of international environmental law as a 'heroic and transformative project' see Prost and Torres Camprubi, 'Against Fairness? International Environmental Law, Disciplinary Bias, and Pareto Justice', 25 *Leiden J Int'l L* (2012) 379, at 381.

5 Bodansky, 'The Copenhagen Climate Change Conference: A Postmortem', 104 *AJIL* (2010) 230.

6 See, e.g., Death, 'A Predictable Disaster for the Climate – But Who Else Won or Lost in Durban at COP 17?', 21 *Envtl Politics* (2012) 980.

already) by the strong prevalence of prescriptive and aspirational works. As a consequence of the stalled negotiations, hopes faded and proposals were reconsidered. Utopian but constructive discussions[7] gave way to more tailored, 'pragmatic', and supposedly more policy-relevant recommendations.[8] Significantly, the once central narrative of a global responsibility tended to be put aside: climate change governance was conceived as *solidarity* rather than as *reparation*.[9] Because of this shift of narrative, the literature on 'climate law' embodies an intense yet ill-defined longing: the widespread feeling that something should be done without – absent the strong responsibility rationale – being able to say precisely *what* and *why*, and soundly to justify policy recommendations.

The following dissects *in vivo* a rich and diverse literature on climate change and international law, written by lawyers but also by political scientists and other social scientists. The next section reflects on the aspirational literature that proposes principled approaches to reconsidering international cooperation in the grim days of stalling climate negotiations, navigating in the troubled waters between 'utopia' and 'pragmatism'. It refers to a literature on 'Earth System Governance' dominated by political scientists and to a multidisciplinary debate on climate fairness. The third section looks at the projects of defining climate law as a coherent legal regime – mostly doctrinal works on climate change mitigation, on compliance, and on multiple forms of liability. The fourth section discusses the emergence of fragmented climate change governance resulting from the encounter of climate change adaptation with pre-existing regimes on development, human rights, and migration. The fifth section concludes by reviewing some innovative perspectives, mostly by international relations scholars, on the 'multi-level' or 'transnational' governance of climate change as forming a 'regime complex'.

2 Reconsidering Climate Cooperation in the Grim Days: From Utopia to 'Pragmatism'

An important part of the debates on climate change relates to the setting of goals for international cooperation to address climate change. In the context of the stalling of international negotiations, the previous emphasis on ethical considerations[10] was

[7] See references cited *infra* notes 10 and 11.

[8] See references cited *infra* notes 23–27.

[9] Compare, for instance, the central role of responsibility in Verheyen (*infra* note 10) with its oversight in Soltau, in Posner and Weisbach, or in Grasso (*infra* notes 23–27). On the distinction between the two ethical narratives see L. Rajamani, *Differential Treatment in International Environmental Law* (2006), at 71; Mayer, 'The International Legal Protection of Climate (or Environmental) Migrants: Fraternity, Responsibility and Sustainability', in M. Morin *et al.* (eds), *Responsibility, Fraternity and Sustainability in Law: In Memory of the Honourable Charles Doherty Gonthier* (2012), at 723.

[10] See, e.g., K. Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (2008); J. Garvey, *Ethics of Climate Change: Right and Wrong in a Warming World* (2008); R. Verheyen, *Climate Change Damage and International Law: Prevention Duties and State Responsibility* (2005).

progressively replaced by more 'pragmatic' arguments. This section identifies two different contemporary perspectives. One – led by political scientists of the Earth System Governance project – echoes some of the past utopia. It stresses that climate change is a major concern of our time, but comes with little justification for its prescriptions (A). The other perspective elaborates on notions of climate 'justice' or 'fairness', but its goals are significantly limited by pragmatic concerns (B).

A *Transforming Earth System Governance*

In the run-up to the 2012 UN Conference on Sustainable Development in Rio, a group of 32 prominent researchers, composed mostly of political scientists and led by Frank Biermann, published two aspirational articles, 'Transforming Governance and Institutions for Global Sustainability' and 'Improving Earth System Governance'.[11] They pleaded for 'human societies' to 'change course and steer away from critical tipping points in the Earth system that might lead to rapid and irreversible change'.[12] The authors prescribed a 'fundamental reorientation and restructuring of national and international institutions toward more effective Earth system governance and planetary stewardship', which would require 'a "constitutional moment" in world politics and global governance'.[13] Biermann *et al.* outlined 'nine areas where major reforms are most urgently needed', listing broad and ambitious goals: to 'revise and improve the design of international [environmental] treaties to make them more effective', to 'manage conflicts between international treaties' and to 'fill regulatory gaps by negotiating new international agreements', to 'upgrade UNEP and the UNCSD', to 'strengthen governance within and beyond states', to 'strengthen accountability and legitimacy', to 'address equity within and among states', and generally to 'prepare governance for a warmer world'.[14]

This literature[15] certainly has an important role to play in incentivizing and orienting policies, but it comes with three caveats. First, by its apparent optimism it risks eluding the necessary trade-offs between the 'desirable' and the 'possible'. It can be contrasted with the pessimistic realism of economist Dieter Helm who identified some of the reasons 'why … so little [has] been achieved'[16] in climate-change policy:

> the allocation of responsibility for the existing stock of carbon in the atmosphere (which developing countries point out was put there by the industrialized countries) is complex; carbon emissions per head are low in those countries most rapidly increasing their emissions; some countries (and, particularly, some countries' political elites) may actually benefit from climate

[11] Biermann *et al.*, 'Transforming Governance and Institutions for Global Sustainability: Key Insights from the Earth System Governance Project', 4 *Current Opinion in Env'l Sustainability* (2012) 51; Biermann *et al.*, 'Navigating the Anthropocene: Improving Earth System Governance', 335 *Science* (2012) 1306.

[12] *Ibid.*, at 1306.

[13] *Ibid.*, at 1307.

[14] Biermann *et al*, 'Transforming', *supra* note 11.

[15] See also, e.g., F. Biermann and P. Pattberg (eds), *Global Environmental Governance Reconsidered* (2012); F. Biermann, P. Pattberg, and F. Zelli (eds), *Global Climate Governance Beyond 2012: Architecture, Agency and Adaptation* (2010).

[16] Helm, 'Climate-Change Policy: Why Has So Little Been Achieved?', 24 *Oxford Rev Econ Policy* (2008) 211.

> change, and generally the effects vary greatly between countries; there are powerful – multi-dimensional – free-rider incentives; the measurement of emissions (including, to list just a few, rain-forest depletion, soil erosion, methane from permafrost melting, aviation and shipping, agriculture, and ocean and other sink depletion) is at best weak; and there are, at present, no serious enforcement mechanisms.[17]

Helm concludes that there is little hope: 'it is hard to think of an international problem which lends itself less to a coherent, credible, and sufficiently robust and comprehensive general agreement.'[18] Of course, Biermann *et al*. are aware of these difficulties. Rather, their wager is seemingly that some degree of utopia may spur a last-ditch effort in international negotiations.

Yet, a second caveat relates to the somewhat simplistic 'solutions' suggested by this literature. Arguments about *what* ought to be done are of little practical use if they are not coupled with a reflection on *how* this could be done. How can the political resources necessary for any reform be accumulated? What should be the role of states, regions, and international bureaucracies in making things happen? 'Hard' international law, for instance, that Biermann *et al*. prefer, is neither the only medium available, nor necessarily the best.[19]

A third and most important caveat relates to the lack of explicit ethical foundations in this literature. '*Why* should climate change be governed' should determine '*how* it should be governed' – arbitrages are unavoidable, not only between purely national interests and ethical considerations, but also possibly between different ethical narratives.[20] In this strand of literature, however, ethics are addressed only as a tool to enhance legitimacy and efficiency, not as a goal on their own. In the science plan of Earth System Governance, a decennial research project led by Frank Biermann, ethics are circumscribed to a marginal discussion on 'allocation' and 'access', rather than being considered as a determinant of the necessary reform.[21] This marginalization of ethical discussions may stem from the assumption that the need to address climate change is all too obvious to be justified. However, this appeal to objectivity, as concerns for example the necessity to address climate change, eludes *alternative* rationales that could justify different responses to climate change, or at least different priorities. With little questioning of the rationale for the proposed law reforms, this literature adopts a managerial approach to climate change governance, eluding a host of ethical questions and geopolitical stakes.

17 *Ibid.*, at 219.

18 *Ibid.*

19 See, for instance, the debate on the governance of climate migration: Biermann and Boas, 'Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees', 10 *Global Env'l Politics* (2010) 60; McAdam, 'Swimming against the Tide: Why a Climate Change Displacement Treaty is Not the Answer', 23 *Int'l J Refugee L* (2011) 2; Mayer, 'The International Legal Challenges of Climate-Induced Migration: Proposal for an International Legal Framework', 22 *Colorado J Int'l Env'l L & Policy* (2011) 357.

20 See the next subsection. See also S. Gardiner, *A Perfect Moral Storm: The Ethical Tragedy of Climate Change* (2011).

21 'Allocation & access' is the fifth (and last) analytical problem identified by the ESG project. See F. Biermann *et al., Science and Implementation Plan of the Earth System Governance Project* (2009), available at: www.earthsystemgovernance.org/publication/biermann-frank--earth-system-governance-science-plan.

B *Whatever Works?*

By contrast, three recent monographs attempt to develop a principled approach reconciling the fair and the feasible in the governance of climate change.[22] First, *Fairness in International Climate Change Law and Policy* by UN officer Friedrich Soltau is a well-informed discussion on the influence of ethical arguments in the governance of climate change.[23] Soltau denounces a purely realist approach to international relations and argues that 'normative analysis has a role to play'.[24] Secondly, Eric Posner and David Weisbach of the Chicago school wrote *Climate Change Justice*, a critical essay drawing on initial work with Cass Sunstein.[25] This monograph can be read as an academic attempt to apply the Chicago school's welfarist critique to climate law, or rather as a systematic and often one-sided defence of the US position in climate change negotiations. Posner and Weisbach oppose liberal idealism and submit that 'an ethical argument that ignores the interests of states is a fantasy'.[26] A third book, by Italian economist Marco Grasso, focuses on *Justice in Funding Adaptation under the International Climate Change Regime*.[27] For Grasso, fairness and efficiency go hand in hand: 'the more international climate negotiations are informed by principles of justice, the more numerous the participants will be, and the more a manageable international solution can in principle be achieved.'[28]

The three books identify different ethical justifications. Grasso focuses on Rawls's theory of justice, in particular on its cosmopolitan interpretation by Charles Beitz and Thomas Pogge. The two other books compare several perspectives. Soltau distinguishes between five ethical approaches based respectively on equality, needs, responsibility, capability, and *status quo*.[29] His view is that a convincing ethical argument should put these different models in perspective. This classification runs parallel to Posner and Weisbach's distinction between arguments based on distributive justice, corrective justice, equality, and concerns for future generations. Yet, unlike Soltau or Grasso, Posner and Weisbach reject all of these ethical narratives.

Posner and Weisbach boast that their 'argument is unusual'.[30] The authors consider that the objective of mitigating climate change should be pursued in isolation from any other (however legitimate) concern. In particular, they submit that including

[22] Other books are not discussed here but should be mentioned: J. Broome, *Climate Matters: Ethics in a Warming World* (2012); S. Gardiner, *supra* note 20; S. Vanderheiden, *Atmospheric Justice: A Political Theory of Climate Change* (2008).

[23] F. Soltau, *Fairness in International Climate Change Law and Policy* (2009).

[24] *Ibid.*, at 3.

[25] E.A. Posner and D. Weisbach, *Climate Change Justice* (2012). See: Posner and Sunstein, 'Climate Change Justice', 96 *Georgetown LJ* (2008) 1565; Posner and Sunstein, 'Should Greenhouse Gas Permits be Allocated on a Per Capita Basis?', 97 *California L Rev* (2009) 51; Sunstein and Weisbach, 'Climate Change and Discounting the Future: A Guide for the Perplexed', 27 *Yale L and Policy Rev* (2010) 433. Sunstein abandoned the project when he joined the Obama administration.

[26] Posner and Weisbach, *supra* note 25, at 4.

[27] M. Grasso, *Justice in Funding Adaptation under the International Climate Change Regime* (2010).

[28] *Ibid.*, at 3.

[29] Soltau, *supra* note 23, at 153–163.

[30] Posner and Weisbach, *supra* note 25, at 5.

any consideration for global inequalities would necessarily prevent a Pareto-optimal agreement on mitigation. What they call the principle of 'International Paretianism' requires that 'all states must believe themselves better off by their lights as a result of' an international agreement on climate change mitigation.[31] Consequently, the role of fairness is essentially limited to the distribution of the economic surplus among states. Yet the authors rely on fragile assumptions, in particular on that of the pure rationality of states – neglecting the role of civil society in defining the ethical obligations of a state. As a consequence, some of their conclusions are daunting. Since states are unequally affected by climate change and have different degrees of interest in global cooperation, Posner and Weisbach put forward that securing an ambitious climate agreement would call for side payments from affected states to polluting ones.[32] To draw an analogy with a famous case, could one seriously imagine the US paying Canada to reduce the environmental impacts of the Trail smelter?[33] Posner and Weisbach present their approach as one intended to ensure the political feasibility of an ambitious climate change regime, but the authors seemingly fail to consider that reverse payments will be unacceptable for developing states. Posner and Weisbach are mostly concerned with political acceptability *in the US*, or, as Mario Prost and Alejandra Torres Camprubi put it, with 'fairness *American style*'.[34]

Surprisingly, all three books reject the corrective justice ('polluter-pays') argument[35] as an ethical foundation for the international responses to climate change. Soltau considers that 'the technical philosophical concept of corrective justice does not fit comfortably with the multifaceted climate change problem, which cuts across time and space.'[36] Yet, he discusses corrective justice exclusively in relation to individual behaviour, where the long and complex causal relationship between an individual's behaviour and the harm resulting from climate change makes attribution difficult. By contrast, Posner and Weisbach situate the corrective justice argument at a collective level. Yet, they generally reject collective responsibility on the ground that it may result in unfair individual situations: for instance, *some* Indians may have a greater individual responsibility than *some* Americans. Here again, their argument is astonishing, as it does not take account of the widespread recognition of collective responsibility in international law even in the absence of individual responsibility, for instance through the law on state responsibility.[37]

[31] *Ibid.*, at 6.

[32] *Ibid.*, at 7, 84, 179. See Farber, 'The Case for Climate Compensation: Justice for Climate Change Victims in a Complex World', *Utah L Rev* (2008) 377.

[33] *Trail Smelter Arbitration*, 3 RIAA (1941) 1905.

[34] Prost and Camprubi, 'Against Fairness? A Response to Mickelson and Posner', *Opinio Juris* (5 July 2012).

[35] See, e.g., Verheyen, *supra* note 10; S. Vanderheiden, *Atmospheric Justice: A Political Theory of Climate Change* (2008); Garvey, *supra* note 7; Caney, 'Cosmopolitan Justice, Responsibility, and Global Climate Change', 18 *Leiden J Int'l L* (2005) 747.

[36] Soltau, *supra* note 23, at 160.

[37] See ILC, Commentary on Draft Articles on Responsibility of States for Internationally Wrongful Acts, para. 2 under Art. 2. By contrast, the analogy that Posner and Weisbach draw with corporate liability reflects a troubling tendency of some American scholars to confuse US and international law, as well as confusion between the two aspects of corrective justice: punishment and remediation. Posner and Weisbach, *supra* note 25, at 106.

Rejecting corrective justice arguments generally impedes cooperation on climate change matters because the alternative ethical arguments situate climate change cooperation in the voluntary language of solidarity rather than in the compulsory framework on responsibility. The difference is particularly significant with regard to climate change adaptation: if not conceived of as a corrective mechanism, adaptation finance may mean little more than a 'green' form of development cooperation. Grasso, in this regard, takes a very ambiguous position. Although he claims to reject corrective justice and to deal only with distributive justice,[38] his argument is largely about reparation for wrongful acts. Thus, Grasso defines 'justice in funding adaptation at the international level' as 'the fair process, which involves all relevant parties, of raising adaptation funds according to the *responsibility for climate impacts* and of allocating them by putting the most vulnerable first'. Later on, Grasso distinguishes between 'prospective responsibility', based on capacity to help, and 'retrospective responsibility', based on fault without a moral element.[39] As a matter of fact, there seems to be no distinction between 'retrospective responsibility' and the concept of corrective justice (as reparation more than sanction).

Grasso's avoidance of an explicit corrective justice argument may reflect a strategic withdrawal of the literature on fairness in climate change governance: the notion that the polluter must pay is avoided because it is seen as a deal breaker; *pragmatism* is considered the new way, in a desperate quest for 'whatever works'. Yet, this approach eludes the central geopolitical dimension of climate change governance, in a context of a strong gap between the historical and present responsibility of the developed countries and the harm caused to many developing countries. An observer noted that 'it is hard to see the justice in Posner and Weisbach's Climate Change Justice'.[40] The same observation applies, however, to Soltau and Grasso's contributions. By shying away from strong ethical arguments in terms of reparation, this literature undermines the justification for an international cooperation with regard to climate change adaptation.

3 Doctrinal Attempts at Defining 'Climate Law'

The previous section reviewed the literature on prospective climate change governance. This section now discusses the emergence of several strands of literature that attempt to define an emerging 'climate law' in a narrow sense – a set of norms forming a special legal regime, having its own object and purposes and its own doctrine. These works, mainly doctrinal (i.e., engaging in the interpretation and systematization of existing norms), are deeply affected by the failure of international negotiations in defining an ambitious legal regime. They address substantive norms on climate change mitigation established in particular by the UNFCCC and the Kyoto Protocol (A), but also issues of compliance with these norms (B), and specific forms of liability under international and municipal law (C).

[38] Grasso, *supra* note 27, for instance at 35, 58.
[39] *Ibid.*, at 53, 55–58 (emphasis added).
[40] Subramanian, book review, 10 *World Trade Rev* (2011) 277, at 280.

A *Seeking Substance in International Climate Change Mitigation Law*

Despite a recent emergence of doctrinal works on specific aspects of climate change and mitigation law,[41] there still exist few comprehensive overviews of the topic. This is perhaps not so surprising, given the relative novelty, ephemeral nature, and unpredictable evolution of the Kyoto Protocol.[42] David Freestone and Charlotte Streck edited two important volumes. The first one, *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work*, published in 2005, details the technicalities of joint implementation, the clean development mechanism, carbon sequestration, and emissions trading.[43] The editors conclude by identifying three broad crosscutting themes: 'originality and innovation', 'learning by doing', and 'regulatory uncertainty'.[44] Four years later, in 2009, Freestone and Streck concluded the second volume *Legal Aspects of Carbon Trading: Kyoto, Copenhagen, and Beyond* with the same findings, reflecting the stagnation of international negotiations.[45] Yet, this collection includes some updated contributions to the first as well as new contributions. The Kyoto Protocol mechanisms are now addressed in one section; others focus on regional, national, or sub-national mechanisms. A greater emphasis is put on trade, voluntary markets, and private actors. Significantly, a contribution on 'Public Participation' in the flexibility mechanisms of the Kyoto Protocol in the first volume is replaced by a chapter on 'Private Actors in International and Domestic Emissions Trading Schemes' in the second volume.[46]

International law provides no cure for political stalemate. Yet, some scholars look for a treatment, suggesting in particular that reforms in adjacent legal regimes may compensate for the scarcity of binding mitigation law. On the one hand, Tracey Epps and Andrew Green develop an international trade law perspective in *How the WTO Can Help Address Climate Change*, suggesting that the WTO could be an alternative normative forum to overcome the stalling negotiations at the UNFCCC.[47] The authors also argue that 'positive synergies can be found between [both regimes] that will

[41] See M. Mehling, A. Steen, and K. Upston-Hooper (eds), *Improving the Clean Development Mechanism: Options and Challenges Post-2012* (2011); B. Hansjürgens, R. Antes, and M. Strunz (eds), *Permit Trading in Different Applications* (2011); S. Schütz, *The Kyoto Protocol with an Emphasis on its Flexible Instrument: The Clean Development Mechanism* (2011); R. Lyster (ed.), *In the Wilds of Climate Law* (2010); K.L. Koh, H.L. Lin, and J. Lin (eds), *Crucial Issues in Climate Change and the Kyoto Protocol, Asia and the World* (2009); B.J. Richardson *et al.* (eds), *Climate Law and Developing Countries: Legal and Policy Challenges for the World Economy* (2009).

[42] The Kyoto Protocol is the only treaty with a universal vocation containing binding mitigation measures relating to a wide range of GHGs. The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer addresses only specific GHGs.

[43] D. Freestone and C. Streck, *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work* (2005).

[44] Freestone and Streck, 'Summary and Outlook', in *ibid.*, at 537 at 538.

[45] Freestone and Streck, 'Summary and Outlook', in D. Freestone and C. Streck (eds), *Legal Aspects of Carbon Trading: Kyoto, Copenhagen, and Beyond* (2009), at 625, 625.

[46] Eddy, 'Public Participation in CDM and JI Projects', in Freestone and Streck, *supra* note 43, at 71; Lin, 'Private Actors in International and Domestic Emissions Trading Schemes', in Freestone and Streck, *supra* note 45, at 134.

[47] T. Epps and A. Green, *How the WTO Can Help Address Cliamte Change* (2011), at 254.

enable achievement of environmental, trade, and development goals',[48] for instance to promote trade in environmental goods and services.[49] Yet, Epps and Green do not deny that some trade-offs will be necessary between climate change mitigation and the development of international trade. They suggest that coordination could be promoted by 'a Peace Clause under which Members would agree not to challenge the climate change measures of other Members for a certain period of time … ; an explicit climate change agreement within the WTO … ; [or] a multilateral agreement covering trade and climate measures negotiated under the UN process'.[50]

On the other hand, Matthew Rimmer's monograph on *Intellectual Property and Climate Change* is a doctrinal analysis of more specific issues relating to the impact of intellectual property law (in particular patents) on the responses to climate change, notably by promoting the development but impeding the diffusion of clean technologies.[51] Rimmer suggests 'extend[ing] the reach of climate law to include intellectual property law' while at the same time '"green[ing]" intellectual property law',[52] but he does not provide guidance for such reforms.

B *Facilitating Compliance*

Another hurdle for the development of 'climate law' stems from difficulties in ensuring compliance. It recently came to the fore when Canada's Prime Minister Stephen Harper made clear that he did not intend to comply with the mitigation objectives of the Kyoto Protocol (before denouncing it altogether).[53] Efforts to develop an effective compliance procedure through international negotiations have led to only incremental progress. The disillusionment of the late 2000s translated into a double conceptual shift in the literature: from 'enforcement' to 'facilitation', and finally to 'liability'.

The first shift was initiated by the growing pregnancy of the notion of 'compliance'. As early as in 2001, the Marrakesh Accords established a compliance committee with both a facilitative branch and an enforcement branch.[54] Yet the literature on compliance has increasingly focused on facilitation rather than on enforcement, and on cooperation rather than confrontation, reflecting a move towards more flexibility. Jutta Brunnée, Meinhard Doelle, and Lavanya Rajamani, the editors of *Promoting Compliance in an Evolving Climate Regime*, recognize that 'the GHG mitigation commitments made thus far are inadequate and inadequately implemented'.[55] Brunnée

[48] *Ibid.*, at 249.
[49] *Ibid.*, at 234.
[50] *Ibid.*, at 174.
[51] M. Rimmer, *Intellectual Property and Climate Change* (2011).
[52] *Ibid.*, at 25–26.
[53] McCarthy, 'Canada gets ready to walk away from Kyoto Protocol', *Globe and Mail*, 5 Dec. 2010.
[54] 'Procedures and Mechanisms Relating to Compliance Under Kyoto', decision 24/CP.7, 10 Nov. 2001. Although there is of course no physical 'force' to 'enforce' obligations, enforcement may be considered as a more adversarial approach to compliance as compared to facilitation. See Mehling, 'Enforcing Compliance in an Evolving Climate Regime', in J. Brunnée, M. Doelle, and L. Rajamani (eds), *Promoting Compliance in an Evolving Climate Regime* (2012), at 194, 198.
[55] Rajamani, Brunnée, and Doelle, 'Introduction: The Role of Compliance in an Evolving Climate Regime', in *ibid.*, at 1, 4.

in particular highlights that the traditional legal approach of compliance through legal assessment, dispute settlement, and enforcement 'fits uneasily with the compliance issues that arise under MEAs [Multilateral Environmental Agreements]'. Non-compliance 'may have causes other than intransigence, such as capacity problems'. Consequently, Brunnée rejects the realist assumption of states' 'rationally assessed and pursued self-interest', and pleads for constructivist approaches focusing on the complex interaction between norms and state conduct.[56] Jane Bulmer in the same volume makes a similar point in support of compliance mechanisms that 'provide a non-adversarial and non-judicial forum to promote compliance and allow parties to deal with challenges of non-compliance in a more consensual manner'.[57] Several other contributors regret that little use has been made of the facilitative branch of the Kyoto Compliance Committee.[58] As a whole, the book provides a ground-breaking discussion of key compliance issues in a transnational perspective.

C *Going to Courts: Climate Liability*

The second shift away from enforcement suggests that liability of actors at different levels of governance for injuries attributable to climate change can provide an alternative form of climate change governance – relying mainly on courts. Unlike enforcement of substantive climate change norms, liability extends to tort law, administrative, constitutional, and human rights law, or even criminal law. This perspective can be found in *Adjudicating Climate Change* edited by William Burns and Hari Osofsky.[59] The volume explores cases in a host of different jurisdictions, ranging from the Victorian Civil and Administrative Tribunal in Australia to the ICJ.[60] Through this multiscalar perspective, it reveals the connections between different jurisdictional forums: local jurisdictions may inspire or pressure for a common approach, whereas international jurisprudence often influences municipal decisions.[61]

Osofsky notes that, 'as this volume was being written, the number of relevant cases and their impact increased dramatically'.[62] Proving him right, two edited volumes were soon published following a similar project and a comparable method. Michael Faure and Marjan Peeters' edited volume *Climate Change Liability* focuses on the EU, the European Court of Human Rights, the UK, the US, and the Netherlands.[63] Going

[56] Brunnée, 'Promoting Compliance with Multilateral Environmental Agreements', in *ibid.*, at 38, 40, 40–41, 42–43.

[57] Bulmer, 'Compliance Regimes in Multilateral Environmental Agreements', in *ibid.*, at 55, 58.

[58] Doelle, 'Experience with the Facitative and Enforcement Branches of the Kyoto Compliance System', in *ibid.*, at 102, 105; Lefeber and Oberthür, 'Key Features of the Kyoto Protocol's Compliance System', in *ibid.*, at 77, 95.

[59] W.C.G. Burns and H.M. Osofsky (eds), *Adjudicating Climate Change: State, National and International Approaches* (2009).

[60] McAllister, 'Litigating Climate Change at the Coal Mine', in *ibid.*, at 48, 50; Strauss, 'The Implications of Climate Change Litigation: Litigating for International Law-Making', in *ibid.*, at 334.

[61] Osofsky, 'Conclusion: Adjudicating Climate Change across Scales', in Burns and Osofsky, *supra* note 59, at 375.

[62] *Ibid.*

[63] M. Faure and M. Peeters (eds), *Climate Change Liability* (2011).

further, Richard Lord *et al*.'s *Climate Change Liability* is a massive compendium of case law originating in 17 countries (both developed and developing) and the EU.[64]

The common project of these three books is the identification of the 'myriad of potential forms of liability'[65] that litigants can draw on either in order to trigger, or with the effect of triggering, actions on climate change mitigation and adaptation. Climate liability is climate law from below. In light of the inertia of international negotiations, Lord *et al*. agree with Osofsky that some hope may be placed on courts, as 'liability arising related to climate change is developing apace and, in some jurisdictions, on a large scale'.[66] However, liability is only conceived as a second best as – Lord *et al*. insist – 'an international regime that involves all States and that provides for the action that science tells us is needed to avert dangerous climate change, would be the preferred approach.'[67] The limits of liability are duly recognized. Jaap Spier, for instance, highlights the risk that the dissuasive impact on polluters would be impeded if 'those involved assess as remote the chances of being held liable'.[68] Liability certainly cannot *replace* compliance with a specific set of coordinated norms aiming at climate change mitigation and adaptation. The literature on climate liability generally focuses on domestic jurisdictions: even though these jurisdictions can sometimes apply international law, in most cases the discussion focuses on domestic substantive norms. Consequently the scholarly focus shifts away from international climate change governance – a trend discussed further in section 5.

4 The Fragmentation of Climate Change Governance: Greening International Law?

Part of the literature suggests that climate change responses impact on a multitude of different legal regimes rather than forming an integrated 'climate law' regime. Adaptation in particular calls for action across a multitude of legal regimes, cemented only by minimal institutional arrangements (most obviously some funding arrangements). An early presentation of such an argument is Lisa Schipper's article, 'The Conceptual History of Adaptation in the UNFCCC Process'.[69] Schipper shows that 'vulnerability to climate is determined by factors [that are] very difficult to influence because they are often part of larger socio-economic and cultural building blocks of nations'.[70] She suggests that 'adaptation policy may find a more appropriate home

64 R. Lord, S. Goldberg, L. Rajamani, and J. Brunnée (eds), *Climate Change Liability: Transnational Law and Practice* (2012).

65 Brunnée, Goldberg, Lord, and Rajamani, 'Overview of Legal Issues Relevant to Climate Change', in *ibid.*, at 23, 23.

66 Brunnée *et al*., 'Introduction', in *ibid.*, at 3, 6.

67 *Ibid.*

68 Spier, 'High Noon: Prevention of Climate Damage as the Primary Goal of Liability?', in Faure and Peeters (eds), *supra* note 63, at 47, 48.

69 Schipper, 'Conceptual History of Adaptation in the UNFCCC Process', 15 *Rev European Comp & Int'l Envt'L* (2006) 82.

70 *Ibid.*, at 92.

beyond the existing climate change regime',[71] stopping short of proposing any specific alternative forum. In a similar vein, J.B. Ruhl submits that 'environmental law does not "own" adaptation policy; rather, numerous policy fronts will compete simultaneously for primacy and priority as people demand protection from harms and enjoyment of benefits that play out as climate change moves relentlessly forward'.[72] Rosemary Rayfuse and Shirley Scott, editors of the recent volume, *International Law in the Era of Climate Change* (2012), develop a similar argument. At the outset, they note that 'climate change will, in many cases, serve to exacerbate existing problems, functioning as a threat multiplier or one factor in a complex process of causation'.[73] The book reveals how responses to climate change are and could be mainstreamed throughout a host of legal regimes such as human rights law, refugee law, trade and investment law, environmental law, law of the sea, space law, humanitarian law, and law on the use of force.

The following subsections identify three broad strands of literature on the articulation of climate change governance within the existing regimes of human rights, development, and migration law. The discussion shows how the fragmentation of climate change governance may jeopardize the objective of climate change adaptation. Two opposite scenarios are identified as problematic: mainstreaming climate change or reinventing the wheels of international law. On the one hand, climate change law (or aspects thereof) may be mainstreamed into other regimes: it could for instance become a footnote in development policies. While benefitting from potential synergies, this might lead to silencing the corrective justice argument for an ambitious effort at promoting climate change adaptation. On the other hand, human rights, development, and migration issues exacerbated by climate change are often discussed in isolation from larger pre-existing debates. This is in particular the case with regard to 'climate migration', which the literature tends to address as though 'environmental migrants' could be distinguished from other forced migrants.

A *Mainstreaming Human Rights and Development in Responses to Climate Change*

Part of the literature on climate change looks at the relation of climate change with human rights law. A rich collection of insightful reflections can be found in the volume *Human Rights and Climate Change* edited by Stephen Humphreys.[74] The contributions elaborate on different conceptions of 'human rights': as law, a project, or something in between. Simon Caney, for instance, deals with human rights as a social phenomenon, a set of absolute claims that should supersede any consideration of costs.[75] At the other end of the spectrum, Dina Shelton mentions the technical 'problems of standing, justiciability, ripeness and causality' in human rights adjudication in the context

[71] *Ibid.*, at 82.

[72] Ruhl, 'Climate Change Adaptation and the Structural Transformation of Environmental Law', 40 *Env'l L* (2010) 363, at 364.

[73] R. Rayfuse and S.V. Scott, *International Law in the Era of Climate Change* (2012), at 9.

[74] S. Humphreys (ed.), *Human Rights and Climate Change* (2010).

[75] Caney, 'Climate Change, Moral Harms and Moral Thresholds', in *ibid.*, at 69, 87.

of climate change.[76] Somewhere between, contributions by Philippe Cullet and Jon Barnett focus on vulnerability and equity in the climate regime.[77]

An even more prolific strand of the literature deals with the relations of climate change and development, including no fewer than three recent edited volumes that reveal a similar set of arguments and perspectives. First, Lael Brainard, Abigail Jones, and Nigel Purvis's *Climate Change and Global Poverty* gathers contributions by a large range of brilliant researchers from all over the world to highlight the commonalities of climate and development agendas.[78] The editors argue in particular that 'success on both fronts is inextricably linked to progress on each one'.[79] Secondly, *Mainstreaming Climate Change in Development Cooperation*, edited by Joyeeta Gupta and Nicolien van der Grijp, provides insights into the law and practices of the EU in a global context, at the convergence of development and climate change.[80] Gupta and van der Grijp in particular analyse the climate change regime as 'the latest forum for North–South stress, where old grievances like colonialism and new ones like neo-imperialism merge in a complex pot of interdependence and yet distrust'.[81] They highlight that climate change and development have in common to call for asymmetrical obligations founded on an ambiguous reasoning – partly on the greater capacity of Western countries, and partly on a touch of responsibility.[82] In this context, the two editors note a shift in the conception of climate change, from an 'abstract, technocratic, sectorial, mitigation issue' to an 'urgent, development, political, adaptation issue'.[83] Thirdly, *Poverty Alleviation and Environmental Law* was edited by Yves Le Bouthillier and colleagues following a conference organized in Mexico City by the IUCN Academy of Environmental Law exploring the role of law in regulating the complex relationship between poverty and environmental protection. Its 14 chapters include theoretical contributions and case studies on issues such as the specific situation of aboriginal peoples, the need for public participation, and the role of environmental courts. A last section is specifically dedicated to climate change and poverty alleviation.[84]

These four books share the same starting point: the unquestionable *existence* of overlaps between climate change law and human rights law or development law respectively. An ensuing argument is that coordination could develop synergies between those regimes. These synergies are particularly highlighted in relation to

[76] Shelton, 'Equitable Utilization of the Atmosphere: A Rights-Based Approach to Climate Change?', in *ibid.*, at 91.

[77] Cullet, 'The Kyoto Protocol and Vulnerability: Human Rights and Equity Dimensions', in *ibid.*, at 183; Barnett, 'Human Rights and Vulnerability to Climate Change', in *ibid.*, at 257.

[78] L. Brainard, A. Jones, and N. Purvis (eds), *Climate Change and Global Poverty: A Billion Lives in the Balance?* (2009).

[79] Brainard, Jones, and Purvis, 'Introduction', in *ibid.*, at 1.

[80] J. Gupta and N. van der Grijp (eds), *Mainstreaming Climate Change in Development Cooperation: Theory, Practice and Implications for the European Union* (2010).

[81] Gupta and van der Grijp, 'Prospects for Mainstreaming Climate Change in Development Cooperation', in *ibid.*, at 303.

[82] *Ibid.*, at 326.

[83] Gupta and van der Grijp, 'Climate Change, Development and Development Cooperation', in *ibid.*, at 3, 9.

[84] Y. Le Bouthillier, M.A. Cohen, and J.J.G. Marquez (eds), *Poverty Alleviation and Environmental Law* (2012).

development. For instance, Jones, LaFleur, and Purvis suggest that synergies are possible, for instance, with regard to the governance of tropical forests, agriculture, health, and disaster risk reduction.[85] Michael Jenkin further elaborates on the opportunities of cooperation in forestry, highlighting the phenomenal potential of carbon offsets projects both to avoid GHG emissions and to channel significant North–South financial aid to development.[86] Similarly, Humphreys phrases a wish that 'State obligations under the human rights and climate change regime – *though they differ markedly* – may turn out to be complementary',[87] and he denounces the 'near complete disciplinary disconnect' between human rights and climate change.[88]

Yet, in the discussion of development and climate change, some authors develop a more demanding claim. They argue that synergies between law on development and climate change are the rule, while oppositions between these priorities are exceptional. For instance, Atiq Rahman argues against all odds that 'mitigating climate change, eradicating poverty, and promoting economic growth and political stability all demand the same solution: we must kick the carbon habit'.[89] Similarly, according to Daniel Behn, 'an opportunity has emerged in the twenty-first century to both eradicate extreme poverty and stabilize the planet that we collectively inhabit'.[90] As concerns potential conflict between climate change and development law, Jones, LaFleur, and Purvis content themselves with a rapid and heavily understated acknowledgment that, '*sometimes*, mitigation and development goals *might seem* to conflict'.[91] Such wishful thinking underestimates the unavoidable oppositions between divergent priorities in a world with limited resources.

By contrast, the perspective on human rights and climate change developed in Humphreys' volume duly recognizes the tensions between the two spheres of governance – perhaps because human rights lawyers are used to the need for accommodating diverging interests. Suggesting that human rights protection and climate change mitigation or adaptation may be competing goals, Humphreys argues that the human rights regime needs to take climate change into account because 'the injustice of climate change effects is such that the failure of human rights to provide effective remedy can only work against their current hegemonic status (or aspiration)' as a language of justice.[92] Overall, Humphreys recognizes certain essential inconsistencies between the

[85] Jones, LaFleur, and Purvis, 'Double Jeopardy: What the Climate Crisis Means for the Poor', in Brainard, Jones, and Purvis (eds), *supra* note 78, at 10, 15.

[86] Jenkins, 'Linking Communities, Forests, and Carbon', in *ibid.*, at 87, 88.

[87] Humphreys, 'Introduction: Human Rights and Climate Change', in Humphreys, *supra* note 74, at 11 (emphasis added). See also: Seymour, 'Forests, Climate Change and Human Rights: Managing Risks and Trade-offs', in *ibid.*, at 207.

[88] Humphreys, 'Introduction', *ibid.*, at 1, 3.

[89] Rahman, 'Integrating Climate Change into Development: Multiple Benefits of Mitigation and Adaptation', in Brainard, Jones, and Purvis (eds), *supra* note 78, at 104, 114.

[90] Behn, 'Linking Climate Change Mitigation and Poverty Reduction: Continued Reform of the Clean Development Mechanism in the Post-Kyoto Era to Promote Sustainable Energy Development on the African Continent', in Le Bouthillier, Cohen, and Marquez (eds), *supra* note 84, at 263.

[91] Jones, LaFleur, and Purvis, *supra* note 85, at 16 (emphasis added).

[92] Humphreys, 'Competing Claims: Human Rights and Climate Harms', in Humphreys, *supra* note 74, at 37, 45.

two spheres of governance, such as between human rights' deontological roots and climate change's utilitarian approach.[93] This assessment of the hurdles in reconciling different regimes with diverging priorities is essential; by contrast, the wishful emphasis on 'win-win' solutions in the literature on climate change and development results in a dearth of much-needed discussions on the harder cases where compromises are unavoidable.

B *Migration as Adaptation: Reinventing Migration through Green Lenses?*

Yet another strand of literature deals with the encounter of climate change and migration. Two recent monographs, in particular, discuss national and international policies with regard to human displacements 'caused' by climate change. Gregory White's *Security and Borders in a Warming World: Climate Change and Migration* provides an insightful critique of the conception of climate-induced migration as a security concern calling for increased border and migration control.[94] Substantially influenced by de Tocqueville's thoughts on modern democracies, White denounces the relative ease with which popular support is attracted for 'simple' solutions such as building fences and enhancing the capacity of transit states, despite all evidence of their long-term inefficacy. He suggests that this detracts attention from other necessary efforts, such as climate change mitigation and adaptation.[95] Jane McAdam's *Climate Change, Forced Migration, and International Law* is an extensive and well-informed doctrinal discussion of different legal regimes.[96] It aims at examining 'the scope of existing international law to respond to climate change-related movement, and to identify its potential for future development and expansion'.[97] The book is informed by fieldwork in Tuvalu, Kiribati, and Bangladesh, and it leads to a normative argument for a rights-based governance of climate migration.[98]

The two authors concur in denouncing the often-heard discourse on 'climate refugees' forced to flee countries flooded as a consequence of climate change as 'simplistic and often ill-informed'.[99] However, both authors fail to escape some of these misconceptions themselves. Thus, although they insist – on the basis of consistent empirical works – that migration induced or exacerbated by climate change-related phenomena is 'likely to be *internal*, rather than across international borders',[100] most of their discussion is circumscribed to *international* migration.[101] This neglect of internal displacement is in spite of the long-lasting endeavour of international human rights law

[93] Humphreys, *supra* note 87, at 15.
[94] G. White, *Security and Borders in a Warming World: Climate Change and Migration* (2011), at 125.
[95] *Ibid.*, at 88.
[96] J. McAdam, *Climate Change, Forced Migration, and International Law* (2012).
[97] *Ibid.*, at 7.
[98] See in particular *ibid.*, at 237ff.
[99] *Ibid.*, at 27. See also White, *supra* note 94, e.g., at 22.
[100] McAdam, *supra* note 96, at 5 (emphasis added). See also White, *supra* note 94, at 8, 19.
[101] McAdam, *supra* note 96, at 14 (emphasis added). Only part of ch. 6 deals with internal migration through a case study of Bangladesh.

to protect internal migrants – reminding us that the general human rights *entitlement* does not always translate into *effective protection*: internal migrants, just like international ones, do require specific protection.[102]

Moreover, when calling for specific policies to be developed to address 'climate migration', McAdam (and, to a lesser extent, White) assumes that it is possible to distinguish 'climate migrants' from other migrants. This seems, however, impossible because, as McAdam observes herself, 'it is … conceptually problematic and empirically flawed to suggest that climate change alone *causes* migration'.[103] Indeed, the task of identifying those migrants 'caused' by climate change would face two successive issues of causation. First, climate change does not 'cause' any environmental event in a binary ('all or nothing') manner – such phenomena become only more *likely* (or more frequent) in the context of climate change. Secondly, migration studies tell us that migration is generally not induced by environmental events alone, but rather by a cluster of economic, social, political, demographic, and environmental circumstances.[104] As a consequence, one can identify neither the specific drought that would not have occurred absent climate change, nor in general the specific individual migrants who would not have moved or would have moved differently in the absence of such a drought.[105] Therefore, the circumstances where migrants could reasonably be identified as 'caused' by climate change are exceptional.[106]

More fundamentally, neither McAdam nor White develops a sound ethical argument for the protection of climate migrants. Both authors seem concerned primarily by the vulnerability of climate migrants, but they are isolated from a broader argument for the protection of equally vulnerable 'economic' or 'development refugees', or from proposals for a protection framework for 'survival migration'.[107] If the authors are concerned by the vulnerability of migrants, there is no reason to limit the argument to *climate* migrants (except for a naïve illusion that international refugee law sufficiently addresses all other forced migration). Alternatively, the call for a protection of climate migrants could follow a corrective justice argument justifying an obligation for polluting states to repair the loss and damage caused to other states. Yet, it is not clear how a corrective justice argument at the inter-state level could translate into obligations of a state toward individuals.[108]

Thus, the literature on 'migration as adaptation' runs the risk of reinventing the wheels of the governance of migration and of artificially isolating a 'green' argument

[102] Cp. *ibid.*, at 173: '[t]hose displaced within Bangladesh remain citizens of that country and entitled to the protections that flow from that status. It is therefore likely that they will be regarded as a domestic concern and not within the purview of international attention.'

[103] *Ibid.*, at 24 (emphasis in original).

[104] *Ibid.*, at 5. See also Government Office for Science, *Foresight: Migration and Global Environmental Change*, Final Project Report (2011), at 11–12.

[105] Government Office for Science, *supra* note 104.

[106] See Nicholson, book review, 25 *J Refugee L* (2012) 585.

[107] E.g., Betts, 'Survival Migration: A New Protection Framework', 16 *Global Governance* (2010) 361; Cernea, 'Internal Refugee Flows and Development-Induced Population Displacement', 3 *Int'l J Refugee L* (1990) 320.

[108] See Mayer, *supra* note 9.

from broader debates. Neither 'mainstreaming' climate change in the development regime nor isolating the governance of climate-related migration responds to the essential need for a coordination of climate change governance with existing regimes.

5 A Transnational Regime Complex for Climate Change?

Rather than forming a coherent legal regime, the governance of climate change inextricably appears as part of a complex set of norms and compromises across a variety of regimes. At the same time the governance of climate change struggles to affirm itself as an independent legal regime.

Part of the literature attempts to overcome the difficulties stemming from a lack of far-reaching cooperation and the implication of climate change mitigation and adaptation in all domains of governance and to comprehend the global governance of climate change by applying innovative frameworks of analysis. This literature goes beyond a doctrinal analysis of the specific norms relating to climate change or a coordination of those norms with existing regimes. Instead, it tackles the conceptual challenge of mapping the many norms and their implementation, the policies and actions, even discourses and representations that frame the overall response of human societies to climate change. It deals not only with law, but also with other instruments of governance: the classical structure of international law is questioned for the benefit of function. Ultimately, this literature aims at identifying possibilities of furthering effective responses to climate change.

A significant example of such an approach is Robert Keohane and David Victor's article, 'The Regime Complex for Climate Change'.[109] Keohane and Victor argue that, despite the efforts of states at crafting 'a strong, integrated and comprehensive regulatory system for managing climate change', the result so far has been limited to 'a varied array of narrowly-focused regulatory regimes'.[110] According to the authors, three factors explain such dispersion: the distribution of interests among powerful states, the scientific uncertainty relating to climate change, and the possible linkages with non-climate issues.[111] Yet, Keohane and Victor argue, a regime complex also has advantages over an integrated one, in particular because it provides greater 'flexibility across issues' and 'adaptability over time'.[112] Thus, their support for a regime complex is essentially based on a pragmatic quest for 'whatever works', as opposed to a quest for 'climate justice'. The authors are sceptical towards the role of fairness in international relations. They write that, 'since multilateral institutions always reflect disparities of power and interests, they never perfectly reflect abstract normative standards of fairness, and *should not be evaluated on the basis of whether they achieve this utopian objective*'.[113] A central argument of the authors is that there is no need for an integrated

[109] Keohane and Victor, 'The Regime Complex for Climate Change', 9 *Perspectives on Politics* (2011) 7.
[110] *Ibid.*, at 7.
[111] *Ibid.*, at 9.
[112] *Ibid.*, at 15.
[113] *Ibid.*, at 17 (emphasis added).

climate change regime because climate change governance deals with an array of distinct problems that can be dealt with in different regimes. In particular, they identify four independent problems: 'coordination of emission regulations', 'compensation … for countries that are not willing or unable to adopt emission controls', 'coordination of efforts to brace a changing climate', and 'coordination of common scientific assessments'. Each of these problems, they argue, has its 'own attributes, administrative challenges, and distinctive political constituencies'.[114] Yet, Keohane and Victor come to this conclusion only because they deny the role of ethical criteria in defining what a climate regime should be. By doing so, they neglect the very reason for the existence of a law of climate change: the guarantee of an equal right of all nations, all individuals, to enjoy their existence.

Whereas Keohane and Victor address only the global aspects of the governance of climate change, others develop a multi-level analysis. In particular, Gerd Winter's volume, *The Multilevel Governance of Global Environmental Change*, highlights the need to look at all levels of governance and at all institutional arrangements (possibly) contributing to the global responses to climate change.[115] The contributions to Winter's volume offer a multidisciplinary approach to governance at the local, national, regional, and global levels. They explore aspects ranging from the challenges to compliance in developing countries,[116] to the diffusion of environmental policy innovations,[117] and to the exemplary role of the EU.[118]

The notion of transnational governance provides a slightly more comprehensive frame of analysis, taking into account the diverse interactions between public and private actors within and across national borders.[119] Such a transnational approach is evidenced by Kenneth Abbott's landmark article 'The Transnational Regime Complex for Climate Change', which maps the regime resulting from the '"Cambrian explosion" in transnational climate change governance'.[120] Building upon Keohane and Victor, Abbott argues that climate governance has become not only complex and diversified, but also decentralized. The recent launch of the *Transnational Environmental Law* journal evidences the success of this perspective. Its inaugural issue contributes to setting the stage for a new paradigm: the recognition of the 'proliferation of sites of governance',[121] an emphasis on adaptation, a great openness to comparative legal

[114] *Ibid.*, at 13.

[115] G. Winter (ed.), *Multilevel Governance of Global Environmental Change: Perspectives from Science, Sociology and the Law* (2006). See also Osofsky, 'Is Climate Change "International"? Litigation's Diagonal Regulatory Role', 49 *Virginia J Int'l L* (2009) 585.

[116] Gupta, 'Regulatory Competition and Developing Countries and the Challenge for Compliance Push and Pull Measures', in Winter (ed.), *supra* note 115, at 455.

[117] Tews, 'The Diffusion of Environmental Policy Innovation', in *ibid.*, at 227.

[118] Krämer, 'The EU: A Regional Model?', in *ibid.*, at 333; Winter, 'The Legal Nature of Environmental Principles in International, EU, and Exemplary National Law', in *ibid.*, at 587.

[119] I do not see any fundamental difference between the concept of transnational complex regime and that of global environmental governance. See: Biermann and Pattberg (eds), *supra* note 15.

[120] Abbott, 'The Transnational Regime Complex for Climate Change', 30 *Env't & Planning C: Govt & Policy* (2012) 571, at 587.

[121] Lin and Scott, 'Looking Beyond the International: Key Themes and Approaches of Transnational Environmental Law', 1 *Transnat'l Env'l L* (2012) 23, at 23.

methodology,[122] a reflection on the articulation of global, domestic, local, and voluntary regulation, an underlying quest for efficiency in a context of limited political resources and great governance needs, and a recognition of the challenge of legitimacy.[123]

Both concepts of multi-level and transnational governance emphasize the complementarity of different forums of governance. This emphasis may certainly be interpreted as a consequence of a growing scholarly dissatisfaction with international cooperation on climate change issues altogether. Thus, part of the literature has submitted that downscaling international governance could open new opportunities for more efficient and legitimate governance. It accompanies a proliferation of works that aim at revealing the possibility to govern climate change *without* an international law of climate change. For instance, Lorraine Elliott and Shaun Breslin's *Comparative Environmental Regionalism* shows that forms of regional cooperation on environmental matters have been developing in virtually all regions of the world.[124] And Benjamin Richardson's *Local Climate Change Law* gathers case studies revealing that, because they are more flexible, 'local government can play a useful role in addressing climate mitigation and adaptation.'[125] Karsten Ronit's edited volume, *Business and Climate Policy: The Potentials and Pitfalls of Private Voluntary Programs*, highlights the role of private actors in defining immediate responses to climate change, for instance in the financial, forestry, 'agrifood', and automobile sectors. More traditionally, many textbooks have been published on domestic mitigation or adaptation laws, often with little reference to international law.[126] In their introduction to Michael Gerrard and Katrina Fischer Kuh's manual *The Law of Adaptation to Climate Change: U.S. and International Aspects*, Robert Fischman and Jillian Rountree mention the existence of 'projects under the jurisdiction of international law' [*sic*], depicting international law generally as a 'poor framework' lacking 'an effective enforcement system', therefore unable to provide the binding standards needed for adaptation.[127]

In many cases, however, a repressed desire for international cooperation or at least coordination re-emerges within the literature on downscaled climate change governance through the notion that any isolated initiative should spur further action by others. This emulation is particularly evident in the discussion on voluntary regimes, through which local authorities or private entities voluntarily commit themselves to specific mitigation or adaptation objectives. Yet, emulation may also be expected from the *exemplary* action of a specific actor. In this regard, a literature has developed on the role of the EU. In particular, *The European Union as a Leader in International Climate Change Politics*, edited by

[122] See in particular Carlarne and Farber, 'Law Beyond Borders: Transnational Responses to Global Environmental Issues', 1 *Transnat'l Env'l L* (2012) 13, at 14.

[123] See Shaffer and Bodansky, 'Transnationalism, Unilateralism and International Law', 1 *Transnat'l Env'l L* (2012) 31.

[124] L. Elliott and S. Breslin (eds), *Comparative Environmental Regionalism* (2011).

[125] Richardson, 'Introduction', in B.J. Richardson (ed.), *Local Climate Change Law: Environmental Regulation in Cities and other Localities* (2012), at 3, 24.

[126] S.D. Deatherage, *Carbon Trading and Practice* (2011); N. Durrant, *Legal Responses to Climate Change* (2010).

[127] Fischman and Rountree, 'Adaptive Management', in M.B. Berrard and K.F. Kuh (eds), *The Law of Adaptation to Climate Change: U.S. and International Aspects* (2012), at 19, 42.

Rüdiger Wurzel and James Connelly, shows that Europe has developed 'entrepreneurial leadership' (the ability to facilitate agreements through negotiations) and 'cognitive leadership' (the ability to define the perception of a phenomenon and the interests of different actors), but continues to lack 'structural leadership' (the ability to constrain action), which accordingly resulted in the failure of the Copenhagen summit.[128]

Such arguments have fuelled criticisms based on the lack of legitimacy of European institutions to impose their decisions on other actors. Regarding the extension of the EU Emission Trading Scheme (ETS) to aviation activities, for instance, Scott and Rajamani's article on 'EU Climate Change Unilateralism' denounced the European 'strategy of "contingent unilateralism"' that according to the authors consists of applying EU law to GHG emissions generated abroad until third states or international institutions impose similar regulations.[129] Interestingly, Scott and Rajamani highlight the inconsistency of such an action with the principle of common but differentiated responsibilities, as the EU legislation failed to treat flights connecting developing countries differently.[130] Decentralized governance exacerbates inequalities of powers, thus further isolating developing countries from global politics. Regarding climate change governance more particularly, Scott and Rajamani highlight the risk of an oversight of the inter-hemispheric dimension of climate change. If the governance of climate change is not about holding the polluters responsible for the harm they cause, what is it worth?

The literature on climate change and international law has taken a disturbing turn over the last few years, as the ethical rationales for actually *doing something* have been neglected. Principled approaches to climate change governance often boil down to a desperate quest for 'whatever works' that shadows stronger ethical arguments on the responsibility of polluting states. In this perspective, climate change adaptation is bound to remain conceived as a charitable appendix to a climate mitigation regime, which would itself be circumscribed to the minimal common denominator of what individual states consider to be in their best interests. The project of climate law requires more than that: it calls for a foundational momentum spurring sacrifices guided by the ethics of international affairs, for the human family must learn to share limited global resources in an increasingly independent world. A strong ethical narrative needs to be re-invented to guide and inspire the development of climate change mitigation and adaptation.

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[128] Wurzel and Connelly, 'Conclusion: The European Union's Leadership Role in International Climate Change Politics Reassessed', in R. Wurzel and J. Connelly (eds), *The European Union as a Leader in International Climate Change Politics* (2010), at 271, 272.

[129] Scott and Rajamani, 'EU Climate Change Unilateralism', 23 *EJIL* (2012) 469, at 469.

[130] *Ibid.*, at 488.

2. *Climate Law* (peer-reviewed quarterly, launched in 2010 by Alexander Zahar at IOS Press)
3. *Journal of Energy, Climate, and the Environment* (student-edited half-yearly journal, launched in 2010 by the Washington and Lee School of Law)
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