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# Climate change and the transition to neoliberal environmental governance



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## ABSTRACT

What are the guiding principles of contemporary international governance of climate change and to what extent do they represent neoliberal forms? We document five main political and institutional shifts within the UN Framework Convention on Climate Change (UNFCCC) and outline core governance practices for each phase. In discussing the current phase since the Paris Agreement, we offer to the emerging literature on international neoliberal environmental governance an analytical framework by which the extent of international neoliberal governance can be assessed. We conceptualize international neoliberal environmentalism as characterized by four main processes: the prominence of libertarian ideals of justice, in which justice is defined as the rational pursuit of sovereign self-interest between unequal parties; marketization, in which market mechanisms, private sector engagement and purportedly 'objective' considerations are viewed as the most effective and efficient forms of governance; governance by disclosure, in which the primary obstacles to sustainability are understood as 'imperfect information' and onerous regulatory structures that inhibit innovation; and exclusivity, in which multilateral decision-making is shifted from consensus to minilateralism. Against this framework, we argue that the contemporary UNFCCC regime has institutionalized neoliberal reforms in climate governance, although not without resistance, in a configuration which is starkly different than that of earlier eras. We conclude by describing four crucial gaps left by this transition, which include the ability of the regime to drive adequate ambition, and gaps in transparency, equity and representation.

### 1. Introduction

During the last week of the long-anticipated UN climate change negotiations in Copenhagen in 2009, leading climate activist Bill McKibben published an article in the Guardian with the title "Copenhagen: only the numbers count - and they add up to hell on earth." He was referring to the fact that a new website called Climate Interactive had added up all of the promises made by states to reduce their emissions, and the conclusion was that global emissions concentrations would increase to more than double what many scientists believed to be reasonably safe by the year 2100. McKibben said that under these conditions, "we would live in hell, or at least a place with a similar temperature" (McKibben, 2009).

At the time of McKibben's statement, a shift in governance in the United Nations Framework Convention on Climate Change (UNFCCC) was believed by many to have weakened the ability of the regime to carry out its core function: reducing greenhouse gas emissions and stabilizing the global climate system, which had particular implications in the near term for the world's poorest and lowest-lying island countries (Ciplet et al., 2015). Changes in international climate governance that were introduced in Copenhagen were institutionalized over the next six years of negotiations, culminating in Paris in late 2015. In particular, a 'top down' system of more binding national 'targets and timetables' for emissions based on responsibility for climate change and capabilities to address it were replaced by a system of 'bottom up' pledges by each nation. Though there was much celebration at the final gavel in Paris, the ambivalence about the outcome and new direction was still palpable. Some observers hailed the outcome and approach as bringing nations to the table with the level of commitment they were comfortable with, providing the best outcome possible (e.g. Stavins, 2015; Bodansky, 2016; Victor, 2016). But acknowledging the inadequacy of the deal to stabilize the climate, journalist George Monbiot wrote, "By comparison to what it could have been, it's a miracle. By comparison to what it should have been, it's a disaster" (Monbiot, 2015).

What drove the shift in climate governance, and how do we understand its potential for future success in addressing the need for rapid of greenhouse gas emissions reductions in an equitable fashion? This article contributes to an emergent body of scholarship that seeks to make sense of climate governance and particularly the post-Paris

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regime and the neoliberalization of environmental governance more broadly (e.g. Goldman, 2006; Conca, 2006; Newell, 2008; Fieldman, 2011; Bondi and Laurie, 2012). We ask: what are the guiding principles of contemporary international governance of climate change and to what extent do they represent neoliberal forms? We document five main political and institutional shifts and outline core governance practices for each phase. We acknowledge these phases are a shifting set of negotiated settlements, deals and accommodations subject to change and contestation. While there are distinct and significant institutional and normative changes relevant to each phase, many characteristics of the climate regime have remained constant across phases. As a process shaped by competing political coalitions, we do not suggest that the regime has evolved in a linear or predictable fashion. In discussing the current phase since the Paris Agreement, we offer to the emerging literature on international neoliberal environmental governance an analytical framework by which the extent of international neoliberal government can be assessed. While several existing articles address aspects of both the climate regime and neoliberal governance, efforts so far have focused on specific components of the regime; lacking is a more comprehensive view in relation to governance, political economic and ideological developments.

Notably, this article builds from previous scholarship which articulated the forces that have shaped this shift in governance. Ciplet et al. (2015) argued that the contemporary climate regime was conditioned by strategic interactions between state, business and civil society coalitions, and world historic developments which stymied domestic mitigation action and international cooperation. This included the declining hegemony of the United States and its resulting economic insecurity in relation to China and waning international leadership; fragmentation of economic and environmental positions and identities among states in the global South from a simpler North-South duality; a major global economic recession due to speculative capital, and subsequent austerity policies in several large emitting countries; the rise of libertarian and populist ideologies antagonistic to state intervention on environmental problems; shifting geopolitical relations related to unconventional energy development; and a growing emphasis by mainstream environmental organizations and their funders on market-based and voluntary structures of governance (Roberts, 2011; Ciplet et al., 2015; Ciplet and Roberts, 2017). The specific form the contemporary governance regime has taken was also conditioned by developing state and civil society resistance (Ciplet, 2015; Ciplet et al., 2015; Ciplet, 2014). As such, we do not assert that there is any inevitable or linear path to neoliberal forms of international environmental governance.

This article draws upon over two decades of collective experience by the authors as observers and participants in United Nations climate negotiations. Data collection has included dozens of extensive interviews with key state, industry, bureaucratic, and civil society stakeholders in the process, informal interviews and observational data collected during the negotiations and related events since 2003 (including video archives), and analysis of key texts, agreements, and secondary sources extending back to the founding UNFCCC Convention in 1992. Interviews were conducted with state actors in delegations from the United States and European countries, and close work with Least Developed Countries (LDC) Group and the Association of Independent Latin American and Caribbean states (AILAC) negotiators and expert support staff. We also participated in international civil society meetings in over twenty UNFCCC negotiations since 2003 and in collaborative work with research institutions in developed and developing countries. Climate change is a crucial issue, but the analysis and conceptualization of international neoliberal environmental governance presented in this paper also has implications for our understanding of the guiding governance principles that may be emergent in other global environmental regimes.

We begin by drawing upon relevant literature to map the key characteristics of neoliberal environmental governance. In the next section, we discuss the first four distinct phases of international climate governance and the guiding characteristics of each. In section three, we assess the contemporary phase in relation to our analytical framework, and discuss the ways in which "actually existing" neoliberal climate governance appears to conform to a neoliberal approach. We conclude by assessing the implications of these shifts in international governance. We describe four crucial gaps that remain at least partly as a result of the neoliberal turn in environmental governance. These include that the regime appears unable to drive adequate mitigation action and financial support for poor nations, and unacceptable gaps remain in accountability, equity and representation.

### 2. Neoliberalism in international environmental governance

Neoliberalism can be described as "a politically guided intensification of market rule" in the public realm (Brenner et al., 2010; 184). Or more critically, as sociologist Pierre Bourdieu has explained, neoliberalism is a "programme for destroying collective structures which may impede the pure market logic" (Bourdieu 1998 cited in Gareau 2013: 42). Gill and Law (1993) described how the Reagan and Thatcher governments sought to liberate the private sector from state regulation as "a conscious effort to change expectations and ideas about the appropriate role of government, the importance of private enterprise, and the virtues of markets."

Scholarship on neoliberalism has often been critiqued for analytical imprecision of the concept and its application to local and transnational contexts of governance (Castree, 2008a; Peck and Tickell, 2002; Mansfield, 2004). Specifically, the project to more precisely define the common lines and processes that bring coherency to neoliberalism as a political project has become a major focus in related scholarship (Castree, 2008a,b), and has often centered upon efforts to clarify its variegated forms and ways in which it is contextually bound (Peck and Tickell, 2002). To be sure, numerous works have articulated that neoliberalism is never implemented uniformly, and faces forms of resistance and critique that condition its living articulations (Peck and Tickell, 2002). We support that position here, while attempting to outline the changes that have come in different phases to how global climate change is governed.

An interdisciplinary body of scholarship has identified "neoliberal environmentalism" or "market environmentalism" (Beder, 2001), as part of a growing trend toward the neoliberalization of nature (McCarthy, 2004; Mansfield, 2004; Bridge, 2004; Prudham, 2004). These works emphasize an approach to solving environmental problems through privatization, commercialization and commodification of natural resources and ecosystems (Bakker, 2005; 544), the erosion of state governance in favor of market mechanisms and public-private partnerships (Bakker, 2007), increased dominance of the private sector in environmental decision-making (Corson, 2010), and the minimizing of normative concerns that deviate from market-based or narrowly defined science-based principles (Gareau, 2013).

Notably, a small but growing focus has centered on what some scholars view as a neoliberal turn of global or international environmental governance in regimes such as the Montreal Protocol (Gareau, 2013), Basel Convention (Lucier and Gareau, 2015; Okereke, 2007), the United Nations Conference on the Law of the Sea (Okereke, 2007), and the UNFCCC (Okereke, 2007; Bond, 2008; Lohmann, 2009; Newell and Paterson, 1998, 2009, 2010; Parr, 2014; Koch, 2012; Ciplet et al., 2015). This work has pointed to four main developments which define international neoliberal environmental governance (Table 1). First, Okereke (2007) argues that the dominance of libertarian ideas of justice have undermined distributive justice principles embedded in formative regime texts in regimes such as the United Nations Conference of the Law of the Sea, the UNFCCC, and the Basel Convention. Okereke points to two main "neoliberal justice principles" which he argues dominate in these contexts: justice as private property and justice as mutual advantage. The principle of justice as property rights asserts that individual liberties trump all other social and political ideals (41). In

#### Table 1

Defining characteristics of international neoliberal environmental governance.

Key characteristics	Guiding logics	Omitted and excluded principles and practices
Libertarian justice ideals	Sustainability can best be achieved by protecting individual liberties and property rights and enabling the rational pursuit of sovereign self- interest between unequal parties based on plural conceptions of the good; responsibility for taking environmental measures should be shared by all actors voluntarily	Distributive justice in response to structural inequalities
Marketization	Market mechanisms, private sector engagement, and purportedly 'objective' considerations are most effective and efficient forms of governance	Precautionary principle and regulatory forms of governance; human rights, social well-being, equity, social and environmental justice; Indigenous and other knowledge systems; and norms that don't conform with market interests or that are not readily measurable
Governance by disclosure and voluntarism	Primary obstacles to sustainability are 'imperfect information', lack of transparency, and onerous regulatory structures that inhibit innovation	Regulatory and compliance based forms of governance; responsibility of environmental action based on "polluter-pays" principle, capability and historical considerations
Exclusive decision-making	Intensified minilateralism and bilateralism between states, often outside of the constraints of the regime are more efficient and effective means of governance in the context of transnational complexity and coordination problems	Consensus-based, universalist decision-making, rooted in state sovereignty; pluralistic global governance; representation of vulnerable actors

international regimes, this means that "institutions must guarantee the freedoms of individuals [or presumably sovereign states] to exploit their natural advantages..." (41).

As for justice as mutual advantage, this principle proposes that "the rules of justice can be derived from the rational agreement of agents to cooperate with one another to further their self-interest" (Okereke, 2007:43). In the context of international environmental governance, this view seeks to recognize and affirm asymmetries of resources and power between states in governance arrangements, rather than mitigate them. This points to the importance of institutions that enable voluntary coordination based on plural conceptions of the good, and that allow for states with unequal resources to pursue and maximize their gains under the minimal constraints of an agreed framework (45). The application of this principle in the Paris Agreement's reliance on entirely voluntary and self-determined "nationally-determined contributions" is unmistakable.

As applied in international regimes, both neoliberal principles point to the ability of existing market conditions to solve sustainability problems. However, Okereke argues that these conceptions of justice are pitted directly against normative ideals of distributive justice and equity in that requirements to transfer resources from the global North to the global South are seen to violate ideals of laissez-faire politics and the rights that people and states have to their property (Okereke 2007: 191-92, citing Nozick 1974: 238). As Okereke explains, "...the most significant inadequacy of neoliberal environmental patterns of governance is their inability to countenance questions of distributive equity inherent in the concept of global sustainability" (176).

As part of the shift to libertarian principles of justice, responsibility for taking environmental measures is viewed as shared by all actors, rather than as based on a 'polluter pays' principle. This can be understood as a process of 'responsibilization' – that of burdening a broad range of state and non-state actors (including in those societies with the least resources) with the responsibility to fill the moral gaps "left behind by the retreat of the neoliberal state from assuming its socio-moral duties" (Shamir, 2008: 3).

Second, scholars of neoliberal international environmental governance identify increasing reliance on market mechanisms and private sector actors to address social and political problems. In Gramscian terms, scholars argue that market and private sector dominance has become hegemonic in guiding regime decision-making. Through a process of "depoliticization", that is, "to remove issues from political contention" (Jaeger, 2007, 258), these norms are often painted as common-sense, objective or neutral, as compared to considerations of equity and justice which are depicted as value-laden and normative, and therefore 'political.' Gareau (2013) argues that "The history of global environmental governance involves the gradual move from precautionary, 'command-and-control' state regulatory solutions to private, market-based solutions" (43). Several scholars have attributed the rise of emissions trading within the UNFCCC process to a neoliberal logic and alignment with private sector interests (Newell and Paterson, 1998, 2009; Lohmann, 2009; Bond, 2008). For example, Newell and Paterson (2009) argue that emissions trading "became the preferred solution because of its ideological fit with neoliberal logic, but it was also successful because of its fit with newly dominant financial actors" (88). Thus it is not necessarily a "pure" form of neoliberalism that is being arranged, but ones that benefit specific elites.

The dominance of market-based approaches to environmental governance, and the heightened influence of private sector actors in decision-making and science processes has also been observed in regimes such as the Basel Convention (Lucier and Gareau, 2015) and the Global Commission on Dams (McCormick, 2006). For example, Lucier and Gareau (2015) argue that in the Basel Convention, hazardous wastes have been increasingly treated as economic "resources." In doing so, market actors have re-framed "the toxic wastes trade as essential for sustainable economic development rather than as a manifestation of global environmental injustice" (495). Similarly, in his study of the Montreal Protocol, Gareau (2013) argues that in the governance of methyl bromide, an ozone depleting substance used in agriculture, at the behest of private sector interests, the treaty has in recent years turned to market-based policy mechanisms and considerations. This move, he argues, has fundamentally influenced how scientific knowledge is acted upon in policy governance, and what issues, strategies and perspectives are excluded from consideration, ultimately undermining the treaty's effectiveness (249-250).

While scholars argue that economic considerations have always been part of international environmental governance (such as in the Stockholm Convention), including 'liberal' forms (see Bernstein, 2002), environmental neoliberalism refers specifically to contemporary stages of regime development in which market-based principles come to eclipse or negate those of precautionary and equity-based concerns. Thus, as compared to Bernstein's "liberal environmentalism", neoliberal environmental governance can be understood as a more fully implemented stage of liberalism, with the expansion of the market, economic rationality and private gain as increasingly identified as the primary goals and sole mechanisms for the protection of public and environmental goods. In the process, governance is insulated from normative interventions which extend beyond the well-defined institutional bounds of market-oriented consideration. This has the effect of empowering those that are deemed to possess expert knowledge, including market actors, while often marginalizing lay people and their

context-specific concerns (McCormick, 2006: 322).

Third, numerous scholars have pointed to the prominence of the principle of transparency as a central component of neoliberal international environmental governance. Under the banner of "governance by disclosure" and "empowerment through information", transparency governance defines the primary obstacles to sustainability as that of 'imperfect information' (Mason, 2008, 10), and onerous regulatory structures that inhibit innovation. Addressing such gaps in information disclosure is presumed to enable cooperation among actors in an otherwise anarchic international system. However, despite the attention to transparency in neoliberal forms of governance, such governance frameworks rarely fully embrace transparency in practice (Weikmans et al., 2016) and do so in political contexts in which certain ideas and forms of transparency take precedence over others. As Gupta argues, "information (including scientific information) is neither valueneutral, nor universally valid, and thus information alone is not likely to resolve normative and political conflicts" (2008, 5).

While the pursuit of transparency may also lend itself to other political goals such as democracy, empowerment of diverse stakeholders, and improved governance, neoliberal environmental governance has been argued to embrace transparency specifically in lieu of commandand-control and compliance based forms of governance, and as a 'valueneutral' means of ensuring greater efficiency toward sustainability. Indeed, Mason (2008) contends that analysis of disclosure measures in international environmental governance needs to situate these measures in the broader political economic context (12). Specifically, transparency can be used to preempt stronger, compliance forms of regulatory action (Roberts, 1998; Haufler, 2010), to reinforce neoliberal norms of individual responsibility (Mason, 2008, 12), and to elevate the concerns of powerful actors over others under a veil of neutrality. In developing industry programs of self-reporting on environmental issues, the chemical industry was an early innovator, and its 'Responsible Care' programme was explicitly proposed as an alternative to regulation (Roberts, 1998). As Mason (2008) argues, "The normative agenda here, often unexamined, is the scaling back of mandatory environmental regulation (nationally and internationally), the privatization of environmental resources, and the framing of information disclosure options in terms of individual lifestyle choices" (10). In climate governance, the Paris Mechanism for Enhanced Transparency is the culmination of many years of negotiations on the issue, but lacks teeth for actual enforcement of actions reported (Gupta and Asselt, 2017).

A final development is central to the shift to international neoliberal environmental governance: *exclusive decision-making*. Specifically, while early phases of environmental governance have been founded on principles of consensus-based, universalist decision-making, equal sovereign state representation, and (sometimes) civil society inclusion and pluralistic global governance (Rosenau, 1995), developments in the realm of climate governance suggest that neoliberal governance involves intensified minilateralism and bilateralism between states, often outside of the constraints of the regime (Ciplet et al., 2015). The nature of shifting from top-down compliance-based forms of governance to voluntary, transparency-oriented mechanisms shifts the locus of power from the international regime to domestic contexts. As such, states, often in coordination with private authority (Cutler et al., 1999), are empowered to form exclusive alliances outside of any rigid constraints of the regime.

Scholarship on "regime complexes" and "polycentric governance theory", which directs attention to how climate change is now governed by a loosely coupled, fragmented and decentralized set of specific governance processes, transnational institutions, standards, financing arrangements and programs, rather than a comprehensive or overarching regime (Keohane and Victor, 2011; Abbott, 2012). Notably, the shift to exclusive decision-making is rationalized as a more efficient and effective means of governance in the context of transnational complexity and coordination problems, and necessary to overcome the rigid constraints of multilateralism. Scholars argue that these amalgams have advantages, including adaptability and flexibility, particularly in the case of high uncertainty in terms of collective action (Keohane and Victor, 2011). Benefits can be increased, and costs reduced, it is argued, when international organizations play a role of orchestrating nonhierarchical action to support schemes that further the public interest (Abbott, 2012).

However, developments to undermine multilateralism and consensus-based governance in favor of exclusive decision-making forms have not occurred without resistance from developing country states and civil society, and there are serious implications to equity. For states such as the Least Developed Countries, multilateral regimes are often the only contexts to meaningfully express opposition to unequal policies, and to make demands for environmental and social justice. If core regime decisions can be made outside of the regime context, meaningful opposition and insistence on difficult issues like equity and distributional justice can be minimized and neoliberal reforms can be pushed through, as was the case with the Copenhagen Accord (see e.g. Ciplet et al., 2015).

# 3. Phases of climate governance: a neoliberal climate policy pivot?

We identify five major phases in international climate governance. The first phase began in the 1970s with support for action on global environmental issues at the Stockholm conference and beyond, through the Montreal Protocol on ozone (Gareau, 2010). These focused on protecting global society and the ecosystem upon which it relies, without requirement of cost-effectiveness. Rather, they called upon "Governments and peoples to exert common efforts for the preservation and improvement of the human environment, for the benefit of all the people and for their posterity" (UNEP, 1972). From the beginning, developing nations sought to protect their right to development, and it was understood that fair solutions would involve substantial flows of funding from the global North which created the global environmental problems, to the global South, which was suffering most of the impacts (Newell and Roberts, 2007).

The second phase occurred during the founding years of the UNFCCC, sometime in the mid-1980s, through the 1992 UNFCCC debate and approval in Rio de Janeiro, until about 1996 with the institutionalization of the Kyoto Protocol. After a failed conference in Nairobi in 1982, former Prime Minister of Norway Gro Harlem Brundtland was tasked to lead a commission to reconcile business and environmentalism. Their report specifically called for more economic growth, arguing that business had to be part of the solution (Brundtland Commission, 1987; Lélé, 1991; Newell and Roberts, 2007). In that context of compromise of strong protection with the imperative of growth, the UNFCCC was one of three major international conventions that emerged out of the negotiations at the Rio Earth Summit in 1992. Most central was the principle of "common but differentiated responsibility and respective capabilities" (UNFCCC, 1992). This principle signified that all countries have a common role in addressing climate change. However, it also implied that this role is highly distinct in terms of which states are responsible for having caused the problem (largely understood as based on historical greenhouse gas emissions) and which states have the capability to address the problem (largely understood as based on GDP or GDP per capita). Thus, the ideas of "equity" and "polluter pays" were central to the founding convention: those that caused the problem and that had the capability to act should do so first and assume the largest burden of mitigation and finance obligations.

Two other major elements were carefully worded as part of the founding Convention. First, states would take "precautionary" action to "avoid dangerous climate change," meaning that they would respond to climate change based on the best evidence available. This reflected the idea that early and precautionary environmental action was essential to prevent the worst consequences, particularly in countries with "special circumstances" including small island developing states and the Least Developed Countries, the two groups of states broadly understood to be particularly vulnerable to climate change impacts. Second, the ideas of "cost effectiveness" and "economic growth" were central to the founding Convention. The text calls for action with the understanding that policies and measures to address climate change should be "costeffective to ensure global benefits at the lowest possible cost" (UNFCCC, 1992). Moreover, it argued that, "The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change" (UNFCCC, 1992).

Thus, from the very beginning, the diverse (and likely contradictory) principles of equity, polluter pays, environmental precaution, cost-effectiveness and economic growth were at the center of the UNFCCC regime. This largely reflects Steven Bernstein's conception of liberal environmentalism (2002). Bernstein argued that liberal environmentalism is reflected in the idea of sustainable development that was promoted by the 1987 World Commission on Environment and Development. This idea tried to bridge environmental and economic concerns. In the words of the WCED, sustainable development "aimed to legitimate economic growth in the context of environmental protection" Bernstein, 2002, 2; see also Lélé, 1991). This new approach which became increasingly dominant in the early 1990s, framed environmental problems in liberal terms across environmental regimes. Bernstein argued that the principles of liberal environmentalism were institutionalized as part of the Rio Earth Summit to reflect "the view that liberalization in trade and finance is consistent with, and even necessary for, international environmental protection, and that both are compatible with the overarching goal of sustainable growth" (2001, 4). Lélé describes how "sustainable development" was a phrase understood in entirely different ways by different groups, and which was inconsistent and incompletely conceptualized. He described how it was necessary to acknowledge the structural bases of poverty and environmental degradation. However, due to ambiguity in the texts and a complete lack of implementation into actionable policy, these guiding principles were interpreted in diverse ways during the founding years of the UNFCCC. Specifically, the extent to which the regime would include primarily top-down 'command-and-control' regulation or a marketbased system with tradable emissions permits, or some combination, wasn't yet clear (Levy and Newell, 2002). It also wasn't clear how the principle of common but differentiated responsibilities and respective capabilities would be interpreted in practice, and there were several competing proposals on which states should assume the burden of reducing emissions, and according to what logic.

The dominant form of decision-making of this phase was what we call inclusive multilateralism. Making decisions in the new regime included all 194 states that had ratified the Convention working collectively to ensure that their own interests were represented effectively in the texts. However, certain actors, and namely the United States and European Union, held much greater influence than other actors over the form that the next agreement would take in Kyoto in 1997 (Meckling, 2011; Levy and Newell, 2002).

The third phase of the regime began with the Kyoto Protocol agreed to in 1997 and ended with the Copenhagen Accord in 2009. During this phase, the guiding principles of the regime were institutionalized into a regulatory framework. The first commitment phase of the Kyoto Protocol would come into effect in 2005 and expire in 2012. A key decision, which was particularly contentious, concerned whether to allow the trading of emissions permits between countries, and the "offsetting" of emissions reduction responsibilities through investment in low-emissions projects in the global South (Levy and Newell, 2002; Meckling, 2011). The logic of the Clean Development Mechanism (CDM) was that a market mechanism would ease the economic burden on developed countries because emissions reductions could often be achieved at a far lower cost in developing countries. This approach embodied liberal environmentalism: international governance would still play an active regulatory role, but it would be complemented with a market approach.

After getting its way with the creation of the Clean Development Mechanism, the U.S. never ratified Kyoto, creating a fragmented system which was supposed to be resolved in 2009 in the Copenhagen negotiations. There, the guiding approach of the UN climate regime was dramatically transformed when five countries, the US, China, India, Brazil and South Africa, held a private meeting where they wrote a new pithy three-page draft climate agreement called the Copenhagen Accord. This was later shared with a slightly larger group of twentyeight states, with only one representative from each of the entire regions of Africa and Latin America (Environmental News Service, 2009). The other more than 150 states were then asked to adopt the text without further negotiation. The ideas put forward in the few paragraphs of the Copenhagen Accord would eventually replace the hundreds of pages of negotiating texts that had been developed for two years. While the Copenhagen Accord was adamantly rejected by several developing states on grounds of both process and content, the basic tenets of this agreement were adopted almost word for word as part of the Cancun agreements and Durban Platform for Enhanced Action in the following two years (Ciplet et al., 2015).

The shift in Copenhagen was significant because it largely dismantled the top-down regulatory-market hybrid approach of the Kyoto Protocol, and ushered in a fourth phase, between 2009 and 2013. This phase was characterized by a shift to what was called a "pledge and review" system. While originally proposed around 1994, pledge and review did not take hold until its introduction at Copenhagen. This phase also involved unprecedented civil society participation, which was accompanied by exclusionary practices (Fisher, 2010). In place of the Kyoto Protocol in which wealthy (Annex 1) countries held full responsibility for reducing emissions, the Copenhagen Accord introduced the idea that all countries would play a role to mitigate emissions. Notably, due to large pushback by an alliance between the Least Developed Countries, small island developing states and the European Union, a second commitment period of the Kyoto Protocol was established, but very few actors took part, with only 15 percent of global emissions accounted for (Ciplet, 2015).

Along with the now voluntary mitigation actions of wealthy countries, developing (non-Annex 1) countries seeking international financial support would also be required to introduce "nationally appropriate mitigation actions" that are "subject to international reporting, and verification in accordance with the guidelines adopted by the Conference of the Parties" (UNFCCC, 2009). Thus, the principle of common but differentiated responsibility and respective capabilities was no longer interpreted as placing primary responsibility on the global North; now all Parties, except the Least Developed Countries and Small Island Developing States which were deemed to have special circumstances, were encouraged to play a role in shouldering the burden of implementing actions to mitigate climate change. However, with much ambiguity in the text and few specifics on how such actions would be implemented, in practice, the largely non-binding, voluntary and bottom-up nature of the mitigation approach during this phase represented a phase of what critically could be called shared unaccountability: The agreement required that no one was required to act at any certain level.

The pledge and review approach was rooted in the principles of governance by disclosure and voluntarism. However, the emissions pledges voluntarily put forward by states in the years after Copenhagen was estimated to be only slightly better than what was anticipated in a business as usual scenario and was anticipated to allow warming of 3.7 °C, which was considered an extremely dangerous level (Climate Action Tracker, 2010).

Two significant pledges of climate finance were made in Copenhagen and confirmed in Cancun: to deliver US\$30 billion in "Fast Start" finance over the next three years, "scaling up" to US\$100 billion a year by 2020 (Ciplet et al., 2012, 2015). In practice, outside of these pledges of climate finance – which were not delivered as promised (Ciplet et al., 2012; Oxfam, 2012, 2016; Adaptation Watch, 2015) – the regime embodied almost solely a voluntary approach to addressing climate change.

In the negotiations in Durban in 2012 it was agreed that a new framework for action would be adopted in 2015, and implemented in 2020. This marked a turn to the current phase of the UNFCCC. Those that had advocated for a Kyoto Protocol style approach had lost the fight. Rather, the pledge and review approach would be institutionalized into the UNFCCC, buttressed by new forms of checks and balances to strengthen its ability to ensure transparency and shared accountability between states. In Warsaw in 2013, the new term "intended nationally determined commitments" was introduced to signify the institutionalizing of the pledge and review approach, which was worked out at the Lima negotiations in 2014.

Then, just prior to Lima the United States and China made a joint announcement of pledges to reduce their emissions (Landler, 2014). This partnership represented an important shift in how mitigation decisions would be made moving forward: informal bilateral and minilateral agreements outside of the constructs of the UNFCCC were put forward as a way to advance the pledging round. At this writing, 165 Nationally-Determined Contributions have been filed with the UNFCCC Secretariat, but there is significant disagreement about whether they and their successor pledges in later rounds are likely to sufficiently reduce emissions.

# 4. Discussion: the Paris Agreement through the lens of neoliberal environmental governance

The 2011 Durban negotiations set a four-year roadmap for a round of negotiations that was scheduled to culminate in Paris in December of 2015. The two documents that resulted–the long-term Agreement and the Decision document that laid out how the Agreement would come into effect (UNFCCC, 2015 cp21) were signed by over 190 countries and widely acclaimed as a major diplomatic achievement.

How does this new agreement fit with the neoliberal governance processes outlined in the framework above? First, the agreement has been structured largely, though not completely, around libertarian principles of justice. Distributive justice concerns, such as historical disparities in who caused environmental problems and structural forms of inequality in terms of capability for bearing the burden of action have been largely omitted or reinterpreted; this has mostly been replaced by an "everyone is responsible" discourse and institutional framework.

The core of the Paris model is "nationally determined contributions," or national climate plans pledged by states about what they will do to reduce their emissions, adapt to climate impacts, and provide support for other nations. In place of defined Annexes to specify nations with responsibility and capability, there are delineations between expectations for three groups of nations: developed countries on one end of the continuum and the Least Developed Countries and Small Island Developing States at the other end, with a third group of developing countries between them. LDCs and SIDS are invited, but not required to submit Nationally Determined Contributions, and their expectations on reporting emissions, adaptation and finance received are quite low. There are provisions stating that these poorest nations shall be assisted in meeting their expectations, but left unclear are any mechanisms for raising and providing that support. Expectations are less clear for the group in the middle, and the line delineating that group from the developed nations is not specified, nor are conditions for graduation from one group to another. As a concession to oil-rich nations, the concerns of countries, "with economies most affected by the impacts of response measures" are also to be taken into account (CP/21.4). In terms of measures to ensure that states follow-through on their actions, a compliance mechanism was established, but the text specifies that this is "non-punitive" (CP/21.15) and that parties can leave the agreement at any time without punishment three years after the agreement enters into force (CP/21.28). This is the clause under which the United States has proposed to withdraw. Thus, the process of voluntarism embraced since 2009 has begun to take a more institutionalized and structured form, and some of its fragilities and strengths are becoming clear.

Distributive justice language is still part of the agreement, especially in the (non-binding) Preamble, but there are few institutional constructs that encourage this in practice. Perhaps most notable is that the Agreement is to "be implemented to reflect equity and the principle of common but differentiated responsibility and respective capabilities, in light of different national circumstances" (CP/21.2), and that mitigation actions will be pursued "on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty" (CP/21.4). Some other notable inclusions that depart from a libertarian view of justice (all mentioned in the preamble) include recognition of the specific needs and circumstances of developing countries and Least Developed Countries in particular, a just transition for the workforce, respect to human rights and the rights of indigenous peoples, pursuit of "climate justice", and the protection of "Mother Earth" (CP/21.preamble). Overall, the focus in the Paris texts is on universalism of expectation that most nations make contributions, but that these be differentiated by level of development. This shows some compromise between libertarian and distributive justice ideals, but given the lack of enforcement mechanisms and reliance on voluntary universal pledging, Paris is a major departure in practice and structure from a regime rooted in the principles of equity and common but differentiated responsibility and respective capabilities.

Second, the Paris Agreement is largely indicative of a process of marketization. The discourse in the year leading up to and during the Paris negotiations was that government funding would not transform the economy away from fossil energy, but rather it would require "shifting the trillions" by creating incentives for markets and investors to quickly move to renewable energy and climate resilience. Negotiations in Paris and Marrakesh showed a growing focus on how to effectively leverage the private sector to engage on climate change. Arguably, this has become a more central focus due to the lack of public finance committed by wealthy states since Cancun in 2010, including as nations' attempt to show they are meeting their financial pledges (Roadmap, 2016; Standing Committee on Finance, 2016). In this way, the private sector has emerged as the primary mechanism for spurring mitigation and adaptation actions.

These and other finance issues are pivotal. Rather than increasing expectations beyond 2020, the Paris Agreement extended the pledge to jointly mobilize \$100 billion annually through 2025; there are no new concrete pledges, only that actors should build on previous commitments at a later date (CP.21.9; Decision.114). There is no indication of which specific states should be responsible for delivering these funds (CP.21.9), nor any indication that funds will be forthcoming to help nations like India take the more aggressive action they conditionally offered with adequate finance. The critical issue of "loss and damage" from climate change impacts that cannot be adapted to has been watered down with the explicit language in the Decision text that the measure "does not involve or provide a basis for any liability and compensation" (CP.21.Decision.51)

While a Green Climate Fund was created in Cancun in 2010 and a pledging round before Paris promised just over \$10 billion for it over four years, no coordinating mechanism exists to meet the needs of developing countries to shift their economies and build resilience to the impacts to come, and with the change in the U.S. administration, the \$10 billion promise is almost certain not to be met. In addition, the Agreement establishes a mechanism for the use of "internationally transferred mitigation outcomes" (CP.21.6), which will likely involve market mechanisms by which wealthy nations are able to 'offset' their emissions through leveraging investments in developing countries. However, there is no clarity about why developed nations would need

to resort to purchasing offsets when their own pledges are voluntary and there is no enforcement mechanism to assure compliance. Thus private finance and leveraging the market have grown in emphasis during the contemporary phase but formal mechanisms to drive them are now outside the core of the regime, and are voluntary. The UNFCCC system is largely reduced to cheerleading for private and voluntary national action on climate change.

The main institutional framework of the regime to achieve mitigation targets is that of the Nationally Determined Contributions, and while reporting rules (modalities, procedures and guidelines) are being hammered out in the 2016-2018 period, it is very unlikely that equity or justice concerns will be meaningfully included. Developed countries are required to provide consistent and transparent information on support mobilized for developing countries (as discussed below) (CP.21.7) and were required to explain how their mitigation and finance actions represented their fair share (CP.20.Add.1.76; see Van Asselt et al., 2017); however, reporting so far has been partial and often obfuscatory (Adaptation Watch, 2015, 2016). There is little to suggest that positive language in the Paris Agreement-such as levels of support that match country needs (Article 2.1c) and the aspirational target to limit the temperature increase to 1.5 °C above pre-industrial levels" (CP/21.2) - are implementable priorities. The phrase "sustainable development" is mentioned twelve times in the Agreement but it is never tied to explicit reporting or evaluation requirements within the regime, and often seems a corollary for economic growth in developing countries rather human rights or other context-specific equity or justice concerns. Notably, efforts by civil society groups and developing nations to establish specific mechanisms to uphold human rights and address abuses were sidelined by numerous developing and developed states alike (observation of negotiation sessions, Lima, 2014).

Third, as expected in neoliberal environmental governance, governance by disclosure has eclipsed other forms of regulatory action. The new approach is rooted in neoliberal ideals of information sharing and mutual accountability (see Van Asselt et al., 2016a,b; Gupta and Asselt, 2017). Strengthening elements related to transparency were added at Paris as the result of pressure from a "high ambition coalition." Paris specified a "global stocktake" every five years, to assess the adequacy of the pledges and actions taken, and nations were to submit updated Nationally Determined Contributions (CP.21.14). A "ratchet mechanism" was agreed, by which nations could not backslide to weaker plans, but had to scale up their ambition over time. One of the more binding element of Paris was the requirement for nations to report their actions and levels of finance support, capacity building and technology development and transfer (Van Asselt et al., 2016a,b; CP.21.13). A transparency framework was established for developing countries to report on the support that they have received and their needs, with the intention to consider different capacities (Van Asselt et al., 2016a,b; CP.21.13). While these transparency provisions embody several of the equity concerns of developing countries, how modalities are established in practice will not be worked out until the first session of the Agreement, probably in 2018 (Weikmans and Roberts, 2016; CP.21.13).

Fourth, the Paris pledging year described above showed that the locus of decision-making on climate change has shifted away from the United Nations, to bilateral and minilateral agreements. As a result, this phase represents the institutionalization of exclusive bilateralism and minilateralism – a dramatic shift in how decisions are made in international climate governance. Minilateralism is also formalized in Article 6 of the Agreement which allows for states to form their own alliances of voluntary cooperation in the implementation of Nationally Determined Contributions for pursuing international emissions offsetting partnerships (e.g. "Climate Clubs"). While there will still be heated debates in the UNFCCC process about the particularities of what is reported on and the ways in which verification, compliance and coordination of emissions reductions and financial commitments take place, the most meaningful decisions will likely be made far from the UN conference centers, in domestic contexts and between nations as

part of bilateral and multilateral partnerships. Though this system may be more universal than the Kyoto approach and may sometimes inspire more ambitious statements of intended contributions, these relatively informal pledges and partnerships are likely to be extremely vulnerable to changes in national leadership.

# 5. Conclusion: implications of neoliberal climate governance and areas for research

The neoliberalization of the climate regime has dramatically transformed the normative principles which guide international action on climate change, the institutional arrangements which ensure compliance, and the decision-making processes which determine procedural justice. However, as Brenner et al. (2010) have pointed out, neoliberalism, like any ideal type of a political project, never exists in a perfect form. Rather, given that it is implemented in a political reality where it is often contested and involves strategic concessions (Ciplet, 2015), there has not been a fully linear process in the adoption of neoliberal governance in the UNFCCC during any phase. The contemporary regime maintains some non-neoliberal and variegated forms. As this article demonstrates, it is critical to develop a more precise understanding of the evolving nature of actually-existing neoliberalism in international environmental governance.

What are the implications of the particular shifts described in this article? Can neoliberal climate governance be effective and equitable? For the first time in the history of the regime, in Paris, the world's two biggest net emitters, the United States and China, committed to emissions reductions within the UNFCCC process. Moreover, nearly all the world's countries have made emissions reduction pledges. However, despite these often-celebrated accomplishments (e.g. Stavins, 2015), there is a major gap in ambition related to the ability of the regime to fulfil its stated function in "avoiding dangerous climate change" (UNFCCC, 1992). Namely, the Nationally Determined Contributions that were submitted through Paris added to an expected global warming of 2.7–3.5 °C, not the 2 or 1.5 °C that the scientific and political consensus suggest are needed (Climate Action Tracker 2016).

In addition, despite the growing attention in the UNFCCC to governance by disclosure, in practice, a major gap in transparency exists. For example, Acosta et al. (2015) found that "almost a quarter of a century into climate change negotiations, we still lack an adequate system for defining, categorizing, tracking and evaluating climate change finance." Major inadequacies also exist in terms of standards related to mitigation commitments and performance in Nationally Determined Contributions (Van Asselt et al., 2016a,b). Improved transparency systems are needed for assessing progress and developing pilot programs for best practices. Moreover, to create an enduring system with legitimacy and balance, transparency mechanisms should extend beyond counting carbon and climate finance, to tracking human rights, social impacts and other justice-related concerns related to climate change governance. Transparency systems are needed, but they are not adequate by themselves to drive nations to meet their pledged actions.

The international distribution of pledges to reduce emissions is also far from equitable. By one important reckoning, developing countries have pledged more emissions reductions than developed countries, despite having less responsibility for having created the problem (Civil Society Review, 2015, 2016). Moreover, international support has not been forthcoming for low-carbon technologies and practices for the world's poorer countries to continue or increase their economic growth to address poverty. Rapidly industrializing states will account for most emissions growth in the coming decades, but some countries, like India, still have extremely low per capita emissions and hundreds of millions of people living in dire poverty with no electricity. To pursue lowcarbon strategies of development rather than burn its coal, for example, India called for \$2.5 trillion to implement its Nationally Determined Contribution, while the 48 Least Developed Countries have put forward a collective figure of \$1 trillion (Rai et al., 2015). There is no system under Paris to predictably raise these funds. This gap in equity is perhaps not surprising given that related considerations of fair burden sharing were largely sidelined in the Paris Agreement. Ambitious international cooperation and trust depend upon some focal points of fair action (Klinsky et al., 2016).

An additional gap in equity exists in terms of the needs of developing countries and vulnerable peoples to adapt to and respond to a changing climate, and the level of public funding provided from wealthy countries. In 2013, the global community provided a mere \$3.4 billion in adaptation finance for developing countries (OECD Development Assistance Committee 2014). Innovative mechanisms to raise public finance for adaptation have also increasingly been sidelined in the negotiations. The United Nations Environment Program estimates that \$150 billion a year are needed by 2025/2030 to meet adaptation needs (UNEP, 2014). And in terms of costs related to climate impacts that are beyond the possibility of adaptation (what is known as 'loss and damage'), Hope (2009) estimated damages as high as \$2.8 trillion in 2060. Thus, major questions exist about how we can scale up adaptation finance and address loss and damage considerations in a regime now rooted in principles of voluntarism and marketization (Durand et al., 2016). There is limited evidence to suggest that adaptation needs can be addressed by market forces, in lieu of public sources (see Fieldman, 2011).

Finally, the shift to exclusive minilateralism raises concerns for ensuring procedural justice and representation of those most impacted (Ciplet et al., 2015). As we have discussed, in the post-Paris phase, mitigation decisions are more likely to be made unilaterally, bilaterally and in "climate clubs," outside of the UNFCCC process. In this context, low-income developing countries and civil society groups from the global South may be even more likely to be excluded from having input into decisions that have major impacts for them. This raises difficult questions about how disproportionately impacted groups can find greater procedural justice in neoliberal climate governance in the coming decades. At the international level, research is needed to produce a stronger understanding of the conditions that produce neoliberal shifts in international environmental governance, the forces that drive effective efforts to create more just and ambitious agreements, and how distinct variegated forms of neoliberal environmental governance vary across issue areas such as bio-diversity, hazardous waste transport, desertification and disaster response. Moreover, given the current predicament of neoliberal climate governance, research should inform how the UNFCCC regime and other relevant multilateral processes might be retooled to address the gaps in ambition, transparency, equity, and representation discussed above. Otherwise, the UNFCCC system will continue to be reduced to merely a cheerleading forum for private and voluntary national action on climate change.

To contrast the Paris outcome with what non-neoliberal governance in the contemporary period might look like, we end with some possible elements of a 'different world' as a reference for comparison. A nonneoliberal governance model might do the following: be based upon scientific consensus on the level of effort needed and be mandatory based on ideals of fairness, provide compliance-based regulatory mechanisms, privilege distributive and non-libertarian ideals of justice, strengthen rather than erode public mechanisms to address developing country needs with adequate finance, incorporate multiple logics of legitimacy (not reductive to managerial quantified and market-based measures), and be built with procedural justice and inclusive decisionmaking. We recognize this is an ideal set of criteria for developing a global regime adequate to address climate change, and unlikely to be taken up without a sharp turn in the neoliberal pathway we are traveling.

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